

tapasya

Food Processing Industry

A Publication from The Indira Group of Institutes

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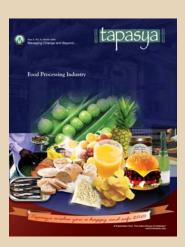
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The food processing sector is the new sunrise industry on the horizon in the Indian economy. It encompasses a variety of gastronomic options which are fast becoming a need for the household in a fast-track economy.

Editorial



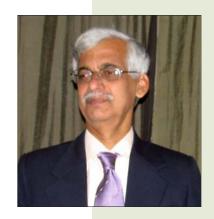
P. G. Vijairaghavan

The editorial in this year's final issue does not want to be another placebo to simulate the feel-good factor in the country.

Yet, first, the good news. Infrastructure growth this year, has seen double digits in November, 2009 which is the one big cheerful news item in an otherwise forgettable trimester of a year. GDP growth is forecast at a commendable 7.75% by the Finance Minister. Which means more jobs, more demand, higher production, greater investments and all round prosperity. Wish it really worked that way. Read on why all the good news can hardly convert into good cheer for the common man. The reader may not necessarily agree with what follows, but the facts cannot be ignored....

"Depression" is a word described by the dictionary as i) a condition of 'low spirits', or ii) a hollow, sunk place, or iii) the time when business is depressed, or area of low barometric pressure..

How strange that the people of India have been suffering the effects of depression on all these counts during the last few months! In a way the citizens are inured to the depression of the first kind going by the quality of public administration that they have been getting for some time now. Public health gets a measly 0.9% of GDP in India, just ahead of Burundi, Myanmar, Pakistan and Guinea; education another 2 to 2.5%, social security for the poor is still a far cry. This is reason enough for depression to set in, but while we deal with the abominable state of the average Indian, it does not seem like our politicians have taken their commitment to serve the citizen too seriously. How else does one explain the fact that for over 3 weeks after declaration of election results in Maharashtra, our lawmakers were unable to form a Government; all because of heavy bargaining and lobbying for positions and posts in the Cabinet. And thus crucial projects and development work which are the responsibility of the Government remained stuck in political red-tape, recrimination and blackmail. All this when the State is going through one of its worst crises in the form of drought and unseasonal heavy cloudbursts that have destroyed even the few crops that managed to survive the massive drought. And it is not just the three weeks postresults, because all sanctions for development work came to a standstill from the date of the notice of election issued by the Election Commission, about 45 days prior to the election date! Which means Maharashtra lost over 70 crucial days of decision making and emergency measures to save its people from the vagaries of the climate. Which again means that the lackadaisical attitude of the powers that be actually delays the rehabilitation of the common man in the economy putting less and less purchasing power in his hands, willy nilly affecting business and industry in the country! If this is the state in a developed State like Maharashtra,



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How else does one explain the fact that for over 3 weeks after declaration of election results in Maharashtra, our lawmakers were unable to form a Government; all because of heavy bargaining and lobbying for positions and posts in the Cabinet.

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one can imagine the fate of the common man in the less developed part of India. Reason no. 1

If this was not reason enough for depression of the first kind, we had the second form of depression, the sunk and hollow place – in more ways than one – because of the extreme and unexplainable changes in weather conditions this year. Severe dry conditions when it should have been pouring from June to September, and as if enough destruction was not caused to the crops and farmers' livelihoods, the story of the depression was complete when it was followed by torrential and utterly numbing quantities of rain over most days in October! (Max. 138 mm in one day!). This left a considerable hollow in the already sunken living of the farmers. One can only hope that this weather behaviour is not repeated next year, or the possibilities seem quite daunting. Forget GDP growth, imports of food items will make another depression in our resources! Reason no.2

One does hope that the third incarnation of depression will lift the fog from the business prospects in the coming months especially after the country's adept handling of the economic crisis of the past two years. Hope springs eternally in the human breast, of course. Yet, what has caused considerable 'depression' in the minds of the average Indian is the way the climate change jamboree was conducted at Cop 15. While some countries have upheld the Copenhagen Accord as a great step forward, the others have taken it to task for it actually being a retrograde document. If such a historic session that can cause diametrically opposite perceptions to an essentially common human problem (human-created?) as climate change where it would be normal to expect a common focus of the entire humanity, one can excuse those who do suffer from depression of the third kind. Though if the statements coming from the developed world are anything to go by, we may have more to rue about in the coming year when the Heads of Government meet once again for another go at caging the obstreperous beast that climate change has now become. Reason no. 3.

This issue of Tapasya takes a look at the Food Processing industry, where we try and bring some erudite thinking on the state of the Industry and suggestions on the way forward. This is one industry that has been low key in profile but with potential to top the growth charts among segments, for the simple reason that when families turn nuclear, and incomes rise, when the housewife starts to earn too, and is hamstrung by the lack of time to cook for the family, which still needs to eat, pre-cooked food is what comes to the resue.

Notwithstanding anything above, Tapasya wishes you the best of good living in 2010!

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All opinions expressed in the articles are those of the authors. The Editor, the Institute and the Publisher bear no responsibility for the same.



Utterly Butterly Delicious:



P. G. Vijairaghavan

The Genesis

When Jawaharlal Nehru is reported to have famously said soon after independence, that the public sector industrial units would be the temples of modern day India, he probably did not have in mind, Amul, or the dairy sector, which is almost larger than life. One is tempted to say, if, however, these industrial units are indeed the temples of the nation, surely then, Amul must be the presiding deity of these temples!! Creditable though the PSUs role in modernizing India may be, to my mind, the story of Amul needs to top it all, for various reasons that make the Amul co-operative

> experiment stand out and apart from any of these units.

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One wonders if the cooperative movement in the dairy industry which started in Gujarat was in reality an extension of the just then concluded freedom movement in the country.

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For one thing, the farmers' milk cooperatives in Gujarat are the sum total of the will, commitment and the aspirations of over 2.7 million farmers spread over 14000 Village Dairy Co-op Societies. For another, going from a milk starved nation to a milk-rich nation over a 25 year span is an achievement that perhaps might take some time to improve upon for any industry. Again, if the relative progress made in the lives of the membership of the dairy cooperatives is any indication,

perhaps the belief that these are indeed the presiding deities which have blessed the small and medium farmer with the largesse of a prosperous and fulfilling life, will only get strengthened. Besides, the cooperatives, as the name suggests enjoyed no capital assistance from the Government, which could perhaps account also for the unparalleled success of the movement today!

However, to get a first hand realization of the magnitude of the change that Amul has wrought in the lives of the villages, one must actually meet the actors in this hugely successful drama of hard work, and, confidence of the farmer in the ability of one man to change the course of their lives for the better.

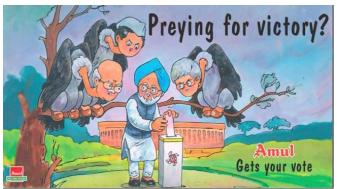
One wonders if the co-operative movement in the dairy industry which started in Gujarat was in reality an extension of the just then concluded freedom movement in the country. Because the main players in this patriotically charged drama were indeed part of the larger movement for independence - like Sardar Vallabhbhai Patel, Tribhuvandas Patel and Morarji Desai, who was to play an important role in shaping much of the Gandhian culture post the Mahatma. The Amul story in many ways is a typical replay of the profiteering, divide and rule and exploitation of the farmers by moneybags of the day with the Britishers at the back. Kheda District, known for its dairy industry was the home of the Polson brand of dairy products. The company had the contract for supply of milk to the Government Milk Scheme at Bombay. Traditionally the villagers were suppliers of milk to the Polson plant at Anand, through middlemen and contractors, who in collusion with the company polished off the butter, leaving the the poor farmer to fend for himself. When the company did not pass on the benefit of higher prices being paid



by the British Government for the milk supplied to them, the farmers realized that they were being taken for a jolly cattle-ride and decided to do something about it. Sardar Vallabhbhai Patel, being from the District was approached for some relief, and the iron man that he was, he had only one suggestion - Polson ne kadhi mukho! (Throw out Polson. Take your future into your own hands!) if necessary by refusing to supply milk to the Government of the day!

Thus began the march towards the empowerment of the rural farmer in Gujarat and it was left to Morarji Desai, a staunch Gandhian and his trusted assistant, Tribhuvandas Patel to take the mission forward.

The Kaira District Milk Producers Union was formed in 1946 on the basis of the mandate received by Tribhuvandas Patel from the villagers. The KDMPUL was charged with the function of marketing the milk supplied by the village societies which were formed and went into business in all earnestness collecting milk from members in the villages and the payment was made not on quantity - but on the quality of milk. Two village cooperatives and a sprinkling of farmers made the initial beginning in 1946 - producing around 250 litres a day. The figure soon swelled to 450 members and 5000 litres per day by 1948. Thus higher the fat content, the better was the price paid for the milk. Milk collected in the morning was paid for in the next session. But the problems had only just begun. Milk production, which oscillates with the rise and fall in temperature, would become volatile with below-demand output in summer months and excess production in the cooler times. Both these created problems of earnings for the poor farmer, since he never got the benefit of higher prices in summer, nor could he sell his entire production in winter. With no



facilities for storage, he was reconciled to the sale of the excess milk produced to the wily middlemen who made a re-entry, buying up the extra milk at abysmally low prices, exploiting the poor producer no end.

The way out for the co-operative was to set up a processing plant to manufacture butter and milk powder from the excess milk brought in by them, which the Government approved and with financial assistance from UNICEF and the Government of New Zealand, under the Colombo Plan, the project to set up a Rs 50 lakh factory was drafted and the foundation stone laid by the then President of India, Dr Rajendra Prasad on 15 November, 1954. Less than twelve months later, on 31 October, 1955, the Prime Minister of India, Mr Jawaharlal Nehru visited Anand to inaugurate the plant, providing a tremendous impetus to the co-operative movement in India. Thereafter, there has been no looking back for the cooperative movement in the dairy industry.

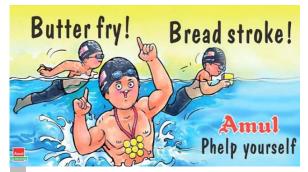
It was not just collecting and selling milk from the farmers that set the Societies apart. It was the provision of integrated services that the Society provided to the farmer that made it an inseparable part of his life. For the cattle, there is a veterinary doctor available 24x7 and his services are available within hours at a nominal fee of Rs.50 – irrespective of the distance from the Society. The artificial insemination centres of the Society take care of the productivity of cattle with state of the art facilities for preservation of semen of healthy cattle.

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Each village society provides substantial funds from its revenues for provision of basic amenities for the village – such as

improvement of roads, libraries, schools, hospitals, etc. helping the State in the discharge of its primary functions towards its citizens.

The Milk Co-operative Structure

The unique quality of the Co-operatives in the milk industry is in many ways symbolic of what India is trying to achieve for its citizens since independence. All for one and one for all can very well be the motto of the sector. It is a three tier structure, that recognizes no bigwig, or ignores no marginal farmer on account of size, it practices no discrimination by way of caste, or religion, sex or occupation. Every member of the village level society, so long as he/she owns a cow or buffalo, is entitled to a single vote irrespective of the number of cattle or the quantity of milk supplied by him or her. Members elected a Managing Committee, which in turn elected a Chairman and employees were appointed to oversee the functioning of the Village level society.

The second tier in the structure was the District level co-

the Societies in the District which elected its Board of Directors, from among the Chairmen of the Village Level Societies. The Board elected its Chairman and appointed a Managing Director, typically an employee of the Organisation, and

employee of the Organisation, and a professional to manage the District Organisation.

operative which was composed of

With operations growing from year to year, the need for an apex organization to liaise with the Government of the day required the formation of a Federation. This was achieved with the third tier of the structure formed in 1974,

called the Gujarat Co-operative Milk Marketing Federation which markets the entire produce of the District Level Societies under the brand name of Amul.

The Growth Story

The success of the co-op movement in Gujarat is rooted in the marriage of sound economics to a commitment to social good. The interesting aspect of this success is the manner in which the interests of the consumer, the supplier and the 'middleman' (in this case the Societies) have been seamlessly aligned so that none of these entities feels left out of the value chain. The supplier's interests are taken care of with the Union buying every litre of milk brought in to their doorstep and a price that is equitably pre-decided on the basis of the fat content in the milk paid to him; his cattle cared for by a team of ever-available veterinary doctors based at District headquarters for a small fee; (in fact, it is said that a lady member of the Society once remarked that cattle were at times getting better medical attention than humans in the village - which responsibility was not the Society's!) cattlefeed manufactured by the cooperatives is available at all times so that even during stringent times, cattle are not left to the vagaries of the weather.

For the consumer, Amul has been the story of how a 'desi' organisation alone can fathom the needs of an Indian home and proactively act to provide them. Thus, Amul has been a source of consistent quality, timely availability and at an agreeable price. Not to be outdone by the multinationals in the country, Amul has been at pains to reach out to consumers through market research and introducing newer products to keep the consumer from straying.

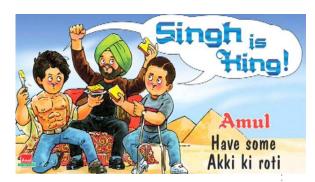
The Societies themselves have been working overtime to ingest technology, and control costs, in a 24x7 endeavour to add

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value to the consumer's aspirations and the suppliers wallet. The dairy plants are examples of exemplary hygiene maintenance and professional management ensures that output never is allowed to chase demand. Products that defy traditional beliefs, and yet deliver that ethereal object called value, make the Amul brand the envy of even multinationals. For instance, Amul was the first in the world to market skimmed milk powder and butter made from buffalo milk; a product long considered by the West as being impossible to produce. Not only was the West cynical about the possibility of successfully concluding the project, it made attempts to derail its progress. But the combined will of the members of the Federation led by Dr. V. Kurien, was too much for the multinationals to take on.

It would be very shortsighted to treat Amul as the story of growth in real terms alone. It is much more than mere numbers, a story of progress in human terms. It is a movement that has taken the world by storm. And to realize this one needs to visit the town of Anand and meet a cross section of the members who contributed to its immense success and share in the many flavours of growth. A typical society was the Navli Co-op Milk Producers Union Ltd. a few kilometers away from Anand . The Secretary of the Society is Nileshbhai C Patel, who has been in the Chair since 2000. His father was a member of the Society when it was formed in the fifties. His pride in running a

Society that today has ISO certification is justified because the entire village has found prosperity – almost every household of the total 1400 boasts of an educated member who is based in the United States. More than 95% of the 1625 acres is irrigated and a number of crops and vegetables are grown here. The village procures an average of 1500 litres of milk a day. Of the nearly 1100 members in the Society, almost 1000 own a maximum of 2 hectares of land and only about 57 own more than 2

hectares. As against a net profit of Rs 11,095 in 1953-54, the society has made a pfofit of Rs 1,58,465 in 2008 raising the average per litre bonus plus price difference paid to members from Re 0.01 in 1954 to Rs 2.83 in 2008!

Figures apart, the Society earmarks a minimum of 10% of net profit for community related projects every year and has contributed to such developmental projects as building of teachers quarters, general hospital, garden, providing milk for children in kindergarten, Family planning initiatives, earthquake relief etc.

The Gujarat Co-operative Milk Marketing Federation which is the apex organization of co-operatives has charted a blazing course of operational success during the 35 years of its existence. With a fully owned Mother Dairy plant at Gandhinagar, a string of 30 dairy plants and cattle feed manufacturing plants with capacity exceeding 3200 mt/d the story of GCMMF is one of continuous growth. All plants sport state of the art machinery and use of IT which ensures

not only accuracy, and speed of operation, but also thorough hygiene in treatment of such a highly perishable commodity, in its processing. With a membership exceeding 2.7 mn, and over 14000 Village Societies under its fold, it is perhaps the single largest cooperative running on such a scale anywhere in the world. Being India's largest exporter of dairy products is a distinction that sits lightly on its head, because it believes in achieving much more if its Mission 2020 is anything to go by.

The success of GCMMF prompted the setting up of the National Dairy

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No ad campaign in living memory, has relied so much on one single mascot who just refuses to grow up, for well over 40 years.

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Development Board led by Dr. V. Kurien. After its formation in 1965, NDDB logged its own success story through the conduct of Operation Flood at a time when milk was in chronic short supply and Government had to import milk powder to meet the shortfall. Eventually, though, India became the world's no.1 producer of milk in the face of severe competition from the traditional dairy producers like New Zealand, Australia and Switzerland.

The Amul experiment has been replicated in many States and many countries, alas, but not with

the same degree of success. The reasons are not far to seek. As diagnosed by Dr. V. Kurien, the ownership of the cooperatives needs to be firmly in the hands of the producers - i.e. the farmers, both in financial and control terms. Unfortunately, while financial control may be in their hands the operational control is seen to be hijacked by politicians with vested interests and bureaucrats ready to kowtow to them. This rings the deathknell of the co-operative and invites other interested groups to it to try their hand at gaining control. A strong professional team and organizational leadership that can resist all sorts of pressures to stand up for the rights of the farmer community it represents can only hope to convert the vision of cooperation to scale heights of success that Amul has managed to reach. Total trust in the professional management team, high degree of credibility and confidence in dealing with the vicissitudes of business have created the giant that straddles the Indian consumer food market today, that is the envy of the rest of the world.

Winning has always meant much to me, but winning friends has meant the most.

- Babe Didrikson Zaharias

Marketing coup



by the
Amul
Girl!

Sylvester da Cunha was no

pushover when it came to creatively designing ads. And when he bagged the Amul account in 1966, he knew how he was going to go about promoting it. The little Amul girl who appeared on hoardings dressed for each occasion, but in her trade mark polka dots virtually took every Indian's breath away, as much, with her evidently cuddly pictures as with her tongue-in-cheek barbs. Ever in good taste (pun intended!) and with no room for rancour, the moppet who was not above making her views known on everything that happened around her - be it in sports, politics, literature even science, technology and justice!

Amul - the product itself promises quality, service, price and availability and delivers ably on that promise. But it more than helps to have a handy moppet to make it one of India's most loved food brand. And how!

No ad campaign in living memory, has relied so much on one single mascot who just refuses to grow up, for well over 40 years. Some of the most endearing witticisms are reproduced here. And no one's complaining, we are sure!!



This column focuses on and profiles individuals who, through the power of their hard work and the force of their personality have become success stories and have created a niche for themselves in society.

Mr. B. M. Vyas, Managing Director, Gujarat Co-Op. Milk Marketing Federation



The position of Managing Director of the Gujarat Co-op Milk Marketing Federation sits lightly on B. M. Vyas, whose 40 years in the Federation is evident in the conviction that he displays and the faith in the co-op milk movement. A true-blue disciple of Dr V. Kurien, the Milk Man of India, who initiated many like him into the Anand mould. Vyas has been witness to the astounding growth of the Anand experiment and has seen first hand the transformation of the lives of the farmers of the villages forming the Societies in the Federation. For many like Vyas, the GCMMF is the symbol of farmers' empowerment and evidence of the strength that lies untapped in the toiling millions in India. As he says, it only needs the right impulses to exploit this power for the common good, and Kurien, according to him, was among the first to realize this hometruth. In a freewheeling interview in his simple, yet elegant office in Anand, Mr B. M. Vyas speaks to Tapasya about what makes Amul an internationally inspiring business model and the way forward for it.

In conversation with P. G. Vijairaghavan

Mr. B. M. Vyas has been with GCMMF since 1971, and since 1994 is its Managing Director. Trained under the guidance of Mr. Verghese Kurien, Vyas considers his commitment to Amul and the farming community as his way of acknowledging the contribution of his mentor in moulding his thinking in his formative years.

Mr. Vyas considers, among his many achievements, the three fold increase in sales within 10 years from taking over as MD - from Rs 980 cr to over Rs 3000 cr, and developing and successfully launching 24 new products, along with a nationwide cold storage chain. On the way, Amul also became Asia's largest selling fresh milk brand.

Q. At over \$1500 mn Amul stands high in the world competition. The 13 district cooperative milk producers' union today prides itself on having 2.79 million members handling 11.22 million litres of milk per day. The total milk production in 2008-2009 was 3.05 billion litres. The figures are indeed mindboggling. Yet, the exports of Amul at around Rs 125 cr, although substantial in real terms, are a small portion (2%) of your total turnover of Rs.6700 cr (2009). Is this because of overwhelming domestic demand or competition at the international level? Any special efforts to give exports a fillip?

A. It is not competition at the international

level that keeps our exports relatively low in comparison with the overall turnover. In many ways, we have not really exerted in that direction because our focus has been on different goals. In fact, our quality has been tried and tested in various countries and found to be world standard. But the point is Amul was set up to cater to the needs of the farmers and to care for the nutrition needs of the nation. From a per capita availability of 50 gm in the early fifties to over 250 gm today, we have come a long way in providing the country with essential health nutrients. This we could not have achieved if our focus had shifted to exports and foreign exchange earnings. Of course, Amul has a strong presence in many countries, particularly with a large expat Indian population because it gives the NRI an emotional link with his motherland. That is why most NRIs abroad swear by the quality and content of Amul products.



Matter of life and debt! Amul Value For Makhan Dum ko maro! Amul Butt out. Butter in.

Q. From 87 lakh kg. of milk production per day, to over 231 lakh kg per day by 2020 is an ambitious target. This would involve higher investment in processing plant, veterinary facilities, marketing inputs etc. Is GCMMF ready with the investment in financial and physical terms to handle this level of operations?

A. At Amul we are trained to look at the larger goal set before us, the vision and the mission of the Federation is what we are continuously concentrating on. This means if we see an opportunity and set ourselves a goal we do not see ourselves getting distracted from the path towards it. Finance is the least of our worries, because we believe that if the project is viable, and our commitment and attitude is to make it come true, finance will follow. In just one year, we have grown from 13000 VLCs to over 14000. This means our capacity to raise funds has also grown; our members have the strength and the confidence that Amul will deliver, therefore, it does not deter us. You will perhaps be aware that our first dairy plant for which the foundation was laid

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In more ways than one, the dairy co-operatives have changed the way our farmers live and work in harmony.

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by President Rajendra Prasad, in November 1954 was inaugurated by Pandit Jawaharlal Nehru in October 1955 - i.e. in less than 12 months! We have the past to back our future. Going from 0 to 100 is more difficult than going from 100 to 200. Teething problems, problems of infrastructure, but with higher edu and better communications with farmers and consumers, credibility established, income levels rising, it is easier to think of higher investment hrough better access to technology, better manpower etc. Finance is never a constraint; constraints are possible only in respect of attitude and

commitment, which Amul does not face.

Since ours is a cooperative institution, it is decided democratically; nothing is forced down anybody's throat. All we do is present the picture of growth and achievements that the Societies have to their credit and show how much more the potential for development is. The members take a decision on the basis of their past successes and future prospects. They thus commit themselves to the future projects in terms of investment and other inputs, since it is a voluntary target based on their own assessment.

