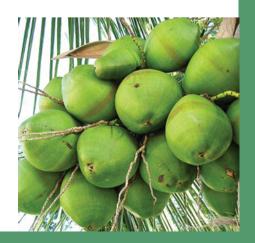
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Global Coconut Scenario & WTO



Coconut farming in India and Global Scenario

Dear Coconut Farmers,

In the post WTO era, the prevailing situation warrants the farmer to move in tune with the domestic and global market trends. The price of copra and coconut oil are interlinked with international demand and supply of coconut oil as well as other edible oils, coconut products, the market surplus and market fluctuations. Even the movements of the Forward Market play a significant role in prices of coconut, copra and coconut oil and impacts income of farmers. The scattered and unorganized coconut farmers of our country with their small and fragmented holdings should have a planned strategy for stabilizing their income. Farmers should be aware of the present and even future market trends. It is in this context that the current issue of Indian Coconut Journal is focusing on the theme 'Global Coconut Scenario and WTO' for educating the farmers on the global coconut scenario thereby enabling them to reap better harvest. The market trends show that in spite of the existing demand - supply gap farmers are not getting a stable and fair price.

Since India becoming a member of WTO on 1st January 2005, a wide array of opportunities are opened up before the country enabling us to compete with other coconut producing countries in global market.

Now we can orient our production based on domestic and global market demands ensuring opportunities for better price realization in existing and emerging markets. The uniform import duty stipulated by WTO for all its signatories allow our competitors to enter into the domestic market too. It is through this window that packed tender coconut water, coconut milk, coconut milk powder, coconut oil and Neera from Philippines, Sri Lanka, Thailand, Indonesia, Vietnam and China have entered into Indian markets. Good quality value added coconut products with attractive

packaging are available in our domestic market from countries which are having higher productivity, lower production cost and better processing facilities. Consumers are not bothered about the price of the product rather go for user friendly products of better quality. Only those who excel in these areas can conquer the market now. How can our farmers overcome the challenges and make use of these opportunities?

To equip our farmers and to move in tune with global trends, expert market studies and discussions are essential.

The age old cultivation technique, old and senile palms, small and fragmented holdings and the lack of mechanization slow down the coconut production. The slow pace of research outcome in the sector coupled with the wide gap in transferring the research results from 'lab to the field' and the reluctance in adopting modern technologies aggravate the situation.

Apart from India, Philippines, Malaysia, Indonesia, Thailand and Sri Lanka are the major coconut producing countries in Asia Pacific region. Most of the countries are way ahead of India in production and export of value added coconut products. They already gathered a lion's share of the steady growing external markets in developed countries, India and other developing countries. They are not following the old traditional off beaten path of $coconut \rightarrow copra \rightarrow coconut$ oil route, but established their strong capability and capacity in the world market with various value added coconut products. Some of them are targeting 40% of their production for tender coconut purpose. Demand for packaged and preserved tender coconut water is estimated to be growing at an annual rate of 40%!

Though India occupies a comfortable position in production and productivity of coconut, when compared to other major coconut producing countries, we lag far behind in processing and exports. In a small country like Sri Lanka whose production and productivity are less than that of Tamil Nadu, the export of value added products is many fold of that of India (except in case of activated carbon). This indicates that India has to go a long way in strengthening the processing sector.

Since 95 % of India's coconut production is domestically consumed, we have to enhance our production for making value added products.

Expansion of area in non-traditional states and organized efforts to increase productivity through scientific package of practices including irrigation and planting high quality hybrid seedlings are the need of the hour. Replanting and rejuvenation also need to be undertaken on a priority basis. The country should have more marketable surplus and become market leader by achieving higher productivity, lesser cost of production and technological advancement in value addition. We have to look forward to achieve these objectives in the coming years.

Even the domestic markets in India are quite diverged. While the producers in traditional states are getting Rs.8-10 per coconut, consumers in various markets across the country especially in the urban centres of north and north eastern states are paying Rs.25-30 per coconut. This wide disparity in our domestic market has to be addressed through a proper supply chain management and logistics. Promoting coconut cultivation in potential non traditional areas is the first step. Lands brought under cultivation through the 'Forest Rights Act', coconut cultivation offers an excellent opportunity for food security, employment generation and forward linkages through processing and value addition. In the 'disturbed districts' of Chattisgarh, Jharkhand and Orissa we can try to consider coconut based integrated farming as a viable livelihood model. A coconut based farming system integrating food crops, spices, dairy, fodder, pulses and perennial crops like cocoa, pepper and nut meg can augment the per hectare income and employment opportunities.

While working under the shade of WTO, we must realize our strength along with opportunities and challenges to strengthen and sustain our virtues. We have to make a strong footing in the international market to provide stable price as well as a steady income to domestic farmers.

It is essential to have an in depth knowledge of our co-producers and competitors as well as the domestic and international market trends. The functioning of Grape Growers Association of India, the Banana and Mango Growers who are trying to make use of the global opportunities, could be taken as a practical model for coconut farmers. Many foreign countries are selling their apple, orange and variety of fruits in Indian market at a stable higher price than similar domestic products. We should learn to make products in accordance with the specifications, quality parameters, consumer taste and preferences, customs and traditions of each country.

To achieve these objectives we have to form farmer producers' organizations. A humble beginning is made in this direction by Coconut Development Board initiating the concept of 'Coconut Producers Societies' (CPS) in all major coconut producing states and Union Territories.

We have to encourage and motivate farmers to make use of the knowledge technology and latest research for improving the status of crop and to enter into processing and value addition to capture the opportunities of the domestic and global markets.

Let us enter into this field by speedy formation, functioning and stabilization of the Coconut Producer's Societies, their Federations and Producer Companies owned by farmers/CPSs. I solicit the cooperation of all coconut farmers in this endeavour.

With best wishes,

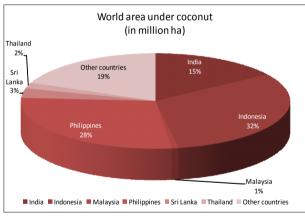
T K Jose IAS Chairman

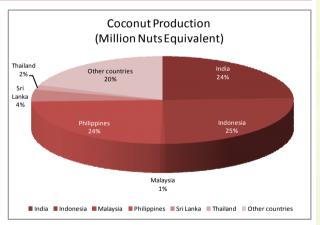
World Coconut Scenario

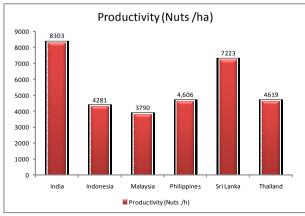
India ranks first in the productivity of coconut in the world with an annual productivity of 8303 nuts per ha. while in production India ranks second and in area, the country is in the third position (2009). Indonesia ranks first in area under coconut as well as in global coconut production. Malaysia imports coconut products equivalent to 1400 million nuts and exports coconut products equivalent to 1200 million nuts.

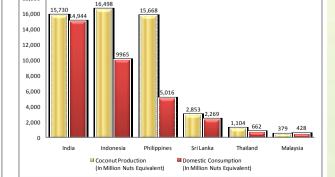
| | India | Indonesia | Malaysia | Philippines | Sri Lanka | Thailand |
|---|--------|-----------|----------|-------------|-----------|----------|
| Area Under Coconut (million ha) | 1.894 | 3.854 | 0.100 | 3.402 | 0.395 | 0.239 |
| Total Coconut Production (In Million Nuts Equivalent) | 15,730 | 16,498 | 379 | 15,668 | 2,853 | 1,104 |
| Productivity (Nuts /ha) | 8,303 | 4,281 | 3,790 | 4,606 | 7,223 | 4,619 |
| Estimated Domestic Consumption (In Million Nuts equivalent) | 14,944 | 9,965 | 428 | 5,016 | 2,269 | 662 |
| Domestic consumption to total production (%) | 95 | 60.40 | 112.93 | 32.01 | 79.53 | 60 |
| Total Export Value (million US\$) | 178 | 579 | 152 | 884 | 253 | 52 |
| Percentage Contribution to National Export Earnings (%) | 0.10 | 0.50 | 0.09 | 2.30 | 3.60 | 0.03 |

18.000









Production vs Consumption

Source: APCC Year Book 2009

Global Competitiveness of Indian Coconut oil - an Outlook

M. Thomas Mathew, Baby P.O.*

Introduction

Coconut oil is considered as a premium priced oil on account of its unique inherent qualities, varied uses and applications for both edible and non edible purposes. The studies conducted in India and elsewhere in the world revealed that the price of coconut and its varied products are integrated with the price of coconut oil which is influenced by the prices of other vegetable oils and fats. In the major coconut producing countries, bulk of their coconut products are exported and hence coconut cultivation and industry plays a pivotal role for the growth of their economies.

Coconut oil yields obtained are fairly uniform from one country to another and from year to year. Coconut oil is heat stable and an excellent cooking medium frying oil. It has a smoke point of about 360°F (180°C). In Kerala and the adjoining districts of Tamil Nadu and Karnatka coconut oil is widely used as the cooking oil. The current article is the continuation of the article published in April 2001 issue of Indian Coconut Journal.

Consumption pattern

Traditionally, the preferences for edible oils for direct food uses in India vary from region to region, depending mostly on their local availability. As such while groundnut oil is the most preferred oil in the producing states of Gujarat, Maharashtra, Andhra Pradesh and Tamil Nadu, mustard oil in Bihar, Assam and West Bengal, coconut is the most preferred oil in Kerala. Coconut oil, a rich source of vitamin A is extensively used in Kerala owing to its palatability, agreeable flavor and easy digestibility. Besides its edible uses, coconut oil is widely applied as hair oil and as skin care body oil. Despite, coconut oil being the predominant oil consumed in Kerala, the post globalization period witnessed a reduction in the demand for coconut oil due to the availability of imported cheaper substitute oils coupled with an anti propaganda linked with health hazards. Apart from affecting the domestic demand of the coconut oil, the availability of cheaper oils gave way to oil adulteration of coconut oil with cheap palm kernel oil. The detection is impossible for ofdistinguishing want characteristics. The physical and chemical characteristics of palm kernel oil and coconut oil are similar except in its iodine value and the aroma. The pure coconut oil has unique aroma and has low iodine value which generally ranges from 7 to 10.

Despite India being the second largest producer of coconut in the world, the country's share in the total world export basket is only minuscule except in case of coir and coir products.

A study by the Center for Development Studies(CDS), Trivandrum, Kerala revealed that the percentage of households consuming coconut oil for culinary purpose is around 4 % both in the rural and urban India. The largest proportion of households using coconut oil is in Kerala and is close to 90 per cent in rural areas and 83 per cent in the urban areas. In Karnataka and Tamil Nadu, only 8 and 5 per cent of the rural households consume coconut oil for culinary purposes. The percentage of households consuming coconuts for culinary purposes in India is 24 % in rural areas and 31 % in urban areas. The consumption of coconut in the states of Tamil Nadu, Karnataka and Andhra Pradesh is widespread, the percentage being 80% in both rural and urban areas. Consumption of coconut oil for culinary purposes in India is rare except in Kerala or where a sizeable Malayalee population resides. The CDS study revealed that the monthly consumption of coconut oil in Kerala is around 1.5 kg by an average family of size 5. Coconut consumption at the all India level is not as insignificant as that of coconut oil. The per capita consumption of coconut at the all India level ranges from 0.32 nuts in the rural areas to 0.46 nuts in urban areas. In Kerala, the per capital monthly consumption of coconut is around 4.8 nuts which is highest in the country. The study further revealed that with the expansion of coconut cultivation in other states, the consumption of coconut is increasing rapidly. The four southern states produce 91 per cent of the total production of coconut in the country and it also account for the bulk of the total consumption of coconut for culinary purpose in India. The share of coconut in the total coconut and oil consumption is around 80 per cent and the use of coconut in food is not easily substituted unlike coconut oil. This indicates that there exists a consistent demand for coconut and coconut products in the country.

Domestic Supply

Coconut is cultivated mainly as a rain-fed crop and is owned by small and marginal farmers. Because of its nature distribution, cultivation and management, the crop is vulnerable to biotic and a-biotic stress of which drought, cyclone, outbreak of epidemic and endemic pests and diseases often causes havocs and losses. The climate change on account of global warming further aggravated the situation and adversely affected the supply. India annually produces 15730 million nuts of which 35 per cent is utilized for the production of copra which is estimated as 9.5 lakh MT of copra in 2010 cropping season. The major states that are involved in the commercial production of copra are Kerala, Karnataka, Tamil Nadu, Andhra Pradesh and UTs of Lakshadweep and A&N islands. It

Table 1. Trend in Area, Production and Productivity of coconut for the last 5 years

| Years | Area ('000 ha) | Production (Million nuts) | Productivity (Nuts per ha) |
|-------------------------|----------------|---------------------------|----------------------------|
| 2004-2005 | 1935.0 | 12832.9 | 6632 |
| 2005-2006 | 1946.8 | 14811.1 | 7608 |
| 2006-2007 | 1939.9 | 15840.0 | 8165 |
| 2007-2008 | 1903.19 | 14743.56 | 7747 |
| 2008-2009 | 1894.57 | 15729.75 | 8303 |
| Compound Growth rate | -0.41 | 5.25 | 5.68 |

Source: DES, Govt. of India

is estimated that about 7089 million nuts are being utilized from these states for the production of entire quantity of copra. In spite of the fact that coconut cultivation is widely distributed in the country, the growth of the industry is positively correlated with the stability of copra-coconut oil market where the major copra producing states play a critical role. However, the post globalization period witnessed abject economic situations in the whole coconut economy. The trend and indicators point out dismaying situations. The dependency of copra-coconut oil market undermines the growth of the coconut economy in the country due the volatile nature of the market on account of external supply pressure from other vegetable oils and fats.

The violent price fluctuations paradoxically lead to inconsistency in production due to neglect of the gardens and improper management. Even though coconut and coconut products are brought under the sensitive lists, the liberal imports of substitute products like palm oil and palm kernel oil often jeopardize the stability of the coconut industry. However, the timely interventions of the Board and continued support to the farmers and industry, the coconut cultivation and industry are often kept vibrant and sustainable. An analysis of trend in area and production of coconut in the country during the past 5 years indicates that the growth in the expansion of the crop is declining at the rate of 0.41 per cent per annum. However, the production of coconut is increasing at the rate of 5.25 per cent per annum mainly on account of the rate of increase in productivity. The productivity for the corresponding period was 5.68 per cent per annum (see table-1). The productivity of coconut in the country which was 6632 nuts per ha in 2004-05 has reached 8303 nuts per ha in 2008-09. The decelerating growth in area under coconut was mainly on account of area replacement for cultivating more remunerative crops like rubber and other commercial activities like real estate in Kerala. Precisely, the globalization period witnessed stagnant supply and impasses in the coconut oil economy of the country; though it has made some impulses and vibrancy in the total supply to continue to meet the domestic need of the commodity without resorting to any import. The long term trends

| | Table 2. Trend in the International Prices of Coconut Oil (Us \$ Per MT, CIF Rotterdam) | | | | | | | | | | | |
|--------------|---|------|------|------|------|------|------|------|------|------|--------------------|-------|
| MONTH | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 10 year Average | CV |
| January | 319 | 362 | 494 | 573 | 645 | 569 | 731 | 1285 | 738 | 794 | 651 | 41.84 |
| February | 285 | 376 | 477 | 642 | 646 | 590 | 763 | 1382 | 671 | 800 | 663 | 45.28 |
| March | 289 | 366 | 441 | 685 | 710 | 577 | 769 | 1471 | 637 | 911 | 686 | 48.83 |
| April | 293 | 411 | 421 | 736 | 679 | 556 | 828 | 1443 | 709 | 959 | 704 | 47.02 |
| May | 295 | 240 | 440 | 749 | 648 | 581 | 894 | 1502 | 842 | 939 | 713 | 51.62 |
| June | 317 | 446 | 459 | 658 | 639 | 566 | 979 | 1551 | 798 | 950 | 736 | 48.63 |
| July | 358 | 445 | 439 | 669 | 607 | 585 | 929 | 1436 | 677 | 1028 | 717 | 45.82 |
| August | 363 | 443 | 421 | 627 | 553 | 595 | 910 | 1193 | 730 | 1160 | 700 | 42.49 |
| September | 323 | 410 | 431 | 657 | 559 | 614 | 930 | 1110 | 705 | 1190 | 693 | 42.71 |
| October | 307 | 343 | 487 | 642 | 578 | 613 | 1010 | 856 | 706 | 1413 | 696 | 47.49 |
| November | 330 | 457 | 515 | 659 | 574 | 649 | 1131 | 719 | 713 | 1528 | 728 | 48.37 |
| December | 330 | 482 | 583 | 652 | 553 | 728 | 1153 | 740 | 756 | 1693 | 767 | 50.94 |
| Annual Avg | 317 | 398 | 467 | 662 | 616 | 602 | 919 | 1224 | 724 | 1114 | | |
| CV | 8 | 17 | 10 | 7 | 9 | 8 | 15 | 25 | 8 | 26 | | |
| Source: Vari | Source: Various issues of Co community, APCC, Jakarta. | | | | | | | | | | | |

in area under and production of coconut in India shows that the states hitherto considered as the group of minor producers doubled their share of area and production for coconut in the country. But the traditional state, Kerala which accounted for 70 per cent of area and production of coconut in the country during 1960 lost its hegemony of supply and reached

to the level of 42 per cent in area and 37 per cent in production in 2008-09 because of the competitive nature of crop introduction by other states like Tamil Nadu, Andhra Pradesh etc. Tamil Nadu, and Andhra Pradesh Pradesh have recorded steady increase in area and production of coconut which had 7.6 and 4.8 per cent share in area under coconut increased their

share to 20.56 and 5.59 per cent area and 34.11 and 6.17 per cent in production in 2008-09.

