

Proceedings of



09-11 Feb 2017

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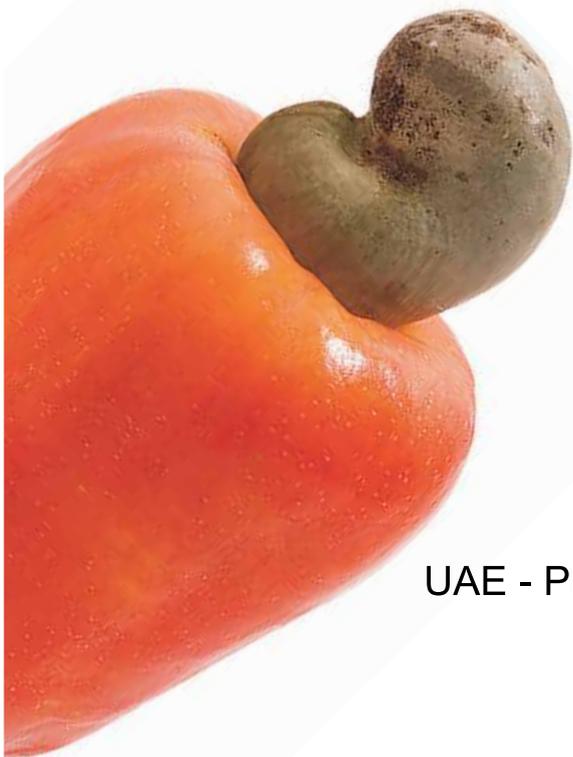
1 - 3 FEB 2018, MACAU

MACAU

The word 'MACAU' is written in large, white, serif capital letters across the bottom of the image. Each letter is filled with a different color: 'M' is red, 'A' is orange, 'C' is blue, 'A' is green, and 'U' is yellow. The background is a nighttime photograph of the Venetian Macao, showing the illuminated facade of the hotel and casino buildings, including the Campanile tower, reflected in the water.



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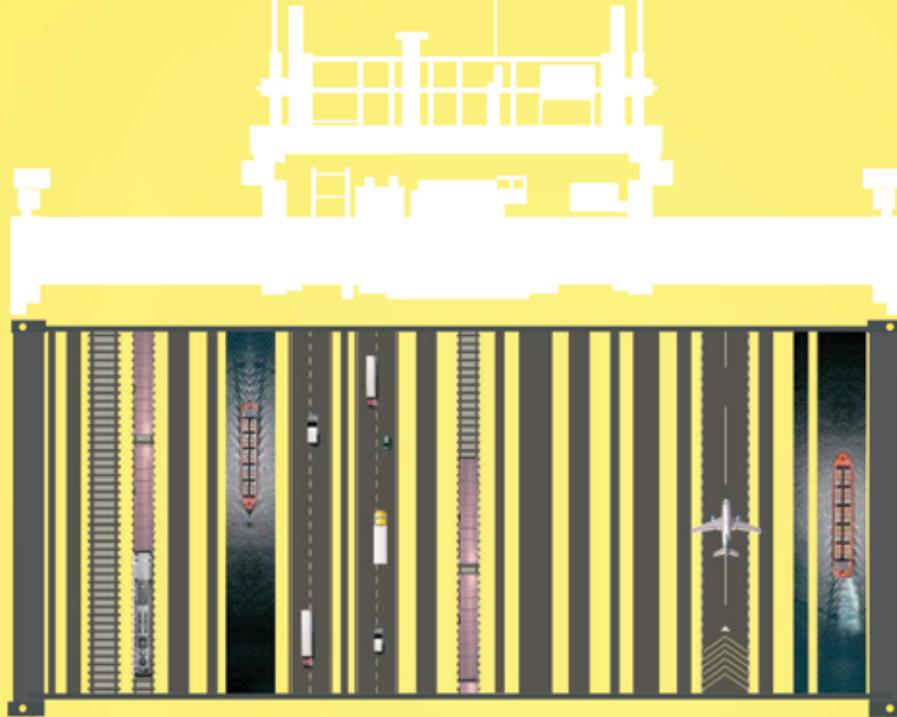
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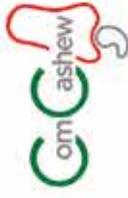
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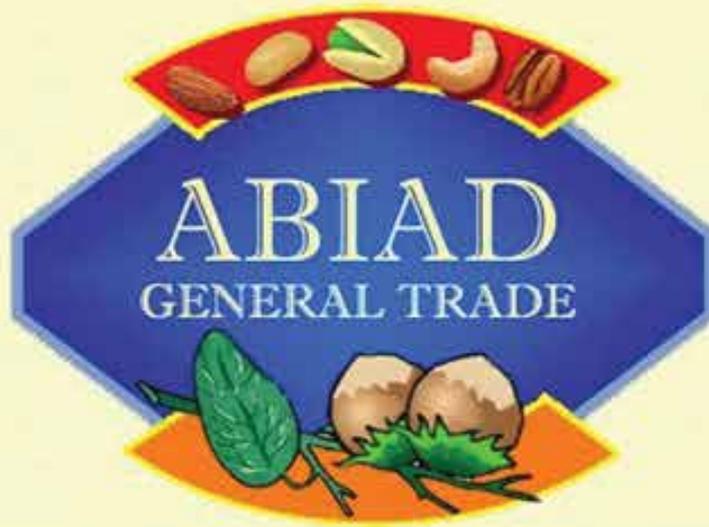
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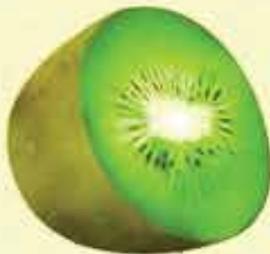
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Technical Committee - WCC 2017

Special Invitee to
WCC 2017 Committee



Mr Amit Khirbat
Senior Vice President, Edible Nuts
Olam International Ltd



Mr G Srivatsava
President
CashewInfo.com



Ms Rita Weidinger
Executive Director
ComCashew



Mr Hari Nair
President
Western India Cashew



Mr Nguyen Duc Thanh
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Global Cashew Sector Lead
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Mr Olusegun Awolowo
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Mr Krishnan Nair
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Ms Vidya Kamath
Bola Cashew



Mr Evan
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Mrs Ferdjani DALADA
Chief Executive
FMA Industry, Cote d'Ivoire



Mr Stefano Massari
Managing Director
Oltremare



Mr Tola Faseru
President
National Cashew Association of Nigeria

Speakers



Ms Shiru Mwangi
Regional Topic Head -
Agriculture Debt Investments
responsAbility



Mr Karim Berthe
Commercial Director &
Technical Adviser to the DG, CCA



Mr Seshu Kumar
Head Merchandising
Big Basket



Mr Shakti Pal
Global Cashew Sector Lead
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Prof Peter Masawe
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Mr Rajiv Kumar
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Business Development
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Mr Dang Van Tuyen
Mekong Technology



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President
OCPA



Mr Alex Tran
Trade Promotion Director
VINACAS



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The Gambia



Mr Cao Thuc Uy
Cao Phat



Mr Sasisekar Krishnamurthy
CEO and co-founder
nanoPix



Ms Fanja Ravoavy
Senior Operation Officer
Cote d'Ivoire, IFC



Ms Mlle Achta Cherif
Caro-Nut, Cote d'Ivoire

PROGRAM SCHEDULE

Day - 1, Thursday February 9, 2017	
11:00 -17:00	Registration at Grand ballroom Foyer (Level 4)
12:30 -14:00	Lunch at Waterfront Ballroom (Level 2)
14:00 -15:00	Inaugural Ceremony Ms Amreeta ENG , Group Director, IE Singapore Mr P Sundaran , Chairman, Cashew Export Promotion Council of India Mr Alex Tran , Trade Promotion Director, VINACAS Mr Karim Berthe , Commercial Director & Technical Adviser to the DG, CCA Mr Mahesh Patel , Executive Chairman, ETG Group Mr Srivatsava Ganapathy , President, Cashewinfo.com Mr Olusegun Awolowo , CEO, Nigerian Export Promotion Council
15:00 -16:00	RCN Markets in 2017: Crop status and outlook Moderator: Mr Krishnan Nair , MD, KGN Group Mr Amrith Kurien , ComAfrique Ltd, The Gambia Mr Suraj Rao , Contoller and Company Director, ETG - Cote d'Ivoire Mr Tola Faseru , President, National Cashew Association of Nigeria Mr Rajiv Kumar , Founder, Radson Exports Mr Cao Thuc Uy , Cao Phat
16:00 -17:00	Changes Sweeping Global RCN Markets and Dealing with them Moderator: Mr Shaktipal , Global Cashew Sector Lead, TechnoServe Dr R K Bhooedes , Vice- Chairman, CEPCI Mr Karim Berthe , Commercial Director & Technical Adviser to the DG, CCA Mr William Awudja , BPS, Cote d'Ivoire Prof Peter Masawe , Lead Scientist, Naliendele Agricultural Research Institute, Tanzania Dr Gustavo Saavedra Pinto , Head - R&D, Tropical Agro Industry, Embrapa
17:00 -18:00	RCN Processing in Africa- Opportunities and Challenges Moderator: Mr Jim Fitzpatrick , Business Development Consultant and Mentor Ingredient Sourcing Solutions Mr Vasudev Barkur , Executive Director, ETG Group Ms Johanna Adotevi , Commercial Director, Cajou des Savanes Mr J C Reddy , Technical Head, Vink Corporation DMCC Ms Shiru Mwangi , Regional Topic Head- Agricultural Debt Investments, responsAbility
Day - 2, Friday February 10, 2017	
09:30 -10:30	Innovation / Technology Trend in Cashew Processing Focus: Post Peeling Technologies Moderator: Mr Hari Nair , President, Western India Cashew Mr Evan , Sales Manager, Hefei Meiya Optoelectronic Technology Mr Bruce , Sales Manager, Hefei Taihe Optoelectronic Technology Mr Stefano Massari , MD, Oltremare Mr A Barathy , Partner, GI Technologies Mr Sasisekar Krishnamurthy , CEO and Co-founder, nanoPix
10:30 -11:30	Changes in Global Kernel Markets and Dealing with them Moderator: Ms Mary Adzanyo , Director Private Sector Development, ComCashew Mr Seshu Kumar , Head-Merchandising, Big Basket Mr Bob Bauer , President, Association of Food Industries, USA Mr Somnath Chatterjee , Head Procurement and Logistics, ITC Foods

PROGRAM SCHEDULE

11:30 -12:00	Networking break
12:00 -13:00	Women Ground-breakers in Cashew Business Moderator: Ms Rita Weidinger, Executive Director, ComCashew Mlle Achta Cherif, Caro-Nut, Cote d'Ivoire Madam Ferdjani, CEO, FMA Industry, Cote d'Ivoire Madam Minata Kone, Director General, SOTRIA, Burkina Faso Ms Vidya Kamath, Bola Cashew
13:00 -14:30	Networking Lunch at Waterfront Ballroom (Level 2)
15:00 - 16:00	Financing the Cashew Value Chain Moderator: Mr Rahul Kamath, Partner, Bola Surendra Kamath & Sons Mr Vipul Sardana, Senior Director, Strategy & Transformation, Maersk Group Ms Suhasini Singh, Head - Agriculture Debt Investments, Asia Pacific, responsAbility Ms Fanja Ravoavy, Senior Operation Officer, Cote d'Ivoire, IFC Mr Sumit Aggarwal, Head - Product Sales, Standard Chartered Bank
16:00 - 17:00	Cashew Kernel Market Outlook Moderator: Mr Pankaj Sampat, MD, Samsons Traders Mr Ranjit Wallia, CEO, CHI Commodities Handlers Inc Mr Vu Thai Son, General Director, Long Son Joint Stock Company Mr Rohit Bajaj, Director, Fairways Trading Company
Day - 3, Saturday February 11, 2017	
09:30 -10:15	Country Forum - India Moderator: Mr Walter D'Souza, Chairman, Fernandes Brothers Mr Rajendra Sabat, President, Odisha Cashew Processors Association Mr Kalbavi Prakash Rao, Director, Kalbavi Industries Dr. D L Maheswar, Vice-Chancellor, University of Horticultural Sciences
10:15 -11:00	Country Forum - Vietnam Moderator: Mr Ashok Narayanan, Director, Orion Commodities Mr Alex Tran, Trade Promotion Director, VINACAS Mr Vu Thai Son, General Director, Long Son Joint Stock Company Mr Dang Van Tuyen, Mekong Technology
11:00 -11:45	Africa Investment Forum Moderator: Mr Jim Fitzpatrick, Business Development Consultant and Mentor Ingredient Sourcing Solutions Mr Olusegun Awolowo, CEO, Nigerian Export Promotion Council Mr Deepak Kacher, CEO, Vink Corporation DMCC Mr Jauad Bruno, General Director, Investment Promotion Agency, Guinea Bissau Mr Karim Berthe, Commercial Director & Technical Adviser to the DG, CCA
12:15 - 13:00	Round-table on Vision 2025 for Global Cashew Sector

Inaugural Session of WCC 2017, Singapore

Welcome to The world's biggest B-B convention on cashews "World Cashew Convention 2017" consisting of over 530 delegates from 35 countries, at the most beautiful, tropical city state of Singapore, it's this place which has showed people how to celebrate the bounties of nature and turn into a precious assets. World Cashew Convention is brought to you by, 'The Foretell Business Solutions Private limited', a company which is committed not only to spread the right updated information to you about the cashew industry but also are trying to be the facilitators, for people across the cashew value chain to connect and forge ahead together for the betterment of the cashew industry



(From left to right)- **Mr G Srivatsava**, President, Foretell Business Solutions Pvt. Ltd.,

Mr P Sundaran, Chairman, Cashew Export Promotion Council of India, **Ms Amreta ENG**

Group Director, IE Singapore, **Mr Karim Berthe**, Commercial Director & Technical Adviser to the DG, CCA

Mr Olusegun Awolowo CEO, Nigerian Export Promotion Council, **Mr Mahesh Patel**, Executive Chairman, ETG group
and **Mr Alex Tran**, Trade Promotion Director, VINACAS

Welcome Address by Mr G Srivatsava, President, Foretell Business Solutions



Distinguished dignitaries on the dais, Ms. Amreeta ENG, Group Director, IE Singapore, Mr. P Sundaran, Chairman, Cashew Export Promotion Council of India, Mr Alex Tran, Director- Trade Promotion -Vinacas, Mr. Mahesh Patel, Executive Chairman, ETG, Mr. Karim Berthe, Commercial Director, Cotton and Cashewnut Council (CCA), Cote d'Ivoire, Mr. Olusegun Awolowo, Chief Executive Officer, Nigerian Export Promotion Council, expert speakers and panelists from all over the world, representatives from government and government sponsored organisations,

special invitees, delegates from over 35 countries, ladies and gentlemen, Cashewinfo welcomes you all to the 3rd edition of the World Cashew Convention 2017 in the splendid country, Singapore.