Q. Economics is said to be at the root of all social injustices. Has the Amul success story resulted in a tangible change in the social mores of the villages where the cooperatives are functional, by transcending long existing prejudices and biases, like untouchability and illiteracy in the structure? If so, would it not be worthwhile to replicate this experiment all over rural India, if only to reap the larger benefits of national integration?

A. It is true that most social injustices stem from economic imbalances. A reasonably well cared for society does not encourage anti social tendencies which has been proved by the situation in most villages where the Societies are in operation. You will hardly find law and order issues in these villages, you will possibly have no news items on discrimination between communities, or atrocities on the weaker sections, no drinking among the menfolk...



In more ways than one, the dairy cooperatives have changed the way our farmers live and work in harmony. You will not find a single Gujarat farmer has committed suicide, law and order issue is almost absent, men and women are better dressed – with none in torn clothes, in fact, you can go to New Jersey and ask a Patel there about his ancestry. Invariably you will find that his parent or grand parent was supplying milk to the Co-op in Anand. How did the son or grandson come to the US if his parents were not doing economically well?

There is not a great deal of social vices in Gujarat – no drinking and violence, no gambling, saving is a habit among the people, also because it is the land of Gandhi and Vallabhbhai Patel.

Some times, this situation does get disturbed for various reasons. For example, there are people from other mores coming in for work and business and settle here bringing in their own ways of living. In the initial years, they may take time to integrate with the locals, that is when aberrations take place, but over the years, they become as much Gujarati as any here.

Q. 48% of the villages' income is from dairying. Women are perhaps the major participants in the entire process of milk collection and thus it would be fair to expect them to play a bigger role in the family's development and the progress of their own gender – in education, removing social biases, and empowering the illiterate

women of the village. Are the women members of GCMMF cooperatives better empowered now than they were 50 years ago?

A. Most of the dairy activity in the societies is looked after by the women of the village, the men look after the farming activity etc. Because the womenfolk earn almost, if not more than, the menfolk do from farming, there is a sense of empowerment among them and since the woman is the fulcrum around which the economy of the family evolves and revolves, she becomes the guiding light in the family for the development of the children etc.

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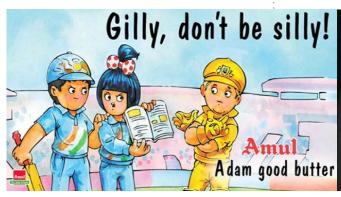
Most of the dairy activity in the societies is looked after by the women of the village, the men look after the farming activity etc.

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Q. Have the villages in the operational area of the GCMMF taken to the use of technology both for milk processing and in their daily lives through use of computers, telecommunication systems, etc?

A. As you said, almost every member has a son, daughter or grandson or grand daughter abroad – either as a student or as an educated employee there – they have come of age as far as use of technology is concerned. From an era when they did not have a single telephone in the village to a mobile phone in every household, is a long way. They are of course in touch with their family abroad through computers, in fact they are very much into technology at the Society which checks their product for quality, prints out the receipt and pays them in minutes – all a result of technology.

Q. What according to you is unique with the Amul experiment that although it has been replicated in many States, in collection and marketing of milk and other dairy









products, they have not registered the spectacular success of GCMMF.

A. Other States have done reasonably good in the dairy coop movement; in TN, Karnataka, Andhra; also Bihar, Rajasthan etc. it is not they have not done well at all. Some of the States could have done better, but certain constraints do affect the working of the Societies. For instance, continuity of professionals at the helm is very necessary, if leadership changes frequently no one can be expected to achieve results. Even so, I would not say the dairy movement has failed in any of the States, if you see all the losses in the co-op dairy sector put together in the past 20 years, would not cross Rs 200 Cr. of the total business of around Rs 200,000 Cr. but in the process the gains are that the consumer has got quality and affordability and the farmer has got good prices for the milk supplied by him. Therefore, if Aavin has not made much profit it is probably because the consumer has been charged less for better quality milk, or the farmer has been paid more for supplying milk to the

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Society. In either case, society has stood to gain and I do not see any reason to complain. The sense of well being among the farmers which you talk about in Gujarat, is certainly there in many other centres - take Kolhapur, or Warana in Maharashtra, or Karnataka, or Pataliputra, or Andhra Pradesh... in different measure success has travelled to these States too. UP? Well, that is a different story. But even there, whatever little progress and prosperity is there in UP it is only because of the cooperatives, e.g. Meerut...

Then again, as I said earlier

continuity is absent where there is no progress. I have never met the same Managing Director of a Co-op Society in UP. Same as in politics — States also need continuity in leadership — take Gujarat for example, since 1960 it has had only 8, if I am not wrong, Chief Ministers in almost 50 years.

Q. How is the CSR commitment of the GCMMF designed to benefit the common man? Any specific initiatives taken by GCMMF that could be replicated elsewhere?

A. As you have seen, our entire functioning is a huge CSR operation. What else can you call it, where the entire village is involved in taking its own decision, and ploughing in almost all its excess revenues into community projects. Therefore, we do not need to specially formulate any special community projects. For profit making companies it may be very well for them to set aside Rs 5 Cr. out of their total profit of Rs 1000 Cr. and claim to have done so much for social transformation, but here we are working for it 24x7!

Q. Dr Kurien's phenomenal contribution to the success of the Kaira experiment can never be underestimated. What according to you would be the projects which could be the unfulfilled dream of Dr. Kurien which GCMMF needs to complete, that would make him proud of GCMMF?

Dr Kurien never worked for targets – either physical or financial. He worked for a purpose. We feel we do not need to identify



projects that would make Dr. Kurien proud of his institutions because, in every single institution he created, he breathes inspiration into the people working for them every day. I can say that anything that will bring the farmer closer to prosperity and well-being, will make Dr. Kurien happy; only, if we can do it earlier, he will be so much more happy. Dr. Kurien has created institutions here that are forever committed to his vision. He is part of our genes now, therefore his vision is always with us. Also, I remember Tribhuvandas Patel who was in many ways Kurien's mentor at Anand and moulded his whole outlook from a US returned techie to a technologist totally committed to his stakeholders – the farmers of Anand.

Q. How much of the success of Amul was due to the marketing coup staged by the Amul Girl, since although Kaira Co-operative was in existence since 1946, the nation did not notice Amul till the mascot came to being. Or could the fact of having mobilized millions of farmers under one umbrella have provided the fillip?

Many reasons have contributed to the success of Amul. 1. Dedicated farmers and 2. sound professional management.

Professional management subordinated its knowledge for the benefit of farmers. So the professional manager would know how to manage the investments with the farmer – say, the cows and buffaloes, but if the cow had a problem in the intestine, he could not have helped. Here, only a veterinarian could

be of any help and the professional manager would subordinate his expertise to that of the vet. The other aspects of branding, like the Amul girl, have played their part to build up the brand, which is also important, and our creative marketing strategies have been effective in bringing the Amul brand to the consumer in India and abroad.

Q. Maintaining the quality, service, availability, and price of an avowedly perishable product like milk and its other forms is a gigantic operation of ensuring backward and forward integration – on a daily basis. In this sense, the

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Managing the trust of millions of farmers does require thorough and true professionalism and as trustees of the farmers' confidence, we take our profession very seriously.

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achievement of Amul is extraordinary. How do you prepare the employees to manage this task? What are the training facilities for your personnel, available to you to keep the wheels perpetually in motion?

A. Managing the trust of millions of farmers does require thorough and true professionalism and as trustees of the farmers' confidence, we take our profession very seriously. Our HR policy is very simple. We employ professionals. If it is to do with dairy technology, we will take only a dairy technologist, or M.Tech. for veterinary jobs, it is a veterinary degree holder, if it is Finance we will take only CAs. And so on. They are recruited from campuses directly. That is why, you will see that we ensure the best in class to attend to our requirements, and build them brick by brick, expose them to the culture of Anand co-operatives, and make them aware of their role in not earning more and more money, but the contribution they make to the prosperity of the stakeholders. That is why you will find that the attrition rate in Amul is so low, everybody realizes that perhaps they may





earn a little more outside, but the contribution to the nation which they are making here, can never be replicated elsewhere!

Q. There are other co-operatives for various agricultural producers doing virtually similar processes like Kaira; but none has had the success of Amul. What in your opinion, is the difficulty to play out the same role in farmers' other produce as in milk?

The fundamental requirement for success of an orgnisation is it has to be fair - to the vendor, to the worker, to the stakeholder, to the farmer etc. wherever exchange takes place, there should be fairness in the exchange. Thus, for example, if you bring one litre of milk I should be able to measure the quality of milk and pay you a fair price. So, where earlier the middleman used to feel the quality by putting in his finger to determine fat content and pay the farmer what he thought was a reasonable price, we removed this subjectivity by having the milk tested through technology in a fraction of a minute and decide the price, which is obviously fair and just since there is no time to manipulate or manage the outcome. Similarly, we have improved the sense of fairness by resorting to technology in all aspects of our functioning. On capital side, we have not once failed to meet our commitment to our stakeholders - not once has our dues to any entity, been defaulted throughout our 14000 Societies for over 60 years! And of course, our employees who have been trained in the ways of honest dealings by Dr. Kurien himself, which itself inspires

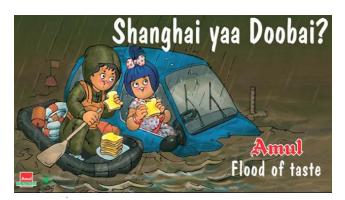
trust among all.

Dr. Kurien was not among the modern day Management graduates who jump from job to job searching for that elusive thing they call job satisfaction.

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In other co-operatives, no investment is done in fairness – for example, the quality of wheat cannot be measured with any degree of fairness, for starch, moisture content, etc., only subjectivity decides the quality which does not inspire trust in the farmers. These can be done with technology, but are not deployed! If we do not earn trust at the base, the project is bound to suffer. Investment in facilities is not made e.g. storage facilities for vegetables, fruits, grains and allow the farmers to use them, so that it all does not go waste. This will



create greater confidence.

Q. Amul has been instrumental in identifying and integrating itself into its area of operation that one can find evidence of its presence almost throughout the city of Anand. Institution building has been a great contribution from Dr. Kurien. A case in point is IRMA, which is now playing a substantial role in rural India's development. How has it helped in building the Amul brand?

A. The fact is. Dr. Kurien did not work for himself. He dissolved his ambitions into the success of Amul and made it his life's mission with a passion. With that in mind, he set up institutions that are life long -Amul, IRMA, NDDB. Because he was there with his sense of mission, we are here, otherwise most of us may not be here. He created a culture of devotion which you can see in most of the employees who are here from his days. For example, in 36 years of existence, GCMMF has seen only 3 Managing Directors! We did not join Amul to make a career – the day we joined Amul our career was made! Dr. Kurien was not among the modern day Management graduates who jump from job to job searching for that elusive thing they call job satisfaction. But here at Amul it is available in plenty and so we are here for 25, 30, 40 years!

Q. Amul had introduced a number of products which were not part of its core competence – eg. Fast Foods. How is this section of products doing within the Amul range? Finally, what further product



innovations can the consumer expect from Amul in the coming months?

As a rule, we work on a 10 year platform. All our business plans are dovetailed in consumer research. No product is introduced unless it is backed by consumer research. We establish the need for the product and then go about introducing it. We take our time introducing it. Many times we succeed, and more than that we fail, too. Some of our products may have failed to create waves in the market. So long as we are able to meet the objectives of consumer satisfaction, we feel it is worth the effort.

Q. Amul has been willy nilly in a few controversies in the past with sister organizations and the parent NDDB. Do you feel this could have any diluting effect on the co-operative movement in milk

production in India?

Much has been made of small matters here and there, yet, the fact remains that we are all working towards the common goal of bringing prosperity in our area of operation. Yes, sometimes, our ways are different but the destination is the same. While we may believe that the farmer is supreme and calls the shots in the supply chain, the other organizations may not believe so. I cannot have a complaint on that account. In fact, when I cannot have reservations multinational companies and their ways, how can I take exception to

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my own sister organizations especially when we have identical missions?

AMUL FACTFILE

Members : 13 district cooperative

milk producers' Union

No. of Producer Members : 2.79 million
No. of Village Societies : 13,328

Total Milk handling capacity : 11.22 million litres per day

Milk collection (Total - 2008-09) : 3.05 billion litres
Milk collection (Daily Average 2008-09) : 8.4 million litres
Milk Drying Capacity : 626 Mts. per day
Cattlefeed manufacturing Capacity : 3500 Mts per day

Sales Turnover	Rs (million)	US \$ (in million)
1994-95	11140	355
1995-96	13790	400
1996-97	15540	450
1997-98	18840	455
1998-99	22192	493
1999-00	22185	493
2000-01	22588	500
2001-02	23365	500
2002-03	27457	575
2003-04	28941	616
2004-05	29225	672
2005-06	37736	850
2006-07	42778	1050
2007-08	52554	1325
2008-09	67113	1504

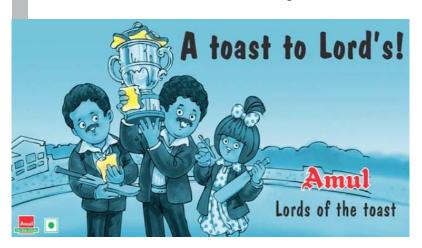


V. Kurien : Anand's Man Of Destiny

P. G. Vijairaghavan



As the fledgeling Kaira Milk co-operative was struggling to get on its feet, in early 1949, a strapping young Mechanical Engineer, educated at Michigan University on a scholarship of the Government of India, was posted to Anand as Dairy Engineer, much to his discomfiture. Seriously contemplating an early exit from this small and dusty place after the bustle of New York City, but for the fact of his having studied abroad at Government expense, the man happened to meet Tribhuvandas Patel, a loyal follower of Sardar Vallabhbhai Patel and Morarji Desai. Soon, however, Tribhuvandas exercised all his persuasive charm on the young man, enough to ensure he did not further his stated objective of leaving Anand at the earliest opportunity. As it happened, though, the young man, far from leaving Anand to its fate, actually moulded it in such a way as to become its darling son, having virtually played God to the thousands of poor farmers of the District, and Gujarat and eventually changing the country's dairy landscape irrevocably. So much so that for the farming community in Gujarat he has almost become a synonym for God! The young man who stepped on Anand's soil in 1949 was none other than Verghese Kurien.

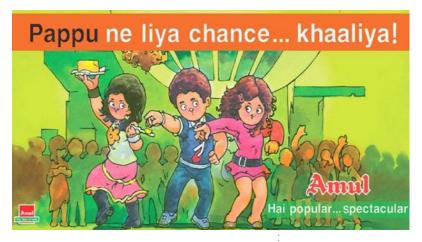


But the exploitation of the farming community at the hands of the pre-eminent brand of the day, Polson, disturbed him no end, and with the guiding light of Tribhuvandas, Kurien took up the task of setting things right in Anand, and ensuring the exit of the Polson brand from, not just Anand, but India. The rest is history, as the transparent dealings of one co-operative gave birth to one more in a neighbouring village, until the whole of Gujarat was enveloped in a movement that no power on earth could stop. Neither the competition, nor the bureaucracy were able to stem the tide of co-operation that seemed to flow from Anand into all the other districts under the ever pro-active leadership of Kurien. All because the destiny was being dictated by the million strong members of the hundreds of Village level societies in the State.

Kurien was no pushover when it came to facing the nay sayers — be it in the multinational companies that were competing with Amul, or the politicians or bureaucrats of Delhi. He had the courage of character to call a spade a spade, irrespective of who he spoke to. In 1965, when the Prime Minister of India, Lal Bahadur Shastri, visited Anand to inaugurate a dairy plant, and requested Kurien to replicate the Anand experiment in the rest of the country, he agreed, but not before setting his own conditions before him. He would set up the headquarters of the national organization - the National Dairy Development Board, at Anand, not Delhi, because, he wanted to be as far away as possible from the corrupting influence of power, and, he would continue to be an employee of the Gujarat Co-operative Milk Marketing Federation, of which he was Managing Director. Of course, Shastri agreed, and once again, Kurien created history, not just in India, but in the world, by leading Operation Flood to the top of the international value chain and India became the world's largest producer of milk, from a milk starved nation just 20 years earlier!

Kurien was awarded the Padma Shri by the Government of India for his services to the dairy industry, but enduring has been the esteem in which the farmers of Gujarat hold him, which is evident whenever one talks





to the local farmer in Anand, many consider him God for he changed their lives for the better; and indeed taught them to take their destiny in their own hands and transformed it from being one of struggle and exploitation to one of dignity and satisfaction.

Dr. Kurien was not a product of any Management School, it may not be too wrong to say he was cynical of the utility of Management school products in promoting Amul. He therefore set up the Institute of Rural Management (IRMA) on a 60 acre campus at Anand which is today a major provider of managerial and research talent for the dairy industry in India. In fact, as B. M. Vyas, mentions in his interview, Amul depends heavily on IRMA for its requirements, and IRMA has never fallen short of its expectations. IRMA and NDDB, along with Amul, have established Kurien as not just another dairy entrepreneur, but a creator of institutions which far outlive the entrepreneur; in the process Kurien, the entrepreneur has been immortalized by Kurien the institution builder.

His memoirs, "I Too Had A Dream" has graphically captured the persona of

V.Kurien and recounts his uncompromising nature - be it the principles for which he has stood at Anand; or his deep sense of patriotism and love for the country and its people.

We reproduce an excerpt from his address at a Seminar in 2001 that more than explains his passion for brand Amul:

What began way back in 1946 was really an effort to carve out a truly Indian company

that would have the involvement of millions of Indians and place direct control in the hands of the farmers. It was a mandate for producing, owning and marketing and above all, building your own truly Indian Brand. And successfully at that.

You will appreciate that when the lives of lakhs of farmers depend on a brand, and when your history is grounded in the Independence movement, when not only competitors but even your own government questions you, then your

resolve to be the best is like the finest steel.

Amul, therefore, is a brand with a difference. That difference manifests itself in a larger than life purpose. The purpose – freedom to farmers by giving total control over procurement, production and marketing. Amul and all other milk products produced by cooperatives were born in struggle. It was the producers' struggle for command over the resources that they create, a struggle to obtain equitable returns and a struggle for liberation from dependence on middlemen. It was a struggle against exploitation. A refusal to be cowed down in the face of what others believed to be the impossible.

Amul's birth was thus a harbinger of the economic independence of our farmer brethren. Amul's mission was the development of farmers, nutrition to the nation, and heart in heart, the real development of India.

Given India's vast geographical spread, the country had very few dairy plants at the time of independence. As the then Prime Minister Lal Bahadur Shastri had said, 'One Amul is not sufficient. Many Amuls are the need of the hour.' This led to replication of the Anand pattern through the Operation Flood programme which has, amongst others, three major achievements to its credit, namely: making dairying India's largest self-sustainable rural employment programme, bringing India close to self-sufficiency in milk production, and trebling the nation's milk production within a span of two and a half decades to make India the world's largest milk producer.

The difference between perseverance and obstinacy is that one often comes from a strong will, and the other from a strong won't.

Henry Ward Beecher

FOOD PROCESSING INDUSTRY

P. G. Vijairaghavan

It is an industry segment that is almost tucked away somewhere in the back of the economy's beyond. What one notices about the industry at first glance is that it is as unorganised as it can possibly be - in fact, Tapasya could not find a representative trade body to speak about the industry's cares and concerns, which one found quite strange – considering it is a segment that contributes almost 10% of our GDP and has the potential to do a lot more. This reminds one of the saying that an elephant is never aware of its own strengths, until it is forced to defend itself!

Every survey that we referred to was unequivocal that it is one of the fastest growing segments of the economy with domestic demand and potential exports likely to peak in the coming decade. The industry growth has been rapid and the reasons are not far to seek. The growing middle class segment in the country, expected to swell at over 300% upto 2015, the almost exponential growth of working couples and nuclear families that leave little time for the employed woman to be able to cook at home during work days... In fact, the Economic Times recently had this to say about the industry:

Investment opportunities in the Indian food industry are set to shoot up by a huge 42.5% now to US\$ 181 billion in 2015 and to US\$ 318 billion by 2020, a FICCI-E&Y study on India's food industry has said. The study Flavours of Incredible India Opportunities in the Food Industry has noted that the food industry accounts for a big 30% of the consumers wallet.

Infact, 70% of the current food spend by the

Indian consumer is on agri produce, the study says. Two thirds of this is sepnt on primary and secondary procressed products. Among agri products, Fruits and Vegetables (F&V) is the largest consumption category and accoutns for over 50% fo the total consumption. Milk, milk products, meat and meat products account for the remaining 30% spend and have been growing at a faster rate as compared to agri products.

The key drivers of the sector have been identified as an increase in per capita disposable income by 8% over the last five years, leading in turn to an additional per capita spend on food by 20% in the same period. The current per capita invome on food is 1/6th that of China and 1/16th that of the USA; growth in the size fo the middle class to av ery rich class that is projected to increase at more than 300% between 2005 and 2015 even as the youth population catapults annually by 11%. This will lead to an increasing demand for food products to meet demands of convenience, health, variety and changing palate, the study says.

The study said the growth in food sector would help in re-organising the supply chain to enable reduction of post harvest losses, especially in fruits and vegetables which now amounts up to 25 per cent by value. "This would mean an opportunity to set up warehouses, cold stores and logistics infrastructure," it said.

The sector would also create a base for exports of value added food products with current shipments of tertiary food products only at 9 per cent of overall food exports, it said, adding that launch of new products

Winter 2009 **bapasya**pasya

and increasing penetration of processed foods has a huge investment potential.

Disposable incomes have grown sharply in the last decade among Indians bringing with it an understandable demand for ready to eat foods with women no longer confined to the kitchen as before; not to mention the tremendous influence of children on the market, in this product segment, again because of the growing practice of their not being able to access home cooked food for the same reasons as above. Add to this, the nuclear families that have become the norm of late, which precludes the possibility of the senior ladies in the house minding the hearth when the younger ones are at work elsewhere! Some of the best brands in the prepacked foods are home grown units set up long ago – like MTR which initially operated a popular eating joint in Bangalore, graduating to pre-processed foods after the business was sold to the Norwegian company, Orkla in 2007. Or GITS Foods, or Rasna, another prominent player in this field.

This special issue takes a look at the broad picture of food processing through the eyes of various agencies in the field – the Government, the trade body, the entrepreneur, the researcher - in order to get a view of how well we are getting equipped to play the markets – both Indian and overseas, considering that the precooked, packaged food business is only just getting to the starter's line in the race for world-wide presence.