Regional disparities in supply of coconut:

Even though coconut is commercially produced in 18 states and 3 Union Territories, differences in productivity of coconut in the county are not static. Huge variation are observed in the

| | Table 3. Trend in the International Prices of Soybean Oil | | | | | | | | | | | |
|---------------|---|------|------|------|--------|---------|-----------|-------|------|------|--------------------|-------|
| | | | | (USS | per MT | Dutch F | OB Ex - N | 1ill) | | | | |
| Month | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 10 year Average | CV |
| January | 306 | 389 | 535 | 656 | 521 | 532 | 695 | 1251 | 789 | 895 | 657 | 41.61 |
| February | 302 | 358 | 521 | 689 | 497 | 530 | 714 | 1376 | 758 | 916 | 666 | 46.77 |
| March | 329 | 353 | 508 | 691 | 546 | 539 | 718 | 1524 | 729 | 935 | 687 | 50.37 |
| April | 321 | 370 | 524 | 671 | 547 | 540 | 761 | 1415 | 783 | 915 | 685 | 46.16 |
| May | 295 | 397 | 538 | 651 | 538 | 582 | 785 | 1429 | 902 | 887 | 700 | 46.12 |
| June | 315 | 436 | 541 | 581 | 559 | 601 | 833 | 1537 | 901 | 853 | 716 | 48.10 |
| July | 409 | 470 | 575 | 597 | 561 | 628 | 885 | 1554 | 837 | 890 | 741 | 44.79 |
| August | 422 | 503 | 543 | 610 | 549 | 629 | 908 | 1305 | 907 | 1015 | 739 | 38.08 |
| September | 382 | 494 | 558 | 585 | 545 | 602 | 974 | 1320 | 853 | 1042 | 736 | 40.48 |
| October | 376 | 517 | 624 | 558 | 579 | 615 | 994 | 1085 | 928 | 1149 | 743 | 36.37 |
| November | 388 | 577 | 625 | 568 | 560 | 675 | 1099 | 717 | 902 | 1267 | 738 | 36.79 |
| December | 423 | 587 | 638 | 567 | 537 | 699 | 1191 | 743 | 956 | 1350 | 769 | 39.27 |
| Annual Avg | 356 | 454 | 561 | 619 | 545 | 598 | 880 | 1271 | 854 | 1010 | | |
| CV | 14 | 18 | 8 | 8 | 4 | 9 | 18 | 22 | 9 | 16 | | |
| Source: Vario | Source: Various issues of Co community , APCC, Jakarta. | | | | | | | | | | | |

| | Table 4. Trend in the International Prices of Palm Oil | | | | | | | | | | | |
|--|--|------|------|------|------------|-----------|--------|------|------|------|--------------------|-------|
| | | | | (۱ | JS\$ per N | MT, CIF E | urope) | | | | | |
| Month | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 10 year Average | CV |
| January | 254 | 338 | 458 | 493 | 402 | 424 | 588 | 1055 | 562 | 780 | 535 | 43.56 |
| February | 240 | 330 | 452 | 535 | 403 | 430 | 605 | 1121 | 578 | 803 | 550 | 46.35 |
| March | 254 | 338 | 426 | 550 | 435 | 440 | 622 | 1270 | 597 | 851 | 578 | 50.96 |
| April | 251 | 349 | 412 | 538 | 429 | 439 | 710 | 1161 | 651 | 823 | 576 | 46.73 |
| May | 234 | 371 | 417 | 524 | 417 | 440 | 709 | 1197 | 812 | 823 | 594 | 48.48 |
| June | 255 | 411 | 430 | 440 | 419 | 437 | 805 | 1213 | 742 | 793 | 595 | 48.35 |
| July | 339 | 406 | 411 | 426 | 417 | 460 | 811 | 1175 | 665 | 808 | 592 | 45.30 |
| August | 362 | 425 | 395 | 432 | 407 | 510 | 821 | 909 | 719 | 901 | 587 | 43.56 |
| September | 310 | 400 | 420 | 439 | 421 | 497 | 825 | 920 | 652 | 930 | 581 | 43.56 |
| October | 277 | 408 | 485 | 431 | 442 | 507 | 857 | 750 | 678 | 985 | 582 | 38.68 |
| November | 318 | 442 | 503 | 433 | 444 | 547 | 945 | 507 | 698 | 1113 | 595 | 42.26 |
| December | 318 | 466 | 510 | 423 | 428 | 583 | 942 | 496 | 784 | 1231 | 618 | 45.86 |
| Annual Avg | 284 | 390 | 443 | 472 | 422 | 476 | 770 | 981 | 678 | 903 | | |
| CV | 15 | 11 | 9 | 11 | 3 | 11 | 16 | 28 | 12 | 16 | | |
| Source: Various issues of Co community, APCC, Jakarta. | | | | | | | | | | | | |

productivity from garden to gardens, region to regions and state to states. These productivity variations are more pronounced in traditional states and older gardens which are predominantly occupied by old and unproductive palms. The highest productivity of 19630 nuts or 1.963 MT of copra per ha in the country is recorded in the Union Territory of Lakshadweep whereas the productivity of major

states; Karnataka, Kerala, Tamil Nadu and Andhra Pradesh are 5193, 7365, 13771 and 9327 nuts per ha respectively. The fact that the higher productivity of coconut is often the result of multivariable inputs such as high rate of investment in the form of adoption of scientific managements like proper application of balanced fertilizers incorporating both chemical and organic manures,

adoption of plant protection measures, soil and water conservation and irrigation etc. Among all variables, the market stability and remunerative farm gate price are the driving factors that determine consistency in production and productivity of the farms especially in traditional coconut growing states. A slump or a trough in the prices always results less investment and neglect

| | Table 5. Trend in the International Prices of Palm Kernel Oil | | | | | | | | | | | |
|--|---|------|------|------|------|------|------|------|------|------|--------------------|-------|
| | (US\$ per MT, CIF Europe) | | | | | | | | | | | |
| Month | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 10 year Average | CV |
| January | 304 | 339 | 498 | 562 | 636 | 606 | 652 | 1229 | 570 | 870 | 627 | 42.36 |
| February | 269 | 359 | 474 | 616 | 641 | 617 | 678 | 1339 | 575 | 915 | 648 | 46.40 |
| March | 278 | 358 | 436 | 669 | 681 | 591 | 702 | 1477 | 584 | 990 | 677 | 51.05 |
| April | 281 | 411 | 406 | 727 | 710 | 576 | 795 | 1421 | 652 | 1019 | 700 | 47.51 |
| May | 292 | 419 | 421 | 748 | 647 | 566 | 839 | 1434 | 830 | 1016 | 721 | 46.60 |
| June | 312 | 441 | 434 | 636 | 639 | 535 | 969 | 1407 | 767 | 1040 | 718 | 46.71 |
| July | 252 | 438 | 406 | 620 | 612 | 553 | 924 | 1318 | 662 | 1064 | 685 | 47.57 |
| August | 363 | 440 | 396 | 610 | 558 | 572 | 904 | 1033 | 710 | 1162 | 741 | 42.36 |
| September | 316 | 412 | 429 | 657 | 577 | 548 | 910 | 1040 | 700 | 1300 | 754 | 42.36 |
| October | 289 | 430 | 498 | 643 | 619 | 557 | 992 | 855 | 722 | 1410 | 702 | 45.74 |
| November | 319 | 456 | 525 | 660 | 614 | 601 | 1095 | 521 | 739 | 1605 | 714 | 52.46 |
| December | 315 | 484 | 583 | 656 | 587 | 647 | 1124 | 554 | 817 | 1850 | 762 | 57.48 |
| Annual Avg | 299 | 416 | 459 | 650 | 627 | 581 | 882 | 1136 | 694 | 1187 | | |
| CV | 10 | 10 | 12 | 8 | 7 | 6 | 18 | 30 | 13 | 25 | | |
| Source: Various issues of Co community, APCC, Jakarta. | | | | | | | | | | | | |

| | Table 6. Trend In The International Prices Of Sun Flower Oil | | | | | | | | | | | |
|--|--|------|------|------|-----------|-----------|---------|------|------|------|--------------------|-------|
| | | | | (U: | S\$ per N | ИТ, CIF I | Europe) | | | | | |
| Month | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 10 year Average | cv |
| January | 386 | 606 | 612 | 688 | 699 | 594 | 717 | 1709 | 815 | 968 | 779 | 46.20 |
| February | 390 | 578 | 595 | 731 | 695 | 595 | 709 | 1839 | 800 | 948 | 788 | 50.50 |
| March | 430 | 557 | 565 | 712 | 714 | 606 | 713 | 1863 | 757 | 949 | 841 | 46.20 |
| April | 436 | 552 | 578 | 696 | 695 | 659 | 755 | 1838 | 842 | 925 | 853 | 46.20 |
| May | 431 | 574 | 595 | 680 | 700 | 675 | 804 | 1985 | 941 | 920 | 883 | 46.20 |
| June | 443 | 595 | 609 | 632 | 706 | 666 | 916 | 2045 | 922 | 889 | 899 | 46.20 |
| July | 495 | 602 | 575 | 624 | 708 | 535 | 999 | 1692 | 840 | 937 | 857 | 46.20 |
| August | 504 | 610 | 543 | 632 | 682 | 666 | 1114 | 1319 | 820 | 1074 | 854 | 46.20 |
| September | 503 | 579 | 545 | 657 | 683 | 669 | 1190 | 1176 | 809 | 1114 | 793 | 33.78 |
| October | 522 | 595 | 615 | 701 | 646 | 666 | 1358 | 1130 | 846 | 1240 | 832 | 36.08 |
| November | 614 | 652 | 628 | 727 | 598 | 722 | 1401 | 835 | 947 | 1320 | 844 | 34.71 |
| December | 597 | 632 | 660 | 724 | 602 | 730 | 1450 | 759 | 995 | 1327 | 848 | 36.39 |
| Annual Avg | 479 | 594 | 593 | 684 | 677 | 649 | 1011 | 1516 | 861 | 1051 | | |
| CV | 15 | 5 | 6 | 6 | 6 | 9 | 28 | 30 | 8 | 15 | | |
| Source: Various issues of Co community, APCC, Jakarta. | | | | | | | | | | | | |

of the garden which in turn lead to low productivity. Similarly crest in the price always lead to more investment for getting more production and more income.

Globalization and External Integration of India's Coconut Economy:

Coconut and coconut products

command consistent demand throughout the year. The growth of coconut industry in the country is primarily domestic market driven. Till 1995, the coconut industry in the country was enjoying the privileges of a closed economy. The coconut industry in the country during the protected regime marked significant and sustainable

growth in production and productivity. Consequent to India became a signatory to the World Trade Organization (WTO) the domestic coconut market is opened to international players. The Globalization has posed multiple challenges to the future of Indian coconut industry. The opening of the domestic market for world

| | T | able 7. [•] | Trend in | the Do | mestic | prices o | f Cocon | ut oil i | n US\$, | / MT | | |
|-----------------|---|----------------------|----------|--------|--------|----------|---------|----------|---------|------|--------------------|-------|
| Month | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 10 year Average | CV |
| January | 609 | 766 | 1138 | 1424 | 1647 | 1026 | 1194 | 1348 | 1175 | 1085 | 1141 | 26.49 |
| February | 661 | 741 | 1198 | NT | 1620 | 1117 | 1165 | 1348 | 1094 | 1107 | 1117 | 25.82 |
| March | 645 | 697 | 1165 | 1385 | 1399 | 1073 | 1072 | 1450 | 1027 | 1097 | 1101 | 24.84 |
| April | 608 | 778 | 1132 | 1356 | 1281 | 1052 | 1126 | 1519 | 1030 | 1117 | 1100 | 24.03 |
| May | 631 | 791 | 1103 | 1371 | 1174 | 1056 | 1202 | 1392 | 1019 | 1075 | 1081 | 21.71 |
| June | 663 | 883 | 1082 | 1471 | 1194 | 1046 | 1157 | 1458 | 964 | 1134 | 1105 | 22.13 |
| July | 660 | 945 | 1200 | 1460 | 1118 | 984 | 1215 | 1535 | 977 | 1143 | 1124 | 22.69 |
| August | 672 | 970 | 1283 | 1514 | 1108 | 1034 | 1226 | 1483 | 988 | 1239 | 1152 | 21.97 |
| September | 631 | 940 | 1371 | 1459 | 1116 | 1105 | 1173 | 1424 | 942 | 1422 | 1158 | 23.27 |
| October | 629 | 960 | 1469 | 1484 | 1072 | 1210 | 1145 | 1219 | 946 | 1559 | 1169 | 24.54 |
| November | 657 | 1137 | 1532 | 1572 | 1091 | 1225 | 1235 | 1204 | 956 | 1662 | 1227 | 24.71 |
| December | 812 | 1147 | 1484 | 1655 | 1055 | 1221 | 1309 | 1449 | 1090 | 1798 | 1302 | 22.93 |
| Annual Avg | 656 | 896 | 1263 | 1468 | 1240 | 1096 | 1185 | 1402 | 1017 | 1287 | | |
| CV | 8 | 16 | 13 | 6 | 17 | 7 | 5 | 8 | 7 | 20 | | |
| Source: Various | Source: Various issues of Indian Coconut Journal. | | | | | | | | | | | |

| Table 8. Percentage increase or decrease of price of domestic coconut oil with that of other competing oils (10 year average for the period from 2001-2010) | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Commodity | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Avg. |
| Coconut Oil (Domestic price) | 1141 | 1117 | 1101 | 1100 | 1081 | 1105 | 1124 | 1152 | 1158 | 1169 | 1227 | 1302 | 1148 |
| Coconut Oil (International Price) | 651 | 663 | 686 | 704 | 713 | 736 | 717 | 700 | 693 | 696 | 728 | 767 | 704 |
| % Over int. price | 75 | 68 | 61 | 56 | 52 | 50 | 57 | 65 | 67 | 68 | 69 | 70 | 63 |
| Palm Kernal oil | 626.6 | 648.3 | 676.6 | 699.8 | 721.2 | 718 | 684.9 | 674.8 | 688.9 | 701.5 | 713.5 | 761.7 | 693 |
| % Over PK oil | 45 | 42 | 39 | 36 | 33 | 35 | 39 | 41 | 41 | 40 | 42 | 41 | 40 |
| Palm oil | 535 | 550 | 578 | 576 | 594 | 595 | 592 | 588 | 581 | 582 | 595 | 618 | 582 |
| % Over palm oil | 113 | 103 | 90 | 91 | 82 | 86 | 90 | 96 | 99 | 101 | 106 | 111 | 97 |
| Soybean | 657 | 666 | 687 | 685 | 700 | 716 | 741 | 739 | 736 | 743 | 738 | 769 | 715 |
| % Over Soy oil | 74 | 68 | 60 | 61 | 54 | 54 | 52 | 56 | 57 | 57 | 66 | 69 | 61 |
| Sunflower | 779.4 | 788 | 786.6 | 797.6 | 830.5 | 842.3 | 800.7 | 796.4 | 792.5 | 831.9 | 844.4 | 847.6 | 811 |
| % Over Sunflower oil | 46 | 42 | 40 | 38 | 30 | 31 | 40 | 45 | 46 | 41 | 45 | 54 | 42 |
| * Internationally sunflower oil price rules highest and palm oil at lowest. | | | | | | | | | | | | | |

players and the global integration of the national markets witnessed a paradigm shift. The domestic coconut industry is becoming uncompetitive with other vegetable oils in terms of price and consumer demands and has been sliding down from its premier role played in the past. The compulsion of WTO has led to an irreversible process of liberalization of trade, lowering of tariffs and provision of increased domestic access to other countries. Free trade agreements with neighbouring countries in the South Asia and South East Asia have increased imports. The high cost of domestic production coupled with the possibility of cheap imports of coconut and coconut products particularly coconut cake and coconut oil under advanced licensing scheme and coconut oil substitutes like palm oil causes concern and anxiety among the farmers.

The coconut culture and industry suffered a setback due to unhealthy competitions from other competing crops and products. Liberalization of trade barriers have reflected in the trade flows. Trends in imports of leading edible

oils into India; like soy bean oil, palm oil, sunflower oil and coconut oil bring out a major policy break. India is depending on edible oil imports to the extent of 70 per cent to meet the domestic need because the domestic production fulfills only 30 per cent. India has emerged as the second largest importer of edible oils in the world. The total annual import of vegetable oil increased to 81.8 lakh MT in 2008-09 from 11.6 lakh MT in 1995-96. The pattern is almost same in case of palm oil. The average annual import of palm oil which is considered to be the cheapest vegetable oil in the world, increased from 2.81 lakh MT during 1988-94 to 48.01 lakh MT in 2007-08, an increase of 24.4 per cent annual compound growth rate during the WTO period. The surge in the import of palm oil and its fractions affected the domestic oil market in the country. The Globalization of coconut market has resulted distinguishing and interrelated developments like; implementation of liberalization policies by all major coconut growing countries, resorting to tariff reductions as well as other trade distorting measures

and the preferential trading arrangements such as ASEAN and ISFTA. The cumulative effect of these strands of liberalization has created an atmosphere of free trade within the community of coconut producing nations. The coconut products are now freely traded within the coconut producing nations. The bulk of the primary processing industries in the world are dominated by small and medium scale entrepreneurs and hence buyers determine the price of the commodity. Many of the major exporting countries in the world are equipped with modern and efficient processing machineries and the scales of economy in the operation are significantly high and hence their products are globally competitive. Unlike India, coconut oil is one among many coconut products of export basket of the exporting countries. The domestic demand for coconut in these countries are mainly for cooking oil in the household sector and food industries such as snack foods and instant noodles. In India the primary processing of coconut into copra and to some extent



extraction of coconut oil are run by small players and hence the marginal scale returns are inadequate to make them globally competitive.

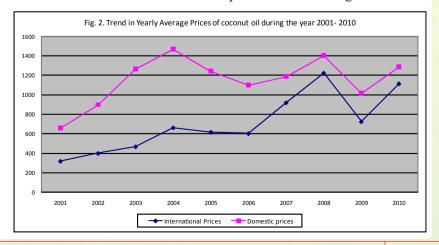
Trade liberalization and Global Coconut Oil Market:

The globalization of coconut economy of producing countries has wrought market uncertainties. in coconut oil trade. Many coconut producing countries witnessed negative growth in the export of coconut oil because competitions from other new entrants in the international market as well as the extravagant growth in palm oil and palm kernel oil. In addition to the new economic order, the liquidity crisis coupled with the economic recession witnessed from September 2008 in both developed and developing countries in the world had depressed the import appetite of many economies in the world as well as distressed the export expectation of important coconut producing countries in the world. The world coconut market witnessed an all time low price for copra and coconut. However the export volume in the major exporting countries had slid down

due to export competitions from new entrants as well as the sudden fall in demand on account of global melt down and increased import demand for cheaper vegetable oils. Philippine's export was down by 6.4 per cent and that of Indonesia's by 31 per cent in 2009 than 2008. The desiccated coconut, shell based activated carbon and coir and coir products have recorded marginal increase in 2009. In short globalization coupled with the world economic downturn has created a catastrophic challenge in the world trade of coconut oil.