We have amidst us over 530 delegates from 35 countries representing more than 320 companies across the entire cashew value chain. This is a testimony of your commitment and your enthusiasm to grow the vibrant cashew sector stronger and better.



When we contemplated moving the conference to a new place, we sent enquiries to several potential places. We were truly delighted by the response and enthusiasm shown by the tourism department of Singapore. Equally, the level of interest and commitment shown by IE Singapore, their reach out programmes to support the conference was truly commendable. Singapore is a AAA rated country and the financial centre of cashew business. We are very happy to be here and equally, we are we happy to have Ms. Amreeta ENG, Group Director, IE Singapore amidst us at the inaugural ceremony. Madam, we welcome you wholeheartedly and look forward to IE Singapore's support for many years to come.

India is the largest processor of cashews in the world. India is a very vibrant market for cashew products built painstakingly by the Industry stakeholders. We are very happy to have the chairman of Cashew Export Promotion Council of India, Mr. P Sundaran, with us as a part of the inaugural function. Sir, we welcome you and look forward to your address.

Vietnam is the largest exporter of cashew kernels and has embarked upon several initiatives in furthering quality and food safety aspects. Vinacas is the voice of Vietnam cashew industry. We are happy to have Mr. Alex Tran, Director Trade Promotion, Vinacas, leading the entire delegation from Vietnam. Sir, I welcome you to the 3rd edition.

ETG has been our 'Title Sponsor' since the inception. We are extremely fortunate to have amidst with us Mr. Mahesh Patel, Executive Chairman, ETG today. Sir, I recall Mr. Jayesh Patel's message at the first edition of WCC 2015. Then, he urged the industry to work towards reducing the overall risk in cashew business to invite investments into the sector. It is still most relevant. I am sure most of us present here are eagerly awaiting your address today, sir. I welcome you sir.

Mr. Olusegun Awolowo has been driving the transformational agenda in Nigeria as the CEO of the Nigerian Export Promotion Council. Cashew is one of the top priorities of Nigeria- be it export of raw nuts, expanding acreage or processing the raw seeds to kernel. We are happy to have Mr. Awolowo with in this evening. A warm welcome to you Sir.

Dr. Adama Coulibaly, Director General, CCA is unable to join us due to sudden exigencies. Mr. Karim Berthe, Commercial Director, CCA would read out Dr. Coulibaly's message.

Several recommendations emerged from the 2nd edition of World Cashew Convention in 2016. We reached out to all the stakeholders and shared these recommendations. I am glad to share with you that several stakeholders have started executing some of the recommendations. Noteworthy among them are initiatives to restrict moisture in RCN to 8% by Nigeria, "Clean Cashew" initiatives and effort to standardise RCN specifications by Vietnam and so on. These demonstrate the relevance of WCC in not only bringing out solutions to industry challenges but also taking back the resolve to implement these solutions. I thank the stakeholders for that.

2016 has been a remarkable year for cashews, a year which we saw disruptive changes in policies, practices and processes in the cashew business. There is a dire need today more than ever before to accept change as given and prepare to '**Embrace Change**'. The Technical Advisory Committee members have rightly proposed "Embracing Change" as the theme of the conference.

Like every year, we have devoted day-1 for RCN, day-2 for Cashew kernels and technology and day-3 for country forum and setting future agenda. Moreover, we have tried to bring in three special sessions in the 3rd edition of the conference. One, "**Financing the Cashew Value Chain**", as Singapore is the regional financial centre and

the financial nerve centre for raw cashew trade. We have amidst us more than 20 bankers and financiers here today. We thought it would be appropriate to devote a special session on financing the value chain. Like-wise, there are remarkable women amongst us who have strived hard and made their presence felt through their perseverance. To commemorate their success and to understand their challenges and constraints, we have devoted a special session on **“Women Ground-breakers in Cashew Business”**. We have expanded on the country Forum to include India and Vietnam with Africa to understand the aspirations and goals of each of these giants. I am sure you would appreciate the motives behind them and participate in full in all these sessions.

We have also set an ambitious goal of developing a vision for Global Cashew Sector with the presence and participation of the gathering here. With the help of Technical Advisory Committee, we intend to set up a ten-member working group representing different countries and stakeholders along the value chain to articulate and present a workable goal for the sector. I solicit all your cooperation.

A gathering of this size is not possible with out the support of all the sponsors, partners and supporting bodies. I thank each one of them for supporting us and making the conference relevant. We have put in efforts to provide simultaneous translation of the sessions in French and Vietnamese with the help of technology. Hope it helps bridge the language divide and grow the industry.

We have tried to provide ample time for networking during the course of the next three days starting with cocktails tonight, Gala Dinner tomorrow and networking breaks. There are more than 24 exhibitors present here to educate you on new products and services. Do take time to visit the exhibition stalls and benefit from them.

Every year, we put-in efforts to make the conference business-enabling for you. We also make it a point to

reach out to the stakeholders year-round, support regional meetings and get together and take every opportunity to promote cashew and contribute in a small way to the development of the industry. We hope the 3rd edition would also be rich and rewarding for each one of you. Our staff is around to help you all through. Feel free to reach out to the help desk anytime. With these words, I welcome you all to the 3rd edition. Best wishes and good luck.



Mr. Tukaram Prabhu
Secretary, KCMA

We have been participating since the beginning of first year. We see it’s been continuously growing and the sessions being conducted here are very informative. For us, it’s a place, where we can meet all our concerned people in the whole cashew value chain, it’s been helpful in that way and over the period it’s been very helpful for the whole industry. I feel, the timing has been right, as the new season is about to begin. We have this WCC, which in turn provides us the feedback and trends about the season. We hope the same thing continues in the future.

Keynote Address by Ms Amreeta ENG Group Director, IE Singapore



I extend my warm welcome to the guests, dignitaries, international exhibitors, delegates from around the world and am delighted as Singapore has been chosen as the destination of 3rd edition of World Cashew Convention 2017. IE Singapore is a government agency that partners Singapore Agency to go global and promotes international trade. Today Singapore is a leading hub in Asia for global commodities. Despite the challenging situations in other commodities around the world, the cashew industry has remained relatively resilient and provides opportunities for companies to tap on, with its popularity among tree

nuts and growing health benefits on consuming. Cashew industry is expected to remain strong moving forward. The theme of the convention “Embracing Change” aptly describes growth of Singapore from a small fishing village to the global trading hub which she is today. Singapore economy over last five decades has gone through a lot of transformations from the export-led industrialisation in 1960s, emergence of higher value-added manufacturing in 1970s and 1980s to the growing emphasis on the service industry as a key driver of growth in recent years.

Key attributes which enable effective commodities trading and value chain for cashew value chain in Asia as a neutral trading hub.

- Network of companies in Singapore continues to expand (80% of world’s largest commodity traders are located in Singapore and they generate about USD 1 trillion in combined annual turnover in 2015)
- Singapore extends an extensive service to support your trading activities from financing to logistics, to legal activities, and has established itself as a premium financing sector with more than 500 financing institutions. These provide finances to around one-third of the Asia’s Financial trade, significant part of RCN is financed out of Singapore.
- We have been recognised Best Airport, Best Seaport and second busiest seaport in the world. Connectivity facilitates movement of goods and people and enables companies to tap on opportunities in a cost-efficient manner.
- On the legal front, Singapore is known as the top five most preferred locations in the world and the first in Asia for Arbitrations.
- We are well-known for our global talent pool. In fact, in this area in order to support the growth of global trading industry, IE Singapore has embarked on certain initiatives to grow talents for the sector. We work with various institutes of higher learning such as Singapore Management University and other universities to prepare students for a career on International trading. More recently along with Singapore Management University, the International Chamber of Commerce Academy and the Singapore Workforce Agency, we also launched a trading program for mid-career professionals seeking new career opportunities in the global trading sector. These various factors have boosted Singapore as a leading trade hub. Moving forward, we are eager to expand the cashew trading Community in Singapore alongside with the World Cashew Convention as a global platform for cashew industry, the world cashew convention brings together

key players providing opportunities for effective business negotiations and networking. We welcome more of such initiatives by the cashew industry as we are very committed to work with you to support the industry for growth. Once again thank you for inviting me to be here and have a pleasant conference.



Mr Olusegun Awolowo, CEO Nigerian Export Promotion Council

My expectation is to build up and grow better than last year. We have brought more private sector business in and we are looking to engage

with them and address to their partners with more B-B interactions and particularly we are looking in to encourage more investments into processing in Nigeria and there are already a lot of interest among investors.

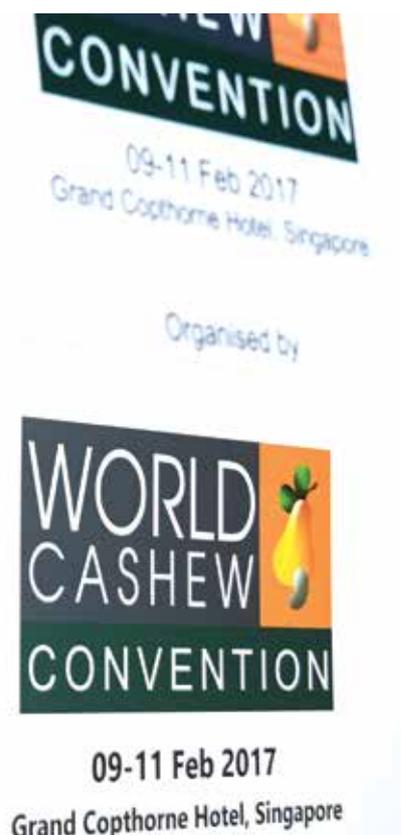


Mr Kalbavi Prakash Rao, Director, Kalbavi Industries

I’m really thrilled to see the kind of participation from across the world. We have good buyers, sellers and manufacturers from around the world. Networking is

fantastic. The location is good and the way it’s been organized, I must compliment Cashewinfo for an excellent conference. I see a great future for this WCC to grow much bigger and make its mark. I must congratulate the entire team for the efforts made so far, to make this happen.

Address by Mr P Sundaran, Chairman Cashew Export Promotion Council of India



Today, I take this opportunity to extend my wishes of New Year to everyone present. It's my pleasure to meet you all today at the inauguration of the third edition of the World Cashew Convention held in Singapore. I am also delighted that this convention represents a good cross section of the World Cashew Industry with producers, exporters, processors, buyers, logistics and other service providers being present. As we all know India was the first country to develop cashew as a commercial crop and introduced cashew kernels to the global markets. Since the last two decades, many other countries have also started processing and exporting these products. However, India continues to be the world's largest producer, processor

and consumer of cashews. Indian cashew industry has strived to be in tune with the buyers requirements. It is capable of supplying any kind of cashew kernels of any quantity, anytime and anywhere in the world.

As for the latest figures available, India has exported around 97,000 metric tonnes of cashew kernel during 2015-16. Our production of RCN 2015-16 is estimated at 700,000 metric tonnes. We are not self-sufficient as the industry requirement is more than double the production, which is around 1,600,000 metric tonnes per year. This huge requirement of RCN is met by imports mainly from African countries. As per the reports available, India is

the largest importer of RCN in the world 960,000 metric tons imported during 2015-16. We need an opt strategy to improve our production and productivity.

For the sake of the Indian Cashew sector, CEPCI has developed a roadmap to attain two million metric tonnes of RCN by 2025 and thus has submitted this plan to Government of India. We are also planning to supplement the shortfall of RCN requirements by augmenting Indian production by adopting proper area expansions, replanting senile trees with hybrid varieties and pre-harvest techniques. As we all know, the growth rate of cashew consumption is higher than that of the production of RCN. The need of the hour is to promote the production of RCN worldwide. CEPCI has formulated a roadmap to promote the world production of RCN by 2025. Considering the rich experience and expertise, CEPCI is willing to provide all possible support to other producing countries in order to develop and improve the overall production of raw cashew nuts.