But there are no prizes for identifying the home brewn player in the food processing sector, having been in the arena since the early independence days and having given the multinationals a run for their money

during its entire existence, while at the same time being an example of how an organization can be the darling of the market, while being just and fair to all the stakeholders – the vendors, consumers, employees and the owners! Tough job but admirable, no less.

We are, of course, speaking of Amul the Indian food brand that has virtually straddled the Dairy market for over 60 years like a colossus giving the multinational brands a creamy pasting they never would have expected from a desi lightweight like the delicious, mischievous little moppet! All because one man made it his life's mission to stand up for the producer, the consumer, the employee and everything Indian!

The issue does not profess to analyse the food processing industry in its entirety in terms of each segment; we would have to devote a couple of issues for it. Yet, with our limited resource of time and material, we have attempted to bring together the best of minds in the country- from Government to industry, known for their experience and knowledge of the industry to contribute their effort. We trust this will open up vistas of curiosity among the readers to know more on the subject and, if possible, to be part of the industry that is waiting to be explored!

About the time we can make ends meet, somebody moves the ends.

- Herbert Hoover



Indian Food Processing Sector: Building Bridges between Industry and Agriculture

Ms. Vinod Kotwal, Director,
Ministry of Food Processing Industries,

Govt. of India



Ms Vinod Kotwal, Director, Ministry of Food Processing Industries is a 1994 batch officer of IP&TAFS, Group 'A' Civil service. Her academic qualifications include MSc (Botany) and MBA (Finance) apart from doing a course on Leadership from the University of Bradford, UK under the Chevening Scholarship.

Before joining Ministry of Food Processing Industries in July 2008, she has had a rich and varied work experience in the field of telecommunication in MTNL, Delhi and Department of Telecommunication encompassing the areas of revenue assurance and revenue management, Information Technology, Budgeting and planning, financial management and personnel management including human resource development. The posting in the present Ministry has given her in an opportunity to work in an exciting and evolving area of food processing in the country.

Her hobbies include reading, listening to western country music and appreciating art particularly paintings.

Agriculture continues to play a pivotal role in the Indian economy even though its share has been declining over the years. Agriculture (including allied activities) accounted for 17.8 per cent of the Gross Domestic Product in 2007-08 as compared to 21.7 per cent in 2003-04. Though the share of agriculture in GDP has been declining over the years, its role remains critical as it accounts for about 52 per cent of the employment in the country.

While the average growth rate of agriculture and allied sectors over three years (2005-06 to 2007-08) has been over 4.9 per cent, its growth declined to 1.6 per cent in 2008-09. Crop productivity remains a key issue as the compound growth rate of yield of major food crops is showing declining trend. Furthermore, contribution of this sector in gross capital formation is also witnessing downward trend, which is evident from the fact that it fell from 11.7% in 2001-02 to 7% in 2006-07. Thus, slowdown in investment and declining productivity raises serious concern about the economic sustainability of millions of farmers. It is estimated that if the country has to maintain a GDP growth rate of over 8%, the agricultural sector has to grow at the rate of at least 4%.

In view of above, food processing industry in India is increasingly seen as a potential source for driving rural economy as it brings synergy between industry and agriculture. A developed food processing industry is expected to lead to increase in farm gate prices translating into increased rural incomes, reduced wastages, ensure value addition, promote crop diversification, generate employment opportunities as well as export earnings.

Advantage India

With access to a large natural resource base of total arable area of around 180 million hectares and diverse agro-climatic zones, 15 million hectares of freshwater reservoirs and 8,041 kilometers of coastline India has all the favourable conditions for ample food



production as is reflected in the table given below:

<u>Category</u>	<u>Production (2007-08)</u>
Food Grains	230 million tonnes
Fruits	63 million tonnes
Vegetables	125 million tonnes
Milk	105 million tonnes
Spices	4 million tonnes
Fish	7 million tonnes
Poultry Population	489 million
Live stock Population	on 485 million

Despite of huge production every year, processing is quite low i.e. around 2.20 % in case of fruits & vegetables, 35% in milk, 21% in meat, 6% in poultry produce and 26% in marine products. Value addition is around 26%. With such a large and diversified production base coupled with low manpower cost and modern technology, the Indian food processing sector is poised for growth.

The Indian food market in 2006-07 has been estimated at around US\$ 200 billion¹ and is

slated to reach US\$ 310 billion² in 2015. Food retail, dominated by around 5 million retail outlets in India, is also likely to grow from around US\$ 75 billion in 2007-08 to US\$ 150 billion³ by 2025. In comparison, the world food industry, which stands at \$175 billion, is expected to grow up to \$400 billion by 2025.

Food Processing Classified

Food processing industry is one of the largest industry in India and is ranked 5th in terms of production, consumption and export. The Indian food industry can been classified into three broad categories:

- 1. Agri-products: covering grains and cereals, oils and oilseeds, fruits and vegetables, and beverages
- 2. Milk and milk products
- 3. Meat, poultry and marine products

These products are consumed through three levels of processing⁴, depending on the food category and the product as indicated below:

Growth of Food Processing sector

Market size of food processing sector has been estimated at US\$ 80 billion in 2006-07 and the sector grew at a rate of 13.1%⁵ in the same period. The importance of food processing sector can be gauged from the fact that the total deployment of the gross bank credit in the year 2006-07

	Food	d Processing	
	Primary Processed -basic	Processed -Secondary	Processed -tertiary
		Examples of Key products	3
Agri Products	Fruits and vegetables	Pulp, dried, preserved, paste, sliced etc.	Ketchup, jam, juices, pickles, candies, chips, etc.
	Grains and cereals	Rice puff, flour, malt, rawa etc.	Biscuits, noodles, flakes, cakes, namkeens, etc.
	Oil seeds	Oil cakes	Sunflower, mustard, soya, olive oil etc.
	Beverages	Powder, dust, leaf, etc	Tea bags, soft drinks, alcoholic beverages, etc.
Milk and Milk products	Milk	Khoya, cottages cheese, cream, etc.	Spreadable fats (butter and cheese), yoghurt
Meat and Marine products	Meat, poultry and marine products	Cut, fried, preserved, frozen, chilled, eggs	Preparation such as ready to eat meals



was around Rs. 43,000 Crore, which is almost 6% of the total gross credit deployment across all industry segments⁶. Moreover, the exports of processed food products have been increasing over the years and buffalo meat, dairy products, jiggery and confectionary were the major products shipped out of country.

The food and agro processing industry employed 16% of total workforce in the organized manufacturing sector in 2004-05 whereas it was 32% of the total workforce in the unorganized sector. It also has the potential to generate significant employment as the multiplier effect of investment in food processing industry is 2.5 times than in other industrial sectors. Even within food processing industry, the employment intensity is significantly higher in the unorganized sector as compared to the organized sector for the same level of investment.

Major Products exported from India 40.00 30.00 10.00

Growth drivers for industry

The spending on food and food products amounts to 21% of India's GDP and constitutes the 31% of the Indian c o n s u m e r ' s

spending, which is the largest portion. A number of socioeconomic factors are driving the growth in the sector:

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The importance of food processing sector can be gauged from the fact that the total deployment of the gross bank credit in the year 2006-07 was around Rs. 43,000 Crore, which is almost 6% of the total gross credit deployment across all industry segments.

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- Higher disposable income: High economic growth has led to increased disposable income for the Indian middle class, which is switching over to healthy and processed products. It is estimated that disposable income is set to rise at an average rate of 8.5% by 2015⁷. Also, the middle class is estimated to reach a size of 582 million from its current size of 50 million by 2015⁸.
- Shift in demographic profile: The median age of Indian population is 24 years and approximately 65% of Indian population is below 35 years of age. The large population of working age group forms a wider

consumer base for processed products.

- Increasing number of working women: The number of working women, as a percentage of the total female population, has grown from 12% in 1961 to close to 25% in 2005 resulting in demand for convenience food.
- Increasing incidence of lifestyle diseases: Diabetes, obesity, heart ailments and asthma are on an increase leading to demand for healthy products.
- Increased consumer awareness: International exposure, increased consumer awareness driven by media is promoting new product categories across urban and rural India.
- Emergence of organized food retail: It is estimated that the total food and grocery retail space will grow at a CAGR of 6% over 2006-2011, with the organized share likely to increase from less than 1% currently to 6-6.5%. This will translate into more business opportunity for processed products as well as provide forward linkage to the industry.

Opportunities

All the above changes are expected to create opportunities for the various stakeholders in the sector.

- Large and diversified production base: India ranks second in fruit as well as vegetable production in the world. In 2007-08, it occupied a share of 12% in the world's fruit production and around 13% in the world's vegetable production, which ensures round the year availability of abundant raw material for the food processing industry.
- Huge and growing consumer market: With a huge population of more than 1 billion and an evolving consuming class with a gradual shift towards processed food, India is a growing market for processed products.
- Enabling policy framework: To attract



investment in food processing sector, the government launched the scheme of Mega Food Parks and cold chain in the 11th five year plan. Various policy measures have also been initiated like Income Tax deduction of 100 % of profit for five years and 25 % of profit in the next five years in case of new agro processing industries set up to package and preserve fruits and vegetables; excise duty on meat, poultry and fish products has been reduced from 16% to 8 %, excise duty on dairy machinery has been fully waived off etc.

Status of Food Processing in the States

Andhra Pradesh is the leading state in India in terms of number of registered factories (6,402) in operation and second in terms of total output for food and agro processing Industry in India. Tamil Nadu is the second placed state in terms of number of factories (3,736) in operations and is ranked fifth in terms of the total output. Maharashtra is the third major state in terms of number of factories (2,238) in operations and leading in terms of total output. The average invested capital per registered factory for the food and processing industry was Rs. 3.3 Crore per factory in 2004-05. The average invested capital per registered factory was low in Andhra Pradesh and Tamil Nadu at Rs. 1.5 Crore and Rs. 1.7 Crore respectively. The average invested capital per registered factory was highest in the state of Uttar Pradesh at Rs. 8.2 Crore per factory followed by Maharashtra with average invested capital of Rs. 7.2 Crore per registered factory in 2004-0510

A large number of the processing – around 75%- units in the country fall in the MSME sector resulting in these being unable to exploit the advantages of economies of scale.

An Enabling Policy Structure for Food Processing Sector

The efforts of the Ministry of Food Processing Industries towards creation of an enabling policy structure for food

processing sector marked a significant milestone preparation of the Vision Document in 2005. The Vision 2015 was a comprehensive document which reflected a clear desire on the part of the Ministry to take a great leap forward for the fledgling food processing sector in India. This Report thus set some challenging targets for the sector over next 10 years and laid a road map too.

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The efforts of the Ministry of Food Processing Industries towards creation of an enabling policy structure for food processing sector marked a significant milestone with preparation of the Vision Document in 2005.

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Vision 2015 set the target of trebling the size of the processed food sector by 2015 and thereby increasing (a) level of processing of perishables from 6% to 20 %, (b) value addition from 20% to 35 % and (c) share in global food trade from 1.5% to 3%.

The policy structure of the Ministry is driven by the belief that a robust food processing sector would not only enrich farmers by providing them better prices but also lead to greater farm productivity by attracting more investments thus addressing the issue of food security and "food processing for food security" can be the new mantra for growth.

References

- 1 Food Processing: Market and opportunities by KPMG
- 2 McKinsey & Company
- 3 Study by McKinsey and Company
- 4 An appetite for growth: Opportunities in the Indian Food Industry (Study by Ernst & Young)
- 5 Ministry of Food Processing Industries
- 6 Economic Survey of India- 2007-08
- 7 E&Y Research, 2008
- 8 NCAER Research
- 9 Retail Edelweiss report, 2008

10 NMCC Competitiveness Report on Indian Manufacturing Industry, 2009

(The above are the author's personal views)

A free lunch is only found in mousetraps.

- John Capozzi



Packaging: Delivering Good Food, Looking Good

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When we enter a supermarket or even a neighborhood grocery store, what we "see" there in fact is the packages - a massed display of packages - and not the actual products that we intend to buy and use. And we hardly realize it. Packaging is so much taken for granted that it has come to represent the product that it contains and has become an integral part of the product. The days of seeing, feeling, smelling and tasting the product before buying, as was the norm not too long ago, are gone. Walking along the aisles of shelves, we try to pick up familiar products that we identify through the visual elements of the package design, or the unfamiliar ones again through the visual elements of the package design. In the former case, the package would have served the simple function of identifying itself, while in the latter, it would have communicated messages in order to motivate the buyer and effect a sale. Package has come a long way from performing the simple task of containing a product as was the case in early times to the present day's job of selling the product that it contains. In fact, a package does



much more.

Mass production and distribution of goods

Development of mass production techniques resulted in availability of cheaper goods that needed to be distributed on a mass scale over geographic regions beyond local markets. Globalization has now made it possible for goods produced in one corner of the globe to be available for use in a country situated in another corner. Foods, despite their perishable nature, are no exception. Modern food preservation and packaging technologies make foods available thousands of kilometers away from the places of their origin and weeks, months and even years beyond the day of their production.

In industralized societies, food industry is the largest user of packaging materials. Packaging forms an integral part of food manufacture providing the link between the processor and consumer. In fact, it plays a dominant role in the total manufacturing activity and in marketing. With packaging lines usually occupying 50% of the shopfloor area, packaging and related operations engage about 60% of the work force of Indian food industry.

Indian scenario

The impetus to food processing industry in India came in the 1970's and 80's, resulting in the proliferation of packaged foods and changing the face of the neighbourhood grocery store. Commodities stocked in bulk, weighed or measured on the spot and sold started giving way to unit packs attractively packaged and branded by the manufacturer. The post-liberalisation period of 1990's has seen the most significant development of food industry in India, facilitated by opening up of the economy that encouraged foreign direct investment, eased import restrictions on materials and machinery, which led to setting up of state-of-art packaging and processing industries. This period also was

a witness to the growth of organized retailing which in turn provided increased market access to the manufacturing industry, especially the packaged foods. The Indian packaging market is currently worth Rs. 85,000 crores and is growing at a rate of 15 per cent per annum, more than twice the global average.

Understanding packaging

Packaging, despite its key role in preserving food, preventing wastages and facilitating distribution and marketing of food, is sometimes regarded as a "necessary evil", an unnecessary cost, a drain on resources and an

environmental menace. Such a view, undoubtedly an uninformed one, arose since packages are ultimately disposed off while using the product and one is hardly aware of the crucial role that a package plays in delivering the product. In order to appreciate the place of packaging in the economy, one should try to understand what it is. A simple definition of packaging as "a means of ensuring safe delivery of a product to the ultimate consumer in sound condition at minimum cost", shows how it is closely linked to marketing.

The packaging system

Packaging is the key link in the supply chain that delivers wholesome, safe, nutritious, convenient and quality foods to the consumer. Packaging functions at several levels. At the most basic level — occasionally it is the most sophisticated one — is the primary or unit package, which is in direct contact with the product. It provides the initial and usually the major protective barrier. It is frequently the primary package, which the consumer "sees" and purchases at retail outlets and uses. Other levels of packaging that include secondary package, e.g., a corrugated fibre-board box that carries a number of primary packages, and a tertiary package such as stretch-wrapped pallet of corrugated boxes, perform mainly the distribution function. In inter-state and international trade, a quaternary package is frequently used to facilitate the handling of tertiary packages. This is generally a rectangular metal container of 8 x 8 ft crosssection and up to 40 ft in length which can hold many pallets and is intermodal in nature - it can be transferred to or from

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The Indian packaging market is currently worth Rs. 85,000 crores and is growing at a rate of 15 per cent per annum, more than twice the global average.

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ships, trains, and flatbed trucks, by giant cranes. Certain containers can also have their temperature, humidity and gas atmosphere controlled and this is necessary in particular situations such as the transportation of frozen foods or fresh fruits and vegetables.

Packaging functions

A total packaging system performs the four major functions of containment, protection, providing convenience and communication. Packaging has evolved from a relatively small range of heavy, rigid containers made of wood, glass and steel to a broad array of rigid, semi-rigid and flexible packaging options increasingly made from specialised lightweight materials like plastics, metalized plastics, paper and paperboard, aluminium foil and their combinations.

Containment, the most basic function of packaging is so obvious that it is usually overlooked. With the exception of

> large, discrete products, all other products — whether a litre of liquid milk or a kg of wheat flour — must be contained as a single unit before they are moved from place to place.

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The modern methods of consumer marketing would fail without a package communicating various messages to the ultimate consumer.

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The function of protection is often regarded as the most important since the product has to be protected from outside environmental effects, be they water, water vapour, oxygen, odours, microorganisms, dust, shocks, vibrations, stack loads, etc. In case of food products, protection afforded by the package is often a part of the preservation process. For example, aseptically packaged juice in a Tetrapak carton cannot retain its

shelf life if the integrity of the package is breached.

Changing demographic trends such as urbanization, increasing incomes, more women in the workforce, nuclear families and single-person households have brought in their wake an increasing demand for convenience in consumer products — ready-to-cook and ready-to-eat foods and readyto-drink beverages, foods and drinks that can be directly consumed from the packages, dispensers that facilitate use of products like sauces, etc. The convenience function designed to be performed by the package allows products to be used conveniently.

Another aspect of package convenience is the apportionment function. The package containing the net quantity of the product reduces the output from industrial production to manageable, desirable consumer size, e.g., 1 litre of sunflower oil, 25 g portion pack of butter, etc. Put simply, the large scale production of products with its associated economies of scale could not have succeeded without the apportionment function of packaging to deliver product quantities convenient to use by the consumer. Besides convenient sizes, the relative proportions of the dimensions of the packages are designed to achieve efficiency in building into secondary and tertiary packages, such as corrugated cases and pallets and, occasionally, even the quaternary package of intermodal container. With optimal dimensions in primary and secondary packages, maximum space available on pallets and in intermodal containers, which are of standard sizes, can be utilized. As a consequence of this function, material handling is optimized since only a minimal number of discrete packages or loads need to be handled at any stage of distribution of goods.

Finally, packaging plays an important role in marketing products through the communication function. The modern methods of consumer marketing would fail without a package communicating various messages to the ultimate consumer. The package through its distinct form, style and surface graphics, identifies the brand, the category and the product features and even motivates the buyer in a supermarket environment, which functions on selfservice basis without the help of a salesman to promote products. It is no exaggeration that a package has been dubbed the 'silent salesman'. Besides, modern retailing extensively makes use of barcodes printed on the packages through scanning at checkout counters for efficient store operations.

A knowledge of these functions of

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packaging and the ambient, physical and human environments in which packaging has to perform will help in the development of real, cost-effective optimized packaging design. Recent developments in materials and technologies have made a variety of food products in packed form available off the shelf with fresh-like quality and ultimate convenience. Also, increasing demands on shelf-life extension, product safety, consumer convenience, retail operations, cost-effectiveness and environmental issues are the lateral driving forces in shaping the current food packaging practices.

Strengthening barrier function of the package

One of the most important task of packaging is to achieve the necessary barrier effect for the desired shelf life of a food product. With the emergence of plastics as versatile cost-effective packaging materials, the need to find practical solutions to restrict their permeability to gases, especially oxygen, carbon dioxide, flavours and water vapour has become all the more significant. Along with coextrusions for films, bottles and trays, newer coatings, metallizations, fillers, and nanomaterial based inclusions that give tortuous paths to the passage of gases, are being developed. Recent plastic beverage bottle innovations include the development of cost-effective PET bottles in smaller sizes, the blending of PET with oxygen-scavenging materials and the development of aseptic filling for dairy beverages in plastic bottles. External barrier coating of epoxyamine or silica and thin carbon coating on inner surface on the PET bottle are offering longer shelf life for beer and carbonated soft drinks with prolonged carbon dioxide retention.

Active packaging to extend shelf life

Modified Atmosphere Packaging (MAP) has come into use during recent years for extending the shelf life of fresh fruit and vegetable produce and their prepared items especially in markets that have a well established and controlled cold chain and that can sustain a high priced quality product. Current applications of MAP also include whole or cut green salads, fresh meat, confectioneries, bakery products, sandwiches and convenience foods like pizza and ready meals. The application of novel high oxygen MAP is a new approach for the retailing of fresh prepared produce items and is capable of overcoming the many inherent shortcomings of current industry-standard low oxygen MAP.

Recent research efforts are focused on development of active

and intelligent packaging. Active packaging changes the condition of the packed food to extend shelf life or to improve safety or sensory properties, while maintaining the quality of the packaged food. Food condition here includes various aspects that may play a role in determining the shelf life of packaged foods, such as physiological processes (e.g., respiration of fresh fruits and vegetables), chemical processes (e.g., lipid oxidation), physical processes (e.g., staling of bread, dehydration), microbiological aspects (e.g., spoilage by microorganisms) and infestation (e.g., by insects). Intelligent packaging systems monitor the condition of packaged foods to give information about the quality of the packaged food during transport and storage. They can be external (attached outside the package, timetemperature indicators) or internal (oxygen, carbon dioxide, microbial growth indicators).

Aseptic packaging - a revolution in delivery of fluid foods

Aseptic packaging has revolutionized the way fluid foods are delivered — cartoned fruit juices, milk and other dairy beverages, soya drinks, tomato puree, soups, puddings, RTD tea, wine and now low-acid and particulate foods. Recent aseptic packaging innovations include injection molded reclosable plastic closures, PET bottles for still beverages and HDPE bottles for refrigerated still beverages, flexible aseptic pouch, octagonal and wedge shaped cartons in both paperboard / aluminium / plastic and transparent silicacoated PET lamination, thermoform / fill / seal systems for barrier plastic cups with heat-seal flexible closures and snapon plastic overcaps and vertical form / fill / seal aseptic stick pack machine for tubular packages.

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Intelligent packaging systems monitor the condition of packaged foods to give information about the quality of the packaged food during transport and storage.

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A relatively newer concept of Extended Shelf Life (ESL), in which products are not necessarily processed under aseptic conditions to achieve sterile product and package structures are treated to approach but not necessarily achieve sterility, has come into use for many liquid products. Ultra-clean packaging conditions and chilled distribution are generally used to deliver a superior-quality product with extended shelf life.

A fallout of the aseptic tetrabrick package is the retortable carton that is likely to compete with the retort pouch and tray for ready-to-eat foods. Its main advantage compared to retort pouch is the fast filling speeds of 400 per min, which is comparable to conventional metal can lines.

Indian successes despite constraints

Availability of food in sufficient quantities to the burgeoning population is a major issue in a country like India, where nearly a third of the population lives below the poverty line. Though constant efforts are being made to increase food production, we have to contend with high levels of food wastages resulting from unscientific or inefficient storage practices and inadequate use of preservation and packaging technologies. The view that packaging is an unnecessary cost arose due to ignorance of the crucial role that a package plays in protecting and delivering the product.