Globally coconut oil competes with 16 other major oils and fats. Among these soybean oil, palm oil, sunflower oil and rapeseed oil are the major oils; the prices of which

are closely integrated with each other. Coconut oil faces tough competition from these oils especially palm oil and palm kernel oil. In recent years, the cultivation of oil palm is increasing at a rapid stride in many countries like; Malaysia, Indonesia, PNG etc. As a result of the increasing trend in area and the production, the palm oil and palm kernel oil are the cheapest oil available in the world market. During 2009, the total world production of crude palm oil was 45.12 million MT and that of Palm Kernel oil was 5.21 million MT from an area of 12.18 million ha recording an increase of 173 per cent and 145 per cent respectively over 1995 production. Indonesia and Malaysia constitute 85.4 per cent of the total production of crude palm oil. During 1995, the share of the palm oil and palm kernel oil in the total vegetable oil pool was 22.68 per cent and 2.96 per cent respectively and that of coconut oil was 4.4 per cent. In 2009, the share these oils reached to 32.86 per cent in case of palm oil and 3.86 per cent in respect of palm kernel oil. The share of coconut oil has shrinked to 2.4 per cent. While the annual compound growth rate (CGR) in the production of total vegetable oil was



4.63 per cent over a period of 14 years the corresponding growth rate in respect of palm oil and palm kernel oil was 7.43 and 6.62 per cent respectively. The rate of growth in the production of coconut oil was only 0.19 per cent which indicates that coconut oil has become minor oil locked up in a competitive battle with other vegetable oils in the world market during the globalization era.

Trend in the prices of coconut oil and other competing oils

Important countries involved in the international trades for coconut and coconut products are Indonesia, Philippines, Sri Lanka, India, Thailand, Mexico and Vietnam, More than 130 countries import coconut in various forms. The major importers of coconut oil are U.S.A., Germany, The Netherlands, China, Malaysia, Russian Federation, Belgium, France, Italy, Japan, Sri Lanka, Korea Republic, Spain and U.K. Coconut oil is considered as the single largest commodity that determines the market of the primary product of coconut in all the producing countries. An analysis of price behavior of coconut oil in the international market revealed that the market is characterized by seasonal and annual fluctuations. Between the two, the annual fluctuations are highly volatile than the monthly price variations. While seasonal variations in the coconut oil is directly correlated with the seasonal demand and supply the annual fluctuations of coconut oil are linked with the abundant supply of cheap vegetable oils and fats due to the free movements of the commodities as well as the cyclic

variations in the supply. The trend in the international prices of coconut oil and the competing oils during the past ten years are given in table 2 to table 8. It is interesting to note that the movement of prices of coconut oil and that of palm kernel oil are symmetrical. It could also be observed that the year 2008 witnessed a sudden price crash in respect of all vegetable oils on account of global recession and resulting reduction in the importappetite of consuming countries whereas the year 2010 witnessed a reverse trend and hence noticed comparatively higher CV in both the cases. A close look at the ten year average prices of major vegetable oil revealed that sunflower oil commands highest price and palm oil is the cheapest vegetable oil among all the oils. However, the trend in the prices of all the oils is moving in close sympathy with each other. (see fig 1). Under the changed economic order, the indiscriminate import of vegetable oils by the importing countries disproportionate to their domestic requirement jeopardized the market behaviour of the native commodities

Slacking competitiveness of Indian coconut oil

The trade liberalization of coconut economies of producing countries coupled with the global economic recessions created setback in the global competitiveness of coconut oil. India too experienced a similar trend. Even though there exist an inelastic demand for coconut oil, the globalization made coconut oil possible for substitution with palm oil in the edible sector and palm kernel oil in the industrial sector.

The increase in the production of palm oil and palm kernel oil lead to a decelerating growth in the area and production of coconut in the major producing countries like Indonesia, Philippines and India. In India, the price of coconut oil rules always above international coconut oil price and hence receives unwelcoming response from the major importing countries. The trend in the international and the domestic prices of coconut oil indicates that the domestic oil price always rules above the international price (see Fig-2). It could be observed from the fig that the movement of price of coconut oil in both domestic and international markets is in close sympathy with each other. Its inherent qualities, clean and hygienic method of copra processing and oil extraction coupled with the inelastic demand in certain sectors and the domestic demand make the industry sustainable.

Conclusion

Among the seventeen major oils and fats in the world, coconut oil (CNO) and palm kernel oil (PKO) are the only two lauric oils. Between the two, coconut oil has advantage over palm kernel oil due to its medicinal and health benefits besides the benefit of cost advantage for further processing into value added products for industrial application. The coconut industry in the country was enjoying the privileges of a closed economy and hence received better patronage and protected the industry from the market induced uncertainties. The opening of the domestic market for world players and subsequent global integration of the domestic markets witnessed a paradigm shift.

The tremendous growth in area and production of oil palm during the post WTO era has made the palm oil and palm kernel oil occupying a dominant position in the total vegetable oil pool in the world. The monthly variations in the prices of important vegetable oils are in sympathy with each other and the fluctuations are marginally low whereas the annual fluctuations are highly volatile. Among the major vegetable oils, the fluctuations are more pronounced in respect of palm oil, coconut oil and palm kernel oils. The domestic price of coconut oil always rules above international price and hence receives unwelcoming response from the major importing countries.

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OBITUARY



Shri, Sundara Ramaraju, former Vice Chairman of the Coconut Development Board and President of National Coconut Growers Federation, India passed away on 18th October 2011. He was a progressive farmer and a guiding force of coconut farmers in the country with years of experience in coconut cultivation and breeding. He possessed diverse germplasm of coconut and ornamental plants. He maintained a well established coconut nursery at Tadepalligudam in Andhra Pradesh. He was the member of several Research Advisory Committees in ICAR Research Institutes. He was the member of the Technical Advisory Committee, DSP Farm, Vegiwada of the Board. The East Coast Coconut Hybrid Centre established by him is recognised as one of the best Nucleus Seed Gardens in India. He was the recepient of the Best Coconut Farmer award of the Board in 2006.

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* CDB, Kochi-11

A farmer friendly strategic vision for coconut in a globalised world *Prof. A Sukumaran, **Prof. Assissi Menachery



Toconut is known for its great versatility as seen in the many domestic, commercial, and industrial uses of its different parts.

Though coconut has its own multifaceted uses, many of the general problems addressed practically by farmers includes lack of knowledge about appropriate variety of planting material with respect to identified uses lack of man power or technology for harvesting or high cost involved for the same, identification of appropriate product mix and lack of value creation on the basic product.

Farmers often complaints that they are getting only Rs. 4-6 per nut whereas the retailer gets Rs. 17 – 20 for a tender coconut. There is not much demand for 50 vear old trunk of coconut tree and the farmer is forced to sell it for a throw away price.

As there exists many such specific issues, the core opportunity addressed in this paper are the co-creative work of

farmers, facilitating organizations such as Agricultural Universities and Coconut Development Board the participation government to initiate the synergy of togetherness and integrate it into a strategic vision for the empowerment of local bodies, farmers, industry and other stake

As readers know that strategy is derived from the Greek strategos, or the "art of general." The general is responsible for multiple units on multiple fronts and multiple battles over time. The general's challenge is in orchestration and comprehensiveness. Generals think about the whole. But strategy has pieces, or elements, but they form a coherent whole. Generals whether they are CEOs of Universities, Government Departments or NGO's must also have a strategy - a central integrated, externally oriented concept of how the business will achieve its objectives.

Without a strategy, time and resources are easily wasted on piecemeal. disparate activities; void of their divergent approaches, interpretations of what business should be doing, and the result may be disjointed feeble initiatives.

The five elements of strategy: If a value proposition or addition (business) to exist, it should have a strategy and has specifically five parts.Arenas: Where will we be active? Vehicles: How will we get there? Differentiators: How will we win in the market place? Staging: What will be our speed and sequence of moves? and Economic Logic: How will we obtain our returns?

This article develops and illustrates these domains of choice emphasizing how essential to form a unified whole from the perspective of coconut growers and its stake holders.

Arenas: The most fundamental question a coconut grower and facilitating organization may ask together may be in what arenas the business will be active? We will be the producer of tender coconut or we will be focusing on the basic core product - the copra/coconut oil or do we will specifically focus on other value addition on the basic product? It is a fact that 50 grams of coffee bean when delivered as a branded coffee experience in Star bucks or Café Coffee Day retail chain provide 200 times of value than the basic price of 50 grams of coffee powder. Presently we have identified around 68 uses for coconut. Do we generally focus on all 68 areas or specifically focus and co-create value in one specific area or a selected few? If then how do we integrate the supply chain and revise supply chain? How we co-create value proposition to the customer and ensure that adequate value is passed on to the farmer? If AMUL can do the same in the case of milk by means of co-creation and Starbucks and Coffee Day can replicate the same in the case of coffee, can we replicate the same for coconut?

Vehicles

Beyond deciding the arenas in which the business will be active, the coconut grower or organization also needs to decide how to get there? Specifically the means for attaining the needed presence in a particular product category, market segment, geographic area, or value creation stage should be the result of deliberate strategic choice. If one has to decide to expand the product range (copra to virgin coconut oil or desiccated coconut or spray dried coconut milk powder or even tender coconut water), are we going to accomplish that by relying on internal product development, if then on what scale and magnitude? On a national level or regional level or are there other vehicles – such as co-creative joint venture with, collaboration or even acquisition and export promotion – that offer better means for achieving our broadened scope? The means by which arenas are entered matters greatly. Therefore selection of vehicles should not be an afterthought or viewed as a mere implementation detail.

Differentiators

A strategy should specify not only where an enterprise will be active (arenas) and how it will get there (vehicles) but also how the firm will win in the market place, how it will get customers to come its way? In a competitive market scenario winning is the result of differentiators, and such edges don't just happen. Rather they require implementers and strategic thinkers to make upfront, conscious choices about which weapons will be assembled honed and deployed to win over competition, challenge

similar product lines, offer value proposition and value addition and differentiate our product with respect to the competition. Differentiation may be image, perceived styling, value, customization, price or others. The critical issue for strategists is to make up-front deliberate choices. It should be very clear to the customer that how natural or preserved tender coconut water add value than aerated water or cola and also its availability and reach.

Staging

Once the strategist decides the choices of arenas, vehicles, and differentiators, constitute what might be called the substance of a strategy – what the implementers plan to do? This substance cries out for decisions on a fourth element - staging, or the speed and sequence of major moves to take in order to heighten the likelihood of success? Most strategists do not call for equal, balanced initiatives on all fronts at all times. Instead usually some initiatives must come first followed only then by others and then still others. In erecting a great building foundations must be laid followed by walls and only then the roof. The enterprise may decide to work on a value added product such as virgin coconut oil or desiccated coconut or spray dried coconut milk powder and expand and co-create it nationally or expand internationally as a collaborative PPP project or as a co-operative movement. There are definite stages to implement it and it follows a sequence of activities performed one by one that is termed as staging.

Economic Logic

At the heart of business strategy there must be a clear idea of how profits will be generated – not just some profits but profits above the enterprises cost of capital. It is not enough to vaguely count on having revenues that are

above costs. Unless there's a compelling basis for it customers and competitors won't let that happen. It's not enough just to generate a long list of reasons why customers will be eager to pay high prices for desiccated coconut or virgin coconut oil along with a long list of reasons why the costs will be lower than your competitors. That's a sure-fire route to mediocrity. The most successful strategies have a central economic logic that serves as a plan for profit creation. In some cases, the economic key may be to obtain premium prices as in the case of desiccated coconut available in our country by offering the same to customers. By taking any strategic initiative the basis for making profits becomes the very base of economic logic.

Conclusion

Apart from the general problems raised by coconut growers and other stakeholders, if the very basis of economic logic itself is to pass on the benefits of value creation to farmers so as to further reduce the economic disparity; we need to have cocreative, innovative, vibrant social enterprises. This need in-depth analysis and qualitative research to understand the practical problems of farmers and quantitative simulations and analysis to make out the strategic intend to be successful and sustainable. The role of Agricultural Universities, Coconut Development Board, government, growers, local bodies and other supporting institutions have got a pivotal role in planning and implementing a farmer friendly vision strategic for the empowerment of small, medium and large farmers of coconut in India.

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Prospects of ASEAN and FTAs for the Indian economy

Deepthi Nair S*

Trade is often considered an engine of economic development. The establishment of World Trade Organisation (WTO) is an important landmark in the history of international trade. The trade policy reforms under WTO have enormous implications for the agriculture sector. It is a reality which is irreversible. The trade liberalization, India's commitment in WTO and the formation of regional free trade area in South Asia has had their impact on export, import and prices of almost all commodities by changing the policy environment.

Coconut is an important horticultural crop which has a significant bearing on the livelihood security of millions of small and marginal farmers. In the globalised scenario, this crop faces serious threats from liberal imports of cheaper oils and other coconut based products.

Strategies have to be evolved for countering the threats and consolidating our inherent strengths to take a lead over other competitors. Before going into the opportunities and constraints that the liberalized economy poses before us, we will have a quick peep into the major free trade agreements entered into by India.

WTO and agriculture

Agriculture has been critically important for the WTO. The Agreement on Agriculture (AoA) was introduced to rid the agricultural sector of the subsidies that distorted the agricultural trade and promoted inefficient producers while discriminating against the more efficient ones. The three main components of

the AoA are domestic support, export competition and market access. The AoA in WTO was the first step towards a long and possibly arduous road towards achieving a distortion free agricultural market. But the promises on AoA largely remained unfulfilled. The impact of WTO on agriculture was severely felt by India as cheap imports have frequently hit the Indian market often destabilizing the market. The participation of a large number of developing countries has made the negotiation more transparent and acceptable in the post Uruguay round period. The liberalization and globalization of the world economy paved the way for bilateral free trade agreements which appeared more meaningful, had much more to offer and had a sustainability in the long run.

Free trade agreements (FTAs)

An FTA is a trade bloc whose member countries have signed a FTA which eliminates tariffs, import quotas and preferences on most (if not all) goods and services traded between them. The aim of a free trade area is to reduce barriers to exchange so that trade can grow as a result of specialization, division of labour and most importantly via comparative advantage. The theory of comparative advantage argues that in an unrestricted marketplace (in equilibrium) each source of production will tend to specialize in that activity where it has comparative (rather than absolute) advantage. The net result will be an increase in income and ultimately wealth and well being for every one in the free trade area.

India is very keen to shake off its protectionist tag and given the impasse at the WTO, India has

been energetically pursuing bilateral trade (and investment) agreements with a wide array of partners. India's high growth has been both an attraction for partners as well as an incentive for itself to launch an ambitious trade policy. The country is currently engaged in about 30 FTAs with developing and developed countries. India also has a number of Preferential Trade Agreements (PTAs) which allow some concessional access to partners, but donot commit on radical reductions of trade barriers.

Most of India's signed agreements are goods (commodity) agreements. While goods agreements can have a huge impact on commodity production and livelihoods thereof, the impact stems from the actual exchange of goods. Now there is an increasing number of goodsplus agreements which are either called Comprehensive Economic Partnership Agreemenmts (CEPA) or Comprehensive Economic Cooperation Agreements (CECA). The goodsplus chapters often have a large impact on the domestic policy framework itself. Most developed countries insist on a goodsplus deal with special emphasis on deep services trade liberalization, Intellectual Property Rights, investments, public procurement and competition policy. Most south - south FTAs still respect each others development space and go in for a goods only agreement in the first stage and then follow up with chapters on services and investment, often limited to the sources sector. A quick glance through three FTAs signed by India will give us an insight into the nature of free trade agreements.

India Sri Lanka Free Trade Agreement (ISFTA)

This was signed in December 1998. India's interest in furthering trade relations with Srilanka was owing to its broader industrial base and ability to meet Srilanka's import needs. Srilanka's interest was the prospect of early mover access to a large market that would help diversify its industrial base and be a potential destination for foreign direct investment on the basis of preferential access to Indian market. The negotiating approach was on the basis of a negative list with both countries agreeing with the need to safeguard sensitive domestic industries. But a less than full reciprocity was adopted in ISFTA with Srilanka being given significant concessions on the grounds of asymmetries in the two economies. So while Srilanka was to have duty free access to Indian market 3 years after the FTA becomes operative,

India could enjoy it only after 8 years. This was exclusive of the items in the negative list.

Prior to WTO, Indian produced goods were perceived as being of low quality vis-à-vis similar goods from Japan and other emerging East Asian countries like South Korea.

Most consumer goods produced in India was geared to meet domestic consumption demand in the context of a highly protected economy and was not quality competitive in the international markets.

After the liberalization process, the push for export growth, combined with quality improvements with increased exposure to competition and facilitated by policy reforms rapidly raised the volume of Indian exports to Srilanka.

There has been concerns raised with regard to unilateral imposition of quotas. For instance, when Srilanka's shipments of vanaspathi started destabilizing the domestic industry, India unilaterally decided to restrict import. The issue was solved after further negotiation. Post ISFTA, bilateral performance between the countries improved exports and imports have grown considerably accompanied by significant product diversification.

India South Asia Free Trade agreement (SAFTA)

SAFTA came into force in January 2006 and would be fully operational by 2016. The pact holds huge potential for intra regional trade growth. For smaller countries, SAFTA would help in large scale investment which will create new prospects for industrialization, acquisition of new knowledge and ideas, possibility of accompanying capital flows through FDI, increased specialization etc. In a labour surplus country, SAFTA would create higher employment and higher wage rate with the implication for income distribution and poverty. For the larger countries, SAFTA shall provide a destination for the vent of its surplus which brings otherwise unemployed resources to employment.

Reduction in tariff rates as effected by SAFTA shall multiply trade and commerce only if it is complemented and supported by adequate infrastructure and trade facilitation measures by member governments.

