



# NEWS LETTER

OIL TECHNOLOGISTS' ASSOCIATION OF INDIA  
WESTERN ZONE

## Inside This Issue

- Farm Revival
- Oil Seed data
- Butter from RBO
- Eat rice-grow thin
- El Nino



**This news letter is for free circulation only to the members  
of OTAI-WZ**

C/o. Department of Oils, Oleochemicals & Surfactants  
Institute of Chemical Technology Tel.: 91-22-32972206/91-22-24146526  
(Formerly UDCT) Fax: +91-22-24124017  
Nathalal Parekh Marg Email: info@otai-westernzone.org  
Matunga (East), Mumbai-400 019 Website: www.otai-westernzone.org  
INDIA.



**OIL TECHNOLOGISTS'  
ASSOCIATION OF INDIA  
WESTERN ZONE**

**EDITORIAL ADVISORY BOARD**

A.K. GUPTA  
RAJEEV CHURI  
S.N. TRIVEDI  
B.R. GAIKWAD

**EDITOR**

V.V. RAO

**EDITORIAL BOARD**

AMIT PRATAP  
D.N. BHOWMICK  
B.V. MEHTA

## *From the Editors's Desk*

*All of us seem to feel the new vibrant wind blowing in all our activities. The bon homie generated from the new group of policy makers is percolating the lower most strata of millions of countrymen. A new horizon is opening up with vibrant ideas all around. A new approach is seen around our own country with the emphasis on good neighbourly realtions leaving adequate facility for growth and advancement. To be focussed on what the requirements are, is the key to success.*



## Sowing The Seeds of a Farm Revival

by

**S. SIVAKUMAR\***

*Divisional Chief Executive, ITC Agri-Business*

INDIA'S agriculture can be re-energised.

Here's how

Very few sectors are as important, yet as beleaguered as agriculture in India. Engaging more than 50 per cent of the country's workforce, it offers livelihoods to 75 per cent of the population living below the poverty line.

It consumes 80 per cent of the nation's fresh water resources, a quarter of the total electricity and more than 70 per cent of central government subsidies.

However, it accounts for just about 14 per cent of GDP. Woefully therefore, the farmer's per capita income is less than one-fifth of the rest of the country's average.

A four-pronged policy agenda in agriculture has the potential to achieve the much desired 'inclusive and sustainable' growth of Indian economy.

Arguably, there has been significant progress in making Indian agriculture resilient to recurrent droughts. Nonetheless, it remains a stark reality that the vagaries of nature can potentially cripple the sector at any time. In addition, dwindling natural resources like groundwater can have disastrous consequences.

Therefore, any solution will have to weather-proof production, and replenish and conserve life-giving natural resources, using the right technologies.

The entire technology spectrum - from better seeds to precision-farming practices, from micro-

irrigation to watershed development, from renewable energy to power-saving farm equipment - will have to be fully harnessed.

Over the years, among other policy initiatives, liberalisation of imports of improved varieties and breeding lines has revitalised the availability of high quality seeds. The Indian seed market, estimated at over \$1 billion, has grown at double the pace of the global seed market.

However, there is a long way to go in developing and deploying seeds that will address extreme weather variations and poor soil conditions, besides serious biotic stresses.

A policy framework that encourages investment in research, and streamlines regulatory processes for accelerated introduction of new technologies will enable sustainable intensification of Indian agriculture.

### **NextGen in agriculture**

India's young demographic profile is a great source of strength. Unfortunately, a future in the agricultural sector does not seem to evoke enthusiasm among the youth. Income from farming is not only unattractive but also not commensurate with the risks and drudgery associated with the farm sector. This has led to farmers moving away from farms to non-farm livelihoods in villages, besides migration to urban areas.

The next horizon in agricultural progress cannot be conquered without harnessing the vitality of the youth. This will require a policy impetus that encourages two vital components: one that enables greater mechanisation of farm operations to mitigate drudgery and enhance efficiency; and

\*Views expressed are those of the author.

the other that enables larger value creation through farming that blends traditional knowledge with new technologies.

Rising disposable incomes and growing urbanisation has brought about a dimensional change in the pattern of consumer demand. The share of cereals is reducing in the diet, in favour of vegetables, fruits, milk, and meat.

Besides more variety, today's consumer demands superior quality, enhanced safety, and added convenience while shopping or using products. This dictates a fundamental transformation.

Producing what the consumer demands is an entirely different ball-game from consuming whatever is produced by the farmer. It is a re-orientation from production-driven supply chains to demand-driven value chains, and will entail huge investments in creating appropriate infrastructure in post-harvest, logistics, processing, packaging, retailing, and information systems.

Corporate involvement through vibrant agribusinesses and food-processing can considerably enhance value for farmers by linking them to the value-seeking markets.

However, a variety of policy constraints deter any sizeable investment by the corporates today. Foremost is the non-implementation of the 'Model APMC Act' by many states. In addition, the 'Essential Commodities Act'

imposes stock limits, and curbs movements from time to time, further affecting the viability of agri-businesses. 'Forward Contracts (Regulation) Act' also requires reform.

Currently, critical risk management tools, such as Options, are not available. Farmers can realise better prices without undue risk, by buying Options, either directly or through aggregators.

This gives them a right to transact at a future price and not just an obligation, as is the case when only the Futures are available. Trade and marketing policies in agriculture will need a significant overhaul, if the farmers have to benefit from

the huge consumption dividend offered by the country.

### Targeting social subsidies

Over the years, subsidies in the farm sector have certainly played an important role in aiding resource-poor small farmers. However, subsidies can be significantly market-distorting. There is also a concern that systemic leakages significantly dilute the quantum of subsidies that finally reach the intended beneficiaries.

Direct transfers of subsidies are perceived to be a more effective alternative. Policies need to sharply target the subsidies to ensure social security but in a way that does not distort markets. In the current global and national economic context, market forces are key to unleashing the true potential of the agricultural sector.

While past investments in rural areas have enhanced the quality of hard infrastructure, such as roads, telecom and irrigation, we need to invest in the complementary 'soft infrastructure' now.

It is important to create the equivalents of ITIs in the farm sector to train rural youth and enable better implementation of best practices. Investments are also needed in soil health and other natural resource management systems, as also in the emerging agri-services.

The ITC e-Choupal experience in empowering millions of farmers lends confidence that a synergistic and integrated rural programme can significantly raise incomes and secure a better quality of life in rural India.

Given the right policy impetus and effective public-private-people partnerships, there is enough reason to believe that the giant agriculture sector can be re-energised to offer a new promise for tomorrow's India.

The writer is Divisional Chief Executive, ITC Agri-Business.

*(Courtesy : SEA NEWS CIRCULAR, Vol. XVII, Issue 2, May, 2014).*

## “HURRAH”

### A Mandate for Growth

THE new Government led by Mr. Narendra Modi has absolute majority in Parliament. This is an excellent development for India and the Government will be able to take bold and quick decisions to revive the economy and check inflation.

The governance task facing Mr. Modi is a gigantic one, especially in the context of the high hopes that he has raised across the country. If one is to judge by the skill and enormous drive with which he has mounted his massive victory, he should be more than equal to the task. Mr. Modi once described himself as a natural manager; the campaign shows that he is capable of organizing, delegating and providing energetic leadership, the very qualities that mark out a good manager. Certainly, what the economy needs most of all just now is a problem-solving drive by a competent manager.

Let us hope and keep our fingers crossed that the new Government quickly settles down and initiates action on the industrial and agricultural front to revive the overall economy of the country.

*(Courtesy : SEA NEWS CIRCULAR, Vol. XVII, Issue 2, May, 2014).*

### IICT Business Meet at Hyderabad

I was quite excited to see the types of facility IICT have and felt need • to inform our vegetable oil industry to take advantage of these facilities. IICT today is a dynamic and result oriented organisation. Doing business with CSIR-IICT means quick, cost-effective, confidential and quality services to clients in the form of (a) Contract research (b) Consultancy & (c) Technical /services. The contracts can be custom / made to suit client and project requirements. Several programs are being run at IICT with Government and private industry sharing research expenditure. They cover long term research projects with potential for commercial exploitation at a future date.

IICT is keen to attract industrial units to participate in such programs at larger scale and has developed a number of processes for utilization of byproducts of vegetable oil processing industry. The Processes for up-gradation of rice bran wax, hydrogenated wax, tocotrienols, polycosanol, oryzanol, lecithin and modified lecithins, tocopherols, phytosterols etc. were developed and transferred to industry. IICT is also actively working in the area of enzymatic modifications of lipids for the development of structured lipids like reduced calorie fats, trans-free vanaspati, diacylglycerol etc. Major thrust has also been given for the isolation of preparation of nutraceuticals of vegetable oil origin like GLA, ALA, CLA etc. Futuristic technologies like membrane separation are also being investigated for processing of vegetable oils and for waste water treatment.

SEA would like to act as Catalyst to disseminate the information on technology developed by IICT to the members and avail the opportunity to enhance their business. (J SEA also plans to sign a MoU with IICT to promote the technology developed by them or development of new technology, upgradation and better utilization of byproducts generated in vegetable oil industry and will shortly publish a dossier giving complete details of services available from IICT on technology for the benefit of the members. I would like to congratulate IICT and particularly Dr. R. B. N. Prasad, Head, Centre for Lipid Research, CSIR-Indian Institute of Chemical Technology, for organizing this “Business Meet” at Hyderabad and look forward to have closer interaction with IICT.

*(Courtesy : SEA NEWS CIRCULAR, Vol. XVII, Issue 2, March, 2014).*

## “READY DATA”

### COOIT's Trade Estimate for Rabi Oilseed Production and Availability of Vegetable Oils during 2013-14 Season

35th All India Rabi Seminar on Oilseeds, Oil Trade & Industry was held on 9th March, 2014 at New Delhi and arrived at trade estimate of Rabi Oilseeds crop and availability of vegetable oils from Rabi Crop during 2013-14 season as under:



## RABI OILSEEDS AREA & CROP

Oilseeds	2013-14		2012-13		Change	
	Area* Lakh Ha	Crop Lakh T.	Area Lakh Ha	Lakh T. Lakh Ha	Area Lakh T.	Crop Lakh T.
Groundnut	8.32	17.67	9.13	17.14	(-) 0.81	(+) 0.53
Rape/Mustard	71.32	72.25	67.26	67.01	(+) 4.06	(+) 5.24
Sunflowerseed	4.29	3.95	5.12	4.65	(-) 0.83	(-) 0.70
Sesameseed	0.99	3.02	0.72	2.61	(+) 0.27	(+) 0.41
Safflowerseed	1.79	1.01	1.50	0.86	(+) 0.29	(+) 0.15
Linseed	3.57	1.20	3.36	1.17	(+) 0.21	(+) 0.03
Other Oilseeds	0.48	—	0.67	—	(-) 0.19	—
<b>Total</b>	<b>90.76</b>	<b>99.10</b>	<b>87.76</b>	<b>93.44</b>	<b>(+) 3.00</b>	<b>(+) 5.66</b>

- Area as per GOI data as on 20th February, 2014

### Oilseeds Production:

Oilseeds	2013-14			2012-13	Change
	Kharif	Rabi	Total		
Groundnut (in shell)	47.15	17.67	64.82	43.34	(+) 21.48
Soybean	102.30	—	102.30	107.00	(-) 4.70
Rape/Mustard/Toria	1.50	72.25	73.75	68.51	(+) 5.24
Sunflowerseed	1.85	3.95	5.80	6.15	(-) 0.35
Sesameseed	3.50	3.02	6.52	6.01	(+) 0.51
Castorseed ®	11.20	—	11.20	13.47	(-) 2.27
Nigerseed	0.70	—	0.70	0.80	(-) 0.10
Safflowerseed	—	1.01	1.01	0.86	(+) 0.15
Linseed	..	1.20	1.20	1.17	(+) 0.03
Sub Total	168.20	99.10	267.30	247.31	(+) 19.99
Cottonseed	111.60	—	111.60	102.30	(+) 9.30
Copra	7.00	—	7.00	6.00	(+) 1.00
<b>Grand Total</b>	<b>286.80</b>	<b>99.10</b>	<b>385.90</b>	<b>355.61</b>	<b>(+) 30.29</b>

## “DING DONG”

**Import of Vegetable Oil - February 2014  
down by 40% Import of RBD Palmolein  
(Nov.'13-Feb.'14) - Up by 46%**

IMPORT of vegetable oils during February 2014 is down by 40% and reported at 578,975 tons compared to 969,175 tons in February, 2013, consisting of 569,544 tons of edible oils and 9,431 tons on non-edible oils. The overall import of vegetable oils during Nov. '13 to Feb.'14 is reported at 3,496,807 tons compared to 3,735,263 tons i.e. down by 6%.

Import during February'14 is the lowest in last

3 years, mainly due to heavy disparity in import of palm products resulted in to drastic reduction of import of CPO to 2.69 lakh tons compared to 6.70 lakh tons in February, 2013. Reduction in import of CPO, partially replaced by soft oils like Sunflower Oil & Soybean Oil. Before the inverted export duty imposed by Indonesia in October 2011, RBD Palmolein used to be sold at least US\$ 60/80 per ton higher than CPO, however now finished product RBD Palmolein is cheaper by US\$ 15/20 compared to raw material CPO. In view of increased import of RBD Palmolein in last two years, capacity utilization of domestic refiners reduced from 55-60% to 30 -35% and many units closed down or on verge of closure due to continuous disparity in processing of CPO.