India, in fact, is a pioneer in evolving cost-effective packaging systems that cannot be found in markets of developed countries. Flexible pouches for milk and edible oil are two shining examples. Spice powders, instant mixes, instant

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noodles, biscuits, confectionery, coffee, tea and health beverages are some of the major food categories, which have now come to occupy large amounts of shelf space in super markets owing to the use of functional and economical packaging. Recent market successes of packaged atta, cartoned fruit juices and ready-to-eat foods in retort pouches point to the consumer trends and increasing appreciation of value addition through packaging.

Organized retail and packaging

The present "organised retail boom" in India, is resulting in

upgradation of technologies and practices along the entire value chain of production, packaging and distribution of food products. Self service being the governing paradigm of organized retailing, packaging has become the focal point of marketing and selling. It has become imperative for food manufacturers to focus on shelf presence, product differentiation and value proposition achieved through innovative product-packaging developments.

Packaging and the environment

Proliferation of packaging is being blamed for the environmental pollution that it supposedly causes. Considered wonder materials not too long ago, plastics that constitute about 50% of packaging, particularly are getting bad publicity for non-biodegradable their nature. Internationally, efforts are on to move towards sustainable packaging – wherein all packaging is sourced responsibly, designed to be effective and safe throughout its life cycle, meets market criteria for performance and cost, is made entirely using renewable energy and once used, is recycled efficiently to provide a valuable resource for subsequent generations - a true "cradle to cradle system".

With greenhouse gas emissions getting to the top of the environmental agenda, experts are looking at the total carbon footprint that a package leaves throughout its life cycle. Seen from this perspective, plastics are no more considered as less ecofriendly than glass, paper and metal packaging. That is something that India can cheer about since plastics provide maximum functionality at lowest cost when it comes to food packaging.

A friend in need is a friend to be avoided.

- Lord Samuel



India is known for its diverse agro-climatic conditions ranging from arid deserts to humid tropical regions thereby supporting a multitude of crops. We have moved from being a food deficit country to a food surplus country. India is ranked amongst the top three producers of fruits and vegetables however, as a processor it is in the bottom three. The food industry constitutes the fastest growing industrial sector in India perhaps as a result of population outbreak. Considering current Global market trends, open policies of Government of India and new food law, the Indian food processing industry needs to gear up for forthcoming challenges. The Farm-to-Table concept of food starts from good agricultural practices. Although food industry has grown, the projected growth of the decade has not been achieved. This may be attributed to the fact that agriculture is not viewed as an 'industry' in this country. In spite of being an agriculture based economy, Indian agriculture has not developed into a lucrative industry due to several limitations. Inadequate education, tendency to use excess chemical fertilizers and pesticides, small lands owned by large number of farmers, lack of mechanization, and dependence on rain water lead to lesser productivity of the grown crops. Estimates indicate that unless a farmer makes Rs. 100, 000 net profit per acre per year, it cannot be called an Agro industry. In the present situation this figure is around 40,000 for most of the crops.

The food processing industry may be broadly classified as Dairy, Fruits &Vegetables, Bakery, Beverages, Snacks and others. The total share occupied by each of these industries has been illustrated in Pie Chart 1.

As per the reports of the Ministry of Food Processing, food processing industry in India is growing at 13.7% even in the midst of global economic meltdown, the time has come for the food technology revolution in our country after the boom in IT and

Challenges in Indian Food Processing Industry

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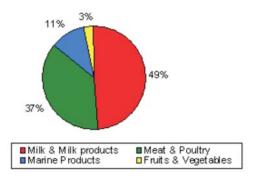


Dr. Smita Lele is currently Heading the Food Engg. & Tech. Dept. of the Institute of Chemical Technology (formerly UDCT), Mumbai. After graduating in Chemical Engineering from then UDCT in 1977, she joined as the First woman engineer in Hindustan Lever Research Centre. Later she completed Masters and Doctorate Degrees and took up academics as a long term career option. She has been consultant to Tetra Pak, worked at Pittsburgh University as visiting researcher, has guided over 50 Masters and 20 PhD students and published 40 research papers in peer reviewed international journals. Currently she is Vice President of the Association of Food Scientists and Tech. (AFST), Mumbai Chapter and has several awards and accolades to her credit including Fellow of the Maharashtra Academy of Sciences, "Hari Om Ashram Prerit Shri. S.S.Bhatnagar Research Award, Savitribai Phule-Outstanding Woman Achievement Award etc. This outstanding personality with an ability to maintain career graph of excellence in academics, research and industry along with balancing domestic responsibilities is a role model for many a young career woman.



Pie Chart 1 –

Market share of various food industries



biotechnology. The Ministry has announced 100 steps in 100 days. Some of the long term initiatives are :

Key areas of action during 2009-2014

- · Manpower capacity building
- Infrastructure development with focus on rural areas
- Fiscal incentives to achieve exponential growth
- Making available process able quality of raw material
- · Setting the agenda for research and development
- Launching a nationwide campaign to address safety and quality issues

Dairy and Bakery are well established sectors for several decades, both as organized and unorganized. Fish, meat and poultry are growing at fast rate for domestic and export market as well. The real potential lies in the growth of Fruits and Vegetables (F&V). The traditional Indian food industry has grown from Pickles and Papads to global success stories of Indian snacks like Bhujia and Farsan. Products such as pickles, papads, bhujias are basically shelf stable with low moisture content hence in this case the major challenges were mechanization, packaging and of course, effective marketing. On the other hand, for processing fruits and vegetables (high moisture) products, appropriate technology for food preservation is also an important challenge. The focus of well established products such as jam-jelly-ketchup needs to be shifted to novel and more indigenous products from fruits and vegetables.

Indian dairy industry

India is world's largest consumer of dairy products utilizing 100% of its own produce. The vegetarian population in India accepts milk as the only consumable form of animal protein hence adding to the demands. Indian dairy industry has gradually undergone a change to suit the ever-changing consumer needs. The focus of the dairy industry has shifted

from milk alone to other value added dairy products. The western yoghurt was customized to suit the Indian taste and the traditional dahi was thus introduced in the processed form. Further, processed products like lassi, chaas and flavoured milk have witnessed a nationwide acceptance. The untapped potential of this sector is immense and can be fully realized by adopting newer technologies.

Table 1 gives an over view of various processing technologies and Indian context of conventional and new technologies for food processing.

(See table on the next page)

Unavailability of freshly grown fruits and vegetables throughout the year leaves foreign consumers with little choice thereby forcing them to accept semi and fully processed foods in their meals.Consumers in general favor mildly preserved convenience foods that possess high degree of freshness. In a country like India having a supply of food crops through out the year the consumer mindset plays an important role. The products cooked regularly at home by grandma that involved tedious methods have already captured the market as ready-made food. For example puran poli and modak (from Maharashtra) as homemade fresh ready to eat (RTE) products are seen at a number of small outlets of Mumbai and Pune. The success of two minute noodles has well demonstrated that the Indian woman has a preference towards ready to cook (RTC) rather than ready to eat products, the later being viewed as a stand-by, emergency arrangement. The conviction of an Indian housewife in her need to contribute to the food making process at home opens up a possibility for a range of semi processed products of Indian origin at organized and unorganized levels. Washed-cut vegetables (minimally processed), idli batter, pani puri chutney and wet curry masala are few examples that constitute the unorganized sector. Dehydrated branded items like Gulab



Table 1: Food products and processing techniques

Food products Milk Fruit juices, curries Gulab jamun mix, Idli mix, Dosa mix, Sambhar mix, Vada mix, Veg soup mix	Processing technique Pasteurization Canning / Retort processing Drying / Blending powders	Type of packaging Conventional techniques of processing Plastic bags, glass bottles, aseptic packs. Tins, cans, aseptic packs months spouches Poly packs, corrugated boxes and sachet, boxes and sachet, safer pro (low mo for a trop country)	rocessing Infrastructure for cold chain transport and storage required. Ambient storage. Six months shelf life. Energy intensive process. However, safer products (low moisture) for a tropical country like India.	Indian context Well developed. This sector is picking up. Need of processing facilities at the farm levels on small or medium scales and development of newer products Alternative techniques utilizing solar energy, more energy efficient designs for convective dryers, Products with value addition e.g. soups with Indian taste Need for marketing set up
		Newer techniques of processing	Sins	in small scale unorganized sector.
Cold sterilized Jams, Ready-to-eat meats, raw oysters etc.	High pressure processing	Shrink bags, film pouches	Capital intensive process. Energy efficient. Well developed technique in Japan, to some extent in Europe and USA.	Good potential for India as community service facility. Low energy and better product than hot processing.
Dairy products, cold sterilized, skim milk, cheese	Pulse electric / Infrared processing	Blister packs, sealed bottles.	Studies with limited commercial value	Future technology, more as R & D



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Packaging maintains the freshness of the food product, provides consumers with nutrition and constituent information along with enhancing its attraction quotient. It is said that people buy by seeing the food rather than reading the label.

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jamun mix, idli, dhokla mix, payasum mix made by organized sectors are well received.

Food processing machinery development

Machinery for processing of fruits like mango, dehulling of peas, dehusking of grains etc. are well established. Institutes like Central Food Technological Research Institute (CFTRI) have played a significant role in developing better machinery for Indian food processing industry, particularly in the southern part. Due to small capacity needs of the processor, indigenous fruit processing machinery is highly specific to one

kind of fruit. The imported machines for de-stoning, slicing, pulping are having several tons per day capacity and are more flexible for the raw material. Such machines are used only by large scale manufacturers. For RTC / RTE traditional food, diverse consuming patterns of Indians make it difficult and challenging to customize processing machinery. Consider for example RTE "Dal". North Indians prefer thick spicy dal fry where as south Indian Sambar has large chunks of vegetables. The making, filling and sealing are affected directly. A small scale retort processor will be able to handle these diverse products in the semi automatic plant; however his main constrain is economic viability. Yet another huge market is Chapati - mechanization in the form of pressing or sheeting the Chapati is successful. However, exact reproduction of roller pin action, intermediate folding or direct flame roasting are difficulties in the different types of chapaties raging from Ghadichee-folded, Fulka and Paratha style. Failure stories of big players are learning experiences.

Development of packaging

Growth and success of food processing industry lies in the hands of packaging perfection. Packaging industry acts as an efficient vehicle in delivering processed foods from the production unit to the consumer market. Packaging maintains the freshness of the food product, provides consumers with nutrition and constituent information along with enhancing its attraction quotient. It is said that people buy by seeing the food rather than reading the label. For wet processed foods, packaging is the heart of preservation. For dry products also, the sensory attributes such as

crispiness are the deciding factors and packaging is the essence of the product. As a rule of thumb, 15% of MRP is acceptable as the packaging cost. Till last century, in India, a good packaging was costing 20 to 35 % of the product cost due to unavailability of indigenous packaging material. In last decade, this industry has developed a range of new packaging materials, films, composites that has opened up several avenues. Local form fill seal (FFS) machines are affordable. Indian market has witnessed transformation in the looks and feel of packaged food. Take for example the largest selling biscuits. Glucose biscuits that were sold in two types - unit pack with double packaging or 6 kg (reused) tins with say 50 packs in wax paper wraps, are now completely replaced by unit packs of different sizes having a single polymer films with 100% moisture barrier. Higher priced biscuits are stacked in trays and packed. Thus both technology and economy has seen revolution.

Materials that have been conventionally used in food packaging include glass, metals like aluminum foils and laminates, paper and paperboards, and plastics. Additionally, a wider range of plastics have been introduced in both rigid and flexible forms. Contemporary food packages combine different materials to exploit each one's functional or aesthetic properties. Package design and assembly play a considerable role in determining the shelf life of a food product. The right choice of packaging material and technology sustains product superiority and freshness during its circulation and storage. Recently several novel food packaging concepts have been launched. The introduction of retail supermarkets and changes in distribution practices such as centralization of activities, newly emerging trends like internetshopping and globalization of markets have resulted in drastic changes in packaging applications for Indian Food industry. The current philosophy of packaging

Table 2 A: Food products and packaging materials

Products	Packaging Material	Technology
Pasteurized milk	LLDPE	Strong, tough, heat sealable and flexible
Sterilized liquid products (Milk, Juice etc.)	Aseptic, tetra packs	Multiple layers with sealable PE inside, aluminum for moisture barrier, paper for printability, external PE for water proofing
Snacks (Chips etc.)	Packets, Metalized polyester	Printability + moisture barrier
Jams, pickle refill packs	Stand pouches, HDPE	Tough, heat sealable
Gulkand, Chavanprash, Ayurvedic wet preparations etc.	(Virgin, food grade) PVC bottles	Chemically fully inert, printability, good moisture as well as light barrier (non transparent)
Amla and fruit candies etc, dry products	PET jars/ bottles	Transparent, separate paper / plastic labeling required Costly material.
Mineral water	PET bottles	Transparent, separate paper / plastic labeling required. Costly material.
RTE curries, meal etc.	Aluminum trays, retort pouches	Most costly, 25% cost loading on the final product
Gift wraps of chocolate, sweet meat, dry fruits, biscuits etc.	Bags in box with multiple packaging	Polymer bags, paper boxes, fancy material, cost of packaging could be as high as 70% of MRP.

emphasizes on holistic approach and innovations such as active packaging, modified and controlled atmosphere are implemented. Packaging and preservation indeed help in building brands and development of consumer preferences. WPO (World packaging organizations) has a slogan "Better Quality of life through better packaging" is indeed the Mantra in today's world. Tables 2 A and 2 B summariz broad applications of various packaging styles and materials popularly used in India and market share. Obviously, in the developed countries, since the MRP of the final commodity is much higher on the dollar scale, better packaging is used yet keeping the loading below15%.

Table 2 B: Indian packaging market share

Product	Value (Rs. Billion)
Flexible Packaging	32
Rigid plastics	28
Printed cartons	24
Glass bottles	16
Metal cans	11
Caps and closures	10
Labels	6
Others	21
Total	148

Potential for fruit and vegetables processing

As mentioned earlier India is amongst the highest producers of fruits and vegetables, China being number one.



Maharashtra, Andhra Pradesh and Tamil Nadu are the leading fruit producing States where as in the case of vegetables the highest production is in the north and eastern regions. According to the survey by the Ministry of Food Processing Industries (MOFPI), the installed capacity for F&V processing has doubled from 1.1 million tons in 2001 to 2.1 million tons in 2006. Yet there exists a large untapped potential. Well established products range in vegetable processing covers a range of tomato products, next being potato as chips. Semi-processed vegetables include frozen green peas as the main candidate. Mango is the most processed fruit and slice, pulp, jam, beverages and pickles from raw mango are the most popular types. Technoeconomic viability of a processing industry depends on the cost and capacity ratio. For high value products, particularly from fruits, several small and cottage level units from unorganized sector have survived although nor grown significantly. The vegetable processing industry suffers since it falls in low value low bulk bracket. The only way to make it grow is have specialty products such as spices and nutraceuticals or have clusters of farmers to grow a single crop and have high capacity of processing. The general scenario in India is small land holding by every family resulting in highly fragmented diversified food crops cultivated in the same geographical location leading to tremendous post harvest losses.

Rajeev Gandhi Commission for Sc. & Tech. (RGC), Govt. of Maharshtra, has taken initiative to encourage implementation of simple technology such as dehydration of vegetables and make value added products like vegetable soups that have good shelf life. The main hurdle still lies in developing a marketing chain for low value low bulk commodity. The concept is that dehydrated vegetables will be collected at a centralized place and converted to value added products after confirming the microbial safety and food quality of the dry vegetable flex. MOFPI has supported the concept of Food Park that will also help survive small scale industry since common infrastructure for raw material procurement and waste utilization will be available centrally. History shows that Amul as a cooperative activity has successfully solved a similar problem and made the dairy processing cost effective with a member partner having only 5 cattle heads in a house. Thousands of rural households engaged in milk production were organized in co-operative manner for mass procurement of milk, subsequent processing and marketing under this "out of the box" scheme. This spurred the White Revolution, which has made India the largest pouched milk brand in the world.

To summarize, the question is how the Indian Food Processing Industry, particularly Fruit and Vegetable processing, will grow as expected? In spite of huge funding by various Governmental and other organizations for R&D, subsidies for agriculture, educational drives, policies to support small and medium sector, entrepreneurship initiatives by the Ministry of Food Processing Industries (MOFPI), we as a country have not hit the bull's eye. It is time to introspect and ponder -- "Will Birbal's Khichadi be ever cooked?" A positive answer could be affirmed - yes it will if one prevents the heat dissipation! The hurdles enumerated in this discussion are to be overcome by us and the consumer plays a significant role. Only by developing successful sustainable business model for a low value low bulk commodity, we as a country will hit the bull's eye. We must act fast or the Indian market will be soon flooded with Papads and Chapatis with "Made in China" mark!

Always acknowledge a fault. This will throw those in authority off their guard and give you an opportunity to commit more.

- Mark Twain



The vision of Food Processing should be at one end to grow agriculture and at the second end to improve rural prosperity so that agriculture particularly value added agriculture and food processing can do for rural India what I.T. did for urban area.

There are certain changes which are happening with the boom in retail sector, customers changing preference for convenience, and all these would automatically add to the growth in value added agriculture sector, but what is required from Government is true role as a catalyst. The reforms should be based on six strategic directions, these are:

- Create "effective demand" by bringing about critical taxation interventions viz. 100% exemption from all taxes on processed food products to ensure that the cascading effect of tax which is almost 20% on consumer selling price of almost all food products if removed price come down which will create more demand. The revenue loss which would be compensated by boom which will happen in Rural sector and create infrastructure and employment which will improve life style of lot of rural India's poor people.
- Incentivise Technology, R&D and innovation. This incentive should be in the form of accelerated depreciation of 200% on R&D for new units in Food Processing and Packaging, as well as establishing more government-funded food research centers and improving education in the food processing.
- 3. Stimulate investments through the designing and implementation of appropriate financial interventions to respond to the unique characteristics and needs of the industry. The main reason for doing so is it is the known fact that this industry has gestation period longer than any other industry because

Food Processing Industry

Piruz Khambatta, Chairman, Rasna International, Ahmedabad



Leading India's largest and the most popular Soft Drink Concentrates brand is a mammoth task, and no one knows this better than Mr. Piruz Khambatta. Chairman and Managing Director of Rasna Pvt Ltd., Mr. Khambatta has come a long way over two decades, when he first got involved with the company at the age of eighteen. His association with Rasna Pvt. Ltd. as Chairman and Managing Director dates back to the year 1997 after he took over the helm of affairs.

Today, Mr. Khambatta with his ingenuous qualities of hands-on-management and innovativeness in products & promotions has developed Rasna into a legendary Indian success story. Rasna has braved competition from giants like International Best Foods, Unilever, Coca Cola, Rallis and a host of smaller players. Yet it has been able to display a rock steady market growth and has gained a significant market share. Currently enjoying 93% of the pie, Rasna has left its competitors far behind.

Rasna has the distinction of being ranked No.1 in the beverages category as the Most Trusted Brand by Brand Equity's Nation-wide Survey 2003 conducted by A. C. Nielsen and Economic Times, and rated as the No.15 top brand in India, including service brands. Relentless dedication and hard work by the Rasna team also earned Rasna the honor of being adjudged the Most preferred brand in the Soft Drink Concentrates category at the FMCG Most Preferred Awards 2003.

Rasna has also received the Consumer Award for the year 2007 and 2006.



of the concept of "Return on Investment" (ROI) v/s Return on "Taste" and "time" (RoTTI) and that is why required appropriate finance intervention including priority sector lands and special interest rate and higher moratorium period.

- 4. Enable the development of an efficient and competitive supply chain starting from the Farm Gate. This total supply chain should be treated as priority infrastructure and all benefits of infrastructure development in terms of nil taxation as well as special finance incentives to be given to this sector. This supply chain will become back bone of the development of the industry.
- 5. Position India as a preferred outsourcing hub for processed foods and as a global food factory, so that like promotion of tourism in India increased tourism, florida Orange got promoted in the world, so did New Zealand Kiwis, so did California Grapes etc.etc. Indian products can be promoted by central budget support where Indian exporters position their products in the shelves of world market, so that Indian food products will be on the dining tables of world.
- 6. Significantly upscale the institutional and infrastructural set up in the country for facilitating testing, and training in food safety and quality management system in line with international standards. As quality in food is major issue, there is a need to set up major capacity building for testing all across the country where government can set up international level lab for testing and set up CODEX cells across the country.

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This can happen by actually ensuring processed food products as cheap as telephone & air tickets by ensuring that the effect of compound taxation does not apply to this sector in line with unprocessed food.

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I once again repeat the most important aspect is to ensure that great demand is created for processed food products. This can happen by actually ensuring processed food products as cheap as telephone & air tickets by ensuring that the effect of compound taxation does not apply to this sector in line with unprocessed food. Moreover there should be total tax holiday, not just for one to two years but at least for 10 years, be it excise, bet it Vat, bet it other taxes like TOT tax or Octroi etc. multiplier

benefit because of employment and rural prosperity, reduction in health cost, creation of rural infrastructure, ensuring no migration from villages to cities, overall improvement of quality of life in rural area is much more that the loss to the exchequer due to the loss of tax and that is why I call cutting the cake and eating it too strategy.

With reforms and concentration of above points by Government, Industries, academia, and all future managers, I am sure we would realize the dream of changing the face of rural India as well as make India proud.

The nice part about being a pessimist is that you are constantly being either proven right or pleasantly surprised.

- George Will



The year gone by has indeed been one of the most challenging for the world economy. The unprecedented financial crisis, acknowledged today as the worst since the Great Depression has brutally shaken the foundations of some the strongest economies in the world. Nearly 40 million jobs have been lost. Cumulative losses from bankruptcy, closures and ailed business are pegged at trillions of dollars. Though Governments across continents have responded speedily and in rare unison, the path of recovery is expected to be long and arduous. Despite this pall of gloom that dears on us, there are reasons to remain optimistic and confident. India's inherent strengths provide a strong foundation to better withstand the aftermath of the downturn in the global economy.

Though the Indian Seafood Industry has moved from crisis to crisis during the last decade due to external factors totally beyond its control, the industry has managed to survive and keep its momentum of growth. However, today it faces the most challenging time in its history since seafood exports from India began in 1955. The industry is fighting for its very survival.

There are fundamental issues, for which there are no short term solutions. The basic problems are:

- 1. There is sharp decline of catch along both East and West Coasts of India due to over-fishing and pollution in our coastal waters. Fishermen are finding it difficult to make ends meet with the low catch and the high cost of operation.
- 2. Our Aquaculture today is focused entirely on the Monodon Species or called Black Tiger in commercial parlance. Demand for Black Tiger in the international markets faces sharp decline due to the availability of low cost Vannamei shrimp, which can be produced at almost half the cost of cultivating Black Tiger. The Vannamei Shrimp is an equally attractive looking and tasting shrimp as the Black Tiger from the consumer perception.