CEPCI is an organisation established by the Government of India, to promote export of cashew and allied products from India. It has been very active and acting as a friend, philosopher and guide to the Indian Cashew Industry and as a link between Indian producers and the global markets. CEPCI is committed to ensure quality of kernels exported out of India. It has its own laboratory and technical division at Kollam, Kerala-India, established in the year 1997. We are glad to inform you that CEPCI lab has upgraded its service to undertake research projects, market research activities, and related programmes besides providing analytical services and now has been renamed as CEPCI Laboratory and Research Institute. We have added another feather for our lab by way of recognition of FSSAI. Our lab is now equipped with the most advanced analytical equipments and state-of-art facilities in accordance with the statutory and regulatory requirements ensuring safety and wholesome food for human consumption. Today, this lab is of international repute renders analytical and

consultative services not only to the cashew Industry but also to the entire food processing industry in India and abroad.

The international economic scenario continues to be unpredictable. The kernel price in the international market has been rather stagnant though we have seen a steep increase in the price of raw nuts. We are hoping that, with time we shall see a revival of the kernel market soon. For the benefit of all concerned in the value chain, there should be an effective pricing mechanism to ensure a parity between RCN prices and kernel prices. On the positive side, the growing awareness on the health and nutrition benefits of consuming cashews would definitely boost consumption. We, at the CEPCI, completed a study on the effects of consuming cashews by the diabetic patients. The results of this research are encouraging and we hope that, the findings would help more and more people to enjoy the goodness of cashews and thereby increase consumption.

CEPCI has assisted around 500 cashew processing units over the last five years for modernisation and automation of processing and packaging. This has helped the Indian Cashew Industry to meet changing quality and food safety concerns of Global food industry. By the year 2025, India is aiming to achieve self-sufficiency in the RCN production. **I take this opportunity to congratulate the commendable efforts made by Foretell Business Solutions Private Limited for organising this international conference. Their work for the development of the World Cashew sector is laudable and the interest it has generated among the stake holders is evident from the increasing number of participants' year-after-year. We look forward to attending some interesting sessions with many relevant issues being discussed, ideas being evolved, problems being solved. I am assured that the delegates of this World Cashew Convention will be immensely benefited. I wish the Conference All Success. Thank You and Best Wishes.**

Address by Mr Karim Berthe on behalf of CCA-Director General Dr Adama Coulibaly



To the President of the Organising Committee of the World Cashew Convention 2017, Ladies and Gentlemen, I would like to express my sincere apologies for not being able to honour the 3rd edition of the WCC. A meeting of my Board of Directors and another meeting at the ministerial level, all scheduled at the last minute, are holding me in Abidjan this week. However, I have ensured the participation of my technical advisor in charge of industrial development, Mr Karim Berthe, and my technical assistant, Mr SimplicieGue, to represent the Cotton and Cashew Council in this important convention. Their presence and that of the strong delegation of Ivorian economic operators, reflect the interest of Côte d'Ivoire for this edition of the World Cashew Convention.

I would therefore like to express my regrets to all distinguished guests and other delegates who would have liked to take advantage of this convention to have an exchange with the Cotton and Cashew Council. My representatives will answer all your queries and carry forward the views from Singapore and convey to us.

I would like to take this opportunity to extend my best wishes for the year 2017 to the entire cashew industry and especially to the organisers and all the participants of the WCC 2017. Finally, I wish an excellent convention that meets the expectations of all the participants. Please accept, gentlemen, the expression of my deep regret.

Address by Mr Olusegun Awolowo Chief Executive Officer Nigerian Export Promotion Council



I thank Cashewinfo.com for this very wonderful convention which is the 3rd World Cashew Convention. I think they deserve a huge round of applause for getting all of us together. Let me also extend my best wishes to Ms Amreeta ENG Group Director IE Singapore, for hosting us in beautiful city state and we are always happy to come here and do business. I also extend my greetings for Mr P Sundaran of CEPCI, and also to Dr Adama Coulibaly CCA. It's always a delight to see Mr Patel ETG Group, as they are doing wonderful things in commodities and very soon we

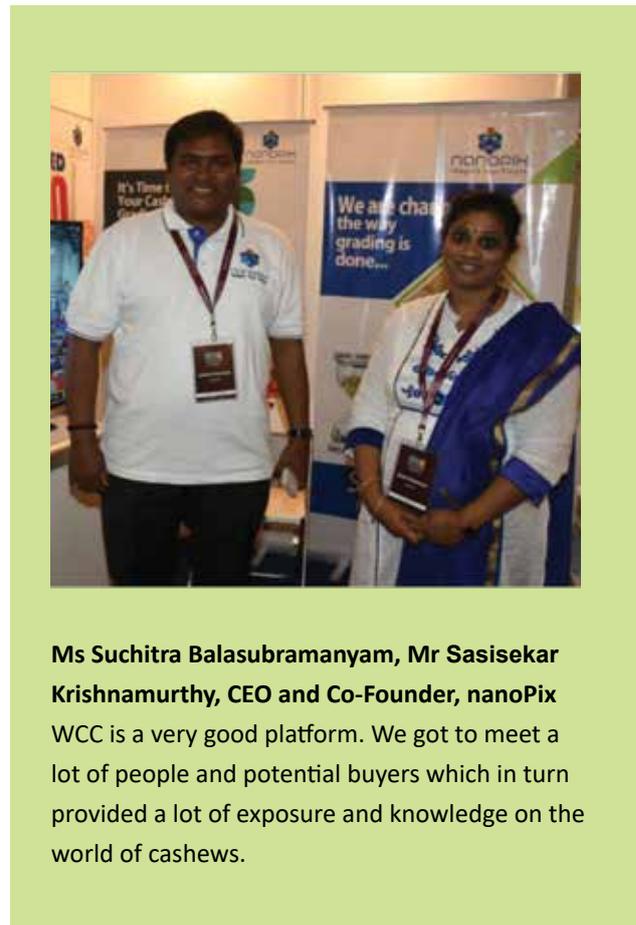
are going to announce a very big partnership with them and the African Development Bank. We look forward to that venture together. As the Nigerian population grows to be the third largest in the world by 2050 according to projections, there we will be along India to challenge cashew, so we look forward to that.

Distinguished ladies and gentlemen, am really pleased to lead the Nigerian delegation to the 3rd World Cashew Convention taking place in Singapore. This is our third

participation in this convention, which brings together all the types of stakeholders from around the globe. It offers us a platform to showcase our products as well as opportunities for investments and most importantly one-on-one interaction with relevant stakeholders. People in the cashew sector who are the part of the previous two cashew editions arrived with better results derived from this level of engagement – new business deals, increased exports, better relations with the foreign partners and also better information on trends in the cashew sector. In this line, we have the presence of the president of National Cashew Association of Nigeria i.e., Mr. Tola Faseru who is driving our productivity in the cashew sector. **Every year since our first participation in WCC, we have witnessed steady year-on-year increase in cashew export.** I hope our delegation this year, which is made up of processors, exporters and investors are looking forward to partner with foreign investors which will have positive outcome.

Cashew is a priority product for Nigerian Export, which is right now critical for our nation's economic diversification. The current federal government of Nigeria acknowledges the importance of this product and its potential of improving economic growth, true job creation along the value chain from farming, production, processing and exportation for foreign exchange earnings. Cashew production in Nigeria cut across all 36 states of Nigeria and federal capital territory. Due to this significant importance, administration is committed to do full implementation of the Nigerian Industrial Revolution plan. It has identified cashew as one of the 13 national strategic export products to replace crude oil. The Nigerian Export Promotional Council has developed a zero-oil plan, which provides an integrated export blue print for the priority products alike in the areas of synergy among the relevant organs of the government as well as the production outputs, infrastructure requirements etc. in order to achieve our export targets and our economic assertions we have consulted a plan to receive endorsement, commitments

and support. The plan aligns with the economic set of plans which are soon to be launched in Nigeria, which is the National Economic Recovery Plan. The federal government of Nigeria is committed to the diversification of the country's economy mainly for the development of non-oil sectors such as agriculture. Being a priority product, the cashew sector will be benefited immensely from the targeted development in that regards ranging from seedlings, technology, finance and other skills. Thereby I join the organisers in welcoming you to the 3rd edition of the world cashew convention. We are looking forward for convention to move into the cashew land itself. Hoping to see this convention in Nigeria very soon. Thank you very much



Ms Suchitra Balasubramanyam, Mr Sasisekar Krishnamurthy, CEO and Co-Founder, nanoPix
WCC is a very good platform. We got to meet a lot of people and potential buyers which in turn provided a lot of exposure and knowledge on the world of cashews.

Special Address by Mr Mahesh Patel Executive Chairman, ETG Group



Distinguished Guests, Ladies and Gentlemen!

I feel greatly honoured to inaugurate the 3rd World Cashew Convention, 2017. I express my gratitude to the Organising committee, Partners, Supporting bodies, Sponsors and Leading Associations for making this event possible to learn and exchange thoughts on Global Cashew Industry on this year's key theme "Embracing Change".

Speaking of change, the use of cashews has evolved over time, and numerous unique consumable and commercial products are made from it, such as the Cashew Shell oil, a

versatile byproduct with many uses including as a varnish and an insecticide.

The most popular cashew consumable is the cashew apple spirit, with many names and adaptations, but the same result...These are just a few uses of this complex commodity.

The main consumption and use of cashews as an edible kernel. We all have it in our Kitchen shelf, but how many of you are aware of the many changes that the humble cashew nut has undergone before becoming edible? Or,

even how far it has travelled to get to our kitchen?

Chances are that the cashew nut you eat is generally processed either in India or in Vietnam, and at present that half of them originate from Africa.

It's true, 50% world cashew comes from Africa. However very little is being processed within the continent due to long standing inherent structural, policy, social, cultural, skills and other issues faced by the Cashew Sector in the various origin countries.

Despite these challenges, raw cashew nut production endures, as they are the livelihood of hundreds and thousands of smallholder farmers, who are below poverty. We know this, as ETG has been present in Africa since 1967 and currently reached nearly up to 12% of the Global Cashew Trade.

We believe that the potential of cashews on the continent, to create sustainable socio-economical processing and value added cashew industries at origin destinations, has yet to be fully harnessed. This will further alleviate poverty for smallholder farmers, by increasing participation in growing cashews, which will in turn enhance rural development through job creation and skill development in particular for women and youth.

The result of centralised processing, grading and packaging in each cashew-origin country will enable industry growth through local employment and reduce wastage, so as to consistently provide the world markets with high value quality products.

In its unique way, ETG has initiated and ensured to achieve this sustainable business model by developing skillsets in Africa through investment, training and knowledge transfer.

We provide smallholder farmers with fair prices, and more importantly, we have already invested in processing

Cashews in African continent itself that process around 10% of our Cashew nuts at our facilities in Tanzania and Mozambique.

We are proud to say that 95% of our employees are women, who are employed for all functions from shelling to supervising and we provide them with everything from sanitation, recreation, nutritional food and clean drinking water to a crèche facility for their children. Our processing facilities also operate in an environment friendly way and have certification from renowned bodies like DNV.

This step has its own challenges due to various factors, both, political and otherwise, but we see it as a necessary evolving step slowly but surely for industry growth.

A strong relationship with small holder farmers will allow you all to continue its work of connecting farmers to the world supply chain, despite facing ongoing challenges of infrastructural and skill shortages, and sensitivities of social, cultural, political norms in each cashew producing countries in Africa. In the end, I would like to close by saying that cashew may test your patience initially, but eventually it is going to be a very fruitful and rewarding industry.

“Talk about Cashew, Think about Vietnam”

Mr Alex Tran, Trade Promotion Director

VINACAS



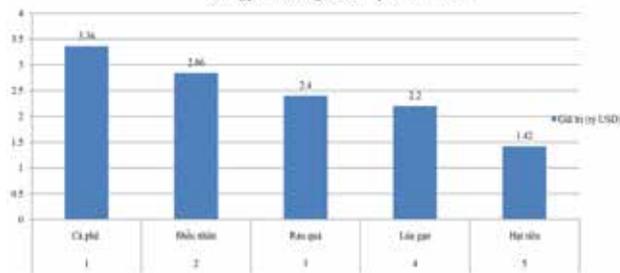
Vietnam Cashew Industry Annual Report 2016

Global Cashew Production 2015/2016

TÊN NƯỚC	TỜN ĐẦU KỲ	SẢN LƯỢNG THU HOẠCH	TỜN CUỐI KỲ
ẤN ĐỘ	nil	172,700	nil
BỜ BIỂN NGÀ	nil	171,100	nil
VIỆT NAM	nil	113,000	nil
GUINEA-BIS-SAU	nil	52,900	nil
TANZANIA	nil	31,100	nil
NIGERIA	nil	34,400	nil
BRAXIN	nil	33,000	nil
BENIN	nil	32,000	nil
CĂMPUCHIA	nil	19,000	nil
INDONESIA	nil	12,000	nil
TÊN NƯỚC	TỜN ĐẦU KỲ	SẢN LƯỢNG THU HOẠCH	TỜN CUỐI KỲ
GHANA	nil	15,300	nil
BURKINA FASO	nil	18,200	nil
MOZAMBIQUE	nil	7,800	nil
SENEGAL	nil	11,800	nil
GAMBIA	nil	2,400	nil
KENYA	nil	1,800	nil
NƯỚC KHÁC	nil	8,300	nil
TỔNG CỘNG	nil	736,800	nil