India ASEAN

Though the framework agreement on Comprehensive Economic Cooperation between India and ASEAN was signed in 2003, the final agreement after a series of negotiations came into being in 2009 with effect from January 2010. The objective was to progressively liberalise and promote trade in goods and services and strengthen and enhance the economic, trade and investment cooperation between the countries. There will be two normal track reduction schemes(NT), one sensitive track (ST) and one highly sensitive track (HST). In normal track, the tariff will be reduced gradually to 0% starting from 2010 to 2016. Tariff on sensitive goods will be lowered to 5% in 2016. For highly sensitive items which include crude palm oil, refined palm oil, pepper, black tea and coffee, the tariffs will be reduced to 40-50% by 2019. Thus under ASEAN India FTA, India is committed to reduce tariff in crude palm oil and refined palm oil and eliminate tariff on 4000 products by 2016. Coconut, rubber, cardamom etc have been included in the exclusion list, but it need not remain there for ever. The lists will be reviewed every year.

There is no way in which India can stand aloof and avoid entering into bilateral agreements with other countries. The country has to plan activities in such a way that the benefits of the agreements are exploited for the development of the agricultural sector in the country. If a free trade agreement is to contribute towards strengthening trade and investment linkages in the area, it should have a policy to introduce a binding commitment to prune the negative lists over time. In SAFTA, though there was a provision made for a review of the negative list every 4 years with a view to reduce the number of items, it was vague.

Constraints and prospects of the FTAs and ASEAN

The major constraints that affect our agricultural sector is that all ASEAN countries have similar crops and similar climate in comparison to India and hence free import of commodities may result in price crash in the domestic market.

There is no guarantee that the items under the exclusion list will remain in this category forever. Increasing productivity and reducing the cost of production is the first important step to equip our farm sector to face the challenges of the free trade zone.

The positive aspects of the trade is that the agreements open up additional market access to our exporters. It fuels growth in bilateral trade and investments. India's manufacturers can source products from overseas at competitive prices from member nations. Having trade associations with South Asian countries based on mutual recognition and economic cooperation will stabilize the sector and offer a confidence building measure. The quality of Indian products will be upgraded to match the requirements of the export markets and meet the higher standards.

Need for an action plan

A time bound action plan with a vision is required for successful implementation of the trade agreements. The nation has to adopt measures to increase production and productivity of all crops whose tariff is going to be minimized by the agreement.

The farming community has to be empowered to change in tune to the demands of the changed economic world. Policy measures should be planned in accordance with the strengths of our nation. For instance there is chance for palmoil from Malaysia and Indonesia to depress the prices of coconut and coconut oil in India. So our policy measures should be aimed at protecting the interests of our farmers.

Conclusion

The agricultural products from India have to be made competitive in the international market and the prices of agricultural goods in the domestic market be improved by taking serious steps of reform. India's Look East policy has prompted engaging trade and investment links through bilateral and regional initiatives with the economies of East Asia. India has in fact articulated a vision of an Asian Economic Community and sees its growing engagement with East Asian countries as building blocs towards such an eventual outcome. The net result of these alternative bilateral and regional agreements with India playing a pivotal role may eventually become something approximating free trade within the region.

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Indonesia, India and Philippines Ltogether account for about 74% of the world production of coconut, share of each varying between 15.7 to 16.5 billion nuts. India being one of the leading coconut producers at the global level, performance of the country in the export front of coconut and coconut products is quite dismal. India is in the bottom most rung in the export of fresh coconuts, copra, desiccated coconut, coconut oil and copra meal. Many of the countries whose production figures are just one tenth or one fifth of India could figure prominently in the export of coconut products. The country is having world class research institutions, a huge domestic market, a highly favourable demographic factor, and above all the availability of raw material, coconut. Technology for production of new value added coconut products is indigenously available. It is just baffling that why India is lagging behind other small coconut growing countries in the export sector. One of the reasons could be the comparatively high domestic price prevailing in India. But during the past two – three years, price of coconuts in the country

was at the lowest level, with the result that Government has to take measures to protect the interest of the farmers. All the above facts point to some of the aspects of production system of coconut products. It is to be ascertained that whether our processing units possess the capability to produce products which meet the international standards and can compete with products emanating from other countries. It needs to be studied that the standards and efficiency of the plant and machinery used in India and the technology could produce cost effective products which meet the quality standards and which can compete in the foreign markets. Mere incentives for exports of coconut products will not be enough for enhancing export without giving proper attention to quality standards and cost effectiveness.

Global Coconut Scenario

The major coconut products which are being exported are coconut oil, copra, fresh coconuts, copra meal, desiccated coconut powder, coconut shell charcoal, activated carbon and coir & coir products. The major exporters of these products are Philippines,

Indonesia, Sri Lanka, Malaysia and Thailand. In comparison to the consumption pattern of coconut in other coconut growing countries, the domestic demand for coconut and its products are very high.

As seen from the table 2 Sri Lanka with an annual production of 2.85 billion nuts could export 59199 MT of fresh coconuts, India with more than 5 times the production of Sri Lanka could export only 6815 MT, just one ninth of the quantity exported by Sri Lanka. Even Mexico with a production level less than one tenth of that of India, exported 9964 MT, about 50% more than that of India. Countries with lesser production have significant exportable surplus, compared to India.

Export figures of copra (Table-3) indicate that countries such as Solomon Islands and Papua New Guinea with far behind in production of coconut to that of India could export comparatively higher quantities than India. The reason may be attributed to huge demand for copra by the coconut oil extraction industry in India.

As in the case of export of coconut and copra, in the export of coconut oil also, India lags far behind even to Malaysia with

Table - 1. Major coconut producing countries

| Country | Production (in million nuts) | Percentage contribution |
|------------------|----------------------------------|-------------------------|
| Indonesia | 16,498 | 25.44 |
| India | 15,730 | 24.26 |
| Philippines | 15,668 | 24.16 |
| Brazil | 3,289 | 5.07 |
| Sri Lanka | 2,853 | 4.40 |
| Papua New Guinea | 1,495 | 2.31 |
| Mexico | 1,402 | 2.16 |
| Thailand | 1,104 | 1.70 |
| Vietnam | 813 | 1.25 |
| Tanzania | 401 | 0.62 |
| Malaysia | 379 | 0.58 |
| Other Countries | 5,218 | 8.05 |
| Total | 64850 | 100.00 |

production of coconut less than 3% of India. An analysis of value of production and export income from coconut products shows that the competitiveness of coconut industry is determined by coconut oil. Around 60% of the value of total world exports of all coconut products is accounted by coconut oil. Coconut oil sustains coconut cultivation to a great extent. In India the production of coconut oil depends almost completely on the production of copra. percentage of coconut production diverted for production of copra is

lesser in India when compared to other coconut growing countries. Apart from that overall shortage of vegetable oils in India is one of the main reasons affecting the export of coconut oil.

Export of Desiccated Coconut Powder from India is meager 2173 MT(2009). Philippines tops the list with an export of 1.16 lakh MT closely followed by Indonesia to the extent of around 47000 MT. Sri Lanka with one sixth of the production of coconuts of India exported around 40000 MT of desiccated coconut powder in 2009. It is every interesting to note that countries such as Dominican Republic and Ivory Coast whose production levels are less than 3% of the production of India could export 15 to 20000 MT per year.

Table 8.

| Country | Export value (in '000 US \$) |
|-------------|----------------------------------|
| Philippines | 884,022 |
| Indonesia | 578,972 |
| Sri Lanka | 253,010 (78,365*) |
| India | 178,217 (115,506*) |
| Malaysia | 151,558 |

*Export value of coir and coir products

Domestic Scenario

Barring coir and coir products, the export of coconut products from the country was below Rs.300 crores till recently. This was mainly because of the high domestic demand for kernel products resulting in prices of kernel products ruling above the international prices most of the

Table-2. Export of coconut products

| Country | 20 | 007 | 20 | 008 | 2009 | | |
|-----------|----------|------------|----------|------------|----------|------------|--|
| Country | Quantity | Percentage | Quantity | Percentage | Quantity | Percentage | |
| Indonesia | 8693 | 10.97 | 42839 | 31.40 | 72818 | 42.66 | |
| Srilanka | 45763 | 57.73 | 38284 | 28.06 | 59199 | 34.68 | |
| Mexico | 9550 | 12.05 | 8613 | 6.31 | 9964 | 5.84 | |
| India | 1043 | 1.32 | 2838 | 2.08 | 6815 | 3.99 | |
| Malaysia | 8488 | 10.71 | 5735 | 4.20 | 4149 | 2.43 | |
| Thailand | 2129 | 2.69 | 332 | 0.24 | 1937 | 1.13 | |
| Others | 3605 | 5.55 | 37795 | 27.70 | 15818 | 9.27 | |
| Total | 79271 | 100.00 | 136436 | 100.00 | 170700 | 100.00 | |

Table-3. Exports of Copra (Quantity in MT)

| Country | 20 | 07 | 2008 | | 2009 | |
|------------------|----------|------------|----------|------------|----------|------------|
| Country | Quantity | Percentage | Quantity | Percentage | Quantity | Percentage |
| Indonesia | 46920 | 36.29 | 26110 | 18.22 | 39517 | 34.51 |
| Solomon Islands | 19302 | 14.93 | 41810 | 29.18 | 21292 | 18.59 |
| Papua New Guinea | 16652 | 12.88 | 32659 | 22.79 | 17491 | 15.27 |
| India | 1357 | 1.05 | 1671 | 1.17 | 13578 | 11.86 |
| Srilanka | 14058 | 10.87 | 13314 | 9.29 | 8592 | 7.50 |
| Malaysia | 4000 | 3.09 | 4500 | 3.14 | 4600 | 4.02 |
| Others | 27019 | 20.90 | 23219 | 16.20 | | 8.25 |
| Total | 129308 | 100.00 | 143283 | 100.00 | 114516 | 100.00 |

Table-4. Export of Coconut Oil (Quantity in MT)

| Country | 20 | 07 | 20 | 2008 | | 2009 | |
|------------------|----------|------------|----------|------------|----------|------------|--|
| Country | Quantity | Percentage | Quantity | Percentage | Quantity | Percentage | |
| Philippines | 886561 | 41.21 | 847626 | 40.48 | 826237 | 45.99 | |
| Indonesia | 739923 | 34.40 | 649255 | 31.01 | 570311 | 31.74 | |
| Malaysia | 139821 | 6.50 | 134725 | 6.43 | 128855 | 7.17 | |
| Papua New Guinea | 56100 | 2.61 | 64525 | 3.08 | 35648 | 1.98 | |
| Thailand | 4399 | 0.20 | 48312 | 2.31 | 17886 | 1.00 | |
| India | 3677 | 0.17 | 6817 | 0.33 | 9855 | 0.55 | |
| Vanuatu | 2600 | 0.12 | 11500 | 0.55 | 5800 | 0.32 | |
| Fiji | 5503 | 0.26 | 6152 | 0.29 | 4423 | 0.25 | |
| Others | 312567 | 14.53 | 324790 | 15.51 | 197634 | 11.00 | |
| Total | 2151151 | 100.00 | 2093702 | 100.00 | 1796649 | 100.00 | |

Table-5. Export of Copra Meal (Quantity in MT)

| Country | 2007 | | 2008 | | 2009 | |
|------------------|----------|------------|----------|------------|----------|------------|
| Country | Quantity | Percentage | Quantity | Percentage | Quantity | Percentage |
| Philippines | 422889 | 52.36 | 435244 | 58.86 | 399782 | 61.19 |
| Indonesia | 323288 | 40.03 | 247022 | 33.40 | 209035 | 32.00 |
| Sri Lanka | 8114 | 1.00 | 5046 | 0.68 | 20007 | 3.06 |
| Papua New Guinea | 22127 | 2.74 | 27452 | 3.71 | 14895 | 2.28 |
| Malaysia | 5062 | 0.63 | 3964 | 0.54 | 3011 | 0.46 |
| Thailand | 174 | 0.02 | 1054 | 0.14 | 1326 | 0.20 |
| Others | 26019 | 3.22 | 19706 | 2.66 | 5268 | 0.81 |
| Total | 807673 | 100.00 | 739488 | 100.00 | 653324 | 100.00 |

Table-6. Export of Desiccated Coconut Powder (Quantity in MT)

| Country | 20 | 07 | 20 | 2008 | | 2009 | |
|--------------------|----------|------------|----------|------------|----------|------------|--|
| Country | Quantity | Percentage | Quantity | Percentage | Quantity | Percentage | |
| Philippines | 130673 | 39.14 | 147626 | 39.84 | 116421 | 35.80 | |
| Indonesia | 59884 | 17.94 | 57689 | 15.57 | 46699 | 14.36 | |
| Sri Lanka | 45393 | 13.60 | 36248 | 9.78 | 38651 | 11.89 | |
| Malaysia | 8268 | 2.48 | 6599 | 1.78 | 9448 | 2.91 | |
| Ivory Cost | 17390 | 5.21 | 17522 | 4.73 | 19661 | 6.05 | |
| Dominican Republic | - | 0.00 | 7156 | 1.93 | 15115 | 4.65 | |
| India | 312 | 0.09 | 1455 | 0.39 | 2173 | 0.67 | |
| Others | 71924 | 21.54 | 96245 | 25.97 | 77026 | 23.69 | |
| Total | 333844 | 100.00 | 370540 | 100.00 | 325194 | 100.00 | |

Table 7. Export of Activated Carbon (Quantity in MT)

| Country | 20 | 007 | 20 | 08 | 2009 | | |
|-------------|----------|------------|----------|------------|----------|------------|--|
| Country | Quantity | Percentage | Quantity | Percentage | Quantity | Percentage | |
| Indonesia | 26325 | 26.06 | 24478 | 18.46 | 22741 | 26.71 | |
| Philippines | 30474 | 30.17 | 20259 | 23.56 | 20027 | 23.52 | |
| Malaysia | 17039 | 16.87 | 15071 | 17.52 | 17730 | 20.82 | |
| Sri Lanka | 17880 | 17.70 | 17388 | 20.22 | 17635 | 20.71 | |
| Thailand | 9303 | 9.21 | 8806 | 10.24 | 7023 | 8.25 | |
| India | N.R. | | N.R | | N.R | | |
| Total | 101021 | 100.00 | 86002 | 100.00 | 85156 | 100.00 | |

N.R.-Not reported

times. This has negatively impacted the efforts of value addition and bye product utilization during the last decade. Though there exist research institutions of international repute in the country for developing food products, their services could not be fully utilized owing to their other priorities. However in late nineties in collaboration with research institutions like CFTRI and DFRL the Board could develop value added products. These products are slowly catching up the export market also

Incentives made under the scheme Technology Mission on Coconut (TMOC) has accentuated the efforts of the Board in value addition and bye product utilization in the coconut sector. Under the scheme 164 coconut processing units with infrastructure facilities worth 152.43 crores for processing 1216 million nuts per year have been established. Nine tender coconut packing units having capacity to process 36 million nuts per year and 13 activated carbon units with a capacity to produce 30,000MT per annum have been established under the scheme. All these efforts have helped in enhancing market potential for coconut products both in domestic and international markets.

Decision of the Government of

India in 2009 to designate Coconut Development Board as Export Promotion Council(EPC) for coconut and coconut products except those from coir and coir products have also helped the Board to pay more attention to the export promotion activities which was hitherto attended by other such as APEDA. CHEMEXCIL etc. On being designated as EPC, the Board is Registration-Cumissuing Membership Certificates to exporters, securing benefits under various schemes, facilitating participation in International Trade Fairs, disseminating important trade information, and providing data on the exports and imports of the country.

The Board could also impress upon the Government of India and secure reliefs and concessions for boosting exports of coconut products under various schemes.

As a result of the concerted efforts, the export of coconut products have registered a significant growth from 2009-10.

The coconut export sector shows signs of improvement. It is felt that the growth could be accelerated further, if proper

Coconut Development Board designated as Export Promotion Council

Department of Commerce, Ministry of Commerce and Industry, Government of India has notified Coconut Development Board as an Export Promotion Council(EPC) for all coconut products other than those made from coconut husk and fibre vide Public Notice No.169 (RE-2008)/ 2004-2009 New Delhi dated the 1st April 2009 . In pursuance of the above notification coconut products such as coconut water based products, raw coconuts, coconut oil, dry coconuts, ball copra, cut copra, medicated

coconut oil, coconut oil based hair/ massage oils, virgin coconut oil, coconut based convenience foods. Coconut shell, Coconut shell powder, coconut shell charcoal, coconut shell based activated carbon, coconut shell buttons, handicrafts made out of coconut shell and parts of coconut tree, coconut wood furniture etc. fall within the jurisdiction of the Coconut Development Board. The EPC of the Board has so far issued Registration cum Membership Certificate to 550 exporters from different States.

Table 9. Export of Coconut Products from India (Qty in Tonnes, Value Rs.in Lakhs)

| CLNo | Itam | 2008 | -2009 | 2009- | -2010 | 2010 | -2011 |
|-------|--|---------|----------|----------|----------|----------|----------|
| SI No | ltem | Qty | Value | Qty | Value | Qty | Value |
| 1 | Coconuts (fresh) | 6814.48 | 937.99 | 13621.03 | 1889.81 | 15751.89 | 2267.77 |
| 2 | Coconuts(dried) | 1787.06 | 618.68 | 2957.56 | 1119.16 | 3889.62 | 1342.99 |
| 3 | Desiccated coconut | 2173.29 | 458.88 | 2050.06 | 464.16 | 900.00 | 950.00 |
| 4 | Other coconuts excluding fresh / dried | 8007.78 | 1882.62 | 8822.87 | 2567.44 | 10960.17 | 3080.93 |
| 5 | Coconut oil (crude) | - | - | 14.13 | 16.05 | 30.17 | 19.26 |
| 6 | Coconut oil (refined) | 9854.58 | 5841.23 | 5066.85 | 3986.90 | 5840.00 | 6130.00 |
| 7 | Other residues of coconut or Copra | 123.00 | 18.56 | 271.14 | 44.33 | 1056.67 | 53.20 |
| 8 | Oilcake (Solvent/expellers) | 76.50 | 9.89 | 346.00 | 41.40 | 213.77 | 49.68 |
| 9 | Coconut shell (raw) | 1164.55 | 183.19 | 1986.28 | 304.00 | 1870.35 | 364.80 |
| 10 | Shell charcoal | 17279 | 2449.39 | 39938.00 | 2429.53 | 15522.78 | 2915.44 |
| 11 | Copra | 13578 | 5580.07 | 22997.16 | 9113.03 | 29625.03 | 10935.64 |
| 12 | Coconut Shell based Activated Carbon* | 26000 | 15000.00 | 36855.21 | 21262.62 | 38712.12 | 25550.00 |
| Total | | | 32980.50 | | 43238.43 | | 53659.71 |

incentives are provided. Though the coconut oil is eligible for VKGUY benefits at the rate 5% of FOB value, due to ban on export of edible oil, the benefit is not extended to coconut oil exporters. In the Middle East, USA, European.