## Import of Vegetable Oil (Edible & Non-edible) Nov. 13-Feb.1 2014

(Qty.in M.T.)

Month	2013-14		2012-13			% Change	
	Edible	Non-	Total edible	Edible	Non-		Total edible
Nov.'13	927,111	17,198	944,309	676,234	24,137	700,371	(+) 35%
Dec.'13	1,052,550	15,159	1,067,709	883,489	25,098	908,587	(+) 18%
Jan. '14	871,527	34,287	905,814	1,132,631	24,499	1,157,130	(-) 22%
Feb.'14	569,544	9,431	578,975	954,176	14,999	969,175	(-) 40%
<b>Total</b>	<b>3,420,732</b>	<b>76,075</b>	<b>3,496,807</b>	<b>3,646,530</b>	<b>88,733</b>	<b>3,735,263</b>	<b>(-) 6%</b>

### Stock at Ports & Pipelines down

Current stock of edible oils as on 1st March, 2014 at various ports is estimated at 475,000 tons (CPO 240,000 tons, RBD Palmolein 110,000 tons, Degummed Soybean Oil 50,000 tons, Crude Sunflower Oil 65,000 tons and Canola Rape Oil 10,000 tons) and about 770,000 tons in pipelines. Total stock, both at ports and in pipelines drastically reduced by 270,000 tons to 1,245,000 tons due to lesser import in last two months.

*(Courtesy : SEA NEWS CIRCULAR, Vol. XVII, Issue 2, March, 2014).*

### “SAD NEWS”

**India wastes up to 30% of annual foodgrain production due to poor storage facilities**

THE Associated Chambers of Commerce and Industry of India (ASSOCHAM) has said in a report that around 20 - 30% of total foodgrain harvest in India is wasted annually due to poor storage facilities.

According to ASSOCHAM around 30-40% foodgrains is stored in an unprofessional manner during the peak marketing season in India. This along with other factors such as inadequate storage capacity, regional imbalance in warehouses, lack of adequate scientific storage and inefficient logistic management leads to wastage of around 20-30% of total foodgrain production in India.

According to ASSOCHAM, the market size of warehouse in India stood at over Rs. 22,800 crore (about \$4.5 billion using historical exchange rates) in FY 2011 (April- March). The warehousing capacity for major foodgrains available in India, in public, cooperative and private sector is over 112 million tons. However, there is an extreme dearth of about 35 million tons of warehousing capacity and a massive foodgrain storage shortfall of about 8 million tons in the country to be filled by 2017. “India needs to recalibrate its strategy to mitigate the challenges of high food grain wastage due to lack of scientific storage facilities,” says ASSOCHAM.

ASSOCHAM also says that most warehouses in India have been built following the traditional norms and without proper specification but even some of the modern warehouses do not meet international standards.

Total foodgrain production in India stands at around 255 million tons which includes around 105 million tons of rice (milled basis). In 2012, the government claimed that the state foodgrains buying agency, the Food Corporation of India (FCI), has reduced wastage of foodgrains from 2.5% five years ago to 0.006% in 2012 despite the 150% growth in foodgrain stocks during the period. The Food Minister had called the reduction in wastage a major achievement of the FCI. According to ASSOCHAM, about 70% of warehousing space in India is owned by government agencies.

*(Courtesy : GRAINS ASIA, Vol. 2, Issue 12, May, 2014).*



## “EL NINO ? ”

### Drought affects global palm oil supplies

THE most-severe drought in 17 years is threatening supplies of palm oil from Indonesia and Malaysia, the world's biggest producers, and forecasters say an El Nino weather pattern this year may cause even more damage. The countries got less than 50 millimeters (2 inches) of rain in January and February in some growing areas, the driest spell since 1997.

According to Bloomberg report, conditions stressed palm fruits that are crushed to make the world's most-consumed vegetable oil, used in Pop-Tarts, Oreo cookies and Twix candy bars. Now, meteorologists see increasing chances of an El Nino as early as July that would parch farms from Thailand to Australia. Prospects for reduced output and rising global demand sent palm-oil futures to an 18-month high in March, boosting costs for top importers India and China. Prices may surge as much as 33 percent to 3,500 ringgit (\$1,074) a metric ton by February or March if evidence emerges of a prolonged drought, said Dorab Mistry, a director at Godrej International Ltd., who forecast the price peak in the first quarter.

*(Courtesy : GRAINS ASIA, Vol. 2, Issue 12, May, 2014).*

## “REALLY”

### Global rice production to increase to about 497 million tons

GLOBAL rice production (milled basis) is estimated to increase to about 497 million tons in 2013-14, up about 1% from about 491 million tons in 2012-13, according to the UN's Food and Agricultural Organization (FAO). However, FAO's latest projection for 2013-14 rice production is about 1% less than its first projection of 501 million tons, due to anticipated drought conditions in Australia, Peru, Sri Lanka and Tanzania, and removal of price support in Thailand.

The FAO forecasts world rice utilization to in-

crease by about 2.5% to about 490 million tons in 2013-14 from about 478 million tons in 2012-13 due to an expected gain in food demand by about 2%. The UN agency estimates world rice inventories to increase by about 3% to about 181 million tons in 2013-14, up from about 175 million tons in 2012-13 due to higher expected stocks in China, Thailand and Vietnam.

The FAO estimates global rice trade to increase to about 39 million tons in 2013-14, up about 5% from about 37 million tons in 2012-13. It expects higher imports by Bangladesh, Nigeria and Senegal, China, Indonesia and the Philippines. It also expects Cambodia, Pakistan, Vietnam, Thailand, and the U.S. to increase their rice exports. The FAO says that India is expected to retain its number one rice exporter position despite larger domestic requirements due to the implementation of National Food Security Act.

*(Courtesy : Business Empire Vol. 8, Issue 7, April, 2014).*

## “TIME TO LEAP”

### Owing to warehousing capacity shortage 40% foodgrain storage in India improper

DUE to the shortage of warehousing capacity [to the tune of 35 million tonne (MT)] and the foodgrain storage shortfall of about eight MT, approximately 30-40 per cent foodgrain is stored in an improper manner during the peak marketing season in India, according to 'Agri-Infrastructure in India: The Value Chain Perspective', a joint study by the Associated Chambers of Commerce and Industry of India and Yes Bank.

“There is an urgent need to develop a strong warehousing system equipped with modern and scientific storage facilities like warehouses, silos, silo bags and others, as the grain storage capacity in India has not been keeping pace with the marketable surplus,” it added.

“In India, about 20-30 per cent of the total foodgrain harvest is wasted due to inadequate storage capacity, regional imbalance in warehouses, the lack of adequate scientific storage and inefficient logistic management,” said D S

Rawat, secretary general, ASSOCHAM, while releasing the study. "Each grain bag is handled at least six times before it is finally opened for processing, which leads to higher storage and transportation charges and adds to the wastage of foodgrain during transit and handling," he added.

"Much needs to be done to build additional storage capacity, renovate existing warehouses and implement a robust negotiable warehouse receipt (NWR) system to make available more funds to farm producers and simultaneously provide security to the lenders," Rawat stated. Growing at a compound annual growth rate (CAGR) of about nine per cent, the market size of the warehousing sector was over Rs 22,800 crore in fiscal year 2011. It is expected to cross the Rs 35,000-crore mark by fiscal year 2016. Only 12 per cent in this accounts for agro-warehousing, while the remainder accounts for industrial warehousing.

While the warehousing space clocked a CAGR of about four per cent and covered an area of about 1.52 billion sq ft in fiscal year 2011, it was expected to grow to 1.84 billion sq ft by fiscal year 2016. Only 29 per cent of this accounts for agro-warehousing, the remainder accounts for industrial warehousing.

"India needs to recalibrate its strategy to mitigate the challenges of high foodgrain wastage due to the lack of scientific storage facilities and high inflation due to the lack of cold chain infrastructure (such as cold storages and refrigerated transport), as these lead to the wastage of fruit and vegetables," the study suggested.

"Warehousing is the backbone for developing trade and commerce and the agro-processing industry, as it plays a very crucial role in strengthening agricultural supply chain, ensuring food security and price stabilisation," said Rawat. "Besides, it also solves the problem of glut and scarcity by maintaining uninterrupted supply of agricultural commodities in the off-season," he added. "The warehousing capacity available in India's public, cooperative and private sectors is over 112 MT, and another 35 MT of warehousing capacity is required during the 12th Five-year Plan to store all major crops. This highlights the huge demand-supply mismatch. About 70 per cent of the warehousing space is owned by government agen-

cies," the study said. "Warehouses in India lack in optimal size, adequate design, ventilation facility, inventory management and storage system, as they have been built following the traditional norms and without proper specifications. Even some of the modern warehouses do not meet international standards," it added.

"There is an intense competition amongst the warehousing players due to the low entry barriers (lower capital outlay and lesser regulatory environment) and high fragmentation," the study stated. "Besides, unorganised segments pose a great threat and competition to modern warehouses because of lesser overheads and competitive warehousing rates in the country," it added.

*(Courtesy : Business Empire Vol. 8, Issue 7, April, 2014).*

## "TOO TAXING"

### Multiple taxes uncalled for on packaged foods: Co-chair of PHD Chamber

VIJAY SARDANA, co-chairman, Agribusiness Committee, PHD Chamber of Commerce and Industry, urged the state governments to stop levying multiple taxes (including hygiene tax) on packaged food products, including poultry products, to enable India to realise the real potential of the food processing industry.

Addressing a Roundtable on Poultry Marketing under the aegis of the chamber in New Delhi, Sardana said that nowhere in the world was hygiene tax imposed on packaged food products, barring India. This was leading to health and food safety issues and preventing investments in India's infrastructure sector.

"In case it wants the food processing industry to grow to its real potential, such illogical measures need to be shunned, especially when unpackaged food products are allowed to be sold off without any taxes," he cautioned, pointing out that food safety could not be compromised.

"Different states levy packaged food products with different slabs of hygiene tax, ranging between

10 per cent and over 25 per cent without consulting the industry. This does not just discourage the entrepreneurs, but also disconnects them from the consumers in the value chain of the industry,” pointed out Sardana.

He prescribed a multi-pronged strategy to market poultry products, which include a suitable connect between farmers, middlemen and retailers, so that each stakeholder’s share of profit is protected in an equitable manner. A cooperative market approach was also recommended by him to sell meat and poultry products.

The participants in the seminar includes Arabind Das, chief executive officer, Godrej Tyson Foods Ltd; Dinesh T Bhosale, chairman, Compound Feed Manufacturers Association of India (CLFMA), poultry expert S A Khan and Avian Consultants’ Shashi Kapur. David Yiend, global chief executive officer, AB Agri, and Simon, who also represented the company, shared their global experience with the Indian poultry industry, and stressed that the time had come to look at livestock issues seriously in India.

*Courtesy : Business Empire Vol. 8, Issue 7, April, 2014).*

### “BE DAY”

#### India’s growth to improve to 5.5 per cent in 2014-15

FITCH Ratings affirmed India’s sovereign rating at ‘BBB-’ with a stable outlook even as it projected the country’s growth to improve to 5.5 per cent in 2014-15 (FY15). ‘BBB-’ ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.

Pointing out that the course of the Indian economy is uncertain in view of the on-going Parliamentary elections, the global rating agency forecast real GDP growth to rise from 4.7 per cent in FY14 to 5.5 per cent in FY15 and 6 per cent in FY16. “Once the next coalition starts implementing its economic policies, it will become clearer whether the economy can return to a higher sus-

tainable growth path or whether it remains stuck at current levels.

“A policy push that includes structural and governance reforms, fiscal consolidation and efforts to rein in inflationary pressures would likely require a coherent coalition with a strong electoral mandate,” Fitch said in a statement.

Fitch said the Centre seems to have met its Budget deficit target of 4.8 per cent of GDP (including privatisation receipts) for FY14, despite the looming elections. “But this (budget deficit target) was only achieved through substantial off measures...” it said.

*Courtesy : Business Empire Vol. 8, Issue 7, April, 2014).*

### “OPTIMISTIC”

#### As food processing potential increases, US imports turmeric from India

DUE to its medicinal properties, turmeric is finding huge potential in the processed food industries of the United States, and importing larger quantities from India, the largest producer of the spice. According to data by the United Nations, the import of turmeric in the US has tripled from 2008, and the majority of it is from India.

The demand for turmeric has increased due to the realisation of nutritional and medicinal values of this humble spice. According to reports India’s Spice Board (headquartered in Kochi), the worldwide export of turmeric from India has increased to 60 per cent from 2008. The US has already started a wide range of research about nutritional and medicinal properties of turmeric. The spice is used to cure such diseases as cancer, Alzheimer’s, arthritis, Crohn’s disease and even depression.

Though turmeric is imported from India, they also plan to cultivate this spice on their land to reach the domestic demand. “The market for turmeric-based supplements in the US has grown by almost 31 per cent to \$108 million,” revealed a recent study by Nutrition Business Journal. The spice has been termed a super-food in the US processed food market, and a number of compa-

nies are now offering products containing turmeric. These are poised to increase in future. The demand for turmeric supplements is higher in the US beverage sector. Turmeric juice and other food supplements are being increasingly sold in the US market.