Vietnam Key Exported Agro-Products - 2016

Kim ngạch XK nông sản chủ lực VN năm 2016



Source: INC/GCC

Cashew Kernel Exports from Vietnam - 1990-2016



Source: VINACAS

Cashew Kernel Exports from Vietnam - 2016

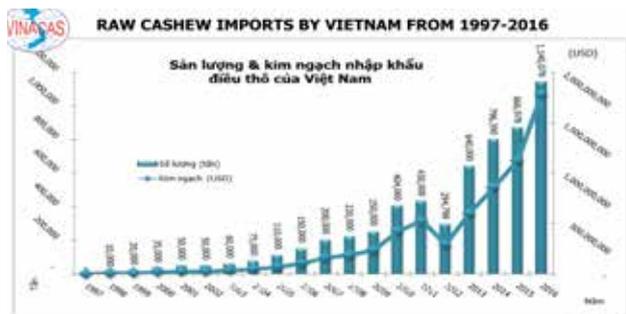
Tháng	Lượng XK (MT)	So cùng kỳ 2015 (%)	Kim ngạch XK (USD)	So cùng kỳ 2015 (%)	Giá XK BQ (USD)	So cùng kỳ 2015 (%)
1	25,040	12.54%	187,402,605	19.78%	7,484	6.43%
2	8,741	-31.05%	64,979,938	-27.62%	7,454	4.97%
3	28,404	38.82%	215,921,213	47.74%	7,602	6.42%
4	30,932	10.07%	236,408,923	20.84%	7,643	9.78%
5	33,930	6.65%	264,742,026	17.68%	7,803	10.33%
6	34,146	8.97%	268,643,767	11.45%	7,867	2.28%
7	32,750	-5.23%	262,201,407	0.72%	8,006	6.28%
8	35,981	24.54%	297,372,043	37.74%	8,265	14.42%
9	32,029	-4.51%	276,407,832	28.58%	8,630	34.65%
10	32,077	-4.14%	284,597,998	27.03%	8,872	21.97%
11	29,468	18.83%	266,324,140	43.74%	9,038	20.97%
12	26,180	-4.15%	240,967,134	19.22%	9,204	24.38%
T. cộng	349,679	6.76%	2,865,968,125	21.61%	8,154	13.39%
K. hoạch XK 16 (*)	350,000	6.86%	2,520,000,000	6.93%	7,200	0.13%
So với K. hoạch	Đạt 99.91 % so với Kế hoạch năm 2016		Đạt 113.73 % so với Kế hoạch năm 2016		Đạt 113.25 % so với Kế hoạch năm 2016	

(*) Kế hoạch XK KĐ năm 2016 của VINACAS

Source: VINACAS

Source: VINACAS

Raw Cashew Imports by Vietnam from 1997-2016



Source: VINACAS

Raw Cashew Imports by Vietnam - 2016

Tháng	Lượng NK (MT)	So cùng kỳ 2015 (%)	Kim ngạch NK (USD)	So cùng kỳ 2015 (%)	Giá NK BQ (USD)	So cùng kỳ 2015 (%)
1	34,005	-9.47%	55,017,773	1.15%	1,618	11.73%
2	20,913	-45.61%	32,943,526	-40.03%	1,575	10.23%
3	116,668	54.84%	181,703,416	88.10%	1,557	21.48%
4	35,334	-23.53%	53,564,510	-8.35%	1,516	19.84%
5	100,931	17.91%	143,771,519	44.02%	1,424	22.17%
6	159,999	0.82%	231,901,012	24.42%	1,449	23.46%
7	165,858	29.93%	246,933,422	59.48%	1,489	22.74%
8	138,812	-1.43%	213,657,386	13.51%	1,539	15.21%
9	94,989	79.77%	148,724,042	103.21%	1,566	13.05%
10	94,736	193.65%	158,345,965	244.99%	1,671	17.46%
11	52,799	80.62%	98,255,120	124.31%	1,861	24.23%
12	125,032	195.66%	221,355,543	228.40%	1,770	11.07%
Tổng cộng	1,140,078	31.50%	1,786,173,233	58.92%	1,586	17.42%
K. hoạch 2016	870,000	0.35%	1,131,000,000	0.63%	1,300	-11.80%
So với K. hoạch	Đạt 131.04 % so với Kế hoạch năm 2016		Đạt 157.93 % so với Kế hoạch năm 2016		Đạt 122.03 % so với Kế hoạch năm 2016	

(*) Kế hoạch XK KĐ năm 2016 của VINACAS

Source: VINACAS



Thank you very much!

Raw Cashew Markets in 2017

Crop Status and Outlook



Moderator: Mr Krishnan G Nair, KGN Group, India, **Panelists:** Mr Amrith Kurien, ComAfrique Ltd, The Gambia
 Mr Suraj Rao, Controller and Company Director, ETG Group – Cote d’Ivoire, Mr Tola Faseru, President,
 National Cashew Association of Nigeria, Mr Rajiv Kumar, Founder, Radson Exports, Mr Cao Thuc Uy, Cao Phat

Initial Comments by the moderator

Crop prospects = Confused, lost, unclear, perplexed, unsure, Disoriented, Bewildered

Crop forecasting three decades ago was simple as the crops were stable, which was a rule of five percent (+/-), but now crop forecasting is very difficult due to the advent of technology and information overload, number of players are more, financing issues, RCN prices, and constant pressure.

Mr AmrithKurein, ComAfrique on ‘SeGaBi’

The SEGABI block is the second biggest origin in Africa, after Cote d’Ivoire. Hence, what may happen or may not happen here is important.

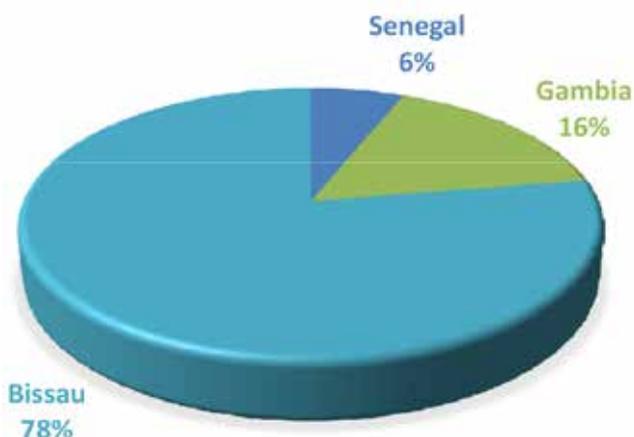
1. Let’s take a quick look at 2016 SEGABI production and exports.
2. You will find that the much believed short crop theory of last year is busted.
3. We did have a healthy crop of about 245,000MT.
4. About 40% or more was exported to Vietnam. India for most part of the season was not in the market.
5. Quality-wise – Very varied. Senegal has nut count varying from 200 to 240. Out turn from 48 to 55.

Country	Production RCN 2016	Export RCN 2016	Production RCN 2015	Export RCN 2015
Senegal	35,000 MT	15,000 MT	35,000 MT	1,000 MT
Gambia	10,000 MT	40,000 MT	10,000 MT	74,000 MT
Bissau	200,000 MT	190,000 MT	200,000 MT	170,000 MT

- In 2015 and in the years before that, we had Senegal exporting actually very little of what it produced.
- Gambia exported about 75,000+tonnes, which meant it exported almost all of the 35,000 tonnes produced in Senegal and about 40,000 tonnes from Bissau through Senegal.
- All this changed last year with the change in political scenarios in Bissau and Senegal.
- Borders were closed between Gambia and Senegal and thus reduced the flow between Senegal and Gambia
- Stricter Border controls and better pricing in Bissau reduced the flow between Bissau and Senegal and consequently to The Gambia.
- Bissau commands a premium of \$100 higher export price over Senegal.
- The Local price in Bissau though is at least \$100 lower locally, vis a Vis what a farmer in Senegal across 100Km gets.
- The difference is due to the export tax structure in place in Bissau, which sets off the advantage of a higher export price.
- Last year for the first time we found that Senegal was unable to match Bissau price because of the existence of a lot more exporters in Bissau than normally and the fact that there was more money pumped into the bush than what was needed. This actually resulted in no cash shortage.
- Also the fact that significant amount of exports happened from the port of Dakar, which is as expensive as Bissau due to the distance and the higher fob costs.

Exports of RCN from the Ports of SEGABI

PORT-WISE RCN EXPORTS



Crystal Ball Gazing - RCN 2017

Crop RCN 2017: Early crop means that the crop will be fair and is expected to have a 10% increase in the SeGaBi crop size for RCN 2017.

Crop timing RCN 2017: Expected to be two weeks early.

Flowering: So far, flowering seems to be good and healthy.

We do have a late Harmattan that comes around the mid/end of March, which normally leaves everyone guessing.

Currency Variation

The SE-Bi is a CFA zone and Gambia though a Non-CFA zone and heavily depends on the cross border business of the neighbouring CFA countries.

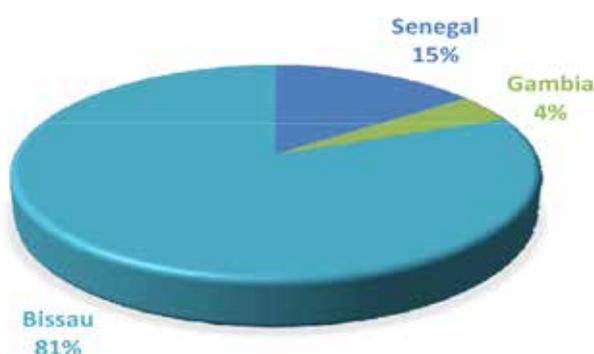
The CFA, as you know is pegged to the Euro. Therefore any weakening/strengthening of Euro affects the local price of the SEGABI farmer.

We have seen currency fluctuations of anything between 3% and 5% in the last trade season during March to September, which is huge, as this is a business of 7% margin at best ...So, a Currency volatility actually means it decides about 50% of your net margins.

Political Situation

Gambia has a new coalition government and hence lots

COUNTRY-WISE RCN PRODUCTION



of changes are expected. An impetus on local processing is there.

Senegal was very much looking at ways and means of controlling the RCN inflow into Gambia. But a friendly Gambian government currently in place may slow this down at least in the short term. In the long run exports are planned through alternate ports apart from Dakar, Senegal.

Bissau – We have a Govt in place that is Untested. We are made to believe that there will be quite of few challenges in operating this origin during this season(2017).

To conclude, the SEGABI Crop of 2017 looks bigger, better and earlier than last year.

Mr Suraj Rao, ETG on RCN crop status and outlook on Burkina Faso, Cote d’Ivoire and Ghana



Weather Forecast - Regional

In West Africa, the rainy season started normally and average rainfalls were normal to slightly above the average in the main cashew production areas from June to September 2016.

In October, rains stopped suddenly in most of the production areas (except Central Cote d’Ivoire) bringing most of the cashew trees to start their production cycle early.

In November and December, some rains happened, but the weather was generally dry; average temperatures were normal.

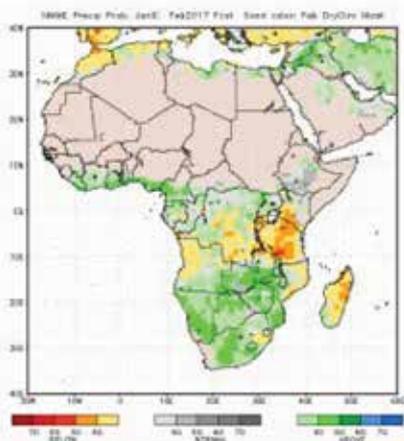
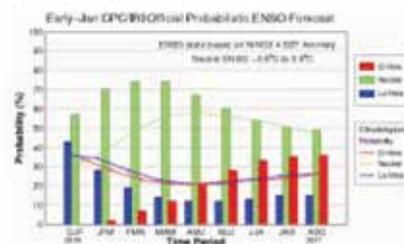
This weather analysis lead us to expect an early Cashew crop early, yield is expected to be normal to good in West Africa.

Weather Forecast – Continental

The global system is expected to transition from La Nina to neutral conditions in February (First Figure) and remains in neutral levels during the first half of 2017. For west Africa the long-term models predict slightly better precipitation to continue over the main cocoa region during February

Long-Term Outlook

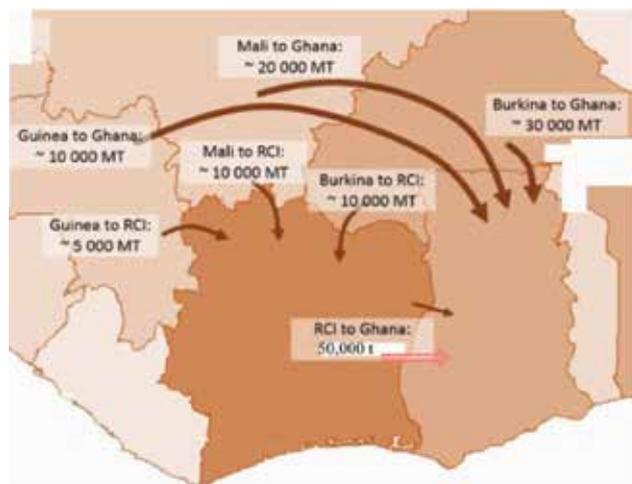
The global climate system is expected to transition from La Nina to neutral conditions in February (first figure) and remain at neutral levels during the first half of 2017. For West Africa the long-term models predict slightly better precipitation to continue over the main cocoa region during February and also March (not shown)



and also March (not shown).