Indian Seafood Industry : An Appraisal

Sandu Joseph,Secretary,
Seafood Exporters Association of India,
Cochin



Mr. Sandu Joseph is a seafood exporter and is also involved in Project Management, Seafood Marketing, Trade Promotion, Training, Formulation And Implementation Of Projects.

Working in a National organization for the development of seafood industry and trade with a wide spectrum of activities and background has moulded his personality, so believes Joseph.

His key strengths include -

- Helping Seafood Industry in trade issues, marketing aspects and trade complaint settlement.
- Arrange for market promotion, fair participation, trade delegation market survey and promotion of Indian Seafood abroad.
- Liaise with commercial consultants for Brand Promotion of Indian seafood.
- Organise India International Seafood Show (IISS)
- Implement UNCTAD project "Strategies and Preparedness for Trade & Globalization in India".
- Printer and Publisher of Seafood Journal



3. India is unable to compete on the aquaculture shrimp front against its Asian competitors. China, Thailand, Vietnam and Indonesia have all switched massively from Black Tiger to Vannamei. The farm level price for Black Tiger in India is the lowest ever. It is unviable for the Indian Shrimp Farmer to cultivate Black Tiger at prices now being offered based on offer prices exporters are receiving from major international buyers. The Indian Shrimp culture industry is in turmoil and farmers are averse to seeding their farms. There will be a drastic reduction in aquaculture production in coming years unless we find a solution.

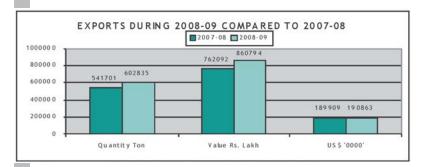
1. Export Performance during 2008-09

For the 5th year in succession, the export earnings of marine products in dollar terms touched record levels during 2008-09. The export earnings in rupee terms were also the highest ever recorded. The overall exports showing the export growth are given below:

OVERALL EXPORTS DURING 2008-09

Details	2008-09	2007-08G	rowth (%)
Quantity in Ton	602835.34	541701	11.29
Value Rs.crore8607.947620.92			12.95
US \$Millio	n 1908.63	1899.09	0.50

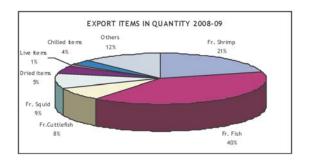
1.01 Major Item wise exports



Frozen shrimp continued to be the largest item with a share of about 44% in the total export earnings, even though their share in the export during the period dropped by 8% in quantity, 4% in value and 15% in dollar value. Fish, the largest item of export in quantity terms with a share of about 40% and the second largest item in value accounted for a share of about 20%. The frozen fish recorded an export growth of about 8% in quantity and 32% in rupee value and 15% in dollar earnings. Frozen Cuttlefish contributed 8% in quantity and about 9% in value terms to export basket. Export of Frozen squid grew very remarkably registering a growth of 67% in quantity, 55% in rupee terms and 41% in dollar terms respectively. All other items also recorded a growth in export during 2008-09.

1.02 Major Export Market

European Union remained the largest market for Indian seafood accounting for 151590 MT (25%) in quantity, Rs.2800 crores (32.5%) in rupee terms and US \$ 623 million (33%) in dollar terms. Share of European market has come down from 35% to 32.6% in dollar terms during the year. A very important feature of the export trend is the increase in export to China. China got

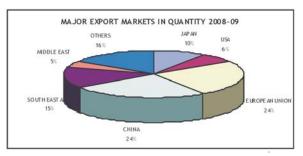


into the second place from 3rd position held in last year with a share of 15% in dollar terms. Japan was relegated to 3rd position with an overall export of 57271 MT having a value of US \$ 278.61 million. Share of export to Japan has also gone down to 14.34% from 16 % during the pervious year. Exports to USA have fallen further to US \$ 227.29 million (-10.18%) relegating it to 4th position. But East Asia registered a remarkable growth with 39% increase in quantity, 52% increase in rupee terms and 33% increase in US \$ terms. The share of South East Asia has increased to 10% from 7.5% in US \$ terms during the year. Export to Middle east also registered growth with 5.5% increase in quantity, 20.8% in rupee value and 7.3% in US \$ terms. Share of other countries is 10%.

1.03 Port Wise Exports

A total 23 land/Air ports handled marine cargo during the year, The major ports in order of export were Kochi (17.6%), JNP (17.3%), Pipvav (16,1%), Chennai (12.6%), Vizag (10.5%), Calcutta (8.4%), Tuticorin (8%), Mangalore (2.8%) etc. While JNP and Pipavav increased their share, Chennai and Vizag witnessed a reduction.

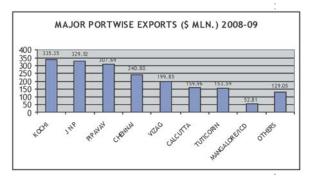




2. Culture Fisheries

2.01 Export production through aquaculture

Aquaculture contributed significantly in the year of Global economic recession to the seafood exports of the country although a decreasing trend was noticed both in the area under aquaculture and overall production compared to the previous year. Production of aqua cultured shrimp and scampi has been decreasing during the past



two years due to various factors that has plagued the sector such as increased cost of production, recurring disease outbreaks, natural calamities like cyclonic floods. However, efforts are being taken to create increased awareness among the farming community regarding the need for quality improvement by MPEDA as this is one of the major issues for retaining the markets for sustainability of production and exports from the country

2.02. Status of aquaculture production

Reports received indicated an overall reduction in aquaculture production during the year under report. While shrimp production showed a decrease of 28.40%, there was a drastic reduction of scampi production by 53% less than the previous year. This is attributed to the global

economic crisis, which resulted in the reduction of the international prices for the seafood items in general and shrimp in particular. This led to the reduction of shrimp and scampi farming operations by the aqua farmers. Other factors that resulted in the decrease in the farming areas are the natural calamities like floods, increase in disease prevalence, supply of poor quality seed for farming and competition from large scale production of the Pacific white shrimp at lower prices in the international markets.

2.03 Shrimps:

During the year under review i.e. 2008-09, shrimp production was estimated at 75,996.54 MT that was produced from an area of 1,08,788.68 ha. Compared to the previous year production of 106160 MT from an area of 1,22,078.80 ha utilized for shrimp farming, a decrease of 28.41% in production and 10.89% in area was noticed during the current year 2008-09. The estimated value of the shrimp produced during the year is Rs.1,710 crore, which registered a reduction of Rs.690 crore over the previous year.

2.04. Scampi:

Compare to the previous year's production of scampi i.e. 27,262.06 MT from an area of 50,206.30 HA, A DECREASE OF 53% in production and around 63.30% in area utilized has been registered during 2008-09. The production of scampi was 12,806.25 MT from an area of 18,421.14 ha. The estimated value of scampi during the year is valued at Rs.205.00 crore which registered a reduction of Rs.231.00 crore over the previous year (Table -4). In addition to the above area it is recorded that about 1980.27 ha has been

brought under scampi farming in the state of Kerala under the newly introduced scheme of Padasekharams during 2007-08. Though production is only 284.30 MT with an average productivity of 140 kgs/ha, this had contributed to the aquaculture production from the state and also the area that was not utilized earlier could be brought under productivity purpose.

2.05 Total aquaculture production

The overall production from export oriented aquaculture during the year 2008-09 was estimated at 88,803 MT and the value of the same was estimated at Rs.1,915,00 crore, which works out to an average farm gate price of Rs.216 per kilogram of wet weight. There was a decrease of 44,619 MT production and Rs.921 crore in value respectively which is 33.44% reduction in quantity and 32.48% in value compared to the previous year production of 1,33,422 MT valued at Rs.2,836 Crore.

Though it is anticipated that all the shrimp/scampi produced by aqua farming will be exported, it is observed that some



quantities of shrimp and scampi would have been disposed off in the domestic markets as well due to the increase in demand for the seafood and also to realize better prices for the produce.

In addition to the above, serious attempts were made to diversify aquaculture into other exportable varieties like finfish (Asian Seabass) and Crab for farming in cages and ponds. During the current year 2008-09 about 10 MT of Seabass was produced valued at approximately Rs.0.13 crores.

B. Trade Issues

1.EU Regulation No.1005/2008

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Though it is anticipated that all the shrimp/ scampi produced by aqua farming will be exported, it is observed that some quantities of shrimp and scampi would have been disposed off in the domestic markets as well due to the increase in demand...

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With effect from 1st of January 2010 EU will be implementing a very stringent legislation to fight against illegal, unregulated and undeclared fishing. As per Regulation (EC) No. 1005/2008 all wild caught fishery products, except those caught in inland waters i.e freshwater and lakes will have to be accompanied by an official statement giving the name of the catching vessel, name of the Captain and date and quantities caught per fishing vessel, etc.

The above referred regulation has come into force on 29/10/2008 i.e. on the day of its publication in the Official Journal of the European Union and will be effective from 1st January, 2010. The regulation is result of the follow up action of:-

- 1. The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea signed by member states on 10/12/1982.
- 2. The FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement) dated 24/11/1993,
- 3. The Agreement to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement) dated 04/08/1995, and the Common Fisheries Policy of the EU as set out in Regulation (EC) 2371/2002.

The regulation consists of a pre amble and three chapters. The first chapter deals with the definitions of IUU and

vessels, etc. The second chapter deals with conditions for access to port of member states by third country fishing vessels, port procedure, inspections, etc. the third chapter deals with Catch Certification related to import of fishery products from third world countries by member states. Article 12 para 2. of the above regulation specifically states "fishery products shall only be imported into the Community when accompanied by a Catch Certificate in Conformity with this Regulation". It is very clear from this that all seafood exported from India and arriving at any EU port after 31st December, 2009 will be cleared only on production of a Catch Certificate.

Para 41. of the above regulation also reiterates that the provisions of Regulation (EEC) No. 2847/93 relating to sanctions remain thus applicable to violations of the rules of the Common Fisheries Policy as set out in Regulation (EC) 2371/2002.

Let us now look at the requirements of the Catch Certificate.

- 1. The Catch Certificate should be issued by a Public/Competent Authority who has been empowered by a Notification issued by Government of India, to attest the veracity of the information contained in the Catch Certificate and empowered to carry out verifications of such certificates on request from EU member states.
- 2. The acceptance of these Catch Certificates validated by the Competent Authority shall be subject to the conditions that EU has received a Notification from GOI certifying that it has in place national arrangements for the implementation, control and enforcement laws, regulations and conservation and management measures which must be complied with by its fishing vessels.

These are the two paragraphs which have a direct bearing on the seafood export from India. At present, EIC, which is the Notified Competent Authority, is only empowered to attest the veracity of the Health Certificate for import of seafood into EU. They are at present not legally empowered



to issue the Catch Certificate. It is also doubtful whether they have the requisite infrastructure and personnel to physically conduct a verification audit of the fishing vessels, should the need arise. Therefore, GOI first needs to identify the Competent Authority in relation to Regulation (EC) No. 1005/2008 and empower them with a Notification as required in Annexure III of the above regulation.

The second Notification is a much more complex issue. This involves putting in place national arrangements for implementation, control and enforcement laws, regulation, conservation and management measures for fishing in conformity with International Rules on conservation and management of fisheries resources. It is given to understand that the GOI is coming out with a National Fisheries Policy under the aegis of the National Fisheries Development Board. The specific issues notified under the above regulation must be addressed in the National Fisheries Policy. It is also unclear if the proposed National Control and Enforcement Laws, Regulations would be seen as an infringement on the sovereignty of the state over the 12 mile coastal area. As things stands today, this will equally be required for products from small scale fisheries also for composed fishery products.

If this new legislation is implemented it will certainly affect the fishing industry and seafood export industry in India. Our main source of raw material is from artisinal fishing and small vessel.

2.Antidumping Issues

2.01. 3rd Administrative Review

US Department of Commerce (DoC) has finally determined the anti-dumping duty on imports of Indian Shrimps to 0.79% from 1.69% after the preliminary finding of the third administrative review. The rates will be applicable to Indian companies engaged in export business with the US. Efforts by the Union Government, the Marine Product Export Development Authority (MPEDA)

and Seafood Exporters Association of India (SEAI) had resulted in the first review bringing it down to 7.22%, the second review to 1.69% and the final findings of the third review now bringing it further down to 0.79%.

In the final determination shrimp imports from Ecuador will attract antidumping duty of 2.09%, Thailand 4.51%, Vietnam 25.76% and China 112.81%. Therefore, Indian exporters stand to gain compared with exports from some of the competing countries.

2.02. 4th Administrative Review

Federal Register Notice dated April

7,2008 (Vol.74, No.65) from USDOC decided for Initiation of AR for certain Frozen Warm water Shrimp from India. The US petitioners requested for review against 332 Indian Companies. US DOC may rescind a review where there are no exports, sales, or entries of subject merchandise during the POR. So if the Producer exporter had no exports, sales or no entries during the POR should have notified the USDOC with in 30 days.

The department will consider rescinding the review only if the producer or exporter submits a statement certifying that it had no exports, sales, or entries of subject merchandise during the POR. Those companies who made shipments to US during 3rd POR and no shipment during 4th POR should necessarily file a NO SHIPMNET LETTER to USDOC.

US DOC on 13th of May 2009 selected the following as the mandatory respondents for the 4th Review.

- a) M/s. Devi Seafood
- b) M/s.Falcon Marine
- c) Liberty Group

2.03 WTO order on Bonding

The enhanced bonding requirements for Indian shrimp exports to the US have been removed with immediate effect following the ruling of WTO in favour of India and Thailand. The ruling by the US Customs and Border Protection that has come into effect from April 1, 2009, is a major consolation for the Indian shrimp exporters who had to pay hefty anti-dumping duties at the US ports of entry and also execute bonds for millions of dollars upfront as well. The ruling put up by the US Customs and Border Department

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It is given to understand that the GOI is coming out with a National Fisheries Policy under the aegis of the National Fisheries Development Board.

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There is close to \$50 million outstanding bonds pending with the US Customs Department, which are still to be liquidated in favour of Indian exporters.

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reads: "This notice ends the designation of shrimp subject to anti-dumping or countervailing duty orders as a special category or covered case subject to an enhanced bonding requirement".

There is close to \$50 million outstanding bonds pending with the US Customs Department, which are still to be liquidated in favour of Indian exporters. During the year 2005-06, Indian exporters had to execute close to \$20 million as bonds for a total shrimp export of Rs 950 crore at 10.17 per cent. While the value declined to Rs 800 crore the next year the rate also fell to 7.22 per cent, which would have entailed a bond requirement

of approximately \$11.55 million. In 2007-08, Indian shrimp exports to the US were at Rs 750 crore while the duty fell to 1.69 per cent, necessitating a bond requirement of \$2.55 million. While the value of shrimp exports to the US is estimated at Rs 611 crore for 2008-09, the bonding requirement would have been around \$1 million at a rate of 0.79 per cent.

3. Trade issues with China

Beijing has threatened to ban import of seafood and other food products from India if New Delhi continues to restrict import of milk products from China.

The Chinese side, in a response to the extension of ban on milk and milk products, including chocolate exported by China to India till December 24,2009, the General Administration of Quality Supervision, Inspection and Quarantine of China had conveyed that it had encountered food safety problems in imported food products from India, including seafood products.

China, however, has not imposed a ban on import of the food products.

We came to understand that the Indian Government has conveyed to China that India has taken note of their concerns. China has been also told that the decision to extend the ban till December 24 was taken after due consultation with authorities concerned and experts in the dairy industry.

Although China has not confirmed it yet, a hint from the Chinese government has put Indian fish exporters in a fix. China is our 2nd largest trading partner in volume and 3rd

largest in Value. During the financial year 2008-09 China imported 147312 tons of Seafood worth Rs. 1296 Crores.

4. Rejection in EU Countries

Indian Seafood Industry has faced a serious situation due to the rejections by the Health Authorities in EU Countries and USA on detection of anti biotic residues in cultured shrimps from India. Japan is also very conscious on this issue.

During the year 2008, in EU, the total rejections of shrimp consignments from India due to detection of antibiotic residues were more than 30 in number. In the first 10 months of the current year, the number of rejections is 55.

EU authorities have informed the competent authority in India viz. Export Inspection Council of India (EIC) that they will be closely observing further rejections. They have now informed Export Inspection Council (EIC) that every health certificate must be accompanied by antibiotic free certificate of the consignment from the origin. It is very likely, if not imminent that EIC may very soon introduce 100 percent compulsory inspection of all the Indian shrimp consignments Exported to Europe, for antibiotic residue presence. If this happens, we will surely loose EU market, which now constitutes almost 45% of the total cultured shrimp exported from India. Similarly, we will have serious issues on this ground with US FDA and Japan health authorities.

What mentioned above is nothing new and every one of us is well aware of the consequences of this problem. We have been trying to conveniently ignore or remove from our mind this problem. The situation has now come for us to take serious actions on dealing with this issue.

SEAI advised the members, that an exporter should not buy the cultured shrimps, if it is not accompanied by antibiotic free certificate from MPEDA.

On the wake of large rejections due to antibiotic residue, EIC made certain



guidelines to put control on aquaculture products meant for export. As per the guidelines Exporters are allowed to buy raw materials only from farms approved by Coastal Aquaculture Authority.

4. Strengthening of Monitoring & Inspection of Aquaculture shrimps Exported to Japan

EIC informed that they are going to strengthen the Monitoring & Inspection of Aquaculture shrimps exported to Japan. EIC, the Competent Authority suggested the following course of action for immediate implementation:-

- 1. All establishments approved for exporting fish and fishery products may be appraised about the detection & occurrence of the hazard pendimethalin.
- 2. All consignments of aquaculture shrimps meant for Japan shall be tested for the presence of pendimethalin (MRL 0.01 ppm) prior to export.
- 3. All establishments processing aquaculture shrimps shall be directed to identify pendimethalin as a hazard and the same should be addressed in the HACCP worksheet and plan to avoid the future occurrence.

Ministry of Health, Labour & Welfare, Japan has intimated that they have decided to raise the frequency of monitoring inspections related to Agricultural Chemical residue to 30% to Frozen Cultured Shrimp produced in India. EIC advised SEAI to educate the farmers regarding the consequence in using the herbicides containing pedimethalin.

5. Removal from Rapid Alert System (RASFF) in EU

Indian Seafood exporters have 3 major issues with regard to exports to the European Union (EU).

- 1. The various EU member states do not have a harmonized procedure for either acceptance of cargo or removal of an importer from their "Rapid Alert List" if the exporter had faced a consignment rejection.
- i) The present EU procedure of Rapid Alert

places an exporter on the Rapid Alert of all Member States if a consignment is rejected by the Health Authorities of any country. However, if the Exporter on Rapid Alert subsequently clears Health for a certain number of consignments, the unit is removed from the Rapid Alert List. However, the number of consignments to be cleared varies in the case of different member states. As an example:

- a) In the case of France, it is 3 consignments
- b) In the case of Italy, it is 10 consignments
- ii) What is illogical is that, if a consignment is rejected in any one country, the exporter is put on Rapid Alert by all the member states. However, to get off the Rapid Alert List of each country, the unit needs to clear 10 consignments in each of the member states. To date, there are over 30 member states and it would take an exporter a life time to get off the Rapid Alert under this procedure.

Logically, if an exporter clears the required number of consignments for a particular country and is taken off the Rapid Alert from that country, then the unit should be removed from the Rapid Alert of all the member states.

2. If a consignment is rejected by a member country's health authority in the EU, the consignment is to be returned to the exporting country to be reexamined by the Competent Authority of the exporting country. Also, a certain procedure is to be followed for monitoring by the competent authority of the exporting country for a certain period.

However, certain countries like the United Kingdom are destroying cargo if they detect antibiotic residue at the port of entry. The Health Authorities have no right to destroy

Cargo, valued at hundreds of thousand dollars, which has not entered the borders of the importing country. The exporter has the right to bring the cargo back to origin forre-inspection by the Competent Authority and it is upto the Competent Authority of the Exporting country to determine how the affected cargo should be disposed. The Competent Authority is recognized by the EU.

3. At present the antibiotic residue levels required by the EU for seafood exports are extremely rigid and beyond the actual requirements of food safety according to most experts. There

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Ministry of Health, Labour & Welfare, Japan has intimated that they have decided to raise the frequency of monitoring inspections related to Agricultural Chemical residue to 30% to Frozen Cultured Shrimp produced in India.

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has been considerable debate on the efficacy of such stringent requirement for antibiotic residue. We should appeal for a certain relaxation in the antibiotic residue levels that has been given for wine and dairy products in the EU.

It is very serious NTB for exporters exporting to EU faced with rejection. Even though SEAI took this issue at various levels no solution was arrived at.

C. Future outlook

1. Need for Conservation of Sea catch

It is common knowledge today that the oceans of the world are completely fished-out, and that capture fisheries worldwide are on a steep decline. Global warming is leading to ocean surface temperature rising and acidification of seawater and, combined with over-fishing, we are faced with a sharp decline of fish in the world oceans. Fish that once seemed an inexhaustible source of food, are almost everywhere in decline. 90% of large predatory fish like Tuna, Swordfish and Shark have gone, 85% of whales have disappeared and many smaller fish are also in sharp decline.

As far as capture fisheries in India is concerned, our coastal waters are almost completely over-fished and catches are declining. Every Indian coastal state follows its own fishing policy. There is unrestricted coastal fleet expansion; no fishnet size restrictions; massive illegal wild seed collection along the coast; no attempt at resource management; uncontrolled pollution of coastal waters; destruction of breeding grounds both by industrial pollution and relentless bottom trawling. As a consequence of all this, our shrimp capture catches are down by 40%; and fish catches are

virtually disappearing.

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Our declining catches are leading to social unrest along the coastline with fishermen competing for depleting resources. There are daily conflicts between fishermen of different coastal states over fishing grounds.

In such a situation where the oceans of the world are under threat and our coastal waters are almost fished-out, the only future really is aquaculture.

Fortunately, we have one of the largest resources of inland water bodies and rivers, second only to China. We, therefore, need to harness our inland water bodies

and unproductive land along our 8000 kilometer coastline for sustainable aquaculture.

Our coastal fishing communities are amongst the poorest of the poor and they need alternative livelihood during periods of conservation. Consequently, a policy on cage culture rights in our inland waters and rivers for our fishing communities as a source of alternative livelihood needs urgent implementation.

China realized the importance of their fisheries sector as a critical component for food security and therefore, formulated a 20-year fisheries plan which has today resulted in China becoming the world's largest fishery nation accounting for over 50% of the world fish production from both capture fisheries and aquaculture.