The Spice Board of India has identified a huge demand from the Middle-East as well. This would be beneficial to turmeric farmers across India. An official from the Trade Information Service Department of the Spice Board, said, "The demand for turmeric has increased of late, and we are able to export a better quality of it to these countries." "As the demand is increasing in the US, they have plans to grow their own turmeric to meet the domestic demand," he added. The official said, "Only if India can supply high-quality spices consistently, we can stay in the market. Though the market has good potential, only fair players can continue in the market." "Unlike other spices, it demands very less attention from the farmer and can fight its own diseases," he added. "Then it helps us to fight our diseases also. Thanks to its therapeutic qualities, the demand for turmeric is growing all over the world," the official stated.

"More than 90 per cent of curcumin, extracted from turmeric, is used to make nutraceuticals and dietary supplements" he added. S. Suresh, assistant director, Spices Board, said, "India is the top producer of turmeric in the world. The Spice Board conducted thorough checks for Sudan and Aflatoxin contamination." "This ensured the quality of our spices. The various turmeric-producing states in India were able to produce enough to supply it to the US, the Middle-East, Canada, Japan and Australia," he added. The medicinal and nutritional qualities of turmeric, which has been used in Indian cuisine for several years, were revealed centuries ago.

*Courtesy : Business Empire Vol. 8, Issue 7, April, 2014).*

## **"OPTIMISTIC"**

**SEA Rabi Rapeseed-Mustard Crop Survey 2013-14 Production jumped to over 75 lakh tonnes**

TO assess Rapeseed-Mustard crop during the current rabi season, SEA's 6 Survey Teams

consisting of about 50 members including leading Crushers, Oilmillers, Representatives of the Multi National Companies, Agronomists, Commodity Analysts, headed by Shri Vijay Data, President, Shri G.G. Patel, Past President, SEA; Shri D.P. Khandelua, Chairman & Shri S.K. Shukla, Co-Chairman, SEA Rapeseed Mustard Promotion Council; Shri Chakresh Jain; Shri Vijay Kumar Yadav; Shri Jyoti Kanda; Shri Nirav Desai and Dr. B.V. Mehta, Executive Director SEA extensively toured the major districts growing Rapeseed-Mustard in Gujarat, Rajasthan, Haryana, U.P. & M.P. during 23rd - 26th February, 2014 & visited a large number of mandis in these States, had number of meetings with traders, commission agents & farmers at mandis and carried out number of field visits to understand the ground reality of Rape-Mustard crop situation. One team also visited National Research Centre on Rapeseed-Mustard at Bharatpur to understand their view points on the current rapeseed-mustard crop.

After 4 days of field visits, the teams met at Jaipur on 26th February evening to collate the data collected for Rapeseed Mustard crop estimate. The overall area under rape-mustard has increased by 4.04 lakh hectares to 71.30 lakh hectares while the production is expected to jump by 7.39 lakh tonnes to 75.90 lakh tonnes, due to good subsoil moisture at the time of sowing, useful showers during January & February, hardly damage due to severe cold and continuous favourable weather has helped to increase the production.

The team members also reported that in some districts of Rajasthan, there is variation in the area reported by the Government of Rajasthan. While we have maintained the area as per the Government record, yield is adjusted wherever necessary to reflect the correct production of rapeseed mustard in those areas.

Secondly, this year the crop is delayed by 15 to 20 days which has increased yield and also oil content by 1 to 1.5%.

We are also enclosing herewith District-wise Area, Production and Yield for Gujarat, M.P. and Rajasthan for your kind information.



## SEA Estimate of Rapeseed-Mustard Crop 2013-14

State		2012-13			2013-14			
		Area (Govt.) Lac. Ha	Yield Kg/Ha	Crop Lac MT	Area Lac. Ha year	Change over previous	Yield Kg/Ha	Crop Lac MT
U.P.	Mustard	7.68	1,146	8.80	8.17	-0.01	1,100	9.00
	Torla	3.00	500	1.50	2.50	0.00	600	1.50
Rajasthan	Mustard	26.74	1,171	31.30	28.14	1.40	1,286	36.20
	Taramira	1.11	495	0.55	2.36	1.25	580	1.37
PB/Haryana		5.90	1,251	7.38	5.83	-0.07	1,350	7.87
Gujarat		2.14	1,449	3.10	2.82	0.68	1,680	4.74
M.P.		8.05	893	7.19	8.14	0.09	851	6.93
Chhaattisgarh		1.45	717	1.04	1.40	-0.05	807	1.13
W.Bengal		4.80	688	3.30	4.57	-0.23	600	2.74
Others *		6.39	681	4.35	7.37	0.98	600	4.42
Total		67.26	1,019	68.51	71.30	4.04	1,065	75.90

•Includes Odissa (1,41,000 ha), Assam (2,89,000 ha) and Bihar (1,33,000 ha) and rest of States.

Courtesy : Food Grain Oil, March, 2014).

## “BANKING” An X-Ray on bank Boards

T.R. SHASHTRI

*Prof. Shastri is Dean, ICICI Manipal Academy, Bangalore*

AN RBI appointed committee has thoroughly dissected the functioning of bank boards and gives curative suggestions Prof. Shastri is Dean, ICICI Manipal Academy, Bangalore.

THE issue of board responsibility in a corporate has been discussed at length in different fora. The role and responsibility of a director and also of the board of directors of a company are well laid down. Clause 49 of the listing agreement aims at improving corporate governance in case of listed companies. The responsibility of the board of a bank, particularly that of a PSU bank, goes beyond that of a corporate and several committees have also deliberated this. A bank incorporated as a company and listed, even if partly owned by government, is expected to follow the rules without any exception. However, public sec-

tor banks are incorporated under special statutes creating them and have separate guidelines. Sometimes, the guidelines relating to board responsibility do not stand up to the expectations of civil society. Changing expectations have not been incorporated into these statutes, thus leading to expectations gap. RBI, the regulator of the banks, has, therefore, constituted committees for suggesting improvements from time to time. The latest is the report of yet another committee chaired by Mr P J Nayak, former Chairman JULY 2014 and CEO of Axis Bank, and published on RBI webpage for public comments.

Many of the observations of earlier committees are pending implementation for more than a decade. If these were to persist for long, notwithstanding flagging off frequently, there should be

some fundamental structural reasons therefor. That basic reason appears to be the lack of clarity on why some banks are in the public sector. Is it because they do social good or is it because they can be used for carrying on private agenda at public cost? Actually, we have a strange concept called 'public sector character.' This was made clear by the government in a different context - the questions on ceiling on FDI and FII (or both together) in banks and its interpretation have been well known. Any relaxation in the ceiling was seen by one class of lawmakers as though the family silver is being gifted away. The pressure on the government at one time was so much that in December 2004, the finance ministry had to specifically clarify that 'the public sector character of these banks will remain unchanged even after it ceases to have majority ownership.' This politically correct statement also enabled the government not to loosen control over the management of banks. What is meant by public sector character is debatable. Is it inefficiency, social justice or centralised power? It is possible that the desire to maintain public sector character may have caused the weak financial position of PSU banks and prevented any reforms at board level performance of PSU banks. Hence, before attempting to implement any of the recommendations of the latest committee, the authorities have to decide on the necessity to continue the tag of public sector character imposed on public sector banks.

### Committees in the past

In December 1999, RBI, in consultation with the Government of India, appointed a Standing Committee on International Financial Standards and Codes. To assist it, several advisory groups were formed. One of the advisory groups was entrusted with the responsibility of advising on matters relating to banking regulation and supervision including the task of collection of information on international standards and codes, studying them for their immediate relevance and applicability to Indian conditions. This group submitted its report relating to the board of directors of banks to RBI in September 2000. Its recommendations included the following:

- The process of induction of directors into banks' boards and their initial orientation is to be streamlined.

***Many of the observations of earlier committees are pending implementation for more than a decade. If this were to persist for long, notwithstanding flagging off frequently, there should be some fundamental structural reasons. The basic reason appears to be the lack of clarity on why some banks are in the public sector. Is it because they do social good or is it because they can be used for carrying on private agenda at public cost? Actually, we have a strange concept called 'public sector character.' This was made clear by the government in a different context - the questions on ceiling on FDI and FII (or both together) in banks and its interpretation have been well known. Any relaxation in the ceiling was seen by one class of lawmakers as though the family silver is being gifted away***

- Members of Board of Directors are required to give their valuable time to the governance of banks.
- Accountability for non-performance, at any level including that of the Board of Directors is nearly absent. This situation calls for correction.

Another advisory group on Corporate Governance submitted its report in March 2001 and it had the following observations relating to public sector banks:

- The government often acts as a quasi-regulator creating a number of problems for the RBI as the regulator of the financial system. The ground reality is such that the government performs simultaneously multiple functions vis-a-vis the PSBs, such as the owner, manager, quasi-regulator, and sometimes even as the super-regulator. Effective management of these banks vests with the government and the top managements and the boards of banks operate merely as functionaries.
- As things stand today, there is no equality among the various board members of the PSBs. Nominees of RBI and Gol are treated to be superior to other directors. There are certain committees of the PSB boards, which can-



not function unless the RBI/Gol directors participate. AGM cannot be conducted without the presence of the government nominee.

- Another major problem affecting banks has been the representation given to various interest groups on the boards of the banks.
- It has also been noted that boards do not function in a manner that would lead to a healthy balance of interests of the shareholders and stakeholders. Hence, a major reform is needed in the area of constitution of the boards of the banks.
- The chairmen, executive directors and non-executive directors on the boards of the public sector banks (including the SBI and its subsidiaries) need to be appointed on the advice of an expert body set up on the lines of the UPSC, with similar status and independence. Such a body may be set up jointly by RBI and the Ministry of Finance.
- There is no need to have directors that represent narrow sectional and economic interests. In April 2002, Consultative Group of Directors of banks and financial institutions was set up by the Reserve Bank in consultation with IBA (chaired by Dr A S Ganguly, Director, Central Board, RBI) and the terms of reference included reviewing the supervisory role of boards of banks and to recommend steps for making the role of Board of Directors more effective with a view to minimising risks and over-exposure. Incidentally, this committee consulted, inter-alia, Dr P J Nayak who was chairman of UTI Bank Ltd (the earlier name of Axis Bank) at that time. Its report included the following recommendations:
  - The independent/non-executive directors should raise in the meetings of the Board, critical questions relating to business strategy and other important aspects of the functioning of the bank and investor relations.
  - The existing level of remuneration paid (by way of sitting fees, etc) to directors of banks and financial institutions is grossly inadequate, by contemporary standards, to attract qualified professional people to their boards and expect them to discharge their duties as per the mutually agreed covenants.
  - It would be desirable to separate the office of Chairman and Managing Director in respect of large-sized public sector banks. • Instead of attempting to wholly change sectoral represen-

tation, efforts should be aimed at bringing about a blend of 'historical skills' set (that is, regulation-based representation of sectors like agriculture, SSI, cooperation, etc) and the 'new skills' set (that is, need-based representation of skills such as marketing, technology and systems, risk management, strategic planning, treasury operations, credit recovery, etc). The boards of banks should have representation in areas such as finance, information technology, human resources development, persons with good track record of experience in managing/advising industrial enterprises and economics.

RBI constituted a committee in February 2014 to examine FSLRC recommendations relating to Capacity Building in Banking Sector. One of the terms of reference is to 'examine if the members on bank boards also need to be certified - by way of, say, an appropriately designed course which could be made mandatory for every individual before appointment to the board of a bank.' The committee's report is not yet been made public but it would be interesting if it recommends positively on this and RBI starts implementing such academic requirement for anyone becoming a director of a bank.

### **Nayak Committee and its report**

In January this year, RBI constituted an Expert Committee to Review Governance of Boards of Banks in India, with P J Nayak as the chairman. Its terms of reference were very mundane - to examine the working of banks' boards including whether adequate time is devoted to issues of strategy, growth, governance and risk management; to review central bank regulatory guidelines on bank ownership, ownership concentration and representation in the board; to analyse the representation on banks' boards to see whether the boards have the appropriate mix of capabilities and the necessary independence to govern the institution, to examine board compensation issues and to investigate possible conflicts of interest in board representation, including among owner representatives and regulators.

The Nayak committee report starts with the alarming sentence, 'The financial position of public sector banks is fragile.' It goes on to analyse the financial strengths of PSU banks and the

causes therefor, at length (nearly 1/3rd of the operative part of the report -though this is not one of the specific terms of reference) occasionally linking it to the poor board governance. This lengthy backdrop helps in reinforcing the belief that weak board could be causative of the poor performance.

The committee has made 41 recommendations. These can be broadly classified against the terms of reference of the committee as under:

- Regulatory compliance requirements 5
- Areas for rationalisation 1
- Working of banks'boards 3
- Ownership guidelines 14
- Capabilities of the directors 7
- Fit and proper criteria 6
- Compensation guidelines 1
- Any other issues 4

Some of the recommendations are reiterations of various other RBI-constituted committees referred earlier, indicating that deciding on these has its own challenges. Some examples of repeat recommendations are:

- There is a need to upgrade the quality of board deliberation in public sector banks to provide greater strategic focus.
- Dual regulation is discriminatory. RBI should be the sole regulator for banks.
- The positions of bank Chairman and CEO should be separated.
- Profit based commissions for non-executive directors should be permitted.