Crop Forecast – B.I.G

Country	2015	2016	2017 **est	Quality - avg
Burkina Faso	75,500	71,000	80,000	45lbs
Cote d'Ivoire	702,510	649,857	725,000	46lbs
Ghana	65,000	85,000	85,000	48lbs



Mr Tola Faseru, President, NCAN, Nigeria
 Welcome to the annual World Cashew Convention, 2017
 themed “Embracing Change”



I bring you greetings from the cashew stakeholders in Nigeria. Incidentally, we flagged off the beginning of our cashew season on Monday 6th February, 2017 and so the season has begun and is in full swing.

RCN Market Outlook

The 2016 season was a challenging season for Nigerian cashew and indeed African cashew also. The flowering started very late because of climate change and the crop size was small compared to our projection. Our total production quantity for 2016 was 175,000mt, just a little over our quantity of 160,000mt for 2015. The gains from proper post-harvest handling activities compensated for the short crop of the year. In 2016, we rolled out the Cashew road map, a four-year plan for cashew development, which was presented to the Honourable Minister of Agriculture and his team. The road map is geared at increasing primary production from 175,000mt to 500,000mt by 2020. This will be achieved by planting 53 million new cashew trees across the country. The private sector has already started implementing the road map, having established commercial cashew plantations across the country. As we speak, not less than 20,000 hectares have been cultivated for cashew.

The government has also joined forces with the private sector as the very first official planting season, which was flagged off in South West Nigeria, which is a major production zone of the country. The road map also focuses on Cashew processing, Cashew marketing and Cashew research and development. Our projected volume for 2017 is about 200,000mt, which is a recovery from the 2016 season. The weather was favourable this season and the crop has begun to leave the farm gates for the port city.

Our estimation is based on the favourable weather, which encouraged fruiting at the right time, the reduction of post-harvest handling losses at the time of harvest and the rehabilitation/regeneration of old cashew trees. Our farmers have been continually sensitised on the need to dry their cashews to 8 percent at the farm gate. We are refusing to compromise on the quality of our cashew nuts. Quality is very important to us and it has become our top

priority. We continue to engage with various shipping companies and other service providers in our quest to reduce the transit time of our cashew between the load port and the destination port and we have achieved considerable success.

Finally, there's a concerted effort in place to totally eliminate the activities of foreign encroachers at the farm gate with NCAN task force fully in place and empowered to enforce the same. This will drastically reduce price distortions at the farm gate and improve quality.

RCN Buyers and Sellers - Rights, Responsibilities and the Route to Better Relations

Mr Rajeev Kumar, Radson Exports, India



The El Dorado for RCN Buyers

The	outturn of	Guinea Bissau
The	count of	Brazil
The	colour of	Benin
The	texture of	Maharashtra
The	uniformity in size of	Indonesia
The	processing ease of	Tanzania
All at the price of	PEANUTS

The El Dorado for RCN Sellers

The	outturn of	Mali
The	count of	Madagascar
The	colour of	Brazil
The	texture of	Mozambique
The	uniformity in size of	Senegal
The	processing ease of	Nigeria
All at the price of	GOLD

Common Issues Raised By Sellers

- Defaults
- Payment delays
- Settlement of claims
- Reciprocity in outturn claims
- Disregard for contract terms
- Quality survey disputes
- Delay in clearing cargo

Common Issues Raised By Buyers

- Defaults
- Shipment delays
- Settlement of claims
- Moisture Content
- Complicated and vague contract terms
- Container packing material (Dry Bags and Kraft Paper)
- Advances

Look from the other's perspective

Quality Survey from a buyer's view point

- A statistical approximation
- Cut test outturn ≠ Processing outturn
- Same outturn yields different values
- Moisture damage is difficult to estimate

Procurement from a seller’s view point

- Heavy financial risk
- Quality
- Falling market ≠ Profits
- Logistical issues

Sanctity of the Contract: “It’s Impossible to unsign a contract, so do all your thinking before you sign”

- Warren Buffet

“We must keep on trying to solve problems, one by one, stage by stage, if not on the basis of confidence and cooperation, at least on that of mutual toleration and self-interest”

-Lester B. Pearson

Vietnam-Cambodia 2017 season forecast

Mr Cao Thuc Uy, Cao Phat, Vietnam



Vietnam’s raw cashew import-2016

1. Quantity, Turnover And Average Price

Average Price of Imported Raw Cashew In 2016: 1566

USD/MT CFR

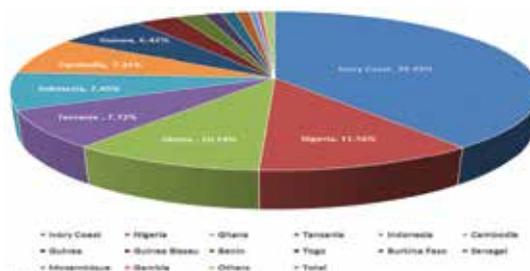
MONTH	IMPORT QUANTITY (Mt)	IMPORT TURNOVER (USD)	AVERAGE IMPORT PRICE (USD/MT)
1	34,005	55,017,773	1,618
2	20,913	32,943,526	1,575
3	116,668	181,703,416	1,557
4	35,334	53,564,510	1,516
5	100,931	143,771,519	1,424
6	159,999	231,901,012	1,449
7	165,858	246,933,422	1,489
8	138,812	213,657,386	1,539
9	94,989	148,724,042	1,566
10	94,736	158,345,965	1,671
11	52,799	98,255,120	1,861
12	125,032	221,355,543	1,770
TOTAL	1,140,077	1,786,173,233	

(Source: VINACAS)

2. Import Market

EXPORT COUNTRY	QUANTITY (MT)	SHARE (%)
Cote d’Ivoire	447,495	39.25
Nigeria	131,806	11.56
Ghana	115,640	10.14
Tanzania	88,003	7.72
Indonesia	84,889	7.45
Cambodia	83,370	7.31
Guinea	73,143	6.42
EXPORT COUNTRY	QUANTITY (MT)	SHARE (%)
Guinea Bissau	35,322	3.10
Benin	22,178	1.95
Togo	13,729	1.20
Burkina Faso	12,900	1.13
Senegal	10,607	0.93
Mozambique	6,207	0.54
Gambia	5,032	0.44
Others	9,756	0.87
Total	1,140,077	100

(Source: VINACAS)



3. TOP IMPORTERS

MONTH	NUMBER OF IMPORTERS	IMPORT QUANTITY (Mt)		TOP TEN IMPORTERS (*VINACAS members)
		Max	Min	
1	80	2,741	16	Olam VN, Minh Huy, CAO PHAT , Tanimex-LA, Lafooco, Thanh Hien, My Le, Hoang Son 1, Phuc An, Duy Duc
2	64	1,754	18	CAO PHAT , Olam VN, Minh Huy, Lafooco, Thanh Thom, Rals VN, Dai An, An Dien, Nam Ha, Tu Hai
3	143	5,000	16	Olam VN, CAO PHAT , Minh Huy, Hung Phu, Hoang Son 1, Thanh Hien, Lafooco, Quang Son, My Le, Tanimex-LA
4	59	3,100	17	Da Kao , Rals VN, Huynh Minh, Olam VN, My Le, Long Duc, Phuc An, Ladco, Nam Ha, Bimico
5	120	9,741	26	Olam VN, Hoang Son 1, Huynh Minh, Da Kao, Tan Hoa, Bimico, Tanimex-LA, Rals VN, CAO PHAT , Ladocashews
6	141	8,030	17	Hoang Son 1, Da Kao, Hunh Minh, Olam VN, Tan Hoa, Tanimex-LA, Thao Nguyen, CAO PHAT , Rals VN, Bimico
7	147	12,143	28	Olam VN, Hoang Son 1, CAO PHAT , Da Kao , Rals VN, Tan Hoa, Kieu Loan, Tanimex-LA, Hoang Ha BP, BIMICO
8	138	13,076	25	Olam VN, Long Son, CAO PHAT , Tan Hoa, Hoang Son 1, Minh Huy, Da Kao, Kieu Loan, Tu Hai, Rals VN
9	122	7,277	0.001	Long Son, Olam VN, Rals VN, Tan Hoa, Tu Hai, Minh Huy, BIMICO, My Le, Phuc An, Valency VN
10	119	12,392	0.006	Long Son, Olam VN, Rals VN, C&N (Tanimex-LA), Tan Hoa, Intimex, Da Kao, Thao Nguyen, CAO PHAT , Thai Gia Son
11	114	3,367	15	My Le, Phu Thuy, Olam VN, Phuc An, Long Son, Hoang Son 1, Duy Duc, Minh Huy, Da Kao, Valency VN
12	120	13,097	0.0035	Tan Hoa, Rals VN, Da Kao, CAO PHAT , C&N (TanimexLA), Bimico, Olam VN, Thai Gia Son, Ladco, Long Son

4. QUALITY

Import Quality Comparison Between 2015 and 2016

EXPORT COUNTRY	OUT TURN (LB/80KGS)		MOISTURE (%)		FOREIGN MATTER (%)	
	2015	2016	2015	2016	2015	2016
COAST IVORY	45 – 49	39 - 48	9 – 10	9 – 12	0.2 – 0.3	0.2 – 0.3
CAMBODIA	49	51	16 (fresh)	16 (fresh)	0.5	0.5
NIGERIA	44 – 50	33 – 48	9 – 10	9 – 12	0.2 – 0.3	0.2 – 0.3
GHANA	45 - 49	45 -49	9 – 10	9 – 10	0.2 – 0.3	0.1 – 0.2
GUINE BISSAU	50 – 54	49 – 53	9 – 10	9 – 11	0.2 – 0.3	0.1 – 0.2
TANZANIA	51 – 54	-	9 – 10	-	0.2 – 0.3	-
INDONESIA	49 - 54	50 - 54	9 – 10.5	9 - 10	0.1 – 0.3	0.1 - 0.2

Source: Vina control



How to control quality more strictly in 2017 season?

1. Moisture Control: Raw cashew must be well dried to get moisture below 10% before stuffing

2.Storage Control: Raw cashew must be stored in good condition from harvest to export

Vietnam-Cambodia 2017 season forecast

Season is likely to be delayed by about one month. But the season is expected to be good in terms of both quality and quantity.

Question and Answers

Mr Prakash Kalbavi: **What steps can we really take in terms of better infrastructure and other necessary steps to reduce moisture content to desirable range, so that cashews which are exported are well-dried and incidence**

of poor quality of RCN can be resolved?

Mr Suraj Rao: Drying is an issue, which rises because of few factors like post-harvest practices as well as trade practices. Farmers are ready to dry, but it's up to other stake holders (Exporters, Traders and Buyers) in the value chain to have some responsibility and own up to the fact that over aggressive buying up of the product will affect the drying procedure. Post-harvest and trade practices impact significantly on the drying dynamics of the crop. Therefore, this year, the Cote d'Ivoire government has taken some very serious measures to ensure that the moisture of the cargo arriving at the port is bare minimum. They have instituted a system, wherein any cargo that comes humid into port is going to get rejected, the delivery note of that particular truck will be seized by the government, the truck as to go back into the bush, get dried and get delivered back to the exporter. There is a large responsibility on part of the ex-

porters, traders, to help and work with their governments hand-in-hand for this enforcement. The farmer is ready to dry as long as we demand. In most of the countries they have open land to dry their produce, so infrastructure is definitely not an issue. Trade practices as well as government enforcement should together be effective in addressing the moisture control issues this year. If buyers are willing to accept moist cargo, sellers will always ship moist cargo. The moment buyers stop accepting moist cargo sellers will be compelled to make sure the cargo and quality is good. Buyer's shouldn't compel the sellers for early delivery as a result of international trade price fluctuations buyers' ship off moist cargoes. Hence this issue can be addressed only when buyers as well as sellers join together and work to obtain 8% moisture RCN at their destination ports.

Why there is no regulatory body for cashews to assist trade of cashews with specific rules and arbitration, which advices the stakeholders and be effective for the smooth flow of the cashew trade as in case of cocoa?

Mr Rajeev Kumar: Vinacas has been working on that front. Unfortunately its unilaterally done by the buyers. If we can get both the buyers and sellers on board, discuss and develop a contract, which is acceptable to both the parties, it might work. But, again the problem arises as there would be certain companies, who might not agree upon this contract. I feel it's something worth trying, it's not been done so far.

In Nigeria the government and cashew associations are working together to prevent foreign buyers to enter the bush. What are the measures you have put in place to ensure the same?

Mr Tola Faseru: Very clearly the level of aggressiveness shown in the cashew trade is unimaginable. Even before the season starts, we can see buyers near the bushes. On this front, NCAN as well the government is working together to prevent the encroachment of the foreign buyers in

the farm gates, which further leads to complete exportation of the goods with the indigenous people left with nothing. I request my buyer friends to kindly stay in the port city. The initiatives we are taking to maintain quality is; the companies that don't follow the order of the government in terms of moisture percentage and quality will be black listed.

Mr Rohit Bajaj: How can we bring in more transparency in RCN crop statistics in trade, in terms of buyers, figures, crop patterns and quality as there is always confusion about the figures when compared to other nuts where in trade is very transparent and clear?