India, till now, has had no effective, comprehensive and coordinated National Fisheries Policy like China and other Asian countries. We do have a National Fishery Policy, but its more a vision statement. Also we have no integrated and effective National Fishery Conservation and Resource Management Policy. Hence it is high time that we should formulate a policy to conserve our resources for the sake of 2 million people directly or indirectly depending on the Sea

2. Promotion of Aquaculture

To promote aquaculture, which appears to be the only alternative for the growth of the fisheries sector and for India to emerge as an important global player, there is an imperative need for the Central & State Governments and the NFDB to effect the following policy changes:-

- a. Declare Aquaculture as an agriculture activity.
- b. Compulsorily register all aquaculture establishments and issue licenses to operate. Registration should be under both the Aquaculture Authority and MPEDA.
- c. Statutory clearance of Aquafarms from pollution control board, forest department, etc., should be through a single window



system of the Aquaculture Authority.

- d. Institutional finance made available on par with Agriculture.
- e. Crop Insurance available at reasonable premiums.
- f. Declare Aquaculture as legitimate user of land and water. Permit unproductive agriculture land for conversion to aquaculture. Allow specific quantity of water from irrigation canals for fresh water aquaculture.
- g. Prepare master plan for import of technology for culture of commercially viable fish species like Catfish, Tilapia, Seabass and other high value fin-fish. Broodstock quality improvement through Specific Pathogen Free projects, which fortunately are now under implementation. The recent permission for Vannamei culture by Ministry of Agriculture will now see a dramatic growth in shrimp culture. Evolve a strategy for providing MINIMUM PRICE PROTECTION for Aqua Farmers.
- h. Remove all constraints of sanitary permits for import of Artemia, Feed Ingredients and other aquaculture inputs.
- i. Reduce all import duties on aquaculture inputs.
- j. Subsidize airfreight for transport of aqua seeds.
- k. State Governments must exempt all Aqua produce, seed, feed and ingredients from VAT.
- I. State Governments must provide power at tariff rate similar to agriculture.
- m. State Governments must strictly prohibit wild seed collection along the coast.
- n. Identify suitable marine zones for establishing marine fish cages. Lease such areas to fishermen and fishermen cooperatives and promote cage culture in fresh water reservoirs, deep salt water creeks, estuaries and the open sea.
- o. Tilapia, Catfish, Seabass and Grouper cultures should be encouraged to augment supply fish for both domestic and export markets.
- 3. Need for Industry friendly Research

Organization

India has some of the best Fishery Research Institutes in Asia. However, their contribution in extending technical help to the Fishermen, aqua farmer and export processing industry is dismal.

Correct the situation by:-

- a) An annual independent Audit on the usefulness of the research work undertaken.
- b) Evaluate the extent of research transferred from lab to farm.
- c) The Institutes should make available to entrepreneurs their findings at a fee for commercial exploitation.

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India, till now, has had no effective, comprehensive and coordinated National Fisheries Policy like China and other Asian countries.

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We are too important an industry to disappear. Too many livelihoods are dependent on this sector, that we just cannot allow ourselves to perish.

We have one of the largest resources of inland water bodies and rivers, second only to China. We have 8000 kilometers of Coastline. Our Exclusive Economic Zones is one of the largest available for Deep Sea fishing. We have large unexploited Tuna resources in our EEZ. It is said that the tuna in our waters are dying of old age.

We have the largest number of EU approved factories in Asia. We have internationally competitively priced skilled labour. We have an effective Quality Assurance Agency in the Export Inspection Council. So why are we not the second largest fishery nation in the world, after China? This is the question we need to ask ourselves. The answers are simple.

We need to harness our inland water bodies for sustainable aquaculture. Our coastal waters need conservation and rejuvenation.

Most writers regard truth as their most valuable possession, and therefore are most economical in its use.

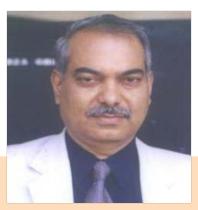
- Mark Twain



Processed Food Industry : The Unrealized Dream

Gokul Patnaik,

Chairman, CII Task Force on Agri Marketing and Chairman, Global Agrisystems P Ltd.



Mr. Gokul Patnaik is the Chairman of Global AgriSystem Pvt. Ltd (www.globalagri.com), a premier consultancy organization devoted exclusively to food and agri-business. He is also the Vice Chairman of Katra Group (www.katra.biz). Prior to taking voluntary retirement from the Indian Administrative Service Mr. Patnaik had an illustrious career as a civil servant. While in Government, he headed a number of Public Sector Undertakings (PSUs) including the Punjab State Industrial Development Corporation (PSIDC), Punjab MARFED, Punjab Agro Industries Corporation (PAIC) and The Agricultural and Processed Food Products Export Development Authority (APEDA) under the Ministry of Commerce. He is a member of the Chief Minister's Advisory Committee on Agriculture for the Government of Madhya Pradesh. Mr. Patnaik is a well known authority on agribusiness and has contributed many articles and Papers on the subject. His views are frequently sought by the Government and Industry bodies.

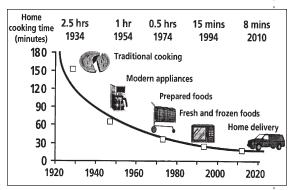
Food is the constant need of human beings and remains a constant challenge. Physical resources needed to produce food being finite in nature, many prophets of doom have long predicted that human population growing by geometric progression will soon overtake food production which can only increase by arithmetic progression. The scepter of famine and natural disaster, as predicted by Malthus, always hangs over our heads like sword of Damocles, if we do not control population or increase food production sufficiently to meet the growing demand.

However, man's ingenuity has always been able to overcome such dire consequences. Scientific innovations in processing technology have been able to meet the challenges of increased demand by increasing food production, cutting down wastages and preserving food. The first innovation in food processing can be traced back to 800,000 BC when fire was domesticated. By 30,000 BC mankind was cooking food with ovens of holes with hot stones. Techniques of frying, grinding and distillation were invented subsequently. Canned food made its first appearance at the London Exposition in 1804. Each of these innovators had to face skepticism and opposition from their fellow being. When Louis Pasteur of France invented his signature method of sterilizing milk, people thought he was trying to pass on stale milk as fresh. However with time, most of these innovations have been accepted and assimilated into our everyday life. Some of the new innovations in food processing during the last 50 years have indeed revolutionized our life. Examples are aseptic processing and technology, the microwave oven, freeze drying, food fortification and



UHTP of milk and other products. These innovations have not only helped in increasing food production but resulted into safer and tastier food. Processed food products that we get in the market today are better in quality and nearer to its fresh equivalent than ever before. The consumer concern of food safety and nutritional adequacy has also led to the processors taking care of traceability of the products as well as hygiene and health factors.

Chart 1: Consumer Demand- Shortest Possible Shopping & Preparation Time



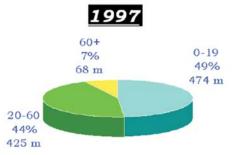
The consumer demand for convenience has also led to processed food being prepared ensuring shortest possible preparation time. A study undertaken by Anderson Consultants in US and Western Europe had revealed that whereas the average time taken for cooking at home was about 2.5 hours in 1930s, by the year 2010, technological revolution in prepared foods have made it possible for housewives and homemakers to be able to spend only about a few minutes in the kitchen for preparing everyday meals as shown in the chart below:

This trend is likely to continue and it is expected that more and more consumers will depend on home deliveries by the year 2020. Although the above study was carried out in western countries, similar trend is also visible in India. Eating out is booming

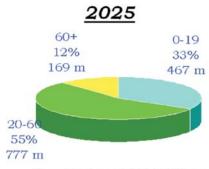
in urban India and even tier-II cities. Multiple restaurant chains such as McDonald, Pizzza Hut, Dominos, Barrista, Café Coffee Day, Saravana Bhawan, Nirulas are growing rapidly. The ready-to-eat foods sold by companies such as HUL, ITC, MTR and Tasty Bites have also carved out a dominant place for themselves in the food market with their wide range of 'Heat & Eat' dishes. Innovation has led to superior products and services to the customers stimulating demand at all levels.

Apart from the increasing population and rise in per capita income, the growth in the Indian food market is driven by two significant factors. India has the largest population of young adults in the world. It is estimated that by the year 2025, almost 55% of the total population or about 777 mn will be in the age group of 20-60 i.e. the major consuming class as shown in the following chart:

Chart 2: Demography India



Population-967 million



Population-1412 million

Secondly, increasing number of working wives and nuclear families with high disposable income creates demand for convenient foods in the category of ready-to-eat or ready-to-cook. According to the Ministry of Food Processing, the industry contributes 9% of India's GDP and has a share of 6% of the total industrial production. This makes India the second largest producer of food in the world next only to China.



More significantly the food consumption in India is growing at a healthy rate of CAGR 5.32% and is likely to exceed USD 229.7 by the year 2013. While urbanization, rise in disposable incomes, changing life style and aspiration are leading to significant demand for processed food, Government's role in creating a conducive environment for the food industry has also helped. In the last 10 years, Government has selectively removed SSI regulation in food, modified MMPO to ease entering into Dairy, repealed Cold Storage Act, enabled the setting up of agri export zones & food parks and removed restrictions on movement of food grains. Several State Governments have also taken commendable steps to boost agriculture and food processing. Karnataka has facilitated setting up of a modern auction market for fruits and vegetables. West Bengal has laid down an ambitious agri-vision focusing on Horticulture and Aquaculture. UP and MP have allotted land for contract farming for wheat and rice. Gujarat and AP are actively targeting investors offering single window clearance and investment subsidies.

Government of India has also come out with several schemes for technology upgradation, modernization of abattoirs, integrated cold chain and setting up of Mega Food Parks, setting up of analytical laboratory for food products and training centers also qualify for Government grants. However a lot needs to be done and Government must play a major

role in realization of the full potential of the processed food sector.

Following are some of the critical areas where the Government must take initiatives to unlock the sector potential:

Single Unified Market

The Indian market is fragmented and many laws, rules and executive orders hinder the free movement of goods across States. Thus the attractiveness of India as a large unified market is lost. Government should take steps to

remove restrictions on Inter-State and Intra-State movement and trade in agricultural and food products.

Amendment of APMC Acts

The prevalent APMC acts creates a virtual monopoly of the State in agricultural marketing. Although Government of India has circulated a Model APMC Act and urged the States to amend their respective laws to provide for establishment of private markets and allow direct marketing, most of the States have not amended the act in line with the requirements. Food processing companies are unable to source their products directly from the producers. Multiple handling of the products not only result in increase in transaction cost but also deterioration in quality. State Governments should amend their APMC acts to allow private markets for more efficient handling of the produce and competitive pricing. Competition will result in better price realization to the farmers.

Organized Retail

It is well known that organized retail acts as a catalyst to the food processing industry by integrating the supply chain through investment in superior technology. In many countries, including some developing countries like China and Indonesia, more than 20% of the food now goes through organized retail. In India organized retail is still at a nascent stage and is facing many problems. Government should support growth of organized retail including Foreign Direct Investment (FDI) in it.

Tax on Processing Food

Processed Food is still being considered as a "luxury" item in some quarters and being taxed at a high rate. Market fees and levies

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are imposed on primary agricultural products in many States which have a cascading effect downstream. The VAT and excise duties on processed foods and other value-added products are also fairly high. Australia, Canada and UK have cut down tax rates and almost all food items are zero rated except restaurant meals. As we move towards a GST regime, Government should consider abolition of taxes on processed food items which will help in saving huge wastage of agri-commodities.

• Import duties on Equipments

As food processing industry is technology sensitive and innovation is the key, a number of equipments have to be imported. There is a strong case for either giving a tax holiday or bringing down import duty to the minimum level to give a fillip to cold chain infrastructure and food processing equipment which will help in reducing wastages and improving quality.

• Integrated Food Law

Till recently, processed food industry was subject to a myriad of laws and regulations implemented by various departments and local bodies. Parliament has enacted an Integrated Food Safety and Standards Act in 2006 and has constituted a Food Authority. However the rules are yet to be notified and the Authority has not started taking action. There is a need to expedite implementation of the Integrated Food Law.

India has vast natural resources and highly favorable factor conditions such as low cost of labour and availability of land to enable the food processing sector to flourish. It has diverse agro-climatic zones and abundant resources to produce every raw material for processing. All these factors combine to make India the second largest

producer of fruit and vegetables in the world and the largest producer of milk and many other agricultural commodities. Unfortunately, processed industry is still at a nascent stage - only 2.2% of fruit & vegetables, 26% of marine catch, 6% of the poultry and 35% of milk is processed. There is still a long way to go. Only the combined efforts of the Government to create an enabling environment and the private sector to be efficient and innovative can help India to realize its dream of becoming the 'Food Factory' of the world.

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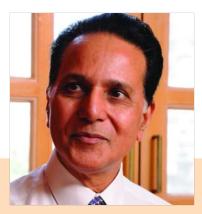
The difference between perseverance and obstinacy is that one often comes from a strong will, and the other from a strong won't.

- Henry Ward Beecher



A Glimpse into the Indian AlcoBev Industry...

Dr S. Puri,Vice President, Operations
Tilaknagar Industries, Mumbai



Dr. Puri is an eminent professional with vast experience in the alcoholic beverages industry. In his vast experience spanning 36 years, he has worn several hats including that of Quality, Marketing, Production, Operations, Supply Chain, Group President etc. During his experience he has set up and revamped several distilleries and breweries and undertaken several innovation in his projects. His professional memberships include CIABC, PFA, BIS, ISWA, Excise, Who's Who, BYST etc. Currently he is the Sr. Vice President - Operations at Tilaknagar Industries Ltd (TI), Connoisseurs of alcoholic beverages. TI's brand portfolio consists of several premium brands including Mansion House Brandy which was awarded the brandy of the year for 2009 by SAP Media (Publishers of the industry magazine called Ambrosia) apart from Courrier Napoleon Brandy, Senate Royale Whisky, Castle Club Vodka, Madira Rum to name a few.

The use of alcohol as drink is an age-old story in India and it appears that the technique for fermentation and distillation was available even in the Vedic times. It was then called Somarasa and was used not only for its invigorating effect but also in worship.

For the purpose of Alcoholic Industry, India is a set of 28 countries. By saying this I mean that each state has a separate regulation and these are self contained markets. Production is done for that state specifically and material produced for one state cannot move into any other state unlike durables or FMCG. Each state levies taxation at its own determined rates and duties. IMFL is also a vital element in each states revenue. The central Government has little control over the taxation rules of the states.

For the purpose of division the Indian Alcoholic market is categorized by beer, wine, Whisky, White Spirits, Rum, Brandy, Flavored Spirits and Ready to Drink varieties. Further categorization of the above spirits can be done as follows

- 1. BAO Bottled at Origin- here the alchol is bottled and imported completely.
- 2. BII Bottled from Bulk in India.. meaning that the aclhol is imported in bulk but bottled at a bottling unit in India.
- 3. IMFL Indian Made foreign Liquor.

Indian Made Foreign Liquor or IMFL as it is commonly known is categorized by Whisky, Brandy, Rum, Gin and Vodka, these are distilled, blended and bottled in India.

India is an essentially closed market for Bottled imports which promotes a lot of contraband traffic especially in the scotch, white spirits and Whisky segments. Whisky is the largest IMFL sprit at present, while Brandy outsells whisky across all south markets. Rum is consumed particularly in the South and East market and also the Indian military is a large consumer of Rum. There are key seasonality factors as well.. Beer rises in Summer, while Rum rises in Winter.



Also on the seasonality typically the first quarter is the leanest and Q3 and Q4 are the strongest quarters in terms of revenue. The festival season starts with the onset of Navaratri (end Sept-mid Oct), continues onto to Diwali, Christmas and New year celebrations. This is high season. The festive spirit carries on to the next year with Pongal and Holi celebrations. Also, Q3 and Q4 are the winter months where consumption of harder spirits generally increases. Q1 (April-May-June) being very hot there is more beer sale in that quarter and IMFL dips

On Advertising

Advertising is particularly banned in theory for this category although sponsorships and surrogates are widely used for advertising the respective alcohol brands. Common Surrogates could range from water, sugar, soda, holidays, awards, airlines, Music CD's, parties etc to name a few. Hence it is always a challenge to advertise your surrogate and connect it to your product. Direct Consumer promotions are banned but are done at points of consumption e.g. on the purchase of a nip of a particular brand you might end up getting a nice gift like a pen, wallet etc.

On Distribution

As far as distribution is concerned the story is as complex as the state taxation. There are few states who are open markets like the FMCG markets wherein you can choose your channel and sell thru licensed bars and wine shops. Some states like Tamilnadu and Kerala although have a very heavily controlled system. In such cases the liquor companies sell to the Government owned distribution companies and retail through the government owned wine shops. The private bars and permit rooms buy from the government in such cases. In other markets like Andhra and Karnataka the distribution is privatized like Tamilnadu but the wine shops are owned and operated by private hands. Hence Supply chain management plays a key role in managing these government based markets even more since there are issues of demurrage on stocks..

normally this duration is between 3 to 6 months and penalties are also pretty high.

More Developments

Till lately the IMFL market was mostly based on molasses. This is now changing with the opening of more Grain Spirit plants. Industries Tilaknagar Ltd manufacturers of the Mansion House Brandy is planning to open a 100KLPD Grain Plant early next year. Also various innovative attempts are made and a lot of success seen in this area. Few to mention are Tetra-Packs for various brands, Innovative Pet and Glass Bottles, growth of the glass and pet ancillary industry etc.

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Various taxation and duty laws across the state make production and distribution a very cumbersome process.

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There are some threats to the Alchobev market as well. Various taxation and duty laws across the state make production and distribution a very cumbersome process. Furthermore, ever rising molasses prices are directly affecting the cost of ENA. Molasses prices are jumping by the day and there is very little to control these prices. The local state governments also continue putting additional levies on IMFL regularly as the liquor industry is one of the major contributors to the state exchequer.

The Alchobev Industry Poised for Growth

The Indian alcoholic beverage industry is poised for a rapid growth in both value and volume terms in the times to come. The Indian alcoholic beverages industry is at its tipping point now, with high growth rates, across the entire spectrum of price points and categories. The industry has seen a double digit growth rate for the past decade and this is expected to continue.

The consumer base has increased with the rising disposable income. He is now more in tune with the outside world and habits. He is now a more social humane with huge links in society.

As it is known that India is home to nearly one-sixth of the global population and is one of the most attractive consumer markets in the world today. Various research studies have shown that a rise in the income levels has a direct positive effect on alcohol consumption. The National Council for Applied Economic Research (NCAER) projects India's 'very



rich', 'consuming' and 'climbers' classes to grow at a CAGR of 15 per cent, 10 per cent and 2 per cent respectively. With this growth in income levels, Indian Liquor consumption is expected to continue growing, at the very minimum, at the growth rates witnessed in the last decade. Further the influx of young population at large viz. in the age group of 20-34 years the IMFL category is slated to grow as they are the most favorite targets of the IMFL Marketers today.

A traditional social aversion to alcohol consumption has been a traditional feature of the Indian society. However this is fast changing. As urban and semi-urban consumers become more exposed to western lifestyles, through overseas travel and the media, their attitude towards alcohol is relaxing. Social habits are undergoing a transformation as mixed drinks are becoming more popular. The greatest evidence of this trend is the increase in beer consumption among women. More and more women are consuming beer – the penetration in metropolitan areas is almost twice as high as the penetration in other large cities – implying that the greater tolerance towards alcohol consumption in metropolitan areas facilitates the consumption of beer. With increasing urbanisation, this acceptance is only going to rise.

The Indian alcoholic drinks market generated total revenues of 12.9 Billion dollars in 2008, representing a compound annual growth rate (CAGR) of 11.1% for the period spanning 2004-08. Also the industry grew at a CAGR of 15.4% for the period ended December 2008 and is set to replicate the same this year also.

The IMFL market is dominated by Whisky, Rum and Brandy where Whisky is expected to constitute 55.2% of the market share. The very large Brandy market (21 million cases) rose by 7%.

White spirits viz. Vodka and gin is growing at the fastest rate but holds a very small market share.

India is turning to be one of the hottest markets in the Alcoholic space. The Indian Economy is growing at phenomenal pace inspite of the global downturn which has resulted in the increase in disposable income particularly among the vast Indian middle class. Alcohol which was a taboo a few years back is now one of the social needs and can be easily seen at middle and upper class social ceremonies like marriage/ birthdays etc. The societies are becoming more open and understanding that controlled consumption only adds to more pleasurable moments. This along with the growing disposable income provides enough evidence that there is only one way for the Indian Alcohol space to go Which is UP !!!!

An Ideal example could that be of our very own Maharashtra based Tilaknagar Industries Ltd. The company has grown from a turnover of about 100 crores 3 years back to over 400 crores as of last year. This year also they expect to surpass their own expectations. From One unit in Maharashtra they have over 20 own and tie-up units across the country. They recently commissioned one more 50 KLPD plant and are on the way to commission another 100 KLPD plant in January next year. Their Flagship brand Mansion House brand is a brand of millions and was recently given the brandy of the year award.

For those who want to make a career in Liquor the IMFL space is one of the most lucrative career options today. Since more and more discerning people in the country are becoming liquor friendly, firmly believing in responsible drinking, there has been significant growth of the industry in general and our Company in particular. Taking into account the challenges as well as opportunities, the liquor industry is looking for thorough-bred professionals who will drive business with a lot of passion and innovative leadership style.

Responsible Drinking and Corporate Social Responsibility

There are many ills of the Alcohol industry as such. Hence every company promotes responsible drinking, messages against drinking and driving etc. Further a lot of companies engage in CSR activities. These include adoption of villages, de-addiction drives, education etc. A lot of money is also donated to the well being of the societies at large.

Watch your thoughts; they become words. Watch your words; they become actions. Watch your actions; they become habits. Watch your habits; they become character. Watch your character; it becomes your destiny.

- Anon



If you are in Chennai and in the mood for some authentic kasundi with your fish, you may be out of luck. The pungent mustard paste is part of the culinary tradition of West Bengal and is not commonly available outside the state. None of the big, pan-India food companies sells it.

Supermarket chain Food Bazaar, which is part of India's largest listed retailer, Pantaloon Retail, introduced Tasty Treat kasundi some years ago as a private label -or store brand -- offering. But you won't find it on shelves across all 119 Food Bazaar stores, only in markets with significant Bengali populations. Similarly, you are not likely to come across Tasty Treat khakra and thepla, traditional savory snacks from the western state of Gujarat, in Food Bazaar outlets in north India. "The product mix varies significantly depending on local tastes and preferences," says Santosh Desai, CEO of Future Brands, which is responsible for private label development for the Future Group, including its flagship Pantaloon Retail. "Unlike national brands where such differences are muted, with private labels, customizing your offering is critical."