The committee agreed that 'private sector banks cannot be held hostage permanently to the refusal of the government to align compensation for its bank boards in line with company law'and'several of the proposals seek to strengthen public sector bank boards and remove discriminatory external shackles (e.g. compensation constraints) in their ability to compete fairly with their private sector peers.'

The committee has made a variety of other important recommendations and they can be summarised as under:

1. There should be a separate category of investors in banks called Authorised Bank Investors (ABIs) which includes funds similar to those

under FII definition. Different ceiling levels for different categories of ABIs have been recommended. Ceiling on promoter stake is 25 percent. Limit for voting rights is 26 percent.

2. A Bank Investment Company (BIC) has to be set up into which government shareholding in PSU banks have to be transferred and diluting it below 50 percent. BIC will have maximisation of returns as a Key Responsibility Area. In a way, it will function like a sovereign wealth fund, though not trading in its assets.
3. Government consequentially will cease to advise any instructions to banks and all will be issued by RBI, as the sole regulator, without discrimination between private sector and BIC-owned banks. External constraints on PSU boards such as external vigilance enforcement, compliance of RTI Act, compensation constraints will all get removed along with this.
4. Quality of board deliberations has to upgrade with greater strategic focus on seven critical themes - business strategy, financial reports and their integrity, risk, compliance, customer protection, financial inclusion and human resources.
5. The government should move towards establishing fully empowered boards and a clearly laid down transit path.
6. Minimum tenure for MD and EDs of banks, separation of chairman and MD positions, maxi-

***It should be noted that repeated recapitalisation of the PSU banks is actually looting the taxpayers' money in the guise of helping society. Depositors of banks, whether taxpayers or not, would have earned higher yield on their deposits, if only the banks were functioning more efficiently. This report has come just in time when a new government with a clear focus on efficiency and productivity has taken charge at the Centre. It is hoped that the recommendations of at least this committee will be examined seriously and decisions taken quickly, in the interest of banks themselves, the government as investor and the public.***

mum tenure for other than whole-time directors, maximum age are other recommendations.

7. Some caustic recommendations have been made with reference to old private sector banks, i.e. where CEO has no full control over the executive management of the bank or where boards are not adequately independent of the controlling shareholders of the bank. May be these are based on actual situations prevailing in large number of small old private sector banks in South India, mostly constituency and community dominated.

The committee in its deliberations has brought out many interesting facts on record. These are well known among bankers but rarely officialised. For example, when candidates are shortlisted for top bank positions, a clearance is sought from the Central Vigilance Commission (CVC). On receiving it, if the candidate is selected, there is a flurry of anonymous complaints to the government jeopardising the selection process. The committee to select CEOs and EDs interviews them sometimes for less than five minutes for a candidate. Banking is a very specialised activity and government officers and regulators may not possess the skills to appoint the top management of commercial banks. The discussions at bank board levels (based on the reading of 3500 board documents across all banks - overcoming the doctrine of indoor management) are more tactical and less strategic, e.g. taxi fare reimbursement policy discussed as much as NPA recovery policy, provision of leased accommodation for officers or lecture of CMD in a local college. A disproportionate number of managers handling 'credit' face vigilance enquiries. Vigilance cases drag on for years with careers damaged permanently.

The committee also observes that the definition of a basic term like private sector bank appears to be more of RBI opinion than based on clear facts. For example, ownership of original Axis Bank was 100 percent in the public sector and yet it was awarded a private sector bank licence. Bank of Nainital, owned 99 percent by a PSU Bank is classified as a private sector bank. Similar is ING Vysya bank owned by a single foreign shareholder up to 42 percent. J&K Bank is classified as a private sector bank though it is

majorly owned by that state government.

Bank boards have to define policy for selling third-party products, this suggestion emanating probably from the current increasing number of customer complaints of mis-selling. It says, in effect, there are no independent directors on the board of PSU banks, thus 'egregiously violating' clause 49 of listing agreement. The report analyses the experiment of ownership change of UTI Bank. It was originally owned by UTI and clutch of public sector insurance companies. UTI shareholding was transferred to an SPY (SUUTI) and in eleven years, the share price has increased by 32 times. The report confirms that 'the government has done well as an investor.' This committee recommendation of new investment pattern of PSU banks is based on this model. The committee has analysed the existing fit and proper RBI guidelines on investors and directors (see Annexure) and has made specific recommendations on the fit and proper criteria for investors.

It recommends repealing the various acts creating the different public sector banks. The committee also has taken time to provide draft schemes under the Bank Nationalisation Acts/ Draft Government Resolution to set up the bank boards' bureau, draft rules and draft legislative provisions to implement its role 'as if State Bank and its every subsidiary bank were a nationalised bank' and draft of an act to provide for a framework to enable global standards of corporate governance in all banks in India. It makes the columnar listing of banks and gives the new name for each existing public sector bank - with the word 'Ltd' added, which was deleted in similar listing during nationalisation in the last century!

The committee has categorically stated that the boards of most of public sector banks do not have the required sense of purpose in terms of their focus on business strategy and risk management and in being able to provide oversight to steer the banks through their present difficult position. The boards are disempowered and the selection process for directors is increasingly compromised. Board governance is consequently weak. The onus of remedying this situation through radical reform lies primarily with the central government.

It should be noted that repeated recapitalisation

## ANNEXURE-1

The terms of reference of the Committee chaired by Mr P J Nayak, former Chairman and CEO of Axis Bank, would be:

- to review the regulatory compliance requirements of banks' boards in India
- to judge what can be rationalised and where requirements need to be enhanced
- to examine the working of banks' boards including whether adequate time is devoted to issues of strategy, growth, governance and risk management; to review central bank regulatory guidelines on bank ownership, ownership concentration and representation in the board to analyse the representation on banks' boards to see whether the boards have the appropriate mix of capabilities and the necessary independence to govern the institution, and to investigate possible conflicts of interest in board representation, including among owner representatives and regulators. In this regard to also assess and review the 'fit and proper' criteria for all categories of directors of banks, including tenor of directorship
- to examine board compensation guidelines, and any other issue relevant to the functioning of banks' boards and the governance they exercise.

## ANNEXURE 2

### Fit and proper criteria for becoming a director of a PSU bank

In November 2007, RBI issued detailed criteria to be fulfilled by persons being elected as a director on the board of a PSU Bank ('fit and proper criteria' for PSU bank directors). It listed the process to be followed by a specially formed 'nomination committee' including the procedure for obtaining an annual deed of covenants as recommended by the Ganguly committee. Through properly recorded minutes, the committee should decide whether or not the person's candidature should be accepted based on the criteria mentioned below. The fit and proper criteria are not exhaustive and the illustrative criteria include:

- Educational qualification
- Experience and field of expertise
- Track record and integrity The candidate coming to the adverse notice of any authority/regulatory agency for insolvency or default of any loan from any bank or financial institution would make the candidate unfit and improper to be a director on the board of a bank.

### Comments by the Committee

Applicability to specific contexts lacks precision. It is an exclusion criterion, but t.hete is need to aim higher at an inclusion category and to move to a more demanding threshold.

of the PSU banks is actually looting the taxpayers' money in the guise of helping society. Depositors of banks, whether taxpayers or not, would have earned higher yield on their deposits, if only the banks were functioning more efficiently. This report has come just in time when a new government with a clear focus on efficiency and productivity has taken charge at the Centre. It is hoped

that the recommendations of at least this committee will be examined seriously and decisions taken quickly, in the interest of banks themselves, the government as investor and the public.

*(Courtesy : Indian Engineering Exports,  
July 2014)*

“TRULY USEFUL”

## **Agri Innovation Conclave 2014**

### **Innovative technologies unveiled to transform the face of Indian agriculture**

**TV Satyanarayanan**

INDIA'S apex farm research body, Indian Council of Agricultural Research (ICAR), brought together agri-business experts, professionals and other stakeholders, including the youth, farmers, industries and institutions from across the country on a common platform under an " NAIP Agri Innovation Conclave 2014" in New Delhi. NAIP - National Agricultural Innovation Project - a World Bank-aided ICAR programme, seeks to provide technological support to farmers through development of new strategies, technologies and innovative solutions to address the changing agricultural environment.

The two-day Conclave was the culmination of a series of programmes --Krishi Parivartan Yatras, covering 1577 km by train, Krishi Parivartan Melas and Agri Biz Idol camps across many states lasting two weeks. The objective is to transform Indian agriculture through innovation and inclusive growth.

#### **Roundtable discussions**

The conclave was an arena where key policy makers, diplomats, eminent agribusiness experts and thought-leaders had roundtable discussions on scaling up partnership opportunities of various NAIP projects.

A spokesman of the Conclave explained that NAIP has played a pioneering role in tapping the vast potential of Indian agriculture through its inventive agribusiness initiatives.

The conclave shared with the participants some of the success stories of NAIP, to strengthen both agricultural development and livelihoods.

#### **Integrated farming systems**

Some of the interesting achievements are:

Integrated fish-makhana-water chestnut farming system in Darbhanga, Bihar; integrated rice-

fish-poultry farming system in Villiupuram, Cuddalore and Nagapattinam in Tamil Nadu; Integrated rice-fish-vegetable system in Assam, and Land shaping in salt-affected coastal areas of Sunderbans in West Bengal.

The project personnel found that duck rearing in village ponds improved livelihood in tribal areas of Odisha, and broiler and goat rearing ensured livelihood security for the rural women. For rice farmers, hand-operated winnower was found to be useful for improving rice quality and income. Polythene pond for rearing ducks and a new irrigation technique for vegetable cultivation were welcome innovations for the resource-poor farmers.

The basic principles of NAIP are: To enable agricultural research system to support agriculture as a business venture and also to make it a means of livelihood security to the rural people; to make the research system a pluralistic one, where every organization - public, private or civil society - having a stake in farm research, has to play a role; to work in well-defined partnership groups with clear common goals; funding through competition so that innovative ideas come in from stakeholders themselves; to work with focus, plan and time-frames; and, to develop well-tested models for application of research and technology for profitability.

#### **Innovative projects**

An ICAR pamphlet, distributed to participants of the Conclave gives details of some of the innovative research projects promoting women empowerment, reaching out to people in disadvantaged areas, and opening up of new gateways, thereby facilitating agriculture sector to become more productive, sustainable and capable of tackling challenges.

One such project is mushroom cultivation, successfully introduced by using agricultural waste



in Dhenkanal, Kandhamal and Kalahandi districts of Odisha. Being a low risk crop, this resulted in monetary benefits to small and marginal farmers.

In Betul district of Madhya Pradesh, around 4000 trees of Palas, Kusum and Ber were inoculated for lac cultivation. It produced 13,470 kg of brood lac, resulting in an annual income about Rs. 12,000 to Rs. 15,000 to each farmer. Other villagers are attracted by this success.

In Chhattisgarh, tamarind, after collection from trees, was entirely in the hands of middlemen resulting in low profit for the growers. In Pedawada cluster of Bastar district, 60 tribal families were organized in six groups for collection, de-hulling, de-seeding, packaging and marketing. A produce of 200 quintals is being handled by the cluster, which is getting additional income of about Rs 8,200 to each family.

### **Value addition**

In Jharkhand, two projects were initiated to add value to non-timber forest produce. Under the leaf plate mechanization project, the income generated per machine was Rs17,000 in three months. Pickle making with underutilized jackfruit in Jharkhand's Sunderpari and Godda forest ranges was another successful initiative. A group was trained for value addition and the pickles that were prepared were sold under the brand name 'Yogini'. It fetched a good price, besides giving employment to 117 women.

### **Products from millets**

Five commercially viable products from millets were developed in Dharwad in Karnataka. The products were ready-to-eat Foxtail and Little Millet products -diabetic mix, khakara, cookies, flakes and sports food. Ready- to-cook instant foods like millet vermicelli, composite mix for children and noodles were standardized. The project helped 200 farmers, who increased Little Millet production.

Vegetable and Fruit Promotion Council Keralam (VFPC) was started in Kerala with collection points in Wayanad district. This is managed by farmers on a self-help mode. Seventeen farmer-

owned procurement and two retail centers were established, with a handling capacity of about 2500 tonnes.

The participants of the Krishi Parivartan Yatra were shown the best of 50 enterprises developed from various NAIP projects so as to share the experience with the visiting farmers and entrepreneurs.

### **At the Agri Biz Idol Camps young**

entrepreneurs and students were encouraged to meet, thereby enabling them to pitch their business ideas and to develop new agri-business ventures. The idea was to strengthen the agri tech sector and innovation capabilities of the youth.

### **Technologies in oils & fats sector**

Through a publication, entitled "innovation to Impact", distributed at the Conclave, ICAR has given details of some of the technologies and innovations developed under NAIP that can benefit agri entrepreneurs to start their business ventures. Illustrative in the list, relating to oils and fats sector, are:

#### **Virgin Coconut Oil:**

Virgin coconut oil (VCO) is produced from coconut milk, extracted from mature kernel, through mechanical process. Machinery for production by hot processing includes testa remover, pulverizer, milk extractor and a specially designed VCO cooker.