During the last year and the first half of the current year large quantities of copra were exported to Pakistan and Bangladesh. Huge quantities of copra is being exported to Pakistan through road also, which seldom reflect in the export figures. Copra is deprived of the benefits of coconut, which is presently enjoying VKGUY benefit of 5% of the FOB value. At present 2% of the Focus Product Scheme benefit is only eligible for copra. If VKGUY benefit is extended to coconut oil and copra, export could be increased considerably.

The activated carbon, which is second only to coir & coir products in export earnings is presently not getting any export incentives except Focus Market Scheme (FMS) benefits. Though it is a value added product from the bye product of an agricultural produce viz. coconut shell, it is categorized as miscellaneous chemical and denied benefits offered to agricultural products.

Despite this, India is now emerged as the leading exporter of activated carbon. However because of non availability of quality shell charcoal at reasonable price the industry is now reported to be facing crisis which is expected to be persist for some more time. Over a period of two years the raw material (shell charcoal) price has almost tripled, whereas the price of finished product has only marginally

increased. It is learnt that all the leading exporters in the country have enough export orders, but they may not honour the orders owing to shortage of raw material. During the last two years, export of activated carbon witnessed an annual increase of 20% in volume.

At present medicated coconut oil, coconut oil based soaps etc. are not categorized as coconut products and as such export earnings are not figured in the total export of coconut products.

Opportunities exist in the export sector for coconut and coconut based products. To exploit these opportunities for increasing our exports the bottle necks have to be over come by concerted efforts of the Coconut Development Board, Processing Units and Government of India. This is the need of the hour.

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Coconut economy in India: status, options and the roadmap ahead

K. Satheesh Babu*

The coconut palm is considered a multi purpose species across the world as every part of the tree is useful to human life for some purpose or the other.

Global Coconut Scenario

Presently, the palm is cultivated

seventies and eighties. Philippines and Indonesia made remarkable strides in area and production of coconut where as area and production in India is almost stagnating.

Indonesia and Philippines are

Table 1. CGR (%) of Area, Production and Productivity of coconut in India

| YEARS | AREA | PRODUCTION | PRODUCTIVITY |
|-------------|-------|------------|--------------|
| 1950 to '59 | 1.29 | 4.02 | 2.69 |
| 1960 to '69 | 4.10 | 2.59 | -1.44 |
| 1970 to '79 | -0.17 | -1.02 | -0.85 |
| 1980 to '89 | 3.47 | 4.69 | 1.18 |
| 1991 to '99 | 2.34 | 2.70 | 0.35 |
| 2000 to '08 | 0.21 | 3.24 | 3.02 |

in more than 93 coconut producing countries in the world, in an area of 12.16 million hectares with an annual production of 61.08 billion nuts. Over the years, global acreage under coconut cultivation has been gradually increasing. The global area has been continuously increasing from 1961 to 1999, reaching a maximum of 11.66 million hectares in 1999. It declined to 10.75 million hectares in 2000, but subsequently regained its position to 11.86 million hectares in 2009.

Major expansion in global coconut area took place in the

the two major competitors in coconut production. It was in the year 1997 that Philippines had a superior position to Indonesia with a production of 13707800 nuts while Indonesia was just behind Philippines with a production of 13463000 nuts after which Indonesia is continuously occupying the first position in global coconut production. It is interesting to note that Philippines, Indonesia, India and Sri Lanka were occupying the first four positions in 1980. Philippines, which occupied first position with 28.35 per cent contribution to the world coconut production in the eighties slipped to the second position with a relative share of 25.39 per cent. On the other hand, Indonesia, which was second major producer of coconut in the eighties, emerged as the leading producer of coconut now. The percentage contribution of India remained in the third position, but the country's relative contribution has increased from 13.96 per cent to 16.45 per cent during the corresponding period.

Indian Coconut Scenario

Coconut is a palm traditionally cultivated in India for more than 3000 years. Systematic efforts to grow coconut as a commercial crop begun in the 1940s (Directorate of Marketing and Inspection, 2008). The coconut pockets in India is concentrated on the West Coast region of Kerala, Karnataka, Goa, Maharashtra, Gujarat; and the East Coast regions of Tamil Nadu, Andhra Pradesh, Pondicherry, Orissa, West Bengal, Assam; and the Islands of Andaman & Nicobar and Lakshadweep. The producers are the States of Kerala, Tamil Nadu, Karnataka and Andhra Pradesh. Three States viz., Kerala, Tamil Nadu and Karnataka together account for almost 84 per cent of area and production of coconut in the country.

Table 2. Export of coconut and coconut products from India (Quantity in MT)

| Year | Coconut | Copra | Coconut Oil | Desiccated Coconut | Coconut Oil Cake | Coir | Total |
|------|---------|---------|----------------|-----------------------|---------------------|---------|--------|
| 1961 | 295 | 0 | 1 | 0 | 10357 | 0 | 10653 |
| | (2.77) | (0) | (0.009) | (0) | (97.22) | (0) | (100) |
| 1971 | 232 | 0 | 9 | 0 | 3813 | 0 | 4054 |
| | (5.72) | (0) | (0.22) | (0) | (94.06) | (0) | (100) |
| 1981 | 118 | 485 | 1 | 0 | 1975 | 160 | 2739 |
| | (4.31) | (17.71) | (0.037) | (0) | (72.11) | (5.84) | (100) |
| 1991 | 4 | 0 | 70 | 0 | 0 | 64 | 138 |
| | (2.89) | (0) | (50.72) | (0) | (0) | (46.38) | (100) |
| 2001 | 439 | 12 | 3134 | 144 | 12 | 11538 | 15279 |
| | (2.87) | (0.08) | (20.51) | (0.94) | (0.08) | (75.52) | (100) |
| 2002 | 1188 | 31 | 5676 | 197 | 6435 | 22114 | 35641 |
| | (3.33) | (0.09) | (15.93) | (0.55) | (18.06) | (62.05) | (100) |
| 2003 | 1402 | 95 | 6014 | 482 | 482 | 27191 | 35666 |
| | (3.93) | (0.27) | (16.86) | (1.35) | (1.35) | (76.24) | (100) |
| 2004 | 2316 | 761 | 5954 | 432 | 4279 | 35764 | 49506 |
| | (4.68) | (1.54) | (12.03) | (0.87) | (8.64) | (72.24) | (100) |
| 2005 | 2690 | 1283 | 5378 | 652 | 272 | 62816 | 73091 |
| | (3.68) | (1.76) | (7.36) | (0.89) | (0.37) | (85.94) | (100) |
| 2006 | 2424 | 1357 | 3677 | 312 | 65 | 96051 | 103886 |
| | (2.33) | (1.31) | (3.54) | (0.30) | (0.63) | (92.46) | (100) |
| 2007 | 6932 | 1671 | 6817 | 1455 | 218 | 107996 | 125089 |
| | (5.54) | (1.34) | (5.45) | (1.16) | (0.17) | (86.34) | (100) |
| 2008 | 16609 | 13578 | 9855 | 2173 | 200 | 14558 | 56973 |
| | (29.15) | (23.83) | (17.30) | (3.81) | (0.35) | (25.55) | (100) |

(Source: FAO, 2011) st Figures in parentheses indicate percentage to the total

The total production of coconuts in India is 15.730 million nuts from a total coconut cultivated area of 1.89 Million hectares (Coconut Development Board, 2011). Among the various states, Kerala contributed 42 percent of area under coconut cultivation in the country followed by Karnataka (22 per cent), Tamil Nadu (21 per cent) and Andhra Pradesh (5 per cent) in that order. Production wise statistics also shows that Kerala occupied the first position with a share of 36.89 per cent followed by Tamil Nadu (34.11 per cent) and Karnataka (13.83 per cent).

The overall productivity of

coconut in the country is 8303 nuts/ha. Available statistics indicate that Lakshadweep has the highest productivity of 19,630 nuts/ha. The second and third positions in productivity are enjoyed by Pondicherry (14,619 nuts/ha) and Tamil Nadu (13,771 nuts/ha). Andhra Pradesh is ranked sixth (9327 nuts/ha). Kerala is ranked nineth (7365 nuts/ha) in terms of productivity. Karnataka occupies the tenth rank (5193 nuts/ha). Tamil Nadu and Andhra Pradesh are having productivity above the national average, while Kerala and Karnataka are having productivity below the national average.

 $NPC = P_d/P_b$

where,

NPC = Nominal Protection Coefficient of the commodity under consideration

 P_d = fob price of Indian Pepper in US \$/MT

 P_b = fob price of Vietnam Pepper in US \$/MT

The export competitiveness of Indian coconut is worked out and presented in Table.5. It showed that the NPC was greater than one, indicating lack of global competitiveness in the commodity form. In other words, the domestic prices of coconut in Trichur and Pollachi markets have been consistently higher than that of the

Table 3. Import of coconut and coconut products into India (Quantity in MT)

| Coconut | Copra | Coconut Oil | Desiccated Coconut | Coconut Oil Cake | Coir | Total |
|---------|---|---|--|--|---|---|
| 9 | 89716 | 0 | 5 | 0 | 0 | 89730 |
| (0.01) | (99.98) | (0) | (0.01) | (0) | (0) | |
| 0 | 8134 | 0 | 0 | 0 | 0 | 8134 |
| (0) | (100) | (0) | (0) | (0) | (0) | |
| 0 | 6063 | 43718 | 0 | 0 | 73 | 49854 |
| (0) | (12.16) | (87.69) | (0) | (0) | (0.15) | |
| 0 | 83 | 1325 | 0 | 0 | 0 | 1408 |
| (0) | (5.89) | (94.11) | (0) | (0) | (0) | |
| 0 | 371 | 23609 | 3 | 9501 | 99 | 33583 |
| (0) | (1.10) | (70.30) | (0.01) | (28.29) | (0.29) | |
| 15 | 227 | 30416 | 24 | 26181 | 392 | 57255 |
| (0.03) | (0.40) | (53.12) | (0.04) | (45.73) | (0.68) | |
| 19 | 1144 | 13760 | 3049 | 70588 | 148 | 88708 |
| (0.02) | (1.29) | (15.51) | (3.44) | (79.57) | (0.17) | |
| 1085 | 1136 | 12712 | 8208 | 53184 | 438 | 76763 |
| (1.41) | (1.48) | (16.56) | (10.69) | (69.28) | (0.57) | |
| 58 | 1790 | 4069 | 716 | 94350 | 803 | 101786 |
| (0.06) | (1.76) | (4) | (0.70) | (92.69) | (0.79) | |
| 0 | 0 | 14096 | 0 | 42432 | 192 | 56720 |
| (0) | (0) | (24.85) | (0) | (74.81) | (0.34) | |
| 2 | 0 | 8119 | 2 | 30849 | 394 | 39366 |
| (0.01) | (0) | (20.62) | (0.01) | (78.36) | (1) | |
| 4 | 0 | 15229 | 0 | 22231 | 0 | 37464 |
| (0.01) | (0) | (40.65) | (0) | (59.34) | (0) | |
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(Source: FAO, 2011)* Figures in parentheses indicate percentage to the total

international prices. It could be no different for copra and coconut oil also as empirical studies revel (Babu et al., 2009).

The Roadmap Ahead

The production of coconut in India has been steadily increasing, thanks to expansion into non traditional areas coupled with robust productivity gains. However, the coconut sector in India has been afflicted by many problems, especially during the last decade or so. Problems of instability in output price, high wage rates, shortage of labour, high incidence of diseases, increasing cost of production coupled with

less relative profitability vis-a vis competing crops like rubber are to be viewed in a holistic perspective. Farmers were subjected to tremendous inter year and intra year price variations. As expected, coconut prices are subjected to a pronounced seasonality where by the harvest period coupled with a subdued price period, while the off season synchronized with a buoyant phase.

A number of factors are likely to shape the prospects of coconut industry in the coming years. The first and foremost among them is competitive production domestically as well as globally. The coconut productivity in the major producing States of India like Kerala and Tamil Nadu are afflicted by old and senile palms. Phased systematic replanting is presently the need of the hour for enhancing the coconut productivity. This only will instil export competitiveness of the Indian coconut industry in the long run.

A number of marketing inefficiencies have contributed to the farmers' woes. Heavy farm level disposal of unhusked commodity, different strata of middlemen, enhanced transport and handling charges and the existence of considerable seasonality in prices acted against producer interests. As farmers are

Table 4. Minimum Support Price of Milling copra: A Comparison

| Year | Milling Copra (Rs/QI) | Ball Copra (Rs/Ql) |
|---------|--------------------------|-----------------------|
| 1990-91 | 1600 | N.D. |
| 1991-92 | 1700 | N.D. |
| 1992-93 | N.D. | N.D. |
| 1993-94 | 2150 | 2350 |
| 1994-95 | 2360 | 2575 |
| 1995-96 | 2500 | 2725 |
| 1996-97 | 2500 | 2725 |
| 1997-98 | 2700 | 2925 |
| 1998-99 | 2900 | 3125 |
| 1999-00 | 3100 | 3325 |
| 2000-01 | 3250 | 3500 |
| 2001-02 | 3300 | 3550 |
| 2002-03 | 3300 | 3550 |
| 2003-04 | 3320 | 3570 |
| 2004-05 | 3500 | 3750 |
| 2005-06 | 3570 | 3820 |
| 2006-07 | 3590 | 3840 |
| 2007-08 | 3620 | 3870 |
| 2008-09 | 3660 | 3910 |
| 2009-10 | 4450 | 4700 |

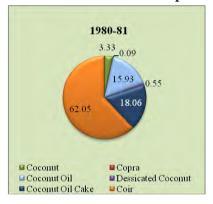
(Source Economic Survey, various issues)

more tuned to handling coconut in the commodity form, strengthening of reliable, region specific, and producer centric market intelligence facilities are the need of the hour in the short run to reduce the price risk of the farmers. In the long run, well chalked out R & D efforts, especially in post harvest handling are to be seriously thought out because the low level of product development and diversification offers excellent opportunities to go up the value chain and turn into a high value-added industry. Sizeable markets exist in domestic as well as export market for value-added products from coconut. It shall be

Table 5. International prices and Nominal Protection Coefficients for Coconut

| Year | Domestic price of Trichur market (Rs/QI) | Domestic price of Pollachi market (Rs/QI) | International price of Philippines (Rs/QI) | NPC with respect to Trichur market | NPC with respect to Pollachi market |
|---------|---|---|---|---|--|
| 2003-04 | 645.83 | 511.67 | 352.45 | 1.83 | 1.45 |
| 2004-05 | 704.17 | 470.83 | 433.17 | 1.63 | 1.09 |
| 2005-06 | 589.58 | 453.33 | 376.15 | 1.57 | 1.21 |
| 2006-07 | 537.50 | 590.61 | 465.27 | 1.16 | 1.27 |
| 2007-08 | 600.00 | 578.98 | 580.80 | 1.03 | 1.00 |
| 2008-09 | 1275.00 | 641.70 | 684.82 | 1.86 | 0.94 |
| 2009-10 | 1145.83 | 649.50 | 431.96 | 2.65 | 1.50 |
| Mean | 785.42 | 556.66 | 474.95 | 1.68 | 1.21 |

Fig 1. Percentage composition of exports of coconut and coconut products from India



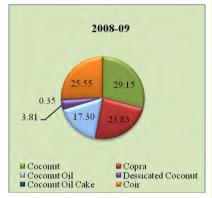
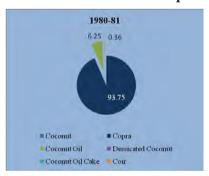
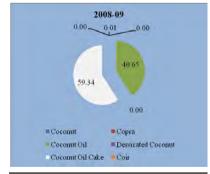


Fig 2. Percentage composition of imports of coconut and coconut products into India



a sure route to harness higher income per unit area cultivated and a path breaking strategy for the selling producers to turn marketing entrepreneurs.



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Agriculture Marketing

Major concerns, post WTO

Binoi K.Kurian*

agriculture Marketing turns to be dearer to the marketing protagonists in the recent past. In a country like India, where agriculture constitutes 24% of the GDP and with 2.4% of the world's land resource, the concept of agriculture marketing needs to have a serious outlook. The rational for this cannot be debated, considering the fact that agriculture turned to be the single largest private sector occupation in the country deploying around 57% of India's work force.

Agricultural marketing involves in its simplest form the buying and selling of agricultural produce. In olden days when the village economy was more or less self-sufficient the marketing of agricultural produce presented no difficulty as the farmer sold his produce to the consumer on a cash or barter basis. A reorientation from the subsistence farming system to commercial farming practises emerged relevance to find takers for the surplus farm products. Local markets play a pivotal role in assembling products and linking traders for the sales of agriculture farm products. As the market size enhances and the scale of commercialisation pops up, agriculture marketing organizations demands professional systems for sustainable growth and development.

Supply chain management construed the key success of any agriculture marketing initiative. It functions as a canopy over producer, supplier and consumer in executing timely and efficient distribution system, meeting the demands of the customer, at an affordable cost. Integration of farmers and such efficient distribution systems into modern value chain will work towards more equitable chain governance. This can be achieved by strengthening the competitiveness of labour intensive sub sectors of the economy and by creating marketing institutions to them and facilitating business linkage and improving

services to manage the legal and administrative frame works of such systems.