Private labels weren't always taken so seriously; in the past, they were considered cheap, no-name substitutes for "real" brands -- cheap in terms of price as well as quality. They were found mainly in generic products such as detergent and toilet paper, and staples such as rice and sugar. While many consumers bought stores' own brands, which usually sold at a substantial discount to national brands, they didn't often acknowledge it. For the retailer, the private label was one more way to earn a little extra. As quality improved, though, customers became more accepting, and retailers began to change their attitudes.

Not only are private brands now found across a spectrum of products -- from groceries and staples to apparel, consumer electronics and mobile handsets -- they are considered brands in their own right. The fundamental reason for the success of private labels is their price advantage, made possible by their nonexistent or very limited spending on product development and brand promotion. The bulk of the products

More Choices in Store: India's Retailers Are Stocking Up on Private Label Brands

IndiaKnowledge@Wharton

As a natural extension of the growth of the food processing industry, the growing trend of organised retail in the country has led to interesting developments in the market place. This article published by IndiaKnowledge@Wharton takes a look at the value of brands to the consumer and the retailers' effort to meet it.

are reverse-engineered copies of category leaders and they are promoted within the store, not advertised outside. Their value still resonates with customers, but it is no longer the only reason private labels are finding their way into more homes.

In India, the growth of store brands is a function of increasing retail sophistication. Large-format, modern retail stores (known as the "organized" retail sector) -- as opposed to smaller, traditional "mom and pop" stand-alone stores -- are presently only a small portion of total retail in the country. A report by investment bank Northbridge Capital, titled "Indian Retail Research 2009," estimates the total Indian retail market at US\$450 billion, growing more than 30% a year and expected to cross US\$720 billion in 2011. Of this, organized retail accounts for just 14%, or US\$63 billion -- although this sector is expected to grow 40% faster than the overall market to reach US\$90 billion in 2010.

Harish Bijoor, CEO of Harish Bijoor Consults and a visiting faculty member at the Indian School of Business, Hyderabad, wonders whether the definition of "private label" should include single-store labels as well. "If it does, then private label's share [of the retail market] becomes quite large. Many small businesses in the unorganized sector do stick their stores' name on the products they sell."



Why Private Labels Matter

Private labels matter for several reasons, the most important of which is their higher margins. For retailers, gross margins on private labels are, on average, 25% to 30% higher than on those of manufacturer brands. In consumer products especially, retailers' margins on national brands are in the 12% to 17% range, which is not enough to offset the cost of modern trade overhead. With a house brand, the margin can be upward of 40%, points out Pankaj Gupta, head of the consumer and retail practice at management consultancy Tata Strategic Management Group. "From the retailers' point of view, the urgency is obviously because of margin play."

The introduction of a store label also gives the retailer greater leverage with manufacturer margins and an increased ability to ride out business cycles, because the retailer has more leeway in pricing, marketing strategies and long-term planning.

Retailers view manufacturer brands as little more than commodities that can be easily procured from any outlet. Store brands, then, help retailers differentiate themselves. "As these products are unique to our stores, we benefit [from] the increase in [consumer visits] and overall sales," says Gunender Kapur, president and chief executive of Reliance Retail. If a store brand becomes popular enough to become a destination brand, it has implications for customer loyalty and profitability. "If a customer remains loyal to the store but switches brands, that works for the retailer," says Avinash Mulky, professor of marketing at the Indian Institute of Management, Bangalore.

To some extent, the market for private labels will grow on

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Traditionally, staples in India are purchased either in bulk from a wholesaler or loose from the neighborhood store. The Tasty Treat label took off after a disagreement over margins a year ago between the Future Group and Frito-Lay.

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its own. "The more consolidation there is in retail trade, the greater the growth of private labels," notes Nirmalya Kumar, director of the Center for Marketing and codirector of the Aditya Birla India Center at the London Business School. According to a September 2009 report PricewaterhouseCoopers on the outlook for the retail and consumer products sector, retailers across Asia - and particularly in India - report a strong increase in the sale of private label goods. "India may be Asia's most receptive market for private label goods. Today, private labels account for 10% to 12% of the retail market there, and

leading brands are far less dominant than in other countries."

Even the economic downturn has not damped that enthusiasm. In fact, private label sales typically increase during a recession as cost-conscious consumers trade down from branded products. While brands tend to return to favor when the economy recovers, the correction isn't to the same degree, Kumar says. "There is a permanent positive effect." Others echo that thought. "As consumers learn about the improved quality of private labels in recessions, a significant proportion of them are likely to remain loyal to private labels, even after the necessity to economize on purchases is no longer required," says a March 2009 KPMG report titled, "Indian Retail: Time to Change Lanes."

Adding Value

Retailers in India are spurring consumers' decision-making by expanding the scope of private labels. In the book Private Label Strategy: How to Meet the Store Brand Challenge, which he co-authored with Jan-Benedict E.M. Steenkamp, Kumar writes: "To be successful with private labels, retailers must remember when private labels add value. They should 'fill a void in the category' either in price or in value." That happens in three cases, according to Kumar and Steenkamp: where a copycat product offers consumers a choice even if prices are similar; where the market can be expanded by offering similar-quality products at significantly lower costs; and where innovative products that are not available through national brands are launched.

All three scenarios have been part of the Indian experience. For instance, most store brands in mass categories such as processed foods, personal care and home care are "me-too" products. (Interestingly, brands in grocery items are a more recent phenomenon for both retailers and national manufacturers:

Traditionally, staples in India are purchased either in bulk from a wholesaler or loose from the neighborhood store. The Tasty Treat label took off after a disagreement



over margins a year ago between the Future Group and Frito-Lay. The snack company temporarily broke ties with the retailer, and Food Bazaar promptly stocked its shelves with Tasty Treat potato chips and a rival brand, ITC's Bingo. The result: The homegrown chip brand raced ahead. "The Tasty Treat brand outsells better-known brands in many products, and we don't advertise," says Future Brands' Desai.

Kapur of Reliance Retail notes that his company's multiple-format stores stock private labels in categories including processed foods, staples, personal and home care, and even dairy and beverages. "The prices are 10% to 40% lower vis-à-vis similar branded products, while the quality is consistently very good. The share of private labels continues to grow as more and more customers are discovering the value and great quality." The introduction of own-label mobile handsets by telecom retailers such as The Mobile Store, HotSpot and Univercell similarly falls in the second category of value creation by private labels. "There may be customers down the value chain who currently buy traded-in phones who would be happy to upgrade to a new, branded, reasonably priced instrument that is feature-rich and comes with a warranty for after-sales service," says TSMG's Gupta.

The third category -- offering a product not available from name brands -- is perhaps the most sophisticated way private labels can create value. This was probably the first step taken by organized retailers seeking to launch private labels in India. Store brands in apparel were introduced along with the first Western-style department stores and hypermarkets. When Shoppers Stop launched the STOP brand of Indian wear in the early 1990s, it was the first branded ethnic women's wear range. "Branded

merchandise was not available, so retailers had to start their own labels," Kumar notes. Similarly, consumer electronics products have been available for some years through most retailers as big international brands or smaller national/regional brands. But Ajit Joshi, CEO and managing director at Infiniti Retail, the Tata group company that runs the Croma chain of electronics stores, says

that "innovative products encourage early trials and are therefore interesting for private labels to explore and be present in." More than the usual laptops and toasters, the "Handpicked by Croma" brand is drawing attention because of its introduction of products including wine coolers, jewelry cleaners and binoculars.

Store brands in high-involvement categories such as consumer electronics seem contrary to conventional wisdom. "Indian consumers can be aggressively brand-conscious, especially when it comes to durables," Bijoor says. "The brand is seen as a guarantee of quality and also has flaunt appeal." Joshi notes that in electronics, private labels have "higher acceptance in products and categories that have low brand preference and high functional appeal. In categories that are predominantly driven by leading brands, it is a challenge to get visibility and conversions. Penetration in brand-neutral categories like peripherals and accessories is easier. We have a fair presence in the small appliance and IT category, both of which allow us the flexibility to offer technologically superior products at high perceived value."

'Just Another Brand'

By that logic, do private brands lend themselves to any particular category of product? "For most consumers, a private label is just another brand. Hence, the categories where consumers have less loyalty to better-known or promoted brands are the categories where retailers should try to push private labels," says Harminder Sahni, managing director of retail consultancy Wazir. Commoditized items with low levels of product innovation and emotional involvement from the consumer, then, are ideal candidates to become store brands. But given the regional variations in India, there is tremendous scope for customization even here. Kasundi and thepla are cases in point, but Desai also cites a to-be-launched staples brand that is a "highly localized effort," with even the variety of wheat differing from region to region.

How do private labels get potential customers' attention? For starters, they advertise -- but not for all brands, not at the same scale as national brands, and, often, not in the same media. Unlike national brands, which may opt for 360-degree campaigns using television, radio, print and online media, retailer brands typically rely on local advertising avenues such as radio, leaflets and newspaper inserts.

The bulk of the communication, though, happens at the store level. That's because most retailers accept that 80% of purchase decisions are made at the store shelf, and the store is where they have maximum control. Thus, most retailers work on creating multiple touch points within the store, through extensive in-store advertising and placement strategy. "Private labels benefit most by comparisons, so retailers will try to drive sales, for instance, by strategic



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Despite the activity surrounding private brands, Indian retailers recognize that it is highly unlikely that a private label will unseat the number-one player in any category. In fact, the conventional wisdom is that when a private label enters a category, it is more likely to take away market share from the brands in second and third place.

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positioning of the product next to the most expensive competitor," says Bijoor.

In-store interactions also have an important role. The traditional Indian shopper prefers to touch and smell food grains before buying. Working on that insight, Food Bazaar outlets display open containers of rice, wheat and lentils to encourage customers to run their hands through the grains and check the quality.

Similarly, grinding mills installed inside many outlets reassure customers that the flour they are buying is fresh – and fresher than the national brands.

Retail stores' sales personnel also play a role, especially when communicating the store brand's advantages. The price angle is rarely the focus of the sales pitch. Instead, the emphasis is on how the

house brand is superior or similar in quality to the leading brand. Most retailers in India source their private label products from "contract" manufacturers. The KPMG report points out that "[in] India, very few players are into manufacturing of private labels and are very dependent on third parties. For example, Vishal Retail is increasingly shifting from manufacturing to third-party sourcing primarily because of increase in categories for private labeling and volumes." Importantly, big brands often source from similar third-party suppliers, a move that has implications for the retailer. Not only do margins increase, the quality of the private label product is likely to be closely matched with the national brand. For consumers who are sitting on the fence, that argument is often the clincher, retailers say.

Who Loses Market Share

Despite the activity surrounding private brands, Indian retailers recognize that it is highly unlikely that a private label will unseat the number-one player in any category. In fact, the conventional wisdom is that when a private label enters a category, it is more likely to take away market share from the brands in second and third place. "Private label products typically offer a wider choice to the consumer and should not replace leading category brands that help set consumer expectations," Joshi says.

Most retailers are aiming for about 50% revenue from their own labels, though there are exceptions.

Pantaloon, the Future Group's apparel store, has an ownbrand ratio of more than 80%, while the ratio is even higher for Trent's Westside stores. Consultants advise against tilting too much in favor of private brands. If manufacturer brands decide to walk out and the in-store variety is compromised as a result, customers may follow.

Manufacturer brands react to the influx of private labels with understandable wariness, especially during the launch phase of a store brand, when its nuisance value is still to be evaluated. If the retail label looks to be successful, the retailer's bargaining power increases. An addition to the product portfolio means greater competition for the retailer's limited shelf space. The result? Better margins for the retailer and more promotional offers for the customer. At the extreme, if too many players occupy a category, the retailer may opt for brand rationalization and do away with the nonperformers.

Retailers aren't tough only with manufacturer brands. They are equally uncompromising when it comes to evaluating the performance of their own brands. Barely a month after launch, Mela -- a home furnishings brand -- was overhauled after Future Group chief Kishore Biyani decided it wasn't working in the existing format. Another in-house brand, Fashion Station, has been phased out on similar grounds. "If you are in the business of retail, your religion is making money for every square foot," Desai notes. "Building brands comes only after store-level efficiencies are achieved."

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Optimism means expecting the best, but confidence means knowing how to handle the worst. Never make a move if you are merely optimistic.

- The Zurich Axioms

(Retailing has come a long way since the days of the local grocer or street corner gift shop. The scale of operations have seen a voluminous growth with the participation of giants like Wal-Mart, Marks and Spencer, etc. In India too, the small time shopkeeper is under tremendous pressure from established Industrial Groups which are breathing down his neck. The conditions in India, however, are different from those obtaining in the developed countries and the ubiquitous retailer of the past, may yet continue to hold on to his business. But for how long, is anybody's guess. Add to the changes in retailing through brick and mortar shops and malls, is the fast growing business of e-tailing which confers many conveniences on the shopper in the process threatening even the by-now thought to be entrenched multi-national, multi-locational mega shopping establishments.

The following is an excerpt from Retail Management by Patrick Dunne and John Lusch published in India by Cengage Learning India P. Ltd.)



In a Nutshell

The Nature Of Change In Retailing

Many observdrs of the American business scene believe that retailing is the most "staid and stable" sector of business. While this observation may have been true in the past, quite the contrary is true today. Regailing which accounts for 20 percent of the worldwide labor force and includes every living individual as a customer is the largest single industry in most nations and is currently undergoing many exciting changes. It is important to note that a recent study concluded that the number one reason CEOs were replaced was for "mismanaging change" While this study looked at all types of businesses, this finding would be especially true in retailing.

According to the Census Bureau, currently just over 1.1 mn retail establishments are selling physical or tangible products in the United States, with total annual sales of nearly \$3.8 trillion, or nearly \$11,000 per capita. Ten retail establishments exist for every 1000 households. This equates to average annual sales of nearly \$3.45 mn per store. Most retailers, however, are smaller, and many have annual sales of less than \$750,000.

These figures do not reflect the changes that have occurred behind these dollar amounts. The number of new retail enterprises that were developed in the last two decades is truly amazing. Most of these new businesses have actually been new institutional forms, such as Internet retailing, warehouse retailing, super-centers and home delivery of both fast food and groceries. Change is truly the driving force behind retailing. Let's explore some of the trends that are affecting retailing today.

E-tailing

The great unknown for retail managers is what the ultimate role of the Internet will be. Most observers recognize the value of online shopping for travel, clothing, cosmetics, and music.



But it is still unclear if online shopping will reach its projections for 'everyday' needs. Probably the best example of this dilemma is what the future holds for online shopping for books. The Internet, with entrants like Amazon.com, was supposed to destroy the traditional bricks-and-mortar bookstore. Despite such projections, the early returns are mixed.

Yes, the discounters stocked all the best sellers and Amzon offered free delivery and lower prices, but the bookstores are maintaining their profitability. Two possible explanations are given. First, that faced with these threats, bookstore management became more business-oriented. Supply chains were streamlined and some of the 'well-read but not profit oriented' staff was replaced with stern business-minded types. Special deals on best sellers were used to match competitors, and better sales techniques, especially suggestion-selling were developed so that, once in the store, customers were sold items the competition didn't carry. Second, the traditional retailer stressed the major limitation of the Internet as a retail channel. The bookstores differentiated themselves from the online competition by becoming a retreat from the house. They began to offer coffee, chairs to relax, poetry readings and lectures. In addition, they conceded the fact that e-tailers can often undercut their bricks-and-mortar rivals, but online customers must wait at least a day for their books to be delivered, often at inconvenient times. This campaign was so successful that Amazon recently announced that it would sell pages of any book for pennies per page, thereby enabling readers to read the first chapter, while waiting for delivery.

What the future will bring for online shopping, which now accounts for about three percent of total retail sales, remains to be seen. However, it is the promise of e-tailing's efficiency that has consumer still excited.

Another dramatic change caused by e-tailing is a shift in power between retailers and consumers. Traditionally, the retailers' control over pricing information provided them the upper hand in most transactions. The information dissemination capabilities of the Internet are making consumers better informed and thus increasing their power when transacting and negotiating with retailers. E-tailers have provided consumers with detailed pricing information about products ranging from autors to office supplies, thus enabling them to negotiate better deals. Some e-tailers, such as Priceline.com are shifting power to consumers by allowing them to set their own prices and then letting retailers fight for customers. Clearly, e-tailing is adding a new competitive dimension to retailing. However, e-tailers must worry that many consumers will use the internet for research and then buy the product in neighbourhood stores.

Experience is the comb that life gives you when you go bald.

- Thai saying

Hot Air on Climate Change at Copenhagen

P. G. Vijairaghavan

So, Copenhagen has come and gone... and as was expected, the common man is left twiddling his thumb. It has proven to be a two week holiday for the hundreds of politicians and bureaucrats from all across, who headed for it, ostensibly with a mission to protect the environment. So what if global warming accelerates, and the Arctic glaciers melt, and the Amazon forests are just a memory, what if rivers change course, droughts and cyclones, desertification and floods become the rule... Growth...be it a country's economy or a leader's own rise to international Nobel stardom, is paramount in today's world. More so, for the developed world which has been baulking at the continuing recession that arrested its march towards retaining global economic supremacy, whatever the cost.

The Inter-Governmental Panel on Climate Change, a scientific inter-governmental body formed by the World Meteorological Organisation and the United Nations Environment Programme was charged with overseeing the implementation of the United Nations Framework Convention on Climate Change (UNFCCC) has been unequivocal in expressing its fears on climate change.

The key conclusions of the SPM (Summary for Policy Makers) were that :

- Warming of the climate system is unequivocal.
- Most of the observed increase in globally averaged temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic (human) greenhouse gas concentrations.
- Anthropogenic warming and sea level rise would continue for centuries due to the timescales associated with climate processes and feedbacks, even if greenhouse gas concentrations were to be stabilized, although the likely

amount of temperature and sea level rise varies greatly depending on the fossil intensity of human activity during the next century

- The probability that this is caused by natural climatic processes alone is less than 5%.
- World temperatures could rise by between 1.1 and 6.4
 °C (2.0 and 11.5 °F) during the 21st century and that:
- Sea levels will probably rise by 18 to 59 cm (7.08 to 23.22 in) [table 3].
- There is a confidence level >90% that there will be more frequent warm spells, heat waves and heavy rainfall.
- There is a confidence level >66% that there will be an increase in droughts, tropical cyclones and extreme high tides.
- Both past and future anthropogenic carbon dioxide emissions will continue to contribute to warming and sea level rise for more than a millennium.
- Global atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values over the past 650,000 years.

In IPCC statements "most" means greater than 50%, "likely" means at least a 66% likelihood, and "very likely" means at least a 90% likelihood.

With these damning predictions made by the IPCC, it was expected that those charged with guiding the destiny of the world will realise the precarious nature of global living today and act with a sense of purpose and urgency, if not to reverse, at least curb further damage to the ecology, and work to preserve the planet for the future generations. As it happened, the world expected too much from them; they just did not have it in them to rise above opportunistic considerations and got mired in their GDP growth, cost and controls, targets and caps, per capita and absolute greenhouse gas emission etc.

It is a travesty of the faith placed by 6.2 billion people, in 192 leaders who got together at Copenhagen, that they could not rise above these 'trivial' considerations (against the bigger picture of surviving the century). History, if it can still be read in the coming century, will never forgive these 192 men and women for bringing the planet closer to self-destruct. The world expected that the developed



countries would show the realisation and ability to let the rest of the world share in the bounty of a beneficial natural endowment to help the less fortunate among them, to grow and reach reasonable standards of development for their people; to share the wealth of the planet equitably and fairly.

At the root of this failure is the unforgivable urge to cling to timeworn cliches of 'harming' the developed economies should they resort to cuts in greenhouse emissions without simultaneous, equal and reciprocal action by the less developed. How much our leaders were blinded by their own brand of 'patriotism' is evident from the fact, that they did not realise that climate change cannot be restricted by geographical borders, simply because the weather is a global phenomenon; it does not recognise state borders or maps. Thus, the effects of climate changing practices, or the lack of it, can be felt in states which are not responsible for the generation of these effects. Therefore, the 95% emissions from the United States need not necessarily affect the US alone, it could as well be reflected in the changing weather patterns in either Canada, or Mexico, or even South America. For this reason alone, the US has to be held singly responsible for pushing the planet close to extinction. The low emissions from the less developed or least developed countries could cause little or no damage to the neighbouring lands. The net losers ultimately will be those with less emissions; read the poorest among the poor countries. This is where the efforts to control climate change need international rather than national action. The Copenhagen summit, as indeed, all the summits before, has, if anything, highlighted the bankruptcy of thoughts in the world leaders and the lack of statesmanship - which has failed to consider the problem in its holistic entirety. The Accord has proven to be more of an alibi and a fig leaf, for the millions of dollars that have gone down the drain as cost of the summit – as some body put it - the real action was outside the Bela Centre where thousands of demonstrators for a clean environment were being given the treatment by the Danish police. Symbolically, representing the treatment the least developed and developing world got from the haves at the Summit. The blamegame has begun – not just for the failure of the summit - but to put the cause of the crisis at individual countries' door. While it is right to identify the sources of the greatest and least corrupting countries in this regard, it should have the corollary of the intent to rectify the past wrongs on their part, and to start on a clean slate. This is where the solution to the problem surfaces.

To say that countries like the United States will merrily continue to wreak havoc on the world, while expecting the rest of the world (read 'underdeveloped") to pay for their continued sins betrays once again the lack of realisation or willingness to acknowledge, that in this game of survival, at

least, we all sink or swim together. The citizens of the world understand that Typhoon Kristina in Louisiana, Cyclone Phyan in Asia, the Mithi river changing course in Mumbai, snow in Dubai, cloudbursts and unseasonally high temperatures in London, vanishing species of flora and fauna (Jean Christophe Balouet and Eric Alibert, in their book, Extinct Species of the World (New York: Barron's, 1990), estimate that we are losing about 100 species of animal and plant life every single day) are all signs of the coming apocalypse. It is only the leaders that we elect who show remarkable lack of vision and sensitivity to appreciate the oft repeated cliché that we have inherited this planet from our future generations.

In the ultimate analysis, Copenhagen became an event not about saving the planet, but about saving the face for our politicians. It was about the next Presidential elections in the U. S., it was about posturing by the BASIC countries, only to cave in under the sheer weight of the personality of the US President, and for the nth time, keeping the least developed world out of the ambit of development, just so some of the 'victorious' could tell their electorates, 'Yes, we said, we can, and we did it'. Of course, they did it... No agreed cuts in emission. Verification of process of implementation in developing countries. Peanuts in financial help to the worst affected. And it is anybody's guess what the fate of the Kyoto Protocol is going to be. And for all the loud posturing by the developing countries led by our own representatives, they gave in finally like a pack of cards, in the process letting down two-thirds, of the world.