VCO is consumed as functional food. It is used in cosmetics and pharmaceuticals industry. The oil is a premium product and if positioned properly can fetch high returns. Developed by Kasaragod-based Central Plantation Crops Research Institute (CPCRI) scientists, this technical innovation is ready for commercialization.

#### **Virgin Coconut Oil Meal-based Products:**

Virgin coconut oil meal (VCM) can be used as a base to produce biscuits, burfi, laddu, porridge and noodles. The technology for it, developed at CPCRI, can benefit food and bakery industries, small-scale entrepreneurs and self-help groups.



### **Sweet coconut chips:**

Coconut is consumed globally for its therapeutic attributes. It is rich source of lauric acid and contains dietary fibres. Sweet Coconut chips are osmotically dehydrated coconut slices, which are crisp and white in colour. It is packaged in layered pouches and it has a shelf life of six months. The machinery for production of chips include testa remover, slicer and electric dryer. Developed at CPCRI, the technology is ready for commercialization. Food industries, confectionaries, small scale and cottage industries can be potential investors.

### **Animal feed with potato waste:**

Potato processing waste, with other feed ingredients like mustard oil cake, rice polish, de-oiled rice polish, maize, mineral mixture, urea and salt, are used in making feed. Maize and oil cake are ground in hammer mill, Then all feed ingredients are mixed in ribbon blender for 15 minutes. Feed ingredients, in the form of mash, are passed through pelletiser to form pellets. Pellets are dried to about 11 per cent moisture for storage.

Developed at Central Institute of Post Harvest Engineering & Technology, Ludhiana, the product can reduce grain use in cattle feed, which is important in a country that has 300 million cattle and buffalo population. The new feed is relatively cheap and an easily digestible source of energy for animals.

### **Mineral-based technology for estrus induction in bovines:**

This technology, developed at Indian Veterinary Research Institute (IVRI), Izatnagar, Bareilly, helps

to increase the milk production of cows and buffaloes. Infertility is a serious problem in bovines throughout the country and animals do not come in heat properly within four months of calving. The problem is more serious in subsequent lactations, particularly in buffaloes and high yielding crossbreds. This affects the profitability of dairies severely. The innovative technology enhances the reproductive performance of animals by estrus induction and synchronization. This will strengthen animal welfare measures. Entrepreneurs and animal feed manufacturers could be potential investors in employing this technology.

PCR based DNA tests for differentiation of cattle and buffalo milk & meat, developed at National Bureau of Animal Genetic Resources, Karnal, and Monitoring Aflatoxin in milk, a technology developed at National Dairy Research Institute, are other new technologies that are useful for the development of animal husbandry and dairying in India.

The inaugural session of the Conclave was addressed by Dr S Ayyappan, Director-General of ICAR, Dr William Dar, Director-General of ICRISAT, Peter Kenmore, FAO Representative in India, and Ashish Bahuguna, Union Agriculture Secretary.

Panel discussions were on such issues as Targeting Inclusive Growth, and Growth Through Partnerships - Calling on Corporates. The panelists and speakers were all experts, and they included Dr A M Pandey, Additional Secretary in the Ministry of Environment and Sanjeev Chopra, Mission Director NHM.

*(Courtesy : SAARC OIL & FATS TODAY, June 2014)*

## “GOOD DIRECTION”

### National Conference on Agriculture for Kharif Campaign Raise production of oilseeds & coarse cereals:

Sharad Pawar

THE two-day 'National Conference on Agriculture for Kharif Campaign' featured discussions among policy makers from the central and state governments and scientists on how to maximise production of various crops in the coming kharif season. Kharif accounts for about half of the foodgrain production of the country.

Inaugurating the Conference, Agriculture and Food Processing Industries Minister Sharad Pawar drew the participants' attention towards the challenges in raising the production of oilseeds and coarse cereals now that the country has achieved record production of many major crops

Pawar said that while production of pulses and oilseeds has risen fast in the last few years and reached a record level this year, the country has to import edible oils worth Rs. 73,840 crore in 2012-13 as the demand is outpacing the rise in production. It is therefore necessary that production of pulses and oilseeds is raised fast by improving productivity and providing better marketing support.

While hailing the role of MSP in incentivising farmers to grow crops, the Minister expressed the need for a re-look at the MSP regime and strengthening the procurement system. He said: "Perhaps there is a need to look into the methodology of fixing MSPs into greater details. Our farmers are presently facing the problem of selling their produce, at least in eastern and central parts of the country, as the government machinery is not fully geared up to meet the requirement. There is, therefore, an urgent need to strengthen the procurement machinery; be it FCI, State Governments, NAFED or SFAC. Procurement has to be efficient not only in respect of wheat and rice but other crops also which are under MSPs and PSS."

Pawar reaffirmed the government's commitment to promotion of biotechnology for agriculture development: "We have to accept the fact that there is little scope of area expansion for ag-

riculture. In fact, the burden on land is bound to increase. We have to meet the burgeoning demand of food grains, fruits, vegetables, etc. from the limited land base. The only Mantra is, increasing the productivity. The use of bio-technology for this purpose is imperative. Bio-technology has great potential to improve yields. Government is committed to the use of bio-technology and other new technologies for agricultural development and backs field trials of GM crops with 'crop-specific dedicated monitoring protocols system'."

#### Plan Ready For The Eventuality of Poor Monsoon

The Agriculture Minister also informed that contingency plans are ready for 500 districts of the country. These will be made operational in the event of low rains during the monsoon season. The contours of the plan to deal with any such eventuality were also explained before the Conference. The plan includes close monitoring of the situation, keeping ready sufficient quantities of short-duration varieties of major crops, issuing location-specific advisories, and involving research institutes, KVKs and extension machinery for reaching farmers in time.

Though the Indian Meteorological Department will come out with detailed predictions in April, some international agencies have reported build-up of El Nino phenomenon in the Pacific Ocean. El Nino is known to impact monsoons over India. The Minister informed that climatic developments were being watched and analysed, but as of now it appears that El Nino will not have a significant impact over monsoon.

MOS (Agriculture and FPI) Shri Tariq Anwar also addressed the Conference.

After the main session, States were grouped into four groups to have detailed discussions on the main themes of the Conference: overall strategy for enhancing crop production; adoption of improved technologies for use of water, fertilizers etc; contingency plan to tackle below-normal

monsoon; and issues relating to marketing of pulses, oilseeds and coarse cereals.

Speaking on the sidelines of the Conference, Shri Pawar said he calls upon the agricultural research system to move vigorously pursue research to improve productivity of crops. This, he said, is necessary to meet the growing demand and the requirements of the Food Security Act.

On the availability of inputs for the kharif, the Minister informed that quality seeds and fertilizers are available in adequate quantities, except for some shortage of soyabean seed. To overcome this, focus will be on better utilization of farm-saved seed and available quality seed, and ergonomic practices that optimise seed usage, he said.

*(Courtesy : SAARC OIL & FATS TODAY, March 2014).*

## “USEFUL INFO”

### Analysing agricultural sector by economic survey 2013-14

As a concomitant of growth, the share of agriculture and allied (hereinafter referred as agri) sector in gross domestic product (GDP) declined to 15.2 per cent during the Eleventh Plan and further to 13.9 per cent in 2013-14 (provisional estimates—PE). While it still accounts for about 54.6 per cent of total employment (Census 2011), there has been a decline in the absolute number of cultivators, which is unprecedented, from 127.3 million (Census 2001) to 118.7 million (Census 2011). This is indicative of a shift from farm to non-farm employment, causing real farm wages to rise by over 7 per cent annually in recent years.

The resilience of Indian agriculture is evident in that this sector last posted negative growth in 2002-03 and has registered a remarkable average growth rate of 4.1 per cent during the Eleventh Five Year Plan (2007-08 to 2011-12). As per the PE for 2013-14, growth rate of agri GDP was 1.4 per cent and 4.7 per cent respectively during the first two years of the Twelfth Plan period. In addition, a structural change in the composition of agriculture, showing diversification into horticulture, livestock, and fisheries, is noticeable. The horticulture sector contributed 30.4 per cent of agri GDP, while the livestock sector contributed over 4.1 per cent of the total GDP in 2012-13. Agriculture being a state subject, the primary responsibility for increasing agricultural production and productivity, exploiting untapped potential, and enhancing incomes of the farming community, rests with state governments. Their efforts are supplemented by many centrally sponsored and central sector schemes. Area, Production, and Productivity:

Substantial progress in acreage and production are recorded for 2013-14. As per the 3rd Advance Estimates (3rd AE) the acreage under foodgrains has increased to about 126.2 million ha; and to 28.2 million ha under oilseeds. Record production of foodgrains at 264.4 million tonnes (mt) and oilseeds at 32.4 mt is estimated. After achieving the goal of increasing foodgrains production by 20 million tonnes, new targets have been set under the National Food Security Mission (NFSM), to produce additional 25 million tonnes of foodgrains by 2016-17: 10 million tonnes of rice, 8 million tonnes of wheat, 4 million tonnes of pulses, and 3 million tonnes of coarse cereals. Focus is on cropping systems and on small and marginal farmers through development of farmer producer organizations (FPOs) and creating value chain and providing market linkages. Funding under Rashtriya Krishi Vikas Yojana (RKVY) during the Twelfth Plan will be through production growth (35 per cent), infrastructure and assets (35 per cent), sub-schemes (20 per cent), and 10 per cent flexi-fund. Bringing Green Revolution to Eastern India (BGREI), a major sub-scheme with an allocation of Rs 1000 crore in 2013-14, increased paddy production in implementing states by 7 per cent in 2012-13 over 2011-12.

Given the limitations in expanding agricultural land, improvements in yield levels hold the key for long-term output growth. However, in the case of most of the major crops, higher production in 2013-14 has been achieved by expanding acreage, rather than productivity. Groundnut has shown the largest jump in yield; while productivity increases are significant in the case of cotton and tur, as they have been achieved against declin-

ing/ stagnant acreage. The compound growth rate of area, production, and productivity during 2000-01 to 2013-14 has been higher than in the previous two decades for coarse cereals, pulses, oilseeds, and cotton, while it has largely declined for rice and wheat.

The Integrated Scheme of Oilseeds, Pulses, Oil Palm, and Maize (ISOPOM) has resulted in record production of pulses (19.6 mt), oilseeds (32.4 mt) and maize (24.2 mt) in 2013-14 (3rd AE), through area expansion and productivity increase. The Technology Mission on Oilseeds and Oil Palm (TMO & OP), introduced in the Twelfth Plan, aims to increase domestic production of edible oilseeds/oil, which is 50 per cent short of the domestic demand, through several focused and integrated interventions. The area, production, and yield figures for the last five years (Appendices 1.9 to 1.15) testify to the continued robustness of Indian agriculture. Climate Change and its Impact:

With 60 per cent of total foodgrains and oilseeds produced being grown in the kharif season, and with just 35 per cent of total arable area being irrigated, Indian agriculture is still heavily dependent on rainfall. Significant warming of temperatures, lower mean rainfalls and higher rainfall variability have been recorded by the Indian Meteorological Department (IMD) over successive plan periods. Three of the 5 years of the Eleventh Plan period had annual rainfall less than 95 per cent of the long period average (LPA), as compared to 5 in the previous 15 years (Twelfth Five Year Plan, Vol. II: 2-3). The LPA of the season rainfall over the country as a whole for the period 1951-2000 is 89 cm.

The south-west (SW) monsoon (from June to September) accounts for nearly 75 per cent of total annual rainfall in India and thus substantially affects agricultural performance. In 2013, the actual season rainfall over the country was 106 per cent of LPA. The second long-range forecast for the SW monsoon season released by the IMD on 9 June, indicates that the monsoon rainfall is likely to be 93 per cent of the LPA (model error  $\pm$  4 per cent), with 71 per cent probability of sub-normal / deficient rainfall and 70 per cent occurrence of El Nino. Rainfall distribution data can aid in gauging the likelihood of an El Nino occurrence. Significantly, the number of divisions reporting deficient/

scanty rainfall cumulative from 1 June is higher this year than in the previous five years with (-) 44 per cent rainfall departure. Further, 80 per cent of districts had deficient rainfall/no rain in this period.

Reservoir capacities monitored by the Central Water Commission (CWC) reflect a better status of water availability. The total live storage in 85 important reservoirs across the country, with capacity at full reservoir level (FRL) of 154.88 billion cubic meters (BCM) and accounting for about 73 per cent of total reservoir capacity, was 39.320 BCM (25 per cent of storage capacity at FRL) as on 12 June 2014. This is 20 per cent more than last year's storage position and 17 percent more than the average of the last 10 years. Only two reservoirs have no live storage as against nine last year. Occurrence of El Nino is associated with deficit rainfall in the states of Maharashtra, Gujarat, Rajasthan, Karnataka, Jharkhand, and Bihar. Against the backdrop of the IMD's forecast on El Nino, the delayed onset of the monsoon coupled with uneven distribution may affect crop growth, especially of kharif pulses and oilseeds, and the exact quantum of yield losses depends upon the duration and intensity of stress.