Development of agriculture marketing systems, over years has developed its present dimension by adding new infrastructure, integration and specialisation in the respective area. In the context of subsistence farming, the scope of supply chain management was relatively negligible. The farming practices adopted were just to feed and whatever surplus was there to open for trade. From there, farmers shifted to the traditional agricultural practises, which is purely the production concept, what ever can be produced was made available for sale. The inadequacies of the traditional practices are some what nullified when they turned to the organised agriculture marketing system after the intervention of Governmental agencies during the green revolution and the promotion of cash crops. Then, recent introduction of vertically integrated value chain with specialised services to empower farming community, based on the need analysis and reorienting farming practises in tune with the market expectations to deliver desired products. As the global markets opened up the system further undergone revision with more consciousness on the product quality and timely delivery of specialised products in lines with global requirements.

It is highly imperative to have foolproof marketing infrastructure facilities coupled with market information systems to back up any agriculture-marketing domain. Marketing infrastructure is required to ensure free flow of the farm produce and its efficient marketing. Since the technologies on the production front has changed the supply scenario, adequate marketing infrastructure is needed to handle the huge quantity of farm produce and make the same available to all the consumers both inside and outside the country in an acceptable form. By and large

unorganised marketing systems face this deficiency and will be in huge risk, while targeting global business. Marketing infrastructure across the value chain will not only add value across the chain, but also helps to minimise post harvest losses and maintain product quality till it reaches the end consumer. The marketing infrastructure requirements for different products need to be defined in accordance with the product attributes and the marketing channels for distribution. Grading and standardisation of products and packaging will add value in the marketing chain.

Market information plays a key role in any agriculture marketing system. The importance of sound agricultural marketing policies is inevitable for ensuring fair returns to the farmers. It is therefore to be considered as the prime responsibility of the regulatory agencies to ensure remunerative prices to the farming community. But the efforts of such agencies seldom had an impact as envisaged. Major lacunas with such systems are their inability to pass on timely market information to the producers. Upto-date market information on price, arrivals, market trends etc will enable better resource allocation and planning. Also, micro and macro economic factors and Government policies will influence this vulnerable sector more rapidly than any other industry.

The transfer of produce or goods takes place through a chain of middlemen or agencies. In the primary market the main functionaries are the producer, the village or itinerary merchant, pre-harvest contractors, commission agents, transport agents etc. In the secondary market the processing and manufacturing agents are the additional functionaries. Financing agents such as banks and co-operatives may also take part. In the terminal or export market the commercial analyst and shipping agent also gets involved in the transfer of goods. The functionaries involved may be individuals, partners or co-operatives who buy and sell on ready and future basis at a price determined by forces of supply and demand. Each functionary renders some service in the process of marketing and also earns a varying margin of profit for himself. This procedure makes marketing rather complicated and inflates the price of the produce. The product characteristics of agricultural products like perishability or seasonal availability further adds complexity to agricultural marketing systems. Agriculture marketing ventures should identify

optimum number of functionaries depending upon the nature the products dealt to minimise the pilferage and to realise major share of consumer rupee by the farming community by offering products at a reasonable rate to the end consumer.

The approach towards agriculture in the country needs a radical shift. Governmental and Non Governmental organisations should redefine the extension mechanisms to have more market oriented production pattern. Being our farm products eyeing international markets, the extension approach should invariably focus on promoting larger product mix with international quality standards, rather than specialised products. This will evade risk in production also, in case of any loss accrued in any one product can be covered from the profits generated on other products.

Commodity markets are vitally important for the countries that depend on export earnings and face variable expenditures for imports. Commodity prices are reflected in a country's terms of trade and its ultimate fiscal position. The underlying behaviour of these markets results in frequent price spikes and prolonged price slumps. To an extend, the volatility in the commodity markets move in line with the futures trading. Speculative nature of the trade and lapse of adequate mechanism to monitor the genuineness of the market participates leads to high volatility in the trade. If the system is embedded with market participants like farmers, traders and consumers of the particular commodity, then the speculative nature of the trade will be minimised.

In short, agriculture marketing is the single largest occupation and the country's economic development largely depend on a prudent agriculture marketing system. The trade channels for different types of commodities are available in rural areas like private, cooperatives, processors, regulated markets and state agencies. In no sense, a social cluster or village economy as at whole can, be developed without effective and efficient agriculture marketing system. Very little attention has been paid in the planning era towards the development of agriculture marketing. In fact marketing is a dynamic state of affairs and is part and parcel of the whole economy. Thus, agriculture marketing systems constitute the nerve centre of the rural development activities.

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APCC-An intergovernmental organization for the cause of coconut industry

Remany Gopalakrishnan*

On 2nd September 1969 in Colombo, Ceylon, six national flags rising slowly towards the sun bathed morning sky and a brief clapping of hands followed by the sharp rap of a gavel marked the beginning of a new concept in regional cooperation. The first session of the Asian Coconut Community was called to order. It was the first of a kind in the region and the first intergovernmental organization for a single commodity, the coconut.

pigraphical, literary and sculptural evidence prove that coconut, the Kalpavriksha is serving the humanity for more than three millennia. Its potential in alleviating poverty and its role in providing food and livelihood security demands the coconut producing countries to accelerate its development so as to continue its sustenance for many more millennia to serve the humanity with its bountiful gifts. Here lies the relevance and importance of an organization which could coordinate and harmonize the coconut development activities of the producing countries, drawing national and international attention to the 'Nature's supermarket'. Asian Pacific Coconut Community (APCC), the intergovernmental organization headquartered at Jakarta, Indonesia fulfils the mission to promote, coordinate and harmonize coconut developmental activities of the Asian Pacific region to achieve maximum economic development. APCC stimulates regional cooperation across national boundaries.

People with common interests and common problems often join hands to share knowledge and experience with the aim of improving their living conditions to mutual benefit and by doing so they form a community. Thus the APCC came into existence

in 1969 under the aegis of Economic and Social Commission for Asia and Pacific (ESCAP) for strengthening the regional cooperation among the coconut producing countries.

The community would serve as a model for seeking solutions to problems which a single state could hardly solve on its own but which would find timely and appropriate answers through joint research and pooling experience

U Thant, Secretary General, UNO

Vision and Mission

The vision of APCC is to improve the socioeconomic conditions of the coconut growers, processors, traders and all those who depend on this crop and crop based industries in the member countries through proper promoting, collaborating and harmonizing of various coconut related activities.

Its mission is to assist the member countries to develop, provide or exchange technologies for the following mission made programs to make the coconut industry vibrant in the years to come.

- Increasing productivity
- Reducing cost of production
- Adopting integrated coconut based farming system
- Encouraging organic farming
- Promoting farm level processing
- Promoting product diversification/value addition and by-product utilization
- Improving quality standards
- Increasing market promotional activities, market survey and market research
- Helping in trade related issues
- Developing human resource for effective transfer of technology

The mission encompasses implementation of projects relating to different aspects of the industry, provision of technical assistance, collection and dissemination of information on coconut and assistance in transfer of technology. APCC also brings together different segments of the industry to facilitate closer co-operation and collaboration among them.

Membership

Developing countries which are state members within the geographical limits of Asia and Pacific are eligible to become members of the Community. Its associate membership is open to any dependent territory within the Asia and Pacific region and to developing countries out-side the geographical limits of Asia and Pacific.

India was one among the first 3 signatories. Indonesia, Philippines and India signed the Agreement on 12th December 1968. Ceylon, Thailand and Malaysia signed on 11th March, 26th June and 30th June 1969 respectively. During its 13th session the nomenclature of the community changed to Asian and Pacific Coconut Community. This regional grouping provides essential tools for coordination, growth and understanding across national boundaries. Its long history of cooperation and achievement has to its credit many incredible contributions to the coconut industry.

The Community is now composed of seventeen members namely; Federated States of Micronesia, Fiji, India, Indonesia, Jamaica, Kiribati, Malaysia, Marshall Islands, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Tonga, Vanuatu, and Vietnam. Jamaica is an associate member of the APCC. These countries account for more than 90 per cent of the world production and export of coconut products. APCC member countries produces more than 55 billion nuts a year and export more than 33 million metric tonnes of coconut products including coir.

Coconut Day

The APCC, at its 35th session held in November 1998 in Ho Chi Minh City, Vietnam decided that September 2nd, the day on which the community was established 30 years ago, be designated as the 'Coconut Day' by the member countries. Thus the 1st Coconut Day was observed on 2nd September, 1999. This marked the beginning of the celebration of World Coconut Day by all member countries of APCC. Among the activities that were planned to carry out during the occasion includes introducing new coconut varieties and technologies, launching coconut development programmes and publicity campaigns, organizing field days, workshops and honoring personalities who dedicate their services to the betterment of the industry - all with the objective of creating more awareness on the importance of coconut.

APCC Session and COCOTECH

APCC Session is the policy making body of the community. The session is held once in each calendar year and the member states are represented by plenipotentiary representatives. The technical arm of the community is christened as COCOTEH which is the Permanent Panel on Coconut Technology. It meets once in two year and sets the guidelines for the community's work programme. Cocotech serves as an open forum for researchers, processors, traders and policy makers to meet and exchange information relating to coconut industry. The APCC session of Plenipotentiary in its annual meetings approves the theme and venue of the COCOTECH meeting for the succeeding year.

| APCC : Area (in 000 Ha) and Production | | | | | | | | | | | | | |
|--|-------|-------|----------------|------|-------|----------------|--|--|--|--|--|--|--|
| (in Million nuts) 1969 & 2009 Area Production | | | | | | | | | | | | | |
| | | Area | | | n | | | | | | | | |
| COUNTRY | 1969 | 2009 | Growth Rate | 1969 | 2009 | Growth Rate | | | | | | | |
| F.S.Micronesia | 30 | 17 | -1.41 | 15 | 40 | 2.48 | | | | | | | |
| Fuji | 56 | 60 | 0.17 | 71 | 270 | 3.40 | | | | | | | |
| India | 1033 | 1895 | 1.53 | 874 | 15730 | 7.49 | | | | | | | |
| Indonesia | 1806 | 3854 | 1.91 | 1203 | 16498 | 6.77 | | | | | | | |
| Kiribati | 27 29 | | 0.18 | 14 | 131 | 5.75 | | | | | | | |
| Malaysia | 310 | 100 | -2.79 | 201 | 379 | 1.60 | | | | | | | |
| Marshall Island | 0 | 8 | | 0 | 36 | | | | | | | | |
| PNG | 246 | 221 | -0.27 | 191 | 1495 | 5.28 | | | | | | | |
| Philippines | 1884 | 3402 | 1.49 | 1356 | 15668 | 6.31 | | | | | | | |
| Samoa | 28 | 102 | 3.28 | 35 | 200 | 4.45 | | | | | | | |
| Solomon Islands | 53 | 59 | 0.27 | 36 | 100 | 2.59 | | | | | | | |
| Sri Lanka | 466 | 395 | -0.41 | 496 | 2853 | 4.47 | | | | | | | |
| Thailand | 320 | 239 | -0.73 | 114 | 1104 | 5.84 | | | | | | | |
| Vanuatu | 68 | 96 | 0.87 | 41 | 308 | 5.17 | | | | | | | |
| Vietnam | 220 | 143 | -1.07 | 44 | 813 | 7.56 | | | | | | | |
| Total | 6547 | 10620 | 1.22 | 4691 | 55625 | 6.38 | | | | | | | |

Administration

Chairmanship of the community is held in turn by representatives of full member states in their alphabetical order and the chairmanship is valid for one year. Vice Chairmanship too follows the same pursuit. Hon. Elijah Doro Muala, Minister for Commerce, Industry, Labour & Immigration, Government of Solomon Islands presently holds the Chairmanship of APCC. Vice Chairman becomes the Chairman in the succeeding year. Mr. DO NGOC Khai, Director General of National Company for Vegetable Oils, Aromas & Cosmetics of (VOCARIMEX), Vietnam Vietnam holds the present Vice Chairmanship.

The secretariat of the community is located in Jakarta, Indonesia. Government of Indonesia provides host facilities to the secretariat under an agreement signed by the Government and APCC. Secretariat serves as

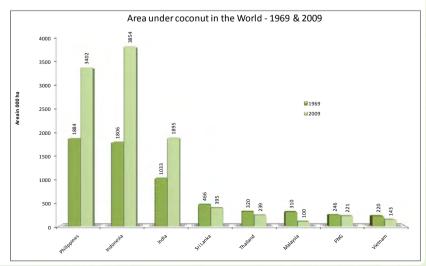
a global centre and assists in collecting, organizing and exchanging information relating to all aspects of the coconut industry and disseminate it through journals, proceedings of meetings, country studies, technological sheets, directories, statistical year books and video documentaries. The national information centres, in turn, through their participating agencies, disseminate information to end-users in their respective countries.

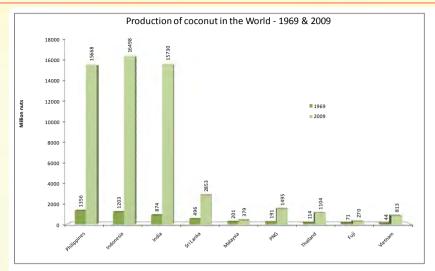
The coordination of activities of the community with the member states is through a network of National Liaison Officers (NLOs) drawn from government agencies which are responsible for the coconut industry in the member countries. NLOs liaise with all stakeholders. India's present NLO is Shri. Sanjeev Chopra IAS, Joint Secretary (NHM), Government of India. Shri. Shailendrakumar IAS, Director (Hort), Government of India is the alternate NLO.

Executive Director (ED) heads the Secretariat. The ED is elected by the session for a period of 3 years which can be extended to one more term if the session desires. The Executive Director is assisted by Assistant Director who is also selected by the session. Executive Director appoints its other skeleton staff as desired by the session. The office of the Executive Director is presently occupied by Shri. Romulo N. Arancon.JR., who hails from the Philippines.

India and its association with APCC

As mentioned earlier, India was one among the first signatories of the APCC. The country so far





hosted three sessions ie., 4th APCC during 12-16 April 1971 at New Delhi, 25th session during 28th Nov – 2nd Dec 1998 at Cochin and 38th session during 5 – 8 Nov 2001 at Bangalore. India was also the host country for three COCOTECH meetings. Viz. 4th

Cocotech during 12-16 April 1971 (along with 4th APCC session), 25th COCOTECH during 23rd Nov - 2nd Dec 1998 at Cochin and 37th COCOTECH during 24 - 28 July 2000. India is planning to host the 47th Cocotech at Hyderabad which is scheduled for July 2012.

India has held the Chairmanship twice and Executive Directorship once since its formation. Mr. MR Sivaraman IAS. the then Joint Secretary to Government of India was the Chairman of APCC in 1998 and Dr. H P Singh, Horticulture Commissioner,

Government of India and the former Chairman of the Coconut Development Board was its

Chairman in 2001. Dr. P Rethinam. former Chairman of the Board was the Executive Director of APCC during 2002-2006.

The major source of funding for the Secretariat is from the member countries through contributions and

The original signatories of the contracting parties for the establishment of the Asian and Pacific Coconut Community FOR INDONESIA: 12 Dec. 1968. Dinch Singh FOR INDIA: FOR CEVION: FOR MALAYSIA:

> special funds from outside funding agencies for taking collaborative projects. Many useful

projects with the assistance from donor organizations have been undertaken with a view to strengthen coconut industry in the region. Important studies undertaken in India with the funding of APCC as well as other donor Agencies like BUROTROP & COGENT include 'Assessment of Performance of Hybrid coconut varieties', 'Developing sustainable coconut based income generating technologies'etc.

The APCC region has recorded perceptible improvement in area, production and productivity of coconut during the span of the previous four decades. The area and production grew from 6.547 million ha .to 10.62 m. ha. and

> production from 4691m. nuts to 55.625 m. nuts during this period recording a growth rate of 1.22 % in area and 6.38% in production.

> No doubt, the APCC will continue to work productively to meet the future challenges in the member countries to make the coconut industry vibrant.

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India in the global coconut economy

Mridula K*

Coconut is a versatile agricultural product having multiple uses. Coconut oil finds major use in toiletries and cosmetic preparation and it is a major edible oil in Kerala. The trade liberalization, India's commitment in WTO and formation of regional free trade area in South Asia had their impact on import, export and prices of almost all commodities by changing the policy environment. The price, production and consumption of coconut products are likely to be affected by these changes.

World area under and production of coconut:

Although coconut production is widely dispersed over the globe, out of the 12 million hectares of area under the crop worldwide close to nine million hectares is accounted by just three countries. Indonesia (3.1 million hectares), Philippines (2.7 million hectares) and India(1.5 million hectares). These three countries also account for close to three quarters of the total world production (in nut equivalent) of about 64 billion nuts.

The area under and production of coconut in the world has been increasing. The area has increased by about one million hectares and production by 11 billion nuts during 2005-2009. The share of the three dominant countries namely India, Indonesia and Philippines in total world area and production has shown slight increase from 74.26% in 2005 to 75.20%

in 2009in respect of area and from 71.75% to 72.09% in respect of production. Among the three countries, Indonesia continue to maintain its share of area at around 31%. The production has declined from 26% to 25% during 2009. India has shown slight decline in area from 16% to 15.57% during 2009 whereas Philippines has shown an equivalent increase in its share of area and production.

Production-consumption balance

The three major producers of coconut are distinct in their production-consumption balances. While the Philippines consumes only around one fifth of its total production, and Indonesia three fourths, India alone has distinction of consuming all its domestic production (table-2). Srilanka and Thailand also report consumption of major share of their production. While Srilanka reports consumption of close to 80% of its production, Thailand consumes around 60% of its production. The share of domestic consumption in total domestic production does not show much of response to prices of coconut and coconut products in the major producing countries.