Cop 15 has certainly achieved the unthinkable. Taking the world for a ride.

Into waiting oblivion.

Character is like a tree and reputation its shadow. The shadow is what we think it is; the tree is the real thing.

- Abraham Lincoln



The lifestyle of the 21st century is definitely termed as ultra-modern and a highly evolved one. Yet one wonders how such an advanced lifestyle could be so faulty that it gives rise to more and more difficult and complicated illnesses? Should our lifestyle be labeled as sick instead of sunny? We understand that human beings made the society and started living in a community for helping each other live a better life. The aim was to shield against the violence of environment and to create an advantage of protection given to each other. The growth and development of such lifestyle was itself being termed as evolution of mankind. So actually the lifestyle should have progressed towards offering a more healthy and disease free life for individuals. It is a surprise that how the so called modern lifestyle is in fact only bringing more problems at physical, spiritual and psychological levels.

Let us have a bird's eye view of some of the major hazards of our millennium:

- Air, space and thought pollution: Air, the very prime necessity of every individual, that which we breathe in and out every minute is polluted like never before. Whether by industrial processes that emit innumerable toxic elements in the atmosphere, green gases or vehicular pollution, the fact remains that the atmospheric air is most impure in our age. Not only is the air polluted by these toxic elements, even more dangerous is the thought pollution. Four out of five persons are either highly stressed, depressed, angry or upset due to some reason or another and these negative thoughts fill up our atmosphere continuously.
- Emotional stress in relationships: Due to the carrier oriented attitude of youngsters and to some extent due to the social situation and pre-requisites, the general trend nowadays is to marry only by the age of thirty.

The requirements of the body and the development of hormonal changes do not

Lifestyle Diseases - Ayurvedic Aid

Dr. Shri Balaji Tambe Atmasantulan Kendra, Karla



Born in June 1940 with an early background in mechanical engineering, Dr Tambe is now a famous Ayurvedic doctor. Above all his aim is to help people find health at all three levels: mind, body and soul. A great Spiritual Guide, he is also an expert in Yoga, Music, Meditation & Cosmology. Dr Tambe has long been a pioneer of the lost art of Ayurvedic rejuvenation treatments Panchakarma and Kayakalpa, which he has re-established at his centres in India and Europe. His unique methods, which incorporate Ayurveda, Yoga and Meditation, have already benefited thousands.

In 1982, Dr Tambe founded Atmasantulana Villageone of the first contemporary and authentic Ayurvedic Panchakarma Centres in India. Today, people from India and all over the world enjoy the benefits of the Holistic Healing therapies offered there. Santulan treatment combines Ayurveda, Yoga, Meditation & Healing Music, together with planning a healthy lifestyle. There is a fully fledged pharmacy on the premises manufacturing traditional Ayurvedic medicines. With more than fifty people living and working there, it was named the best model in Vedic community living at the Expo 2000 Hannover, Germany.

Since founding Atmasantulana, Dr Tambe has established more centres in Pune and Mumbai as well as in Europe, in Munich, Frankfurt, Westerwald and Gleichen. Throughout his career Dr Tambe has personally developed more than 100 medicines to treat chronic diseases such as heart disease, blocked arteries, paralysis, hypertension, cancer and AIDS. He has also designed physical therapies with near miraculous results, such as "Kundalini" massage for back and spine rejuvenation, or "Herbal Smoke Therapy" for psychosomatic disorders.



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Ayurveda suggests that the breakfast needs to be sumptuous and fresh cooked, this is discarded as too inconvenient.

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take into consideration the social and financial requirements, they follow nature's rule which has not changed since the beginning of the time. Naturally, the man and woman either have make-break relations or involve into partnerships without marriage which gives a different psychological pressure. On the other hand the hormones play their role and bring a big disturbance since they have been not given an opportunity to act in their own way in a given time.

• Time tension: All of us are used to living by deadlines rather than lifelines. We are continuously running short of time and are

making rigorous efforts to catch up with it. The phobia of completing the task before the given deadlines starts right from the young students, colleges, universities and permeates every office, home, industry, city and the nation as a whole. Workers are expected to work in three shifts for increasing the production, what is forgotten that this is against the biological body clock. We are trying to change the quality of time but this ultimately hits back. This is impossible as time affects everything but time itself is not affected by any human efforts.

- Fashion trends: At the physical level, modern times give a lot of importance to the outer presentation and thus different fashion trends are adopted for attire, jewelry, haircuts, etc. This too becomes a reason for constant pressure and complexes, resulting in suffering and finally diseases. As it is the area of the bladder, uterus and the genitals needs a certain temperature balance for remaining in perfect health. All over the world, in the beginning mankind designed dresses suitable for the environmental conditions prevailing in a particular geographical region. In warmer climatic zones, the clothes were never tight around these parts of the body. Only in extremely cold temperatures, did people wear denim trousers. Wearing jeans in tropical countries especially by women can lead to many gynaecological and hormonal disturbances.
- Nuclear Families & neglected food: The luxurious and carrier oriented lifestyle demands that both the partners have their own work places and income sources. The Indian concept of joint families is labeled as 'old-fashion' and in

TELEPHONE MANNERS

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Telephone manners may seem simple but they demand a special technique. Here are some guidelines:

- Thoughtful callers consider the other persons lifestyle and hours before ringing.
- Anonymity isn't good manners from a caller." Hi, it's me." is arrogant.
- Always greet the person who answers the phone and then ask for the person you wish to speak to.
- Always look for clues that suggest that you may have called at a bad moment or that person needs to cut short the call.
- Always take messages efficiently. They should be written down carefully with the callers name and number and put where they can't be missed.
- It is polite to return the call on the same day unless you are out of town.
- Nobody should use another person's phone without permission
- Don't put people on hold for too long.
- Wrong numbers are swiftly realized if you give your number while answering the phone.
- Please apologize if you have dialed a wrong number. Do not hang up without speaking.
- Never ring off on an answering machine without speaking. Always leave a clear, short message with your number.
- Use phonetics like Alfa, Bravo, Charlie when giving an address or spelling a name.
- The greatest of all telephone rudeness is to put the telephone down on someone when he is speaking.



Business Calls

Even in these days of computer and fax machines the telephone is still the company's artery to the world. Most of the rules of private calls apply, but business calls need extra skills.

- Use polite, concise but not abrupt speech.
- The first secret of being effective and persuasive on the phone is to smile; it makes the voice sound friendly.
- If a lengthy discussion is needed, the caller should ask if it's a good moment to talk or not.
- If someone else in the office is on an important call, others should keep the noise level or hubbub down.
- A switchboard operator should always say she is putting someone through, and a caller who can't immediately be connected to the right person, should be told what is happening.
- If it is company policy for the switchboard to check the nature of the call before putting someone through, her/ his manner should be helpful, not obstructive.
- Questions should be politely phrased.
 "May I say who's calling" Or "Can I tell her what it's about?"
- Efficient Executives can deal with calls rapidly and courteously and take most calls that come through. The trick in keeping calls short lies in setting the pace.
 If you are brief and businesslike most callers will copy you.
- A business call is not a chat. It should therefore be a just a single exchange of enquiries of how the other person is, before launching into the issue at hand.
- When an unwanted caller needs to be blocked, start with saying that you think he is with someone and then ask the name and what it's about. Then if the call is taken or not nobody feels insulted.
- You can also say that the person is in a meeting with a senior executive and cannot be disturbed, is visiting a client, at a conference or some other professional and believable excuse. Then you can say-"if you can tell me what it's about maybe someone else can help you."

the process the natural working of the family unit for looking after the body, mind and soul of every individual in the family has been neglected. Readymade food packs or fast food has replaced fresh, home cooked food. Ayurveda suggests that the breakfast needs to be sumptuous and fresh cooked, this is discarded as too inconvenient. Also as per nature's cycle according to Ayurveda, the afternoon meal is the main time for food when the sun's energy is maximum outside as well as the digestive fire in the body is at its highest point. However usually our lunch consists of a little quantity of dry food to fill in the emptiness

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It is important that the food we eat has the potential that it can be transformed right up to the seventh stage of providing every individual the vitality or energy.

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of the stomach. Also there is zero relaxing time after lunch, one jumps back to work, this being the reason that many prefer to eat less at lunch so that the heaviness and drowsiness is prevented. All this is compensated at dinner time by a complete, heavy meal. Our eating systems are exactly opposite as to that prescribed in Ayurveda which says, 'Eat breakfast like a king, lunch like a prince and dinner like a pauper'. Also meals need to be taken while sitting relaxed, in a friendly, homely atmosphere. Our lifestyle is full of open air parties with buffet dinners, they are surely an open invitation to diseases.

Our lifestyle has gone so far from the natural Ayurvedic way that it is difficult to reverse it back at once but surely we need to find a balance at a tolerable limit so that we can carry on our modern lifestyle yet enjoy good health.

Stress and anxiety are the two key words which can sum up the overall effect of all the problems of our lifestyle. In the long run they give rise to the most of the common ailments like high blood pressure, obesity, diabetes, depression etc. The earlier signs indicative of such ailments in the future are usually neglected. They may be in the form of lack of concentration, boredom, lack of interest in studies and projects etc, which are commonly observed in around 80% of professional graduates.

Ayurveda suggests that if we could try to make a few changes in our diet and behavior, they would go a long way to give us a healthy and joyful life.

• We are what we eat: The most neglected and yet very

Health, Fitness & Grooming



important factor is the food we eat. According to Ayurveda, the food that we eat undergoes seven stages of transformation starting with rasa-plasma, rakta-blood, maunsa-flesh, meda-fat, majja-bonemarrow, asthi-bones and finally veerya-vitality. It is important that the food we eat has the potential that it can be transformed right up to the seventh stage of providing every individual the vitality or energy. Ayurveda goes further to the development of ojathe essence of all the dhatus which is providing the energy required for all our activities. Junk food, canned food etc. have minimum capacity of transformation to the latter stages and hence are best to be minimized. All of us need to insist on sattvik, fresh home cooked food that is light easy to digest and gives maximum energy and vitality. Every person needs to understand his constitution and prepare a time table for the whole year taking into consideration the seasonal changes, work loads, type of work, age, sex and social conditions along with the geographical conditions where they are living. This will give an understanding of what type of food can offer them the balance.

- Water is precious: But not so precious that we have to drink too little! Drinking sufficient water is the key to good health. Ayruveda suggests that drinking enough quantities of boiled drinking water is a must for optimum health. Boiling not only purifies the water but also makes lighter and this water is easily accepted by the body. Soft drinks or aerated drinks cannot replace the requirement of water.
- Early to bed, early to rise....As far as possible avoid late nights, staying awake after midnight leads to increase in pitta dosha causing indigestion and many problems thereof.
- Fast life, fast food, fast death! Avoid excess of deep fried, oily and junk food
- Walking –the best exercise: Walking every day for about 30 mins and practicing yoga and pranayam is ideal, avoid strenuous exercises
- **Sleep well:** Avoid late nights, sleep in time and for enough hours 6-7 according to individual constitution
- Take a break: Remember to take a short break when you feel stressed or tired either mentally or physically. Avoid any force on the body or the mind
- Give yourself a treat: Abhyanga massage described in Ayurveda is an easy to do home remedy for all individuals. Oil application is ideal for Vata balance, the imbalance of which is the major culprit in al 21st century ailments. Abhyanga helps to improve the circulation and offers relaxation to the body and mind, normalizes the flow of the

rasa and rakta dhatus in the body and reduces the hardening, improves the elasticity of the blood vessels. Ayurvedic panchakarma- a purification and rejuvenation therapy is a must for every person with high blood pressure. The swedan-steam and snehan lubrication therapies help to improve the circulation and the therapies virechan-laxative therapy and medicated oil enema basti give very goo dresults in cases of hypertension. Panchakarma helps to balance the three doshas vata, pitta and kapha, the imbalance of any one or more of them is the cause of disease. Post panchakarma treatmenst like shoridhara, shirobasti, panda swedan, hrud basi etc. are performed depending on the cause of the high blood pressure.

• Connect within: Efforts need to be made that the stress endurance capacity at work as well as in relations may be increased. Give yourself enough time for relaxation, enjoying individual hobbies, listen to relaxing and healing music, practice meditation techniques to keep the mind quiet and calm. Sitting quiet for 10 minutes with closed eyes before sleeping is beneficial, deep breathing, pranayam and yoga nidra — a sleeping meditation or relaxation therapy are excellent remedies for connecting within to experience inner peace and joy.

To put the world right in order, we must first put the nation in order; to put the nation in order, we must first put the family in order; to put the family in order, we must first cultivate our personal life; we must first set our hearts right.

Confucius



tapasya Gyanganga Lecture Series Takes Off

The Indira Group of Institutes opened its heart to the unadulterated wit and widom of Mr R. Gopalakrishnan, Executive Director, Tata Sons Ltd on Saturday, 10 October when he inaugurated the Tapasya Gyanganga Lecture Series at the Dhruv Auditorium and made the maiden address under the Series on the subject of "Innovation and Ingenuity" with special reference to the Tata Experience of over 100 years.

The Tapasya Gyanganga Lecture Series has been conceptualized by the Indira Group under the aegis of Tapasya, the triannual journal. The purpose is to make available to the young students the wisdom and wealth of the experience of icons in Business, Sports, Arts, Media, Journalism, Literature etc. so

that these role models can be their inspiration to contribute actively to nation building in a big way. The Series is being mooted as an ongoing event featuring atleast 3 speakers of eminent standing per year.

In a presentation that was laced with his trademark wit and erudite thinking, Mr. Gopalakrishnan emphasized that innovation is not a formal exercise which can be directed by the corporate, setting standards and limits for the same, much in the same way as it may set standards for production and sales. He underlined the need for a climate of innovation and empowerment in the organization considering the needs of the market and the stakeholders. In fact, he was at pains to insist that innovation does not recognize hierarchy or

position and even the juniormost in the organization; why, even an outsider, can come up with a path breaking suggestion that can change the way the market looks at a product or service. He gave the examples of Tata Salt, which took the country by storm, first by introducing the innovative product through a unique business model of outsourcing the major constituents of the cycle; and then revolutionized the customer's thinking through some imaginative advertising – the Desh Ka Namak campaign!

So too was the introduction of the mini-truck Tata Ace which created a brand new segment in the commercial vehicle market and the rest, as they say, was history! And of course, the Nano which could not have been ignored at the talk, and which today, is at the head of Tata Motors' innovation story. Who knows, it might change the way the middle class travels in the cities of India!

A 400 strong faculty and student audience kept Mr. Gopalakrishnan busy replying to a number of questions during the highly interactive session. Mr. P. G. Vijairaghavan, Editor - Tapasya & Convenor of the Tapasya Gyanganga Lecture Series explained the concept of the Series and introduced the Guest, while the Chairperson Ms Tarita Shankar welcomed Mr. Gopalakrishnan, and Group Director Mr Chetan Wakalkar moderated the interactive session.







"La Salle Matrix Thinking®"

Innovation Management at Indira School of Business Studies, Pune

Indira School of Businss Studies (ISBS), Pune, introduced a certified course in Innovation Management, for its Business Management students.

ISBS successfully launched the course in 2008, with "Igeniou" and its mentor Mr Titus Young, from Singapore.

ISBS concluded its second certified course in Innovation Management, in Sept' 2009 with the globally acclaimed Mr. Roger La Salle, a professional engineer, successful business entrepreneur and an international expert of business innovation, who brings with him a lifetime of experience and successful business creation.

Roger is the author of several books on Matrix Thinking and in 2004 was appointed Chair of Innovation at the prestigious "The Queens University" in Belfast. He is Director of a number of companies both in Australia and internationally and was formerly an expert panellist on the Australian television program, the New Inventors.

Tearful Homage

Students of Indira School Of Communication pay rich tributes to the martyrs of the 26/11 tragedy.

Students of the Indira School of



Students of the Indira School of Communication performed a striking skit, a video show, poetry recitations, speeches and a remarkable lamp lighting ceremony, to pay tributes to the martyrs of 26/11 tragedy. On the sullen anniversary of the sad incident, students of the BAJM course took centre stage at the pool side auditorium in the campus.

Among the items presented was a moving poetry recital by second year students, Shirin Dubey and Pankhuri Jain. The poems were scripted by Shirin, an aspiring scribe.

Emerging India@IIMP

Indira Institute of Management, Pune has a tradition of conducting Thematic Induction Programme. This year it came up with a very unique and relevant theme i.e. "Emerging India". Ms.Supriya Sule, (MP) was the guest of honour and inaugurated the programme.

Also present were Dr. Arun Nigvekar, former chairman UGC and chief mentor Seamless Education Academy who enlightened the students on Emerging India and Mr. Ramakrishnan Ganesh, VP-HR, Oracle Financial Services was also the part of the programme and who gave the overview of HR and job prospects in HR.





Workshop on "Performance Management" By NHRD in collaboration with Indira School of Business Studies

ISBS invited NHRD Pune Chapter, to host a workshop, on Performance Management. The participants in the workshop were Corporates, Faculty and HR students of ISBS. Thirty five participants visited the ISBS Campus from the corporate world and the full day's workshop witnessed tremendous value addition for the participants. The trainers in the workshop were Mr. Prince Augustin- Senior Vice President, Human Capital, Mahindra & Mahindra and Ms. Carmistha Mitra, National OD Manager-Hindustan Coca Cola Beverages.



"Samvedana"An Initiative by Indira School of Business Studies

In yet another CSR initiative under "Samvedana", ISBS Faculty and Students approached an NGO in Pune called Balika Gram which is providing shelter as well as education to children whose parents are afflicted with leprosy. It was conveyed to ISBS that the NGO would tremendously appreciate medical screening of its inmates who are young girls,



to ensure complete health safety and counseling.

Indira School of Business Studies, Pune therefore took it upon themselves to organize such health check up on a regular basis and the first such initiative was organized as a Medical Check-Up Camp on 15th Nov 2009.

ISBS arranged the services of Dr. Neelam Dhamale (Pediatrician), Dr. Rajendra C.Shinde (Dermatologist), Dr. Nandita Nair (Gen Physician) & Dr. Vikrant Aggrawal (Gen Physician), who gave them suggestions about general hygiene, ways to cure the ailment and ways to prevent the spreading of the disease. All doctors worked on honorary capacity.

ISCD's Outdoor Management Training session at Karnala Fort

"The Outdoor Management Training (OMT) Session for ISCD Shivajinagar PGP SMU first Semester students took place 445 meters above the sea level at Karnala Fort.

Karnala is 61 Kms South of Mumbai on the Mumbai - Goa Highway and is a Government protected site.





Induction Programme@Indira College of Engineering and Management'

The third Induction Programme was conducted for First Year Engineering students of 2009 – 10 batch on 11th and 12th September 2009, in college campus.

Distinguished personalities like Mr. Achyut Godbole of Softexcel Consultancy Services, Mr. Deepak Shikarpur of Autoline Design Software & Head IT sector MCCIA, Mr. Balaji Reddie of the Deming Forum, Mr. Sham Bhagwat a trainer in 'seven habits of successful people', and Mr. Anil Rao a yoga teacher, Mr. Ramani Iyer of Forbes Marshall, Mr. Madhav Deshpande of Symphony Software, Mr. Sandeep Israni of Tej Gyan foundation, Prof. Khaladkar a training and placement officer and Mr. Madkikar of Contech Engineers shared with students the way to achieve their dreams.







INDIRA GROUP FORAYS INTO DISTANCE EDUCATION



Indira Group of Institutes-one of the leading names in the field of management education has now forayed in the distance education segment by inaugurating 'Indira International Distance Education Academy' (I-IDEA). It has become the first private institution in the country to offer AICTE – UGC - DEC approved Post Graduate Programs in Management education with specializations like Marketing, HR, Finance, Operations, Systems and Insurance & Risk Management through Distance & Online learning.

This new venture of Indira Group was inaugurated by Prof. Om Prakash Mishra, Pro Vice Chancellor - Indira Gandhi National Open University at Indira Universe Campus in the auspicious presence of Hemant Joshi, Partner - Deloitte Haskins & Sells. Ms. Tarita Shankar, Chairperson - Indira Group, Chetan Wakalkar, Group Director - Indira Group and Manjoo Phadke, Director – I IDEA were also present at the function.





Its The Season Of **AWARDS For Indira Again!**

2009 proved to be not very different from the past years when it came to winning Awards and recognition for quality in education. Coupled with this was the hail of recognition for the Chairperon, Ms Tarita Shankar where she bagged most of the Awards for leadership in education! No wonder we are proud to be Indiraites!

The List Of Awards For Ms Tarita Shankar

vards

- 'Edupreneur of the Year Award' at the Dewang Mehta Business School Awards, November 2009.
- 'Pride of the Profession Award' by Stars of the Industry Group and Fun & Joy at Work.
- III) 'Visionary Leader Award' by DNA & Stars of the Industry Group at Innovative B-School Awards.
- IV) 'Samaj Bhushan Puraskar' by Akhil Bharat Brahman Mahasabha.
- V) 'Hall of Fame Award' at the 16th Dewang Mehta Business School Awards, Mumbai.
- VI) 'Best B School Visionary Award' by Deccan Herald.

Indira Group once again created history winning 11 Awards at the Dewang Mehta B-School Awards function in Mumbai

Indira has received the awards in various categories as under:

Edupreneur of the Year Award - Ms Tarita Shankar, Chairperson, Indira Group of Institutes

Nurturer of Talent Award - Prof. Chetan Wakalkar, Group Director, Indira Group of *Institutes*

Brand Leadership Award - Indira Group of Institutes

Business School with Best Infrastructure - Indira Group of Institutes

Business School that Encourages Leadership as a part of the Curriculum - Indira Group of Institutes

Business School with Best Academic Input (Syllabus) in Retail /Services - Indira Group

Business School with Best Industry Interface - Indira School of Business Studies

Best Teacher in Marketing Management - Prof. Pravin Dange, Indira School of Business

Business School with Best Academic Input (Syllabus) in International Business - Indira Global Business School

Presentation Contest - 3rd Place: Anup Nair & Anurita Saxena, Indira School of Business **Studies**

Best Student in Management Contest - 9th Place: Nilesh Kshirsagar, Indira College of Engineering & Management.

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IGBS Organizes Melting Pot - 2009

Indira Global Business School Melting Pot 2009 saw Ms Shaina NC, Fashion Designer, as Chief Guest when she graced the occasion along with Chairperson and Group Director IGI.



Dr. Sri. Beldona, Associate Prof., Graduate Management School, University of Dallas was the principal speaker at a Seminar on International Marketing and Strategy organized at the Indira Global Business School in September 2009.

Mr. Tony Manwaring, Chief Executive, Tomorrow's Company, United Kingdom. (Co-Organization). Speaking to the students of IGBS.