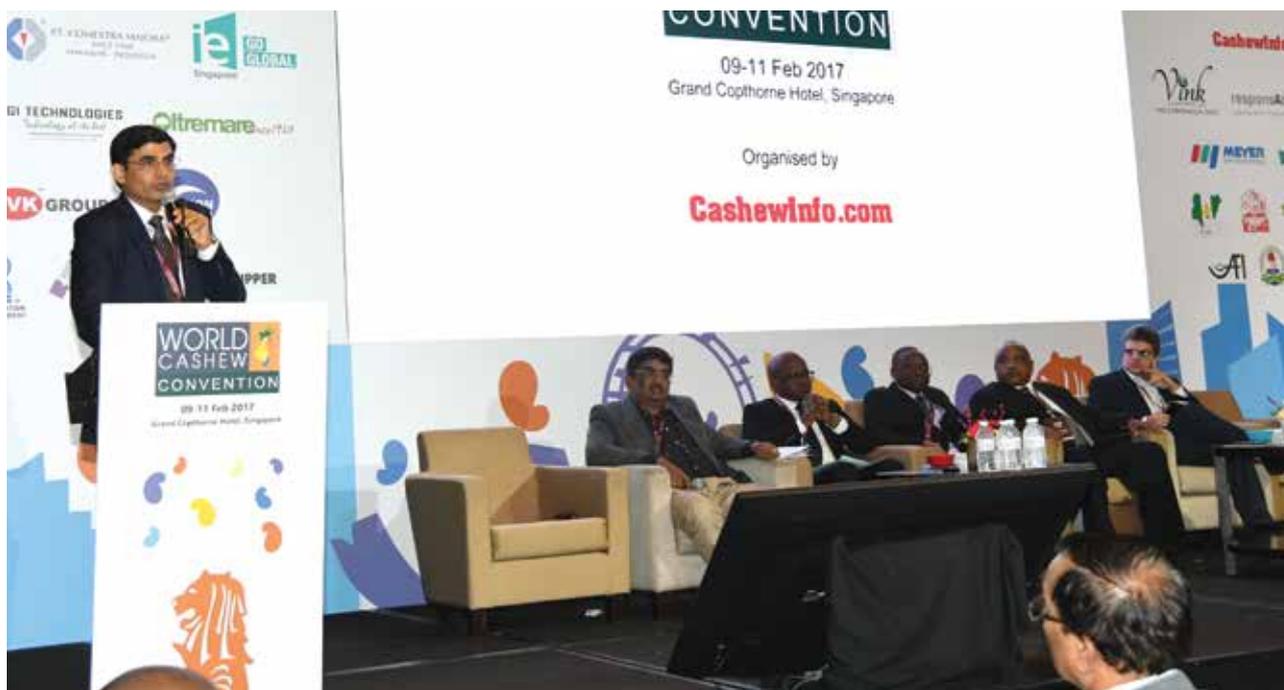
Mr Krishan Nair: In case of almonds, it's mainly grown in California, and few parts of Spain, hence they declare the crop and income statistics. But, in cashews its grown in various countries, in a country like India wherein we recently witnessed demonetisation, we never know what the crop is and lot of it is sold in grey market, in the same way we have only the export figures of Africa. Crop forecasting is a very tricky thing and nobody has ever got it right always, but as the experts here say this year everyone is expecting a very good crop.

■■■

**Mr Seshu Kumar, Head Merchandising
Big Basket**

It's a very good forum, in particular, India is the largest consumer of cashews and presently, where the growing of cashews is still not in line with the demand, a large proportion of its being imported. Overall it's a good convention, which gets the entire stakeholder across the continents.

Changes Sweeping Global RCN Markets and Dealing with them



Moderator: Mr Shakti Pal, Global Cashew Lead, TechnoServe, **Panelists: Dr R K Bhoodes**, Vice- Chairman, CEPCI
Mr Karim Berthe, Commercial Director & Technical Adviser to the DG, CCA , **Mr William Awudja**, BPS, Cote d'Ivoire
Prof Peter Masawe, Lead Scientist, Naliendele Agricultural Research Institute, Tanzania
Dr Gustavo Saavedra Pinto, Head - R&D, Tropical Agro Industry, Embrapa

Mr Shakti Pal: In this session, we are going to discuss about the challenges facing the global RCN markets. I would like to welcome all the participants' and our distinguished guests. In the last few years, RCN witnessed great volatility in the markets and the trends. On the market side there is a big pool, good demand, which is very stable. Markets are growing fast and created a big deal for raw cashew nuts.

After successful reforms in Cote d'Ivoire, almost every African countries and even East Asia, South East Asia have initiatives to grow more cashews and to bring in more pro-

duction. But we all know when we say more production means more trees or additional hectares. The productivity per hectare is far below the average. Moreover, the loss of sectoral reforms impacted heavily on the flows of RCN. Like, after Cote d'Ivoire, Guinea Bissau and Benin are going to announce some more reforms in the next two weeks or so, which is going to impact the trade flows. While Mozambique, Tanzania, Ghana and Nigeria are working on new measures, which will be out in due course.

But all together, the last question that we evolve today is how many additional hectares or focus on trees. Do we

have right trees? We have to think about it. We need to do the right things. Now I would like to invite Dr Gustavo of Embrapa about the best practices and how to get maximum farm productivity per ha going forward.

Ways to increasing farm productivity to 4000 kg RCN/ha Gustavo Saavedra, Embrapa

Superior Genotypes

- Embrapa has 12 clones registered in the Brazilian Ministry of Agriculture
- 4 of these clones are more prominent
- CCP 76 presents great homeostasis, and is present in practically all Brazilian states
- Embrapa 51, CCP 76 and BRS 226 were developed for the cashew industry
- BRS 189 was developed for consumption as fresh fruit or for juice industry, although it presents good nut
- Embrapa 51, CCP 76, BRS 189, BRS 226



Embrapa Cashew Breeding Program

Germplasm Bank

Phase 1

Phenotypic Selection and Cloning: Plant size, RCN yield, and Nut weight (> 7 g) Evaluation at the E.E.F
Dwarf Clones: CCP 06, CCP 09, CCP 76, CCP 1001

Phase 2

Crosses, Progenies Evaluation and Cloning: Plant size, RCN yield, and Nut weight (> 9 g) Evaluation at the E.E.F
Dwarf Clones: Embrapa 50, Embrapa 51

Phase 3

Hybrids and Progenies Competition and Cloning: RCN yield, Diseases tolerance, Drought tolerance and Peduncle characteristics. Evaluation in different environments
Dwarf Clones: BRS 189, BRS 226, BRS 253, BRS 265
Hybrid Dwarf: CommonBRS 275, CommonBRS 275

Phase 4

Construction of Genetic Map, Pre-breeding, Population Breeding, and Use of Quimiometric/Metabolic: RCN yield, Industrial kernel yield (>30%), Diseases tolerance, Drought tolerance and Peduncle characteristics.

Evaluation in wide range of environments

Quimiometric techniques associated with the Genetic Map may accelerate the development of new genotypes resistant to water deficit and with resistance to diseases and pests by identification of molecular fingerprints.

Top Working

- The Top Working technique is fundamental for the renovation of areas with dwarf cashew material and for densification of these, aiming at recovery / increase of productivity.
- The technique shows good results with cashew trees (more than 80 percent of success), but also has limitations.
- Trees of higher age with large trunks presented higher mortality rates;
- Trunk limit for 'Top Working' in trees with perimeters measure up to 1.0 m.

Densification

In the Brazilian older planting (more than 30 years), the spacing is 15 m x 15 m or more Now we are testing i) for small farms at non-irrigated areas with technological inputs 5 m x 5 m and 6 m x 6 m and ii) for Medium Farms located in irrigation Projects (high intensive) 5 m x 2 m and 6 m x 2 m.

Soil Management

- In the rows are formed ridge with 2.5 to 3.0 m wide and 40 cm high to favour drainage, because the soil,

although sandy (> 90 percent sand), is shallow.

- On the ridges are to the irrigation lines
- The remains of the prunings form a layer of mulch to reduce soil temperature and create a microenvironment below tree.
- Between the ridges, the bush is allowed to grow and the control is done with brushcutter.

Pruning

For small farms

Pruning is recommended after the harvest period.

Can be made manually or semi-mechanized with chainsaw.

For medium farms

Pruning occurs after the harvest period, but the use of agricultural implements associated with tractor is recommended.

Pruning

For high intensive farm

All pruning is manual. Pruning is done all year round, with a cost of 1 man for every 1.5 ha.

Formation Pruning

In the formation pruning are left 3-4 branches well distributed. The cup is open in the center, in the shape of a cup.

Production Pruning

The plants are pruned, with a maximum height and diameter of 2.0 m (to facilitate the harvest and the use of cashew apple).

After harvesting the fruits of the terminal panicle, the branches are pruned above the base.

Growth Regulators

For high intensive farm

The use of growth estimulators are required for trees enter in production stage 1,5 year after planting.

In addition to pruning, use growth regulators is necessary to contain the growth of branches in the rainy season and avoid the increasing of number of employees.

Irrigation

- It uses two lines of drippers per row of plants, with drippers of 2 Length / height, spaced of 0.5 m in the line.
- Drip lines are spaced 60 cm to 150 cm apart, depending on the age of the plant.
- The frequency of irrigation is 2 days and applies from 6 to 8 hours by irrigation.
- The daily irrigation depth varies from 4.4 to 5.9 mm /d and the volume per plant varies from 48 to 64 litre/day

Fertilising

- Fertigation is made weekly, applying potassium sulphate, magnesium sulphate, MAP, calcium nitrate, ammonium sulphate and micronutrients.
- For the calculation of fertilizers amount, is necessary to use the nutrient extraction table of the cashew tree and adjust the doses and nutrient sources according to the results of soil and leaf analyses, done every 4 months.
- At the end of each fert irrigation, need apply phosphoric acid to reduce the clogging of the emitters.

Pest and Disease Control

- Brazil presents two species of powdery mildew. The native species poses no problem, as opposed to exotic, which is extremely aggressive. However, the control with sulphocalcica and sulphur is very efficient.
- Anthracnose, resinose, and black mold may be problems in some regions.
- Use of drip contributes significantly to the reduction of diseases
- Whitefly has become the main challenge to culture, but still occurs in very specific regions

Fitossanidade

- Research team looking for:
- Resistent genotypes for deseases and pest
- New molecules for use in desease and pest control
- Understand interaction plant-patogen or plant-insect
- Biological anthagonist
- Biological control methods

Conclusion Remarks

- High productivities of RCN are possible, if

specific environmental conditions may be considered and principles of a modern fruticulture obligatory may be adopted.

- In this case, productivities of 4.000 kg RCN/ha already is a reality, with production period during at least 10 months by year.

Medium and Long Term Challenges for RCN Research For Semi-Arid non-irrigated areas

- 2,000 kg RCN/ha
- 600 kg Kernel / ha

For irrigated and high intensive areas

- 6,000 kg RCN/ha
- 2,000 kg kernel / ha

Mr Shakti Pal: Thank you very much Dr Gustavo. Having right practices, right density, irrigation and best agronomic practices, it is possible to increase RCN productivity up to 4000 to 6000 kg per hectare. African and other nations, which are really taking initiatives to increase production/new planting, should also look at exploiting the inputs mentioned by Mr Gustavo of Embrapa.

Prof Peter A L Masawe - Strategies to Increase Cashew Production and Productivity

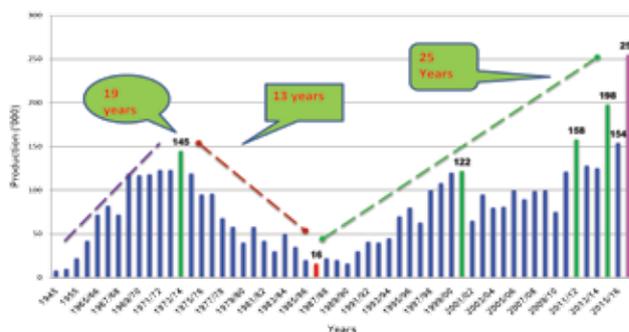
Lead Scientist and Cashew Value Chain Specialist
Naliendele Agricultural Research Institute, Tanzania



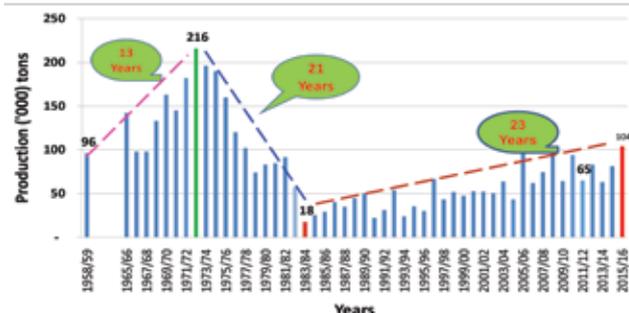
Introduction

- Cashew is an important export crop in many countries
- It grows in few areas in tropical countries
- It is drought tolerant (mainly rain fed)
- Demand for RCN is increasing worldwide with limited supply sources
- RCN prices-increased
- Kernel prices almost doubled in local markets
- Kernels prices internationally! (processors profit margin low)
- Need to increase production and nut quality suitable for mechanisation

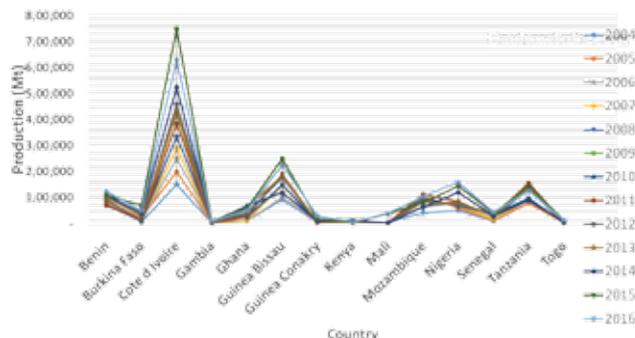
Cashew nut Production in Tanzania 1945-2016 ('000 mt)



Cashewnut Production in Mozambique 1959-2016 ('000 mt)



Cashew Production in Africa (2004-2016)



Why Low production in Africa?