Consumption of coconut and coconut products

Coconut is a versatile commodity and is consumed in various forms. In most of the producing countries, the nut is consumed in the form of fresh nuts, young

Table: 1: World area and production of coconut

| Country | | | Area (%) | | | Production (%) | | | | | | |
|-------------|-------|-------|----------|-------|-------|----------------|-------|-------|-------|-------|--|--|
| Country | 2005 | 2006 | 2007 | 2008 | 2009 | 2005 | 2006 | 2007 | 2008 | 2009 | | |
| India | 16 | 16.22 | 15.98 | 15.71 | 15.57 | 21.73 | 24.43 | 25.84 | 24.13 | 24.25 | | |
| Indonesia | 31.45 | 31.56 | 31.26 | 31.37 | 31.67 | 26.22 | 25.83 | 26.04 | 26.57 | 25.44 | | |
| Philippines | 26.81 | 27.58 | 27.69 | 27.91 | 27.96 | 23.80 | 21.38 | 20.11 | 20.58 | 24.16 | | |
| Srilanka | 3.26 | 3.29 | 3.26 | 3.26 | 3.24 | 3.75 | 4.59 | 4.68 | 4.76 | 4.39 | | |
| Thailand | 2.84 | 1.88 | 1.85 | 2.03 | 1.96 | 2.03 | 2.05 | 1.98 | 1.94 | 1.74 | | |
| Other APCC | 7.21 | 7.24 | 7.22 | 6.92 | 6.86 | 47.69 | 48.02 | 49.46 | 34.34 | 35.11 | | |
| Others | 12.40 | 12.21 | 12.71 | 12.77 | 12.71 | 17.68 | 16.88 | 16.37 | 16.76 | 14.22 | | |
| Total (%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | |
| World total | 12093 | 12002 | 12114 | 12109 | 12167 | 59054 | 60607 | 61291 | 61089 | 64849 | | |

Source: APCC, Coconut Statistical Yearbook -2009

Note: world total area in thousand hectares, production in million nuts

Table-2: Production – consumption balance of coconuts in major producing countries

| Year | | Ind | lia | Indon | esia | Philip | pines | Srila | nka | Thailand | | |
|------|------|-------|-------|--------|-------|--------|-------|-------|-------|----------|-------|--|
| | | Drodn | Ratio | Drodn | Ratio | Drodo | Ratio | Drodn | Ratio | Drodn | Ratio | |
| | | Prodn | (c/p) | Prodn | (c/p) | Prodn | (c/p) | Prodn | (c/p) | Prodn | (c/p) | |
| ĺ | 2005 | 12833 | 0.74 | 221356 | 1.06 | 14056 | 0.10 | 2515 | 0.81 | 1204 | 0.4 | |
| | 2006 | 14811 | 0.64 | 222192 | 0.87 | 12960 | 0.15 | 2785 | 0.80 | 1248 | 0.4 | |
| | 2007 | 15840 | 0.59 | 226191 | 0.87 | 12327 | 0.16 | 2869 | 0.85 | 1219 | 0.4 | |
| | 2008 | 14744 | 0.64 | 230851 | 0.84 | 12573 | 0.15 | 2909 | 0.83 | 1186 | 0.5 | |
| | 2009 | 15730 | 0.60 | 234427 | 0.85 | 15668 | 0.12 | 2853 | 0.79 | 1104 | 0.5 | |

Source: APCC, Coconut Statistical Yearbook -2009

Note: production in million nuts

nuts (tender nuts), coconut oil and copra meal. Coconut is also consumed the world over in various forms, the major forms being coconut oil, copra meal, desiccated coconut, coconut milk and cream. The broad breakup of the total consumption of coconuts in the world is shown in table-3. Over 40% of the total world production is consumed in the form of fresh nuts and tender nuts. Close to 50% of the nut production is converted into copra and consumed as coconut oil and copra meal. A small proportion of the total (about 2%) is consumed as desiccated coconut. A small market is also emerging for coconut milk/ cream and milk powder.

Consumption of coconut oil

The consumption of coconut oil accounts for about 31.55% of the total nut production in the world. The three major coconut producing countries namely India, Indonesia and the Philippines account for over one third of this quantity (table: 4). The other major consumers are USA and Europe accounting to 40% of the total world consumption. Along with Vietnam and Mexico these group of countries account for three fourth of the total world consumption of coconut oil.

The world consumption of coconut oil has not shown any increase during the period 2005-2009. It has been hovering around 3000 mts. But the share of

different countries in the total consumption has changed during the period. Philippines has shown improvement in its share while. India has not shown much improvement.

Consumption of copra meal

India, Indonesia and Philippines are the major markets accounting for one third of the total world consumption. Europe was a large consumer of copra meal in 2002. The distribution of world consumption of copra meal has shown drastic change over this period. Europe, which accounted for close to 60% of the total world consumption in 1990 has shown a rapid decline and accounts less than 2% of the total world consumption. But the largest increase has been in the case of South Korea from below 2% to close to 30% of the total world consumption.

Consumption of copra meal

The world consumption of copra meal has not shown any significant increase during 2005-2009. India, Indonesia and Philippines are the major markets accounting for one third of the total world consumption. Europe was a large consumer of copra meal in 2002.

The distribution of world consumption of copra meal has shown drastic change over this period. Europe, which accounted for close to 60% of the total world consumption in 1990 has shown a rapid

Table-3. Consumption of world coconut production (2009)

| Total world coconut production (in nut equivalent) | 64.849 billion nuts | % |
|--|---------------------|--------|
| Total world coconut production (in copra equivalent) | 11.819 million mt | 100% |
| World production of copra | 4.877 million mt | 41.26% |
| Estimated consumption of coconut oil | 3.064 million mt | 25.92% |
| Estimated consumption of copra meal | 1.621 million mt | 13.71% |
| Estimated consumption of desiccated coconut | 0.201million mt | 1.70% |

Source: APCC, Coconut Statistical Yearbook -2009

Table: 4: Distribution (%) of world consumption of coconut oil by countries, 2005-2009

| Country | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------------|--------|--------|--------|--------|--------|
| India | 14.2 | 13.46 | 13.15 | 13.27 | 13.89 |
| Indonesia | 5.87 | 6.14 | 6.00 | 6.60 | 5.80 |
| Philippines | 7.67 | 8.87 | 10.44 | 11.22 | 14.20 |
| Europe | 30.20 | 28.13 | 27.80 | 24.0 | 24.27 |
| Germany | 11.10 | 10.28 | 9.90 | 6.74 | 8.12 |
| Netherlands | 4.95 | 3.13 | 2.64 | 1.65 | 4.04 |
| USA | 13.60 | 15.53 | 15.0 | 16.6 | 14.35 |
| Vietnam | 1.29 | 1.30 | 1.20 | 1.18 | 1.23 |
| Mexico | 4.08 | 4.18 | 4.52 | 4.17 | 4.53 |
| Subtotal | 92.96 | 91.02 | 90.65 | 85.43 | 90.43 |
| Total consumption (000mt) | 2939.5 | 3064.3 | 2994.1 | 3025.1 | 3064.8 |

decline and accounts less than two % of the total world consumption. But the largest increase has been in the case of South Korea from below 2% to close to 30% of the total world consumption.

Consumption of desiccated coconut

Unlike the trends in the consumption of coconut oil and copra meal, the world consumption of desiccated coconut showed a sharp increase between 1990 and 1995 and then tended to stagnate and again increased during 2005-

2009. In 1990 nearly 75% of the total world consumption of desiccated coconut was accounted by Europe (table-6). The consumption of desiccated coconut is growing in many non-coconut producing countries.

The coconut producing countries together consume almost 45% of the total nut production as fresh nut and tender coconut. Again, close to one third of almost 50% of the total nuts converted into copra is consumed by the three major coconut-producing countries.

Table: 5: Distribution (%) of world consumption of copra meal by countries, 2005-2009

| Country | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------------|--------|--------|--------|--------|--------|
| India | 18.7 | 17.0 | 15.89 | 14.37 | 15.42 |
| Indonesia | 10.5 | 12.43 | 14.30 | 14.25 | 15.29 |
| Philippines | 16.88 | 17.50 | 14.33 | 11.61 | 12.64 |
| Europe | 6.17 | 3.67 | 2.49 | 0.92 | 1.11 |
| Germany | 0.87 | 0.43 | 0.18 | - | 0.03 |
| Netherlands | 1.82 | 1.08 | 11.06 | 0.39 | 0.46 |
| South Korea | 24.0 | 23.75 | 23.82 | 30.01 | 30.84 |
| Vietnam | 7.14 | 6.91 | 9.85 | 9.97 | 11.10 |
| Mexico | 3.73 | 3.89 | 4.75 | 3.92 | - |
| Subtotal | 89.81 | 86.66 | 96.67 | 85.44 | 86.89 |
| Total consumption (000mt) | 1762.7 | 1712.5 | 1626.4 | 1725.5 | 1621.0 |

Consequently, less than 40% of the total coconut production enters the export market in the form of copra, coconut oil, copra meal, desiccated coconut, and coconut milk/cream and coconut powder.

Export of coconut and coconut products

Coconut is consumed in various forms, fresh nuts, coconut oil and desiccated coconut. As already mentioned coconuts is produced in about 87 countries of the world and consumed in almost all countries. The worldwide consumption is made possible by the movement of commodity in various forms.

Export of fresh nuts

Hardly any fresh coconut enter the international market. Of the total world production of coconut, only 129 million fresh nuts enter the export market, which is just around 0.21% of the total world production of coconuts in copra equivalent terms. Just five countries, namely Srilanka, Dominican republic, Malaysia, Thailand, and Mexico in the order of importance, accounts for 70% of the total export of fresh coconut. In the Dominican republic the export of fresh nuts accounts for about 4% of the total production and in Malaysia, it accounts for about 5% of the total production.

In the rest of the coconut producing countries, export of fresh nuts accounts for less than 1% of the respective domestic production of coconuts. In all, exports of fresh nuts is not a major part of the trade.

Export of copra and coconut oil

While coconuts are produced in about 87 countries of the world and

the nuts are converted into copra in about 50 countries, the number of countries actively involved in exports of copra or coconut oil in the year 2000 is around twenty. The total export (after accounting for re exports) of copra and coconut oil in 2009 is of the order of 3986 thousand mt of copra equivalent accounting for about 30% of the world production of coconut in copra equivalent. The major exporters are from Indonesia (37.89%), Philippines (53.42%) and Papua New Guinea (4.65%). All the eight countries account for 99% of the total world exports.

Export of copra meal:

Few coconut producing countries export copra meal. Just five countries namely Indonesia, Philippines, Papua new guinea, Germany and Netherlands accounts for almost entire quantity of the total export of copra meal of 1089 thousand mt in 2009. Among the five, Indonesia (38%) and Philippines (49%) account for 87% of the total export of copra meal. The other three countries account for around 2% each.

Exports of desiccated coconut

Like the export of copra and coconut oil, the export of desiccated coconut is confined to few coconut producing countries. The total world export of desiccated coconut of 325194 mt in 2009 (which is different from the total estimated consumption) originated in just ten countries. Philippines is the largest exporter accounting for about 37% of the world export, followed by Indonesia (33%) and Srilanka (14%). Malaysia, Ivory Coast and

Table-6:Distribution (%) of world consumption of desiccated coconut by countries 2005-2009

| Country | 2005 | 2006 | 2007 | 2008 | 2009 | |
|---------------------------|--------|--------|--------|--------|--------|--|
| Europe | 38.4 | 46.13 | 40.52 | 42.38 | 42.9 | |
| Germany | 7.22 | 7.66 | 7.25 | 6.56 | 5.12 | |
| Netherlands | 6.52 | 8.19 | 6.09 | 1.68 | 5.19 | |
| USA | 20.12 | 16.32 | 19.10 | 16.73 | 17.49 | |
| Australia | 4.65 | 3.84 | 4.83 | 5.0 | 4.39 | |
| Subtotal | 76.91 | 82.14 | 77.79 | 72.35 | 75.04 | |
| Total consumption (000mt) | 167602 | 236156 | 186004 | 179670 | 201815 | |

Guatemala account for another 15% of the world export of desiccated coconut.

Major exporters of coconut and coconut products

Whereas coconut is widely grown in globe the export market of coconut and coconut products is highly concentrated with less than half a dozen exporters accounting for over 80% of the total quantity traded in most cases. In the case of export of fresh nuts, five countries; Srilanka, Dominican Republic, Malaysia, Thailand and Mexico accounts for 70% of the traded quantity. As regards coconut oil, copra and copra meal, Indonesia, Philippines and Papua New Guinea accounts for over 90% of the total quantity traded. In case of desiccated coconut, powder along with Indonesia and Philippines Srilanka is also a major exporter. Among the three groups of products, copra, coconut oil and copra meal is the main commodity traded with the other two groups being almost insignificant. With such high concentration of the supply any major fluctuations in production in any one of the major country producing could affect the price of coconut and coconut products.

India is the third major coconut producing country after Indonesia and Philippines. India's share in world area and production of coconut has increased during 2000. However, India's productionconsumption balance is something different from other major coconut producing countries as it consumes almost all of its domestic production. India's share in consumption of coconut oil and copra meals has increased over the years. Fresh nuts hardly enter international market and as far as export of copra and coconut, oil is concerned. India does not seem to be an important player. Exploration of the relationship between production and price of coconut reveals that world production and world price show hardly any relationship. Indonesian production and world price also show no relationship. But Philippines production of coconut and world price of coconut show a strong inverse relationship. In addition, there is a strong positive relationship between Indian price and world price of coconut. Compared to Indonesia and Philippines India's share in the international market is only minimal.

*Technical Officer, CDB, Kochi

Indo German Carbons Ltd.

(IGCL) is a leading international manufacturer and supplier of all kinds of coconut shell based activated carbon products and solutions, utilizing the latest technologies to provide a comprehensive range of carbon products for all applications. Located in Cochin, the company exploits the advantages of its abundant availability of raw material and the state-of-the-art equipments and technology to produce steam activated carbon from coconut shell. Incorporated in the year 1995, the first phase of the plant was commissioned in 1998. This was then the first and the largest world class activated carbon plant in India. Driven forward by the ambition to meet the challenges and requirements of customers today, the company underwent rapid expansion and modification. Now after enhancing the capacity by three times in a time span of five years, IGCL stands well ahead.

For further information contact: Indo German Carbons Limited, 57/3 Old Mosque Rd, Edayar IDA, Binanipuram, Kerala 683 502, India, Phone: +91 (484) 255 8105, Fax: +91 (484) 255 8202, E-mail: info@igcl.com, Web: www.igcl.com

Pure Tropic

A partnership firm established in 2010, manufactures and markets packed tender coconut water in 200 ml tetrapacks under the brand name Tendo. Tendo is 100% natural coconut water with no additives. The water from the tender coconuts which are seven months old is extracted, UHT processed and packed in Tetrapak.

The manufacturing unit is situated near Pollachi. Pure tropic started export in 2011. The major



Success Stories - Export

Nikasu Frozen Foods Intl.

countries to which Tendo is exported is USA and Australia.

For more information contact: Pure Tropic, 283, Mangalam Road, Karuvam Palayam, Tirupur - 641604, Tamilnadu, India., Web: www.tendococonutwater.com

KLF Nirmal Industries (P) Ltd.

Mr. K.L. Francis, a doyen and well known figure in the coconut oil industry of Kerala with over five decades' experience set up a coconut oil mill in Irinjalakuda under a Partnership Firm viz. KLF Oil Industries (KLF) in the year 1992 (now known as KLF Nirmal Industries (P) Ltd.). maintaining strict quality control measures right from procurement of fine quality copra, extraction of oil and packing the same in a pollution free atmosphere, KLF was able to establish its foothold in the industry under the brand Name, "KLF NIRMAL".

KLF's product are having good demand in the export market purely because of its finest quality achieved through stringent quality control measures such as procurement of finest quality copra, extraction and packaging of oil in a clean and pollution free environment.

Nikasıı Frozen Foods International was established in the 1999 in Kochi for manufacturing and exporting ready to eat vegetarian products such as Idly, Dosa, Vada and all other range of South Indian products; Samosa, Spring rolls, Kachori, Stuffed paratha etc, of North Indian ranges and roots such as Tapioka, Yum, Coconut & Vegetables, Drum sticks, Ladies Finger etc.etc. It is promoted by a lady entrepreneur Mrs Subhadra K Pillai.

The company is using abundant quantity of coconuts for exports as "frozen shredded coconut". In addition Nikasu is also using coconut for its production of various products. The company is exporting products to USA, UK, Australia, Holland, Canada etc. The shredded coconuts are packed in 400gm pouches and frozen. NIKASU is setting this product under the brand name 'NIKASU'.

NIKASU total export turnover is close to Rs. 100 million.

For more details contact: Nikasu Frozen Foods International, 23, Cochin Special Economic Zone, Kakkanad Cochin 37, Ph: 0484 65 44446/ 2413167, Fax: 0484 2413152.

November

Monthly operations in the coconut gardens

Andaman & Nicobar Islands:

Treat stem bleeding affected palms if any. After removing the affected tissues on the stem, apply 5 per cent calixin on the wound. When it dries apply warm coal tar. Application of 5 per cent calixin (5 ml in 100 ml water) at quarterly intervals by root feeding thrice a year during June, October and January will prevent further spread of lesions. Apply 5 kg neem cake per palm per year along with the second dose of fertilizers to the affected palms. Regulate field moisture by providing drainage during rains and irrigating the palms during summer. Remove ungerminated and dead sprouts from the nursery.

Andhra Pradesh: In low lying areas, plant one year old seedlings in the main field. If there is attack of black headed caterpillar, spray young seedlings with 0.2 per cent dichlorvos/0.05 per endosulphan/0.05 per cent phosalone on the lower side of the leaves. On older palms, release specific parasites according to the stage of the pest. Inject the red palm weevil affected palms 0.1 per cent endosulfan or one per cent carbaryl. When the pest entry is through the trunk put Aluminum phosphide tablets @ 1-2 tablets per tree in the holes and plug with cement or plaster and allow to set. Isolate Ganoderma wilt affected palms from healthy ones by digging trenches of 30 cm width and one

metre depth, 2 metres away from the diseased palms. Treat the palms with 5 per cent calixin (5 ml in 100 ml water) at quarterly intervals by root feeding for one year. Grow leguminous crops in the garden.

Apply neemcake @ 5kg/ palm/ year. Apply the second dose of fertilizers i.e. 750 g urea, 1300 g single superphosphate and 1300 g muriate of potash per adult palm, if not applied in October.

Assam: If Ganoderma disease is noticed remove the badly affected palms and dig isolation trenches of 30 cm width and 1m depth, two metres away from the diseased palm. Treat the palms with 5 per cent calixin (5 ml in 100 ml water) at quarterly intervals by root feeding and apply 5 kg neem cake per palm. Treat the crown choke affected palms by the application of 50g borax per palm at half yearly interval.