Occurrence of El Nino is associated with deficit rainfall in the states of Maharashtra, Gujarat, Rajasthan, Karnataka, Jharkhand, and Bihar. Against the backdrop of the IMD's forecast on El Nino, the delayed onset of the monsoon coupled with uneven distribution may affect crop growth, especially of kharif pulses and oilseeds, and the exact quantum of yield losses depends upon the duration and intensity of stress. The government has in place contingency measures in about 500 districts. Further, the National Mission for Sustainable Agriculture (NMSA) is one of the eight missions of the National Action Plan on Climate Change, whose focus is on encouraging judicious utilization of common resources through a community-based approach. The Rain-fed Area Development Programme (RADP), which adopts a holistic approach to enhance farmers' incomes in rainfed areas, was implemented in 22 states in 2013-14 and will be substantially upscaled during the Twelfth Plan.

Other initiatives include the National Initiative on Climate Resilient Agriculture (NICRA) under the



Indian Council of Agricultural Research (ICAR) to enhance resilience of Indian agriculture to climate change and vulnerability through strategic research and technology demonstration, capacity building, and sponsored/ competitive grants. The Earth System Science Organization (ESSO) issues agro-meteorological advisories in 12 lan-

guages to 600 districts, which are currently subscribed to by over 4.8 million farmers, while Gramin Krishi Mausam Sewa has initiated these advisory services at block level.

(Courtesy : BUSINESS STAR, July, 2014).

## “USEFUL INFO”

# Eazy Business • Solutions: Unlocking the new potential of ERP with Tally

WHEN it takes a long time to put one's financials right at the end of the month; when sales forecast is merely a conjecture rather based on solid figures; when the business struggles to keep up with its functions and processes; then probably it is the right time to go for an ERP system. In this dome, several giant ERP providers cater to the needs of big MNCs and help them automate and streamline processes. But when it comes to India that largely constitutes SMEs and MSMEs, these big ERP players fail to understand the pulse of the market. Over 85 percent enterprises in this quarter predominantly use 'Tally' as their accounting software. As these enterprises witness growth, they implement branded ERPs to overcome cash, raw materials, production capacity, etc issues. But with time, they find it tricky to get accustomed to the complicated finance module of branded ERPs and come back to Tally for its ease of use, cost effectiveness and alignment with Indian accounting procedures. Sensing the opportunities, Kunal Singhal, a Chartered Accountant and a hardcore technician & programmer, came up with an innovative product EazyERP which places effective financial management at the heart of business systems and processes with the knack of Tally. He started Singhal System Solutions (3S) Pvt. Ltd. in Gurgaon with an insight to craft the IT enabled business solutions for SME marketplace. Banking on the growth prospects of Tally, 3S is aggressively targeting Tally partners across India and in countries like Dubai, Kenya, Ghana, Egypt and others to expand its network entering into constructive partnerships to take up their distribution to national and international levels.

Following the vision of his father S K Singhal who found Singhal Group at Bhiwadi, Kunal

started 3S in 2007 to capture the possibilities unlocked by Tally. Having a group worth of over Rs.100 crores, the knowledge of the Group dwells down 30 years deep into Financial, Industrial and Project Consultancy, Taxation, Financing, Real Estate Services and Development. Due to striking breadth and depth of experience, 3S today has a satisfied clientele base of over 300 clients with major clients like Kamdhenu Group, Toyota Material Handling, MDH Masala, Ujala Pumps, Hindustan Pumps, KRISH Group, Panasonic India, Goodyear Tires, Bausch & Lomb, Becton Dickinson, Videocon, Mewar Group Udaipur, Rajasthan Barytes, and AVLIGHT Automotive amongst others.

### Helping Enterprises Gain Competitive Advantage

Every organization focuses on enhancing agility and speed of delivering products & services and concurrently keeping track on everything in real times. This requires building a *smooth operational process management* that many times proves to be a nightmare for organizations. Kunal was aware of such intricacies of the SME marketplace and to help them achieve greater efficiency, his idea was to integrate ERP with Tally in such a way that it works like a single solution. Established on this principle, 3S today offers highly effective, modular, customizable and secure Tally Integrated Enterprise Software Solutions & ERP Software Solutions serving wide range of businesses in different verticals. Its flagship product EazyERP is solely developed keeping into view the practical scenario of SME and MSME industries in India.

The comprehensive EazyERP gives great

scope for customizations based on parameters set by user, it keeps a track of production at each stage and also tracks rejections, rework, wastages, and scraps for each production. It comes with extensive features like Item Tracking, Advanced Requirement Planning for production and Job Work, Multi-currency support and more. From a management & user perspective, 3S follows a hand holding implementation approach to train the users and even provide the facility of resident engineers. Benefits like unlimited user license, extensive authorization procedure, SMS and email alert integration makes for an easy operation, multi screen access and better reporting. With EazyERP solution, 3S enables businesses to seamlessly harmonize business processes and achieve operational excellence. The solution enhances the standard of customer service, while reducing operational time and cost.

### **The Way Forward**

The financially strong company 3S has not raised any fund till date with no plans to do so in the near future. 3S heavily invests in R&D to integrate new technologies like Mobile, cloud and others in the ERP to ensure that the company and its clients stay ahead of the challenges. It is currently working on the third version of EazyERP which is all set to be launched this year. This new version will come with new functionalities like mobile apps to connect the sales team and distributor network, vendor and customer portal, better BI tools to analyze data, more dashboard and analytical tools. Kunal and his teams are optimistic towards expanding their wings to reach out the untapped markets and provide clients with solutions ignored by other big players.

### **Launch of ERP Simplified!**

ERP Simplified! has been launched under the aegis of Kunal Singhal, an ERP Expert and founder & MD, Eazy Business Solutions; an interactive Knowledge session on the benefits and significance of Enterprise Resource Planning (ERP) in any organization. ERP Simplified has been launched in Gurgaon and then travelled across the cities like Haridwar and Ludhiana. The series will next travel to Ahmedabad. Several Business Owners, CFOs and Entrepreneurs from each city and nearby industrial clusters had attended the

session and talked about their issues on using ERP. Mr. Singhal has addressed their issues, spoken about the role of ERP for maximum productivity and persuaded them with the exclusive and customized module of EazyERP. The interactive session focused on the concerns that choosing the right ERP solution for your manufacturing operations is the need of the hour. ERP solution helps businesses in performing operations more efficiently and effectively. ERP delivers a single database that contains all information for the modules, which includes manufacturing, supply chain management, human resources, customer relationship management, data warehouse etc. The implementation of the right ERP solution results in tangible return on investment and leads to success.

### **Why EAZYERP?**

Within the complexity of the organization/Industry exist many security threats and the major threat is DATA SECURITY. Due to this several organizations especially manufacturing industries are facing tremendous loss. ERP (Enterprise Resource Planning) is the only response to curb the threat. Thus, Mr. Singhal has developed India's first and only TALLY INTEGRATED ERP - EAZYERP to control such crucial issue of Data theft and making the industry's process smoother and successful. With EazyERP, company owners need not to switch over to any other software. EazyERP has successfully conceptualized its ERP module in many manufacturing industries and increasing its client capacity. Its unique features are:

- Integration with Tally Accounting Software requiring no change in existing systems.
- Extensive Customization Possible.
- Advanced Reporting System with user definable parameters
- Hand Holding Implementation Approach
- Report Scheduling- One Doesn't need to login to the system to see report. They will get it on their mail automatically.
- Open source and robust database to provide huge scalability at zero cost.

**By: Amit Kumar**

*(Courtesy : BUSINESS STAR,  
July, 2014).*



## “GOOD NEWS”

### Six new agriculture universities to be set up in north east

DEVELOPMENT in the northeast region is a top priority of the government. Agriculture Minister, Radha Mohan Singh said that the government will consider the demand of setting up six new agricultural colleges as well as upgrading the infrastructure of existing ones in north eastern states. He gave deep assurance to a delegation from north eastern states, led by Minister of State for Home Affairs, Kiren Rijiju. Singh has directed Indian Council of Agriculture Research (ICAR) to look into the feasibility of opening more agricultural and veterinary colleges and universities in all the eight states of the region.

The Minister said that the six news colleges would cost Rs 600-700 crore and to fulfill the demand will serious look into it. There is also a great need for the Central Agriculture University in Imphal, Manipur to be strengthened as agri-education and research plays a big role in bringing in latest technology to farmers. The Union minister has also met UN food agency FAO representative in India, Peter Kenmore, Who lauded India's efforts in extending support to global partnerships in agriculture and food security. The minister expressed hope that India and FAO will work together for food security, not just of India, but also of the entire region, and the world. The northeast region is endowed with rich natural resources and the climate condition makes it suitable for the cultivation of fruits, vegetables and other crops. There is a huge scope for development in the agricultural sector in the region, which besides bringing revenue will address the employment problem. Emphasis on the development of agriculture sector will improve the socio-economic condition of the region.

*(Courtesy : BUSINESS STAR, July, 2014).*

## “STRENGTH TO STRENGTH”

### Protein Producers Thrive On Global Diet Changes

By  
JACOB BUNGECONNECT

CONSUMERS from Beijing to Boston are gobbling up more meat and dairy products, fueling multibillion-dollar mergers in the food industry and reshaping global agriculture.

This intensifying appetite for protein is one of the main forces driving Tyson Foods Inc.'s planned \$7.7 billion acquisition of Hillshire Brands Co.

Increasingly wealthy consumers in emerging economies are piling more meat on their plates and feeding their children more milk products.

In the U.S., meanwhile, some health-conscious consumers are replacing carbohydrates like bread and cereal with more animal protein, including meat, yogurt and eggs.

The trend has given rise to new meat-industry giants such as Brazil's JBS SA and China's WH Group, and is propelling sales by U.S. companies such as Hillshire, maker of Jimmy Dean sausages and Ball Park hot dogs, and Chobani Inc., the country's biggest Greek yogurt brand.

It is also prompting farmers around the world to expand their production of meat as well as the corn, soybeans and other crops used to feed livestock.

"The protein business is a very good business to be in right now," said Chuck Wirtz, who raises about 50,000 pigs a year on a farm near Whitemore, Iowa. "The farming industry benefits from changing diets world-wide."

Companies are rushing to secure critical assets, from milk powder for infant formula to billion-dollar brands that dominate supermarket meat cases. The Hillshire deal, if completed, would be the meat industry's biggest merger, topping last year's \$4.7 billion acquisition of Smithfield Foods Inc. by WH Group, then known as Shuanghui In-

ternational Holdings. That deal ranked as the biggest-ever Chinese takeover of an American company.

JBS of Brazil has made a string of acquisitions over the past decade to transform the company into what its executives say is the world's biggest meat processor, with sales of \$41.7 billion last year. JBS also bid for Hillshire, through its Pilgrim's Pride Corp. unit, but lost to Tyson.

Meat, eggs, dairy products, beans and grains are among the principal sources of protein, which the digestive system breaks down into amino acids that replace existing proteins in human cells. Because the body can't produce some amino acids on its own, protein is considered an essential part of the human diet.

Protein deficiency remains a problem for millions of people in poorer countries but, as incomes grow, meat typically becomes a bigger part of peoples' diets.

World-wide meat consumption will rise 1.9% a year over the next decade, according to projections from the U.S. Agriculture Department, as rising incomes in places like China, Mexico and Central America allow consumers to afford more pork, chicken and beef.

The United Nations Food and Agriculture Organization has projected that by 2030 the average person will consume about 99 pounds of meat a year, versus 86 pounds in 2007 and 73 in 1991. The U.S. Agriculture Department predicts that China and Hong Kong will boost beef imports by 55% by 2024.

In response, farmers from the U.S. to Ukraine have planted more corn and soybeans, core ingredients in most livestock feed.

U.S. farmers planted 97 million acres of corn in 2013, the most since the 1930s and up from 75.7 million in 2001. Meanwhile, meat producers in developing countries like Brazil are ramping up output: the U.N. expects such countries to account for about 80% of the growth in global meat production over the next eight years.

The mounting demand for meat and dairy prod-

ucts has raised environmental concerns. The U.N. estimates that livestock production is responsible for about 14% of global greenhouse-gas emissions.

Environmentalists blame animal waste from livestock operations for creating "dead zones" in coastal waters, and argue that meat is a relatively inefficient source of protein, and that it would make more sense to convert land that now produces animal feed to high-protein grains for human consumption.

In the U.S., most people already consume more protein than they need, according to the U.S. Centers for Disease Control and Prevention. Average U.S. consumption of meat, measured by weight, ticked up in 2013, after falling in recent years, according to the Agriculture Department. Sales of fresh meat—the cuts sold shrink-wrapped in the supermarket—have suffered in part because of record beef and pork prices. Those prices reflect the drought and disease that have reduced U.S. livestock supplies. Sales of mass-market milk also have waned.

But sales of many processed meat and dairy products are soaring, as many Americans shift away from carbohydrates and companies come up with new and more-convenient products and packaging that tap into the pro-protein trend.

U.S. sales of packaged foods with protein-related claims on their labels rose to \$7.5 billion in the year ended Feb. 15, a gain of more than 50% from the like period four years ago, according to research firm Nielsen.

Companies seeking to cash in on that demand include Kraft Foods Group Inc., which is launching a new Oscar Mayer product called P3 Portable Protein Pack, which includes Kraft cheese, Oscar Mayer meat and Planters nuts. Hormel Foods Corp. HRL has developed meat-and-cheese wraps under a brand called Rev that touts its protein content.