West Africa

- Overcrowding (reduce crop >75%)
- Lack /inadequate of varieties (low productivity)
- Poor agronomic practices

East Africa

- Powdery mildew & Blight diseases (reduce crop >90%)
- Abandoned cashew farms
- Poor agronomic practices
- Inadequate cashew varieties and low adoption rates

Factors affecting productivity

Types of planting materials

- Varieties, clones, local seeds

Good Agricultural Practices

- Control of insect-pest and disease
- Weeding/Herbicide
- Intercropping
- Ploughing
- Pruning
- Thinning and top working (new varieties)
- Gap filling with new varieties

Approach to increase production/productivity

East Africa

- Intensify disease control strategies
- Timing, rate and frequency of pesticide application
- Concentrate on rehabilitation of abandoned farms
- Thinning, top working & new planting of new varieties in place
- Expanding areas under cashew – non- traditional cashew growing areas
- Use new varieties with potential yield 2000-5000kg/ha
- Good nut quality - suitable for new auto-shelling machines
- Intensify training of trainer in Good Agricultural Practices

West Africa

- Upgrading of overcrowded farms by thinning and top working

- Rehabilitation of abandoned and or unproductive farms
- Intensify identification of elite mother trees for multiplication
- Invest in developing cashew varieties

Expanding areas under cashew– non-traditional cashew growing areas

- Use new elite mother trees
- Good nut quality – suitable to new auto-shelling machines

Intensify training of trainers in Good Agricultural Practices

- Formative pruning
- Pest control (no disease of economic importance in West Africa)

Why new cashew varieties

- High yielding (20-40 kg/tree at age of 10 years)
- Short duration of nut picking (max 90 days)
- Big nuts (nut count 100-180)
- Good shape (bold, nut curved or shriveled) –

suitable to auto shelling machines

- High shelling percentage (>25%)
- Low kernel breakage at processing
- Easy peeling of testa (mechanized machines)

Yield of AC4 (Standard cashew variety in Tanzania)

Age (Yrs)	4	5	6	7	8	9	10	11	12	13	14	15
Kg/tree	11	9	27	22	43	37	67	61	61	65	69	50

Yield of AZA 2 (Standard cashew variety in Tanzania)

Age (Yrs)	4	5	6	7	8	9	10	11	12	13	14	15
Kg/tree	11	9	27	22	43	37	67	61	61	65	69	50

Cashew production improvement strategies

Short term strategy

- Intensify training of trainers and farmers-special programme
- Thinning of overcrowded trees, top-working, pruning and inter-cropping
- Undertake intensive disease control

Long Term strategy

- Intensify identification on mother trees (improved planting materials)
- Import varieties from other countries
- Invest in development of new varieties using new selection criteria
- Expand area under production

Conclusion

- African countries can double their cashew production in 5 years, if respective governments decide to invest more in cashew (Cote d'Ivoire scenario)
- The productivity can increase through Good Agricultural Practices in cashew
- Planting cashew in new areas will contribute to future increase in production so that it can address the increasing demand
- Developing and dissemination of new varieties suitable to new processing technology will increase profit margin for processors who will in turn offer high farm gate prices
- Value addition of cashew byproducts (testa, shells, CNSL) will increase the profit margin of processors-who will offer higher farm gate prices that will encourage farmers to plant more cashew
- Cashew remains to be a cash crop that combat global warming (drought tolerant and more importantly carbon sequestration)

Mr Shakti Pal: Thank you very much Dr Masawe. Before, we think about an additional sector; let us make sure that we know what we have. Just by chopping some trees, if you can increase production, then what are you waiting for?

RCN Markets – A Global Perspective

Dr R K Bhodes, Vice-Chairman, CEPCI

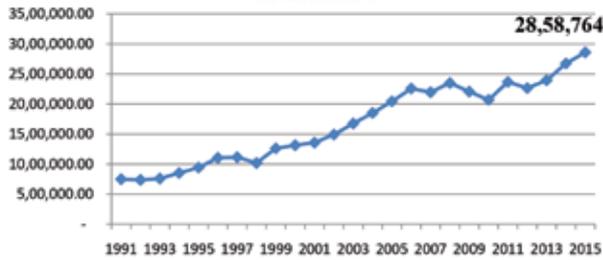
Glimpses of Global RCN trade....

- When cashew trees were introduced from Brazil to the rest of the world, it was meant for preventing soil erosion only

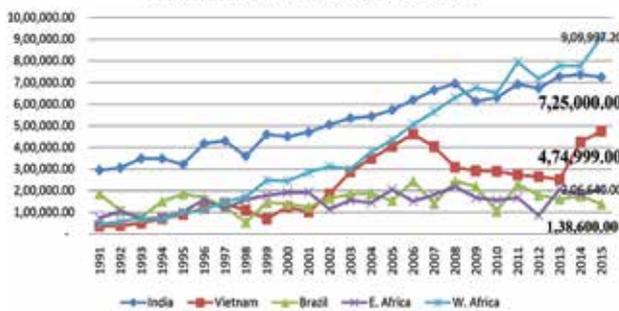


- Raw nut was a waste product just meant for reproduction only
- Later on, 18th century, cashew kernels found a way as a food item and was traded in the local markets in India
- When Cashew kernels found an entry in the international trade, RCN were sourced locally.
- It was India that nurtured cashew as an Industry and it was she who introduced cashew as a commodity in the international trade.
- RCN attained the status of an international commodity in the mid 1960's with shipments made from East Africa (Tanzania) to India.
- RCN trade attained a new outlook after Liberalisation, Privatisation and Globalisation of trade during the 1990's.
- The increased consumption of Cashew Kernels all across the world demanded the supply of more raw nuts for processing that ultimately resulted in processing countries importing bulk quantities of RCN for processing.
- While the processing countries concentrated more in processing, the producing countries concentrated more in production (Theory of Comparative Advantage)
- Mechanisation and automation has brought in a feel of comfort for producing countries to step into processing

World Production of RCN



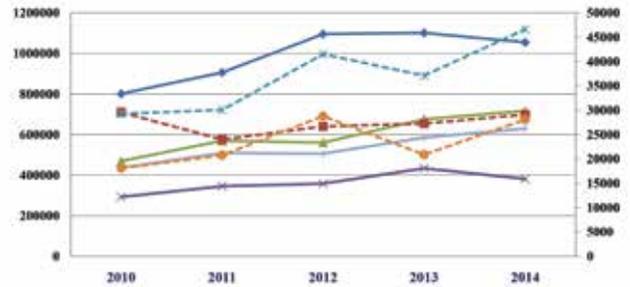
World Production of RCN by regions



Production, Area of Production & Productivity of RCN – A comparison of Growth Rate

Sl.No	Region	Production	Area	Productivity
1	India	4.3	2.79	1.51
2	Vietnam	12.32	4.45	7.87
3	Brazil	2.11	1	1.11
4	East Africa	3.72	2.13	1.59
5	West Africa	13.87	11.07	2.81
6	Others	5.06	5.71	(-)0.65
7	WORLD TOTAL	6.35	4.78	1.57

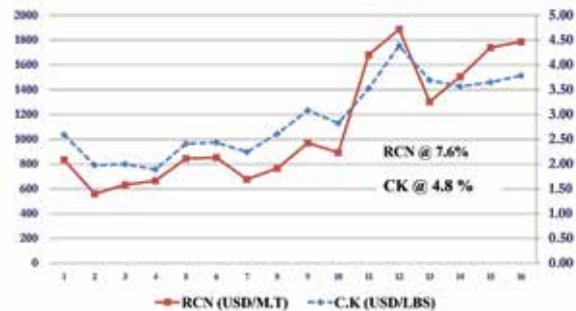
Comparison of Growthrates of Tree Nuts



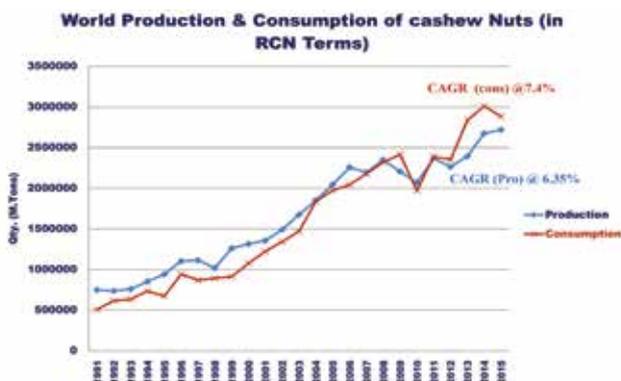
Kernel Price Vs RCN Price

Year	C.K (USD/LBS)	RCN (US/MT)	Year	C.K (USD/LBS)	RCN (USD/MT)
2000	2.59	834	2008	3.08	970
2001	1.98	559	2009	2.82	892
2002	2	631	2010	3.52	1682
2003	1.89	665	2011	4.39	1886
2004	2.41	843	2012	3.69	1302
2005	2.43	851	2013	3.56	1504
2006	2.24	676	2014	3.65	1740
2007	2.61	765	2015	3.78	1786

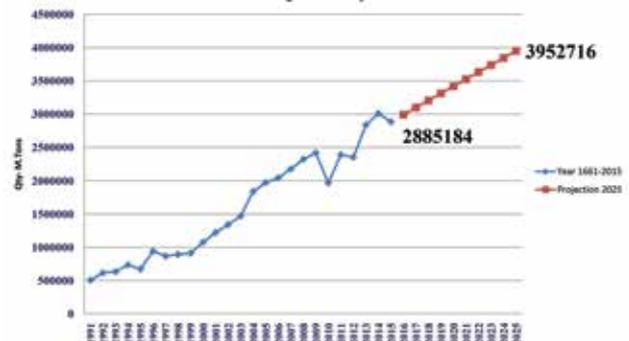
RCN Vs CK Price



World Production & Consumption of cashew Nuts (in RCN Terms)



Consumption by 2025



Transitions...

- The consumption has grown at an unimaginable levels that results in shortage/ high demand for raw nuts.
- The prospects of cashew consumption growth are restricted to the extent of raw nut produced.
- There is a big pull by both emerging markets and existing markets of raw nuts in terms of both quantity and the realization.
- This has resulted in the processors directly purchasing from producing countries
- The producing countries started processing directly
- The mechanisation has enhanced the processing capacities to exhaust almost all available quantities of RCN
- Big Governmental supports in the producing countries Vs reduced levels of Governmental supports in the processing countries
- Restrictions imposed by the producing countries in export of raw nuts
- Low / negative levels of returns in processing

The Result....

- Lack of proper quality control on Raw Nuts
- Un-healthy competition and trade practices
- High price of RCN at non-parity levels with Kernel prices
- Processors to work with low processing costs that affected the income of workers
- Processors from processing countries setting up processing units in producing countries
- Imposition of heavy duties on export of raw nuts and low returns to farmers
- Ban / controls on exports of raw nuts in producing countries

Strength

- Big processing capacities
- Well-established global trade networks
- Mechanisation and automation in processing

Weakness

- Shortage to cater to the demand
- Low productivity

- Wide price fluctuations

Opportunities

- Increasing consumption of Cashew nuts world over
- Scope for area Expansion
- High / early yielding breeds of tree

Threats

- Most of the yielding trees in West Africa /Vietnam planted in the late 1990's are at its peak level of yield, which may come down in the coming years resulting in shortage of raw nuts.
- Old and senile plantations in India and West Africa regions
- Lack of proper Pre & Post Harvest Management
- The productivity is almost stagnant
- Lack of a pricing mechanism in rcn trade
- Lack of regulatory body / arbitration in raw nut trade.

Action Plan

Production point of View

- Processing countries to concentrate more on Production of RCN
- Producing countries to concentrate more on increasing the productivity
- Adopt improved Pre& Post Harvesting Management
- Area Expansion
- Replanting Old & Senile Trees with Hybrid Varieties

Trade point of View

- Adopt suitable Price Control Mechanism
- International Regulatory body for RCN Trade
- International Arbitration for RCN Trade
- Adoption of Uniform Customs & Practices (UCP) in RCN Trade

Key Points

- A well drafted contract solves most of the problems
- The right partners in your business bring down the risk factors.

The Best Approach

Plan well before you start a deal- Follow the Tailor &

Carpenter Theory:-

“Measure Twice, But Cut Once”

Mr Shakti Pal: We have seen significant increase in area as well as production over the years, but the least increase in terms of productivity per hectare. So, it is imperative to bring in more plantations in order to meet additional metric tonnes of RCN for our future needs.

Mr Karim Berthe, Cotton and Cashew Council of Cote-d’Ivoire, Technical Adviser to the DG



IMPACT OF GOVERNMENT INTERVENTION ON RCN EXPORTS FROM AFRICA
 World Cashew Market

Africa:

- RCN availability
- Unemployment
- Limited Processing Capacity
- Land (Indus. Production)
- Lack of investment
- Lack of competitiveness

Asia:

- Production slowing
- RCN imports
- Labour issues
- Far from markets (EU,USA...)

Kernel Markets: (USA, EU...)