Bihar / Madhya Pradesh/ Chhattisgarh: Keep the garden free of weeds. Remove the soil from the collar region of the newly planted seedlings. Apply the first dose of fertilizers. In order to protect the seedlings from winter effect, provide shade. Search for the attack of termites. If found, clean the termite galleries from the affected portion and apply 0.05 per cent chlorpyriphos twice at 20-25 days interval. Irrigate the garden. Cultivate vegetables as intercrops. Karnataka: Plough the garden and keep nursery free of weeds. Start irrigation if dry spell prevails. Apply the 2nd dose of fertilizers if not applied during October. Crown cleaning may be taken up if not done in earlier months. Bordeaux mixture may be sprayed if not applied last month.

Kerala/Lakshadweep: Manure the young seedlings. Start the post monsoon prophylactic spraying of the palms. Discard the seedlings in the nursery which exhibit poor growth and delayed germination. Provide shade to the nursery. Select mother palms for collection of seednuts. In gardens where vegetables are grown under irrigation, transplant the vegetable seedlings. To control the leaf rot disease in root (wilt) affected areas, pour Hexaconasol (Contaf 500) @ 2 ml per 300 ml water per palm, after cutting and removing the rotten portion of the spindle and the innermost fully opened leaves. Apply 20 gm phorate 10G mixed with 200 gm sand around the base of the spindle. If mite infestation is noticed clean the crowns of the palms and spray neem oil - garlic soap emulsion 2 percent (20 ml neem oil + 20 gm garlic emulsion +5 gm soap in 1 litre water) or azadiractin 1 % (Neemazal) @ 4ml per litre of water or root feed 5 % azadiractin @ 7.5 ml with equal quantity of water.

Maharashtra/Goa/Gujarat: Weed the garden. Clean the

irrigation channels. Spray the palms with one per cent bordeaux mixture.

Orissa: Continue the ploughing in low-lying areas to conserve moisture. Remove weeds and grass and burn them. Transplant seedlings of winter vegetables.

Tamil Nadu/Puducherry: Irrigate the young seedlings. Keep the nursery free of weeds and continue discarding poor seedlings. Select mother palms for subsequent seednut collection. Palms affected with mite infestation may be

applied with neem oil-garlic-soap emulsion 2 per cent, i.e. 20 ml neem oil+5 gm soap in 1 litre of water or azadiractin 1 per cent @ 4 ml per litre of water on the perianth region of buttons and affected nuts. Root feeding 5% azadiractin @ 7.5 ml with equal quantity of water is also effective. Apply 20 gm phorate 10G mixed with 200 gm sand around the base of the spindle against rhinoceros beetle and red palm weevil.

Tripura: Entire garden should be cleaned properly if not done earlier. Newly planted seedlings should be

provided shade to protect them from sun scorching. Mulching should be done with dry leaves and husk around the palms for moisture retention. To avoid attack of white ants, drench the nursery with 0.05 per cent chlorpyriphos twice at 20-25 days interval depending upon the severity of infestation. The affected trunk may be swabbed with the above chemical.

West Bengal: Apply the second dose of fertilisers if not applied during October. Discard seedlings which exhibit poor growth and delayed germination in the nursery.

Major Coconut Producing Countries of APCC

Thailand

The Asian and Pacific Coconut Community (APCC) is an intergovernmental organization organized in 1969 under the aegis of the United Nations of the Economic and Social Commission for Asia and the Pacific (UNESCAP). The APCC has 17 coconut producing member countries accounting for over 90% of world coconut production and exports of coconut products.

The APCC member countries include: Federated States of Micronesia, Fiji, India, Indonesia, Jamaica, Kiribati, Malaysia, Marshall Islands, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Tonga, Vanuatu, and Vietnam. Jamaica is an associate member of the APCC. An introduction on Thailand is given in this issue.

| 1. | Capital | : Bangkok |
|----|----------------------------------|---------------------------|
| 2. | Total Area (Ha) | : 320,696,800 |
| 3. | Population (Million) | : 63.39 |
| 4. | Gross Domestic Production | (Baht Million): 4,369,491 |

5. Currency Unit : Baht
6. Exchange rate to US\$ (Average) : THB 33.30

B. COCONUT INDUSTRY

1. Area Under Coconut (Million Ha) : 0,247

2. Total Coconut Production

2.1. - In Million Nuts Equivalent : 1,186 2.2. - In Copra Equivalent (Million MT): 0.356

3. Estimated Domestic Consumption

3.1 -In Million Nuts Equivalent : 889.5 3.2. -In Copra Equivalent (MT) : 0.107

4. Export Volume (MT)

4.1 -Coconut (in 100 nuts) : 4,145 4.2. -Copra : N/A 4.3. -Coconut Oil : 48,312 4.4. -Copra Meal : 1,054 4.5 -Desiccated Coconut : 288

4.7 - Fibre and Fibre Products : 229,873 sqm 46,224 MT

: 8,806

4.8 -Coconut Sugar : 1,322 5. Total Export Value (Baht \$ '000) : 3,110,100

6. Percentage Contribution to National

4.6 -Activated Carbon

Export Earnings (%) : 0.07

Overwhelming response for Friends of Coconut Tree

The Friends of Coconut Tree training programme of Coconut Development Board to address the dearth of coconut climbers is receiving an overwhelming response. More than 1250 persons including ladies have successfully completed the training conducted at 21 centers in 11 districts across Kerala.



A view of the stall in Venad Fest

The trainees of the second batch of the FoCT `training conducted by the Board held at YMCA, Kollam took part in the Venad Fest, held at Kollam from 20th to 30th October 2011. The stall in the Food Court attracted a large crowd. The team is happy and that they could sell the tender coconut harvested by themselves @ Rs.20 – 25 per nut. The team could sell on an average 200-250 tender coconuts daily. The team also received many queries for palm climbing and other plant protection operations.

The Board is targeting to give free training to 5000 FoCTs during 2011-12. Those who are interested to take part in the training programme may contact Shri. Sreekumar Poduval, Processing Engineer (9895816291) or Smt. Mini Mathew, Publicity Officer (9447665105) or forward an application form along with address and phone number to Chairman, Coconut Development Board, Kochi-11.

Product India 2011

Coconut Development Board (CDB), State Centre, Hyderabad participated in Product India 2011 exhibition-cum-Buyer-Seller Meet held at Sri Seshasai Kalyana Vedika, Bandar Road, Vijayawada from 2nd October 2011 to 4th October 2011. The event was

The objective of the exhibition was to motivate the people especially women to entrepreneurship.

Shri. Lagadapati Rajagopal, MP, Vijayawada inaugurated the exhibition and the CDB stall. Smt.

Board. A Buyer-Seller Meet was conducted on 3rd October 2011. Board's stall showcased different coconut based food & beverage products, handicrafts made up of wood, shell, husk etc.

Aahar 2011

Coconut Development Board, Office, Regional Chennai participated in Aahar international food exhibition held at Chennai trade centre from 25th to 27th August 2011. Shri. Ramanadan, Secretary, Food and Consumer Protection, Government of Tamil Nadu inaugurated the exhibition. Board displayed coconut food products and coconut wood and shell based handicraft items. M/s. Jupiter Wood Arts, Kerala and M/s. Sri Ram Coconut Products Dindigul had their sales cum display counters in the Board's stall.



Shri Lagadapati Rajagopal, Hon'ble Member of Parliament, Vijayawada inaugurating the CDB Stall.

organized by Association of Lady Entrepreneurs of Andhra Pradesh (ALEAP), Hyderabad. Aruna Kumari Galla, Minister for Mines & Geology, Govt. of Andhra Pradesh visited the CDB stall and appreciated the activities of the

'Ente Thengu' inaugurated

'Ente Thengu', is a sponsored training programme of the Coconut Development Board organised in association with the SEED (Student Empowerment for Environmental Development) programme of Mathrubhumi daily to create awareness among the students on coconut tree and its various products. Board is providing



Shri Eldhose Kunnappily, President, District Panchayat Ernakulam inaugurating the training programme. Dr. T.I. Mathewkutty, Dy. Director, CDB, Dr. K. Muralidharan, Director, CDB and Dr. Remany Gopalakrishnan, Dy. Director, CDB are seen.

coconut seedlings to all the schools which are participating under this project. The first training for the teachers on planting and maintenance of coconut was conducted at the DSP Farm of the Board on 29th September 2011. Handicraft training as well as exhibition of coconut products will be conducted as part of the training. Shri. Eldhose Kunnapally, President, Ernakulam District Panchayath inaugurated the programme and Dr. K Muralidharan, Director, Coconut Development Board presided over. Dr. T. I. Mathewkutty, Dr. Remany Gopalakrishnan Deputy Directors and Shri. Sardar Singh Choyal, Assistant Director CDB spoke on the occasion.

COWE Trade Carnival 2011

Coconut Development Board, State Centre, Hyderabad participated in the 5th COWE Trade Carnival 2011 held at People's Plaza, Necklace Road, Hyderabad organized by Confederation of Women Entrepreneurs (COWE), Hyderabad from 13th to 15th October 2011. Smt.J. Geetha Reddy, Minister for Major



Dr.Hannah, Leader of Entrepreneurship, University of East London with Shri K.R. Kuttikrishnan, Deputy Director, CDB, Hyderabad.

Industries, Sugar, Commerce and Export Promotion, Government of Andhra Pradesh inaugurated the Carnival. Dr.Hannah, Leader of Entrepreneurship, University of East London, UK was the special guest. She inaugurated the Board's stall. The objective of the Carnival was to help and build a women force that is economically empowered and valued citizens of the nation. Board's pavilion showcased different coconut products, bye-products and handicrafts. Various value added coconut products, handicrafts made of coconut wood, husk & shell and publications of the Board were displayed in the stall.

Registration of CPSs in progress

Coconut Development Board is in the process of registering 1000 CPSs in 2011-12. 114 CPS are already registered and the registration is in progress in Kasargodu, Kannur, Kozikode, Malapuram, Palakkad and Thrissur districts in Kerala.

Market Review September 2011

Highlights

- The price of milling copra, ball copra and coconut oil expressed a downward trend at all the major markets during the month under report.
- ♦ The international price of coconut oil expressed a downward trend during the month under report. The domestic price of coconut oil at Kochi market was about 46 percent higher than that of the international price.

COCONUT OIL

The price of coconut oil quoted at all the major marketing centres in the country expressed a downward trend during the month under review. The weekly average prices at Kochi market varied between Rs.9033 and Rs.8538 per quintal. The monthly average price of Rs.8823 per quintal was about 8 percent lower than the price in August 2011 and was higher by about 36 percent when compared with the price in September 2010.

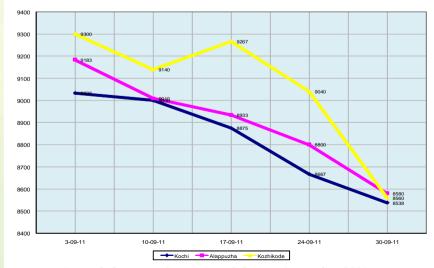
The price of coconut oil at Alappuzha market also moved in tune with the price behavior at Kochi market. The weekly average prices ranged from Rs.9183 to Rs.8580 per quintal.

The weekly average prices of coconut oil at Kozhikode market, varied between Rs.9300 and

Rs.8560 per quintal. The monthly average price of Rs.9061 per quintal was about 6 percent lower than the price in August 2011 and about 33 percent higher than that of the corresponding month last year.

The monthly average price of coconut oil at Kochi market projected by the First Commodities Exchange of India Ltd. for the month of September 2011, during June '11, July 2011 and August 2011 were Rs.9343, Rs.8690 and Rs.9106 respectively, while the average spot price ruled at Kochi was Rs.8823 per quintal.

The Futures Prices quoted for the next two months of October, and November during the current month by the First Commodities Exchange of India were at Rs.8642 Rs.8719 respectively



Price behaviour of coconut oil during September 2011

MILLING COPRA

The weekly average prices of FAO copra at Kochi market ranged from Rs.5983 to Rs.5713 per quintal. The monthly average price of Rs.5854 per quintal was about 7 percent lower than that of the previous month and about 34 percent higher than that of the corresponding month last year. The weekly average prices of Rasi copra at Alappuzha market varied between Rs.6100 and Rs.5840 per quintal. The monthly average price of Rs.5838 for Office Pass copra at Kozhikode market was lower by about 7 percent when compared with the price in August 2011 and higher by about 31 percent when compared with the price in September 2010.

The weekly average prices of milling copra at Ambajipeta market in Andhra Predesh ranged from Rs.4833 to Rs.5300 per quintal.

EDIBLE COPRA

The weekly average prices of Rajapur copra at Kozhikode market varied between Rs.7833 and Rs.8275 per quintal. The monthly average price of Rs.8126 per quintal was marginally higher than that of the previous month and about 51 percent higher than that of the corresponding month last year.

The weekly average prices of ball copra at Kozhikode market varied between Rs.7233 and Rs.7608 per quintal.

The weekly prices of ball copra at APMC market Tiptur, in Karnataka varied between 6849 and 6661 per quintal. The monthly average price of Rs.6755 per quintal in August 2011 slid to Rs.6736 in September 2011.

The weekly average prices of ball copra at Bangalore market ranged from Rs.6900 to Rs.6200 per quintal. The weekly average

price of ball copra at Arsikere APMC market, varied between Rs.6500 and 6675 per quintal.

DRY COCONUT

The monthly average price of Rs.8114 per thousand nuts for dry coconut at Kozhikode market was about 4 percent higher than that of the previous month and about 95 percent higher than that of the corresponding month last year.

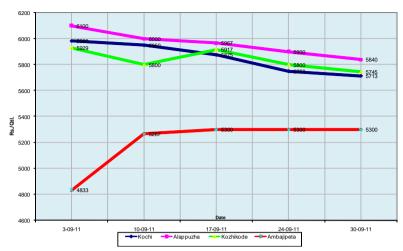
COCONUT

The monthly average price of Rs.8960 per thousand nuts for dehusked coconut at Nedumangad market was marginally lower than that of the previous month and also that of the corresponding month last year.

The monthly average price of partially dehusked coconut at Arsikere APMC market in September 2011 declined to Rs.6838 per thousand nuts from Rs.7143 in August 2011.

The weekly average prices of partially dehusked coconut at Bangalore APMC market ranged from Rs.6000 to Rs.6700 per thousand nuts.

The monthly average price of partially dehusked coconut Grade-1 quality at Mangalore APMC market in September 2011 improved to Rs.10336 from



Price behaviour of milling copra - September 2011

Rs.9894 in August 2011. The weekly average prices ranged from Rs.10567 to Rs.10100 per thousand nuts.

INTERNATIONAL PRICE

The monthly average price of US \$1317 per MT for coconut oil in Europe (C.I.F. Rotterdam) for the month of September 2011 was lower by about 14 percent when compared with the price in previous month and marginally higher compared to that of the corresponding month last year. The monthly average price of US\$ 890 per MT for copra was about 4 percent higher than that of the previous month and about 5 percent

higher than that of the corresponding month last year. The domestic price of US\$1929 for coconut oil at Kochi market was about 46 percent higher than that of the international price.

The domestic price of coconut oil during the month of September, in Philippines was US\$1300 per MT and in Indonesia; the price was US\$1146 per MT. The international price of Palm oil, Palm kernel oil and Soybean oil were US\$1100, US\$1410 and US\$1361 per MT respectively, while the price of coconut oil in international market was US\$1317 per MT and the domestic price in India was US\$1929 per MT.

Market Price

| | | Coconut Oil | | | Milling Copra | | | Edible | Ball Copra | | | | Dry | Coconut | Partia | lly deh | usked | |
|-----|---------|-------------|---------|--------|---------------|--------|--------|------------|------------|--------|--------|-------|-------|-----------------|--------|---------|-------|--------|
| | | | | | | | | | Copra | | | | | coconut | | coconut | | |
| | | | | | | | I | Rs. / Qtl. | | | | | | Rs. / 1000 nuts | | | | |
| | Date | Kochi | Alappu- | Kozhi- | Kochi | Alappu | Kozhi- | Karkala | Kozhi- | Kozhi- | Tiptur | Bang- | Arsi- | Kozhi- | Nedum- | Arsi- | Bang- | Mang- |
| | | | zha | kode | (FAQ) | zha | kode | | kode | kode | | lore | kere | kode | angad | kere | lore | alore |
| | | | | | | (Rasi | | | | | | | | | | | | (Grade |
| | | | | | | Copra) | | | | | | | | | | | | -1) |
| | 3-9-11 | 9033 | 9183 | 9300 | 5983 | 6100 | 5929 | 4833 | 7833 | 7233 | 6849 | 6900 | 6500 | 7933 | 9000 | 6333 | 6000 | 10567 |
| | 10-9-11 | 9000 | 9010 | 9140 | 5950 | 6000 | 5800 | 5267 | 8100 | 7340 | 6761 | 6900 | 6500 | 8520 | 9000 | 6750 | 6500 | 10417 |
| | 17-9-11 | 8875 | 8933 | 9267 | 5875 | 5967 | 5917 | 5300 | 8275 | 7608 | 6661 | 6200 | 6633 | 8617 | 9000 | 7167 | 6500 | 10492 |
| | 24-9-11 | 8667 | 8800 | 9040 | 5750 | 5900 | 5800 | 5300 | 8270 | 7600 | 6706 | 6800 | 6675 | 7820 | 9000 | 6800 | 6700 | 10104 |
| | 30-9-11 | 8538 | 8580 | 8560 | 5713 | 5840 | 5745 | 5300 | 8150 | 7440 | 6704 | 6800 | 6540 | 7680 | 8800 | 7140 | 6000 | 10100 |
| | Average | 8823 | 8901 | 9061 | 5854 | 5961 | 5838 | 5200 | 8126 | 7444 | 6736 | 6720 | 6570 | 8114 | 8960 | 6838 | 6340 | 10336 |
| - 1 | | | | | | | ı | 1 | | 1 | | | l | 1 | 1 | | | 1 |

Source: Kochi: Cochin Oil Merchants Association and Chamber of Commerce, Kochi - 2, Kozhikode: The Mathrubhumi daily Alapuzha: The Malayala Manorama daily, Arsikere: APMC, Arsikere

Price quoted for office pass copra at Kozhikode and Rasi copra at Alappuzha markets. NT: No transaction

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