The trend has been especially pronounced in breakfast foods, an area of particular strength for Hillshire. Post Holdings Inc., maker of breakfast cereals such as Fruity Pebbles and Shredded Wheat, agreed in April to pay \$2.45 billion to buy

Michael Foods Inc., a maker of eggs and dairy goods. Also in April, Chobani, whose business already has grown rapidly, won a \$750 million investment from private-equity firm TPG, in part to fund expansion.

"Greek yogurt has just exploded," said Tyson Chief Executive Donnie Smith, in a recent interview. He said the demand for protein, particularly in foods that are easy to eat on the go, prompted Tyson this year to launch its first line of breakfast sandwiches, called Day Starts, with labels highlighting their protein content.

Western companies also are seeking to profit from the developing world's growing appetites for protein—with mixed success. Archer Daniels Midland Co.'s attempted takeover last year of Australian grain merchant GrainCorp Ltd. hinged in part on ADM's ambition to sell more grain to Chinese livestock producers. Australian regulators rejected the deal, saying it went against Australia's national interest.

Tyson has invested heavily in expanding its chicken processing in China, but has struggled with consumer concerns there about avian influenza, which have damped sales.

In February Montreal-based dairy giant Saputo Inc. bought Australian peer Warrnambool Cheese & Butter for nearly 450 million Canadian dollars (US\$412 million), seeking a platform for sales to Asia, where demand for dairy products is growing rapidly.

The burgeoning Asian market for dairy products to make infant formula and other foods has fueled demand for U.S. milk.

About 15% of the milk produced in the U.S. now is sold to foreign countries, versus a minimal amount a decade ago, according to Connie Tipton, chief executive of the International Dairy Foods Association. "We're sending over cheese on tankers to serve fast-food restaurants" in China, she said.

—Alistair MacDonald,

Annie Gasparro and Julie Jargon contributed to this article. (Source : The Wall Street Journal dated 12th June, 2014).

*(Courtesy : SEA NEWS CIRCULAR, Vol. XVII, Issue:3, June 2014).*

## “TIME TO CONTROL”

### New agriculture minister to revise APMC Act

RADHA Mohan Singh on Wednesday took charge as Cabinet minister of agriculture at Krishi Bhavan here and held meetings with officials of the ministry and associated departments.

The new agriculture minister took stock of the various departments and gave necessary directions while emphasising on participation of private sector as partners in agriculture research, education and extension for bringing larger investment in key areas.

Later speaking to the media, the new agriculture minister called for larger participation by the farmers in policy framing. Agriculture Produce Marketing Committee Act would be revised, said the minister while adding that the ministry would ensure greater cooperation with various departments, agencies, ministries within the government when asked about the food safety issue related to pesticide residue levels.

On genetically modified crops, the minister hinted at doing away with GM crops. He said, "Only if it is utmost required, the government will look into the issue." When asked whether the ministry is rejecting GM, the minister did not elaborate further.

Meanwhile, Singh unveiled some of the plans of the new government. He said that the government had decided to launch a Pradhanmantri Gram Sinchai Yojna (PM Rural Irrigation Plan) to make sure that agriculture was not affected by lack of water supplies. Further the new government has decided to continue with Agriculture Income Insurance Programme.

The new agriculture minister has informed that the government has started preparations in the wake of a weak monsoon. In this regard, series of meetings have already started with state governments. The new government will also review the cooperatives' law.

Further to boost the dairy sector, the new

vernment has decided to rear local breeds and upgrade them along with increasing number of central agriculture universities.

(Source : Food & Beverage News dated 9th June'14)

(Courtesy : SEA NEWS CIRCULAR,  
Vol. XVII, Issue:3, June 2014).

## “CRUSHING NEEDS”

### World Crushing of 10 Oilseeds

CRUSHING of 10 oilseeds are currently forecast to continue to rise sharply in Oct/Sept 2014/ 15, reaching 420.5 Mn T, 16 Mn T or 3.9% more than in 2013/14.

Soybean crushing are seen accelerating with a prospective year-on-year increase of 13 Mn T compared with a rise of 9 Mn T in 2013/14. Insufficient supplies of other oilseeds will make it

necessary to step up soybean processing.

Crushing of the high oil-yielding sunflowerseed and rapeseed are projected to rise by just 2.7 Mn T next season and thus considerably less than the outstanding growth of 6.5 Mn T in 2013/14. In our crush forecast we have already assumed a reduction of stocks of both oilseeds as their production is expected to decline.

The dominance of soybeans - basically a meal seed - will sharply increase world production of 9 oilseed meals to a new high of 289.5 Mn T, about 12 Mn T or 4.3% more than a year earlier. Thus, world oilmeal supplies will become more ample. This is particularly true for soya meal. As crushings are likely to be increasingly driven by vegetable oil demand, the prospective acceleration of oilmeal production is likely to result in price weakness of meals relative to oils.

(Courtesy : SEA NEWS CIRCULAR,  
Vol. XVII, Issue:3, June 2014).

### 10 OILSEEDS: World Crushings & Product Output

(MnT)	Forecast	October / Sept	
<b>Crushings</b>	14/15 F	13/14	12/13
Soybeans	248.00*	235.10*	226.23
Cottonseed	33.20*	33.51*	34.27
Grdnuts, shelled	9.90*	10.16*	9.55
Sunflowerseed	37.10*	37.32*	32.41
Rapeseed	66.30*	63.37*	61.78
Sesameseed	2.09*	2.06*	2.03
Palmkernels	14.98*	14.49*	13.77
Copra	5.30*	5.15*	5.53
Linseed	2.05*	1.88*	1.84
Castorseed	1.55'	1.48*	1.55
<b>Total</b>	<b>420.47*</b>	<b>404.53*</b>	<b>388.94</b>
Change	+3.9%	+4.0%	-1.1%
<b>10 Seed oils</b>	<b>109.65*</b>	<b>105.93*</b>	<b>101.38</b>
Change	+3.5%	+4.5%	-0.9%
<b>9 Oilseeds Meals</b>	<b>289.48*</b>	<b>277.60*</b>	<b>267.27</b>
Change	+4.3%	+3.9%	-1.0%

(Source: OIL WORLD Weekly 30th May, Internet: www.oilworld.de) 2014.

(Courtesy : SEA NEWS CIRCULAR,  
Vol. XVII, Issue:3, June 2014).

## “BUTTER TASTE”

### US scientists develop butter from rice bran oil

A process developed by scientists in the US to make a butter-like product from rice bran oil could come in handy for the Indian edible oil industry.

The extract has been derived by scientists of the Agricultural Research Service of the US Department of Agriculture. The product, somewhat resembling peanut butter, can be a partial replacement for margarine, butter or even shortening, says a release from the service. Quoting Erica L Bakota, chemist of the research service, the statement says that the extract's texture and composition are unique.

During preliminary experiments at the office of the research body, Bakota and her colleagues used the extract instead of butter for granola (a breakfast item resembling muesli) and white bread.

But why rice bran? Feedback from those who sampled the product showed that there was no change in the taste or texture of granola or bread. An advantage with the rice bran product is that it is free of trans fatty acids, which increase the risk of heart attacks. The product also has a longer shelf life, unlike butter. The extract consists of unrefined rice bran oil and its natural wax, which is used in confectionary items. It also contains vitamin E, and low levels of bad or LDL (low density lipoprotein) cholesterol. Another feature of the product is that it is produced by using low temperatures. Bakota, along with her team, is trying to get a patent for the procedure while looking for collaborators interested in finding new uses for it.

Indian potential : India has a tremendous potential to produce rice bran oil and other by-products with paddy output topping 150 million tonnes. Currently, production of rice bran oil in the coun-

try is nine lakh tonnes against a potential of over 15 lakh tonnes. New uses such as butter are likely to encourage more productive use of rice bran oil in the country.

*(Courtesy : SEA NEWS CIRCULAR, Vol. XVII, Issue 2, May, 2014).*

## “AMAZING”

### Rice in Diet can help lose weight

INCLUDING rice in one's diet helps reduce body weight, improve nutrition and health markers, and makes the diet more consistent with the recommended U.S. dietary guidelines, according to a study by the U.S.-based Baylor College of Medicine.

The study analyzed the National Health and Nutrition Examination Survey (NHANES) datasets from 2005-2010 and evaluated the association of rice consumption with overall diet quality and key nutrient intakes in a nationally representative sample of 14,386 U.S. adults. The study found that people who eat rice regularly consume less amounts of saturated fat and added sugars. “Americans eat a variety of grain-based foods, but rice stands out because it is eaten primarily as an intact grain that is naturally sodium free and has only a trace amount of fat, with no saturated fat,” the study says.

Rice eaters also consume healthy nutrients such as potassium, magnesium, iron, folate and fiber because eating rice is associated with eat-



ing more servings of fruit, vegetables, meat and beans, says the lead author. The study is based on two earlier observational studies using NHANES datasets, which showed that rice when consumed with other foods can provide valuable nutrients to the body. The study may help fight overweight and obesity, two major risk factors for a number of chronic diseases, including diabetes, cardiovascular diseases and cancer.

“Once considered a problem only in high income countries, overweight and obesity are now dramatically on the rise in low-and middle-income countries, particularly in urban settings,” the World Health Organization (WHO) says. According to the WHO, worldwide obesity has nearly doubled over the last three and half decades and is caused by irregular and unhealthy dietary habits.

The WHO says that to prevent obesity one should limit total fat intake and shift fat consumption away from saturated fats to unsaturated fats; increase consumption of fruit, vegetables, whole grains and nuts; and limit the intake of sugar and salt.

*(Courtesy : GRAINS ASIA, Vol. 2, Issue 12, May, 2014).*

## “GREAT”

### Pulses Reduce Heart Disease Risk

ANYONE remember singing “beans, beans are good for your heart” as a child? Well, besides leaving children in fits of giggles, it turns out the age-old playground-filling rhyme may have some truth in it.

According to researchers, eating pulses can greatly lower cholesterol and reduce the risk of heart disease. In fact, just one daily serving of pulses such as haricot beans, chickpeas, lentils and peas can significantly lower levels of harmful cholesterol.

Despite this revelation, most people in the West would need to increase their bean consumption greatly to see any benefit.

Scientists analysed data on 1,037 people who

took part in 26 diet and health studies that looked at the effect of pulses on cholesterol. They found that consuming one serving (three-quarters of a cup) of non-oil seed pulses a day led to a 5% reduction in levels of “bad” cholesterol, or low-density lipoprotein (LDL).

Pooling together results of different studies in this way - known as meta-analysis - can uncover otherwise hidden trends.

Dr John Sievenpiper, a member of the Canadian and US team from St Michael’s Hospital, Toronto, said: “The reduction of 5% in our meta-analysis suggests a potential risk reduction of 5% in major vascular events.”

Most health guidelines recommend consuming pulses along with other vegetables and fruits as part of a balanced diet.

But despite the popularity of baked beans - haricot beans in a tomato sauce - and peas, consumption of pulses in the West is low. Only 13% of Canadians consume pulses on any given day - and among those who do the average intake is only about half a serving, said Dr Sievenpiper.

In the US pulse consumption is even lower, working out at typically 0.2 servings per person per day. “We have a lot of room in our diets for increasing our pulse intake to derive the cardiovascular benefits,” Dr Sievenpiper added.

“Pulses already play a role in many traditional cuisines, including Mediterranean and South Asian. As an added bonus, they’re inexpensive. “Since many pulses are grown in North America, it’s also an opportunity to buy and eat locally and support farmers.”

*(Courtesy : GRAINS ASIA, Vol. 2, Issue 12, May, 2014).*

## “YES OR NO”

### Are unsaturated cooking oils best for our health?

THE usage of oil in cooking has gotten a really bad reputation in recent decades. Healthcare professionals are constantly telling us to steam, braise, grill, bake, etc, rather than fry.

But this is hardly surprising, considering the current rise in waistlines, cholesterol levels, blood

pressure and heart disease over the past several years.

However, the truth is, we cannot do completely without oil, which is basically a form of fat, in our daily diet. A certain amount of fat is crucial to our nutrition, and this includes both saturated and unsaturated fats.

The primary reason for this is the fact that four essential vitamins - A, D, E and K - are only soluble in fat, thus, requiring it as an agent to enter our body's digestive system.

Fat is also a powerhouse when it comes to providing us with energy, supplying almost twice the amount of calories per gram that carbohydrates do.

And this remains an important nutritional fact to consider when supplying food aid to the many malnourished communities around the world.

However, for the rest of us office-bound, sedentary people, who have much lower energy needs, but still eat like we do hard physical labour, this is a very bad thing, as the unused excess energy just gets stored in fat deposits around our body.

This is especially so as our body preferentially sources energy from carbohydrates, instead of fats and proteins.

This means that when given a choice, our body will break down carbohydrates first for energy, then only fats, which are less efficient to burn than carbohydrates, followed by proteins as a last resort when malnourished.

In addition, fat plays a far more important role in our food than many of us - other than cooking aficionados - might realise.

The usage of fat affects flavour, texture, appearance, and even, how full we feel, i.e. satiety. (See Food and fat).

But one of the most important functions of fat, in the form of oil, is its ability to be heated up to high temperatures without breaking down and transferring this heat to the food immersed in it.

This allows food to be cooked quickly, contributes flavour, and helps in forming that delicious crunchy surface of deep-fried foods.

However, when it comes to cooking, not all edible oils are created equally.

Although the general understanding is that unsaturated vegetable oils are healthier than their saturated counterparts and animal oils, which are naturally high in saturated fats, this rule-of-thumb might not be as clear-cut as it seems.

### **Too much trans fat**

In November, the United States Food and Drug Administration (FDA) announced its preliminary determination that partially-hydrogenated cooking oils are no longer "generally recognised as safe" for use in food.

This is because such oils are the main source of artificial trans fats in our diet.

According to the US Institute of Medicine, not only do trans fats have no known function, other than the generic role of energy source, but they also increase the levels of low-density lipoprotein (LDL, also known as "bad") cholesterol in our bodies. And a rise in LDL cholesterol, as we know, leads to more atherosclerosis and increased risk of heart disease.

In addition, some studies have suggested that, in comparison to their naturally-occurring siblings, artificial trans fats are actually more harmful to humans.

### **So, what exactly are partially-hydrogenated cooking oils?**

Most vegetable oils consist of polyunsaturated fatty acids - the so-called "healthier" type of fat.

However, before they reach our supermarket shelves, these oils typically undergo a chemical process called hydrogenation, which results in the final partially-hydrogenated version.

The advantages of foods cooked with partially-hydrogenated oils is that they stay fresh longer, with a resultant longer shelf life, and have a more

desirable texture; hence, their popularity within the food industry.

Partially-hydrogenated oils are also more stable when used at the high temperatures required for commercial frying, and can be reused more times than unsaturated oils.

The disadvantage, however, is that the process of partial hydrogenation also causes the creation of trans fats - a side effect deleterious enough to human health that the PDA is considering subjecting the usage of such oils to strict pre-market regulation and approval.

### **Suitable for reuse?**

Whether it is in fastfood outlets, kopitiam or roadside stalls, cooking oil is usually reused as many times as possible.

Naturally, there are limitations to the number of times the oil can be reused, dependant on the type that it is.

According to the Food and Agriculture Organisation (FAO), an important requirement of a cooking oil is that it remains stable under the "very abusive" conditions of deep frying, i.e. high temperatures and moisture.

The high temperature causes the cooking oil to polymerise, resulting in a viscous oil that is readily absorbed by foods and produces a greasy product.

Meanwhile, the high moisture content encourages the breakdown of fatty acids during heating, resulting in a poor-quality oil that starts to breakdown at subsequently lower temperatures, and becomes progressively darker in colour and more acrid in flavour and smell.

Needless to say, whatever nutritional values the oil might have diminishes under such circumstances, says Malaysian Palm Oil Board (MPOB) senior research officer Dr Azmil Haizam Ahmad Tarmizi.

The more unsaturated the cooking oil, the more vulnerable it is to these changes, which accumulate the more times the oil is reused.

Under such heavy usage, saturated oils like palm oil are actually more stable and able to withstand such changes.

Nutrition-wise, Dr Azmil, who recently spoke at the 2013 MPOB International Palm Oil Congress on Novel Frying Approaches for Enhanced Food Quality, has found that palm oil also retains around half the amount of its original vitamin E, even after 24 hours of continuous frying. Palm oil contains the highest amount of tocotrienol - one of the two forms of vitamin E, found in nature.

Research has indicated that tocotrienols potentially have many health benefits, including lowering total and LDL cholesterol levels, protecting our nerve cells from damage and death during incidents like stroke and brain trauma, and helping to heal fatty liver disease.

Dr Azmil adds that palm oil is also cheaper than other alternative oils like genetically-modified high-oleic sunflower oil, making it a more economical option for the food industry.

So, at the end of the day, it is not just about reducing the amount of oil and fat that we consume, but also about choosing the appropriate type of oil that we do use in order to best protect our health and the health of those that we cook for.

*(Courtesy : SAARC OIL & FATS TODAY, March 2014).*

## “GREAT OIL”

# Oryzonal - the health property of Rice Bran Oil helps lower the risk of cholesterol, blood sugar and hyper tension

SEA Press Meet

IT is no secret that most Gijjnmntis prefer to eat some fried food at any time right from Gnthiti and Chevdo with the breakfast, Thepln, Puri and Bhojjyn at lunch and dinner and other fried items in between. They just relish them till they realize that doctors have asked them to be careful in eating such foods. Generally, people use palm oil, sunflower oil, cottonseed oil and groundnut oil for preparation of most of these foods. Now to their relief, many of the sophisticated people have started using Rice Bran oil after knowing the great health advantages it offers. Some of them were using costly Olive oil, but have now switched to Rice Bran oil (RBO) after knowing great health advantages RBO offers.

It raises a question as to what is this Rice Bran oil and what advantages it offers? Rice bran oil is unique edible oil with many nutritional benefits. It has the highest amount of oryzanol which has cholesterol lowering properties, unique micro nutrients and natural antioxidants as compared to other cooking oils. It reduces cholesterol absorption, reduces blood platelet aggregation and increases cholesterol excretion thus reducing total cholesterol effectively.

RiceBranOilisrichinmonounsaturated fatty acids and a higher cholesterol reducing power than other PUFA rich oils due to presence of oiyzanol. Rice Bran Oil produced from the bran of paddy extracted through the physical refining process contains natural vitamin E, which is an antioxidant and helps improve neurological functioning. Due to its high antioxidant content, it fights the free radicals that harm the immune system. Known as one of the 'World's Healthiest Oil' - RICE BRAN OIL is recommended by many leading cardiologists, diabetes experts, nutritionists and health advisors world over.

The recent study conducted by Departments of

Pharmacology and Endocrinology at Postgraduate Institute of Medical Education and Research, Chandigarh points out that "There are several studies on humans and animals showing that Oryzanol found in Rice Bran Oil has the property of lowering low density lipoprotein cholesterol (LDL) and total serum cholesterol and increasing the high density lipoprotein cholesterol (HDL) to some extent by influencing absorption of dietary cholesterol,"

This study has found that Physically Refined Rice Bran Oil consumption caused significant decrease in LDL cholesterol, Total cholesterol and triglyceride levels as compared to Groundnut oil and Extra virgin olive oil. Subjects consuming Rice Bran Oil showed maximum decrease in LDL cholesterol levels at the end of the study. Rice Bran oil group showed approximately two times more decrease in LDL cholesterol levels as compared to Groundnut Oil group and 1.4 times more than extra virgin Olive oil. At the same time, subjects consuming Rice Bran Oil showed maximum decrease in Serum Total Cholesterol levels at the end of the study. Rice Bran Oil group showed nearly 1.64 times more decrease in total cholesterol levels as compared to Groundnut Oil and 1.32 times more than extra virgin Olive Oil groups. Triglyceride levels were also maximum reduced in subjects on Rice Bran Oil as compared to Olive Oil and Groundnut Oil groups. RBO group showed nearly 4 times more decrease in Triglyceride levels as compared to Olive Oil groups and 1.64 times more decrease than Groundnut Oil.

"Thus, the study concluded that the percentage decrease in LDL cholesterol, Total Cholesterol and Triglyceride level was maximum and significant in Rice bran Oil group as compared to Groundnut oil and Extra virgin olive oil groups. Keeping these results in view it can be concluded that rice bran oil is more effective for lipid profile management as compared to Olive oil and groundnut oil," pointed

## Thailand keen to import RBO from India

*Thailand, which has an established market for rice bran oil, has shown interest in importing the oil from India. India, on the other hand, is a net importer of edible oil to meet its domestic demand. B V Mehta, executive director, The Solvent Extractors' Association of India (SEA), said, "Thailand has shown in importing rice bran oil from India. They have an established market for the oil in that country. However, as per government policy, bulk exports of edible oil is not allowed."*

*India is one of the major producers of rice brand oil globally. The country produces around 900,000 tonnes of rice bran oil annually, while the global production is around 1.2 million tonnes. Japan and Thailand produce around 70,000 tonnes and 60,000 tonnes respectively, while China produces around 50,000 tonnes per annum. India is increasing production by 50,000 tonnes per annum.*

*Of this 900,000 tonnes of production only 300,000 tonnes is consumed as edible oil, while the rest is used by the vanaspati industry or is blended with other oils. Mehta further informed that the country produces 9 million tonnes of rice bran, of which around 5 million tonne is processed for producing oil, and the rest is used as cattlefeed. Paddy production in the country has increased from 125 million tonnes in 2004-05 to 158 million tonnes in 2013-14 (expected).*

*Mehta reasoned that, "Rice bran that can be converted into oil is available in the country, if one provides better price to rice millers, then most of the rice bran would go to the oil industry. This can also reduce our import of edible oil."*

*The country imports around 10 million tonnes of edible oil including plam oil, soybean oil and sunflower oil, each year, which according to the SEA runs into a Rs 60,000 crore import bill. The country's net domestic requirement of edible oil is estimated to be around 18 million tonnes per annum. Earlier last year, Japan too had shown interest in importing the oil from India, however, it is more interested in collaborating with Indian companies to produce value-added products using rice bran oil, which is known as rice oil or 'heart oil' in Japan.*

*However, the current government policy does not allow export of edible oil in bulk. If allowed, India has the potential to export around 25,000 tonnes of rice bran oil per annum, claimed Mehta, adding that a few containers are already being exported.*

*The SEA feels that rice bran oil, which contains oryzanol and has numerous health benefits, has a huge potential in the Indian market as well. Coming at around one-fifth of the price of olive oil, and around 10 per cent more expensive than sunflower oil, rice bran oil consumption in the country has been clocking a 20-25 per cent growth rate in the last four-five years. The oil is priced between Rs 115-125 a litre at present. In value terms, the 300,000 tonnes per annum rice bran oil is pegged at around Rs 3,000 crore.*

*Rich in monounsaturated fatty acids and a higher cholesterol reducing power than other poly-unsaturated fatty acids rich oils works to reduce hypertension, improving insulin sensitivity of the blood, contains natural vitamin E and is an antioxidant.*



out Dr. A.R. Sharma, chairman of the SEA RBO Promotion Council.

Dr. Varsha, Founder Chair, Indian Institute of Nutritional Sciences commented, "Rice bran oil and its active constituents improve blood cholesterol by reducing total plasma cholesterol and triglycerides, and increasing the proportion of HDL cholesterol. Rice Bran Oil includes modulation of pituitary secretion, inhibition of gastric acid secretion, antioxidant action, inhibition of platelet aggregation, lowering of blood pressure and regulation of cholesterol.

Adding further she mentioned, "The viscosity of rice bran oil is very light and is bland. Food cooked with Rice Bran Oil absorbs up to 15% to 20% less oil. Less oil absorption results in reduced calories, lighter tasting food, enhanced flavour and palatability. Less oil absorbed also makes it more economical. It has a very high smoke (burn) point, making it perfect for deep frying, pan or stirs frying and is a premium choice for the replacement of hydrogenated oil containing trans fat which has now been proved harmful for human health."

Speaking further on the properties of this 'Health Oil' Dr. Sharma said that "Rice Bran Oil, for those who have intolerance to other cooking oils is an excellent alternative. It is edible oil with naturally balanced fatty acid composition quite close to the latest recommendations by the National Institute of Nutrition (NIN). It contains unique Nutraceuticals known to maintain the right balance of cholesterol besides promoting overall good health."

He further added that "In a country like India it is necessary that we address the nutritional benefits of food items that could be consumed easily and within the budget of majority of Indian families. The best thing about consumption of this healthy oil is it retains antioxidant stability even at high temperatures that is need for Indian cooking and majorly oily foe which is a core part of Gujarati recipes".

Concluding the press conferem Dr B V Mehta, Executive Director, TJ Solvent Extractors' Association of Indi mentioned "India is the second large producer of rice, after China. The count! has the potential to produce over 1 lakh tonnes of Rice Bran Oil, howevt currently it produces about 9 lak tonnes, of which only 3 lakh tonnes ai used as edible

oil while the rest is use by vanaspati industry or blended wit other oils and sold as branded product: It is our constant endeavor to support th small players to create visibility in reta chains and educate the consumers about the benefit of this unique oil."

He further added that "besides th health angle, the price of rice bran 01 is cheaper then that of Olive oil and i comparatively less than that of groundnu oil, inspite of superior health benefits. Ful exploitation of Rice Bran Oil potential wil reduce the import of edible oils and alsI save foreign exchange."

(Courtesy : SAARC OIL & FATS TODAY, March 2014).

## Formula of Life

***Let me conclude by a recent quote by new Prime Minister Shri Narendra Modi.***

***He used to say in his election rallies that, "Log kehte hain ki Modi haarjayega toh kahanjayega. Turn chinta matkaro. Men chai banane ki ketli ka samaan tayyar hai!"***

***Initially the above remark may have been considered a joke but in the extended sense, we can derive from it a wise formula of life! And that formula is - if you lose the first option do not waste time in worrying; instead seek the second option.***

***Life is full of options. If you try to opt for the first choice and fail, then do not consider it as the end. It is a signal that there may be another, perhaps better option, waiting for you!***