- Growing demand
- Food Safety and traceability issues
- Social and Environment issues

Consequences along the value-chain:

Weak traceability, Carbon foot print, speculations and volatility on RCN price

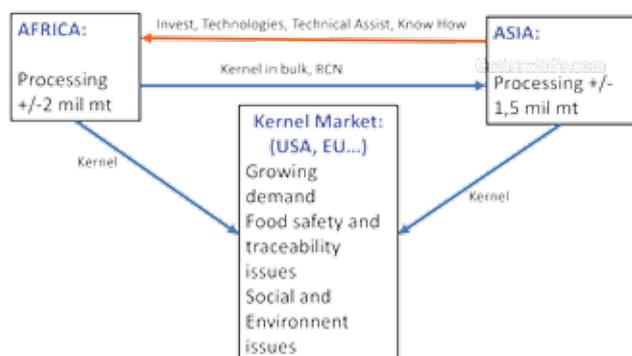
Main objectives of government intervention in cashew industries



- Discourage RCN export
- Strengthen local processing (local and international investors)
- Ship out kernels from Africa instead of RCN
- Add value
- Create job for youth and women

- 1990: Approximately 19,000 Tons
- 2005: 185,000 Tons
- 2010: 380,000 Tons
- 2015: 702,000 Tons

Impacts of government intervention on RCN exports



Mr Shakti Pal: The impact of government interventions to put local processing is already seen. It is going to happen. That's the way forward. There is a role to play for Asia - to provide know how, technical assistance and keep buying RCN, but make sure that your origin also starts talking about simultaneously on the production side, growing more trees, producing more, that's the way forward.

Mr William Awudja, Advisor to the President of AEC-CI/ In Charge of domestic marketing

Prospects for the growth of cashew nuts production in Cote d'Ivoire

History of cashew nuts production in Cote d'Ivoire

Cashew cultivation was started in 1959 in the north of Cote d'Ivoire. Cashew tree was first introduced in Cote d'Ivoire for ecological reasons:

- Soil improvement (fight against soil erosion)
- Fight against deforestation
- Fight against the advance of the desert

Evolution of cashew nuts production in Cote d'Ivoire

- 1960: Production almost nil
- 1970: Start of commercial production



Cashew nuts production over the last three years

- 2014 CAMPAIGN - 564,780 tons ; with approx. 330,000 producers
- 2015 CAMPAIGN – 702,500 tons (+24,38%) ; with approx. 330,000 producers
- Training of 102,282 producers
- 2016 CAMPAIGN – 650,000 tons (- 8%) for approx. 350,000 producers
- 149,950 producers have been trained
- Poor weather conditions resulted in decline in production

Initiatives to improve the production of cashew nuts

- Research program on production improvement - Research for varietal improvement (CNRA)
- Extension of the research results
- Installation of nurserymen for the production and distribution of grafted seedlings obtained from the research.
- Agricultural council: training of producers on agricultural techniques (about 250 000 peasants trained in 2 years)

Capacity building: monitoring of the trained producers

Prospects for the next five years

- Average growth rate of the production - Research



and agricultural advisory initiatives could increase the average yield from 500kgs / ha to 800kgs / ha over the next 5 years.

- Production outlook for the next five years - Taking into account the measures taken to support the increase in production and the possible effects of the climate, an average growth rate of 8% can be used without risk of error for the period 2017 to 2021.
- In 2017, the production forecast is 715,000 tones

Year	Production
2016	650,000
2017	715,000* (8%)
2018	772,200 (8%)
2019	833,976 (8%)
2020	900,694 (8%)
2021	972,749 (8%)

Growth in cashew nut production in Cote d'Ivoire should prompt economic operators to increase cashew nut local processing in order to meet the objectives of emerging countries. The government, in its logic of modernisation of agriculture, must continue to support producers for good agricultural practices.

As a result of the State, private operators are organising to promote the Ivorian cashew sector.

Thus, the Association of Cashew Exporters of Cote d'Ivoire (AEC-CI) aims to set up an International Symposium that will bring together every year world leading experts on cashew in Cote d'Ivoire to discuss about the marketing of cashew nuts.

Mr Shakti Pal: It's interesting to take a leaf out of Cote d'Ivoire, which has increased the RCN yield from 500 to

800 kg per ha in the last decade. I would like to see India's production increasing from 700,000 to 2,000,000 tonnes and Vietnam from 300,000 to 1,500,000 tonnes in the next decade, which is doable.

Q & A:

The crop from Western Africa does not suffer from diseases and pests as compared to the crop from Eastern Africa. But when we export the crop, it fetches same price. When the Western crop is cheaper to produce, the crop from Eastern Africa is more expensive to produce. You give us the same price. That is not fair.

Which of the two ways is the best to produce cashews? Do we engage actively give it fertilizers and do everything? Or we leave it naturally and still make money out of it? Is it cost effective to do the drip irrigation, fertilizers and all the analysis that fall in everything?

Dr Peter A L Masawe: In the first place, there was no disease in East Africa previously in any of the cities. Oflate, in the West African countries, the disease is on its door steps. Get prepared to tackle them. The cost of production in East African is very high due to geographical locations. The cost of treatment of one cashew tree is three kg of raw nuts. If you are producing an average of 15 kg per tree then you can make profit. In most of the West African countries where the production factor is low, if they can get a disease, cashew will never be a crop of their livelihood. So, get prepared by getting different varieties which are resistant to diseases and can adapt the ecological conditions. Cashew is a crop, which can adapt to global warming. Its drought tolerant, but also some varieties are susceptible to changing environment.

If you are going to invest in irrigating the cashew tree, the investment is so high that you may never get returns in aberration of time. In East Africa for e.g., if a tree can produce 50-100 kg, why do you want to put irrigation in place? If you put fertilizer, then you will get more yields. If you are starting a cashew farm and if you don't put inter-crop in the first three years, soon you are out of the business. Inter-crop is the one, which can make the cashew, grow faster.

Dr R K Bhooedes: Regarding the basic difference between the Eastern or West African crop, we have to first understand that the base actually depends on the total packable outturn that we get after processing the yields. There is a wide range between what we get at the end of the processing, when it comes to WA, and particularly in Cote d'Ivoire the sprouting is more. If at all I have same outturn in cutting or at the raw cashew nut, after processing the yield gets drastically reduced. Accordingly, there is a difference in pricing. To put it in nut shell, the final output is the one that decides the pricing. If you can improve the quality of the nuts with less sprouting and other qualities being better, then of course both East and West African crop will be priced at the same level. ■■■

S Kannan, Executive Director & Secretary, CEPCI

I could see from the interaction inside and outside the conference hall, WCC is a massive success. I think this has been the biggest gathering of the WCC also, if you take this forward to the consuming market it will have an even better impact. It's a very good initiative taken up by Foretell Business Solutions and I think WCC has even better days in future.

TGI – Group Introduction

Mr Deepak Kacher, CEO, Vink Corporation DMCC

A Very Warm Welcome to Title Sponsor All the Delegates & Dignitaries from All over the World



Increase The Enterprise Value, While Empowering And Promoting All Stakeholders, Through Product And Local Knowledge From Farming To High-Quality Products And By Sustainable And Balanced Growth Of Trading And Manufacturing.

TGI Group Revenues of over \$1 Billion across a number of verticals

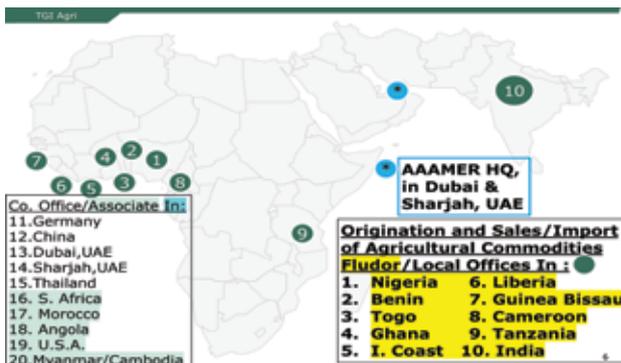
TGI Group

Products Companies	Consumer Goods	Agricultural value chains	Fishing & Livestock	Chemicals	Others
	<ul style="list-style-type: none"> Juice Dairy Coke/Merger Snacks 	<ul style="list-style-type: none"> Origination and processing Branded food 	<ul style="list-style-type: none"> Offshore fishing and processing Poultry, Beef & Fish Farming 	<ul style="list-style-type: none"> Industrial Chemicals Homecare products 	<ul style="list-style-type: none"> Pharmaceuticals Docking & Ship Repairs Real Estate Oilfield Services Hardware consumables

- Founded in 1980
- Head Office in Lagos , Nigeria
- 12 Verticals/Divisions
- ~10,000 Employees
- Revenues of over \$1 Billion
- Operations in 13 countries of Africa, M. East and Asia with presence in 20 Countries

TGI Group: Fludor Cos in 10 Countries and Presence in 20 Countries Worldwide

TGI Agri



TGI Group-Introduction

A Very Warm Welcome to TGI Group...

1. Founded: in 1980
2. Divisions: 12 Verticals
3. Present: in 20 Countries
4. Employees: ~10,000
5. Revenue: ~ \$1Billion+...

Guiding Principle for TGI...

TGI Agric Covers Origination, Processing, B2B Distribution, Retail & Trading of Commodities



TGI Group Consumer Brands that are now household names (1/2)



TGI Group Agric Brands that are now household names (2/2)



TGI Group reaches ~2.5M Consumers/Day in Nigeria through its wide 30+ Branch network

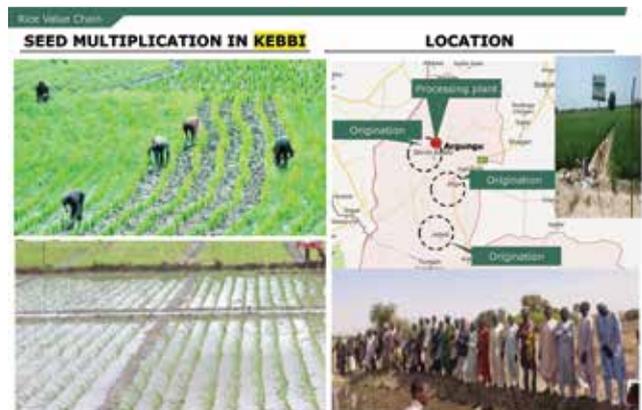
TGI Group
TGI ORIGINATION, MANUFACTURING & DISTRIBUTION NETWORK

Nigeria Example COMMENTS

- TGI Group's strengths are the **origination** of commodities and the **manufacturing and distribution** of consumer brands
- TGI Group is supported by its strong distribution network, which reaches **~2.5M consumers per day**
- TGI Group's branch network also supports its **agribusiness origination activities** throughout the country

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TGI Group Rice Seed Multiplication programs in Kebbi, close to the planned processing plant



TGI Agri's Rice Mill is under construction and will be commissioned in Q1 2017

Rice Value Chain

RICE MILL IN KEBBI

- A rice mill is currently being constructed by TGI Agri at Argungu, Kebbi State
- The plant will have a capacity of ~100,000MT of rice paddy per annum
- Total project outlay is ~NGN 20B

- **Commissioning** of the processing plant is expected for **Q1 2017**
- The TGI Agri rice mill will be the first Nigerian rice project with a **power generation capacity** of 1MW
- **The sourcing of paddy** rice will be managed through **outgrower programs** close to the processing plant and open markets

IMPRESSIONS

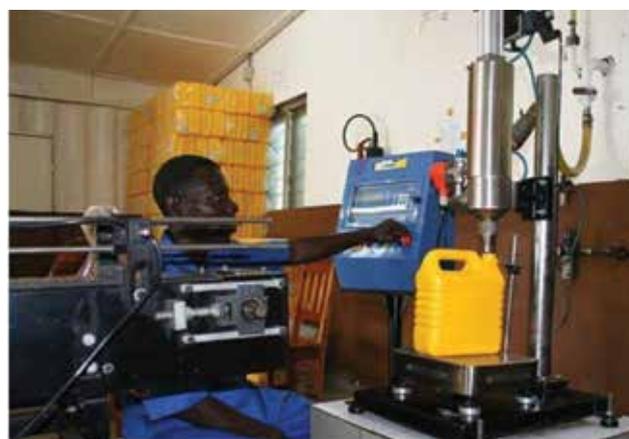


TGI Agri has been active in the production of Vegetable Oils since 2000

EXPERIENCE IN OILS, FATS & MEALS

- TGI Agri's operations in Benin Republic started with the **production of vegetable oil** from **Cottonseed** in 2000. In subsequent years TGI Agri added the capability to crush **Soya beans** and **Shea nuts**
- In 2016, TGI Agri hit a **major** milestone, by crushing a **cumulative 1 Million+ MT of Seeds !**
- From 2000 – 2015 more than, **150,000MT of refined oil** and more than **28,000MT of shea butter** was produced in TGI Agri's Benin plant
- In Q1' 2016 commissioned **RCN Plant & CNSL Plant** in Q1'2017

IMPRESSIONS



The production capacity of the Soya Plant will be ramped up from initial 400MT to 1,000MT per W. Day

Oils, Fats & Meals

PHASE 1: 400MT PER DAY

- **Multi seed crushing complex** established in Sagamu, Ogun State, by 2018 with a daily crushing capacity of 400MT
- Estimated crushing capacity of **120,000MT of oilseeds** (soy beans/ ground nut) per annum
- Annual bottling/ packaging of **25,000MT of vegetable oil**
- Production of **8,000MT of shea butter** per annum

PHASE 2: 1,000MT PER DAY

- **Increase of capacity** by adding additional machines to reach a crushing capacity of up to **1,000MT per day** in 2020

- Estimated crushing capacity of **300,000MT of Oilseeds** (soy beans/ ground nut) per annum
- Annual bottling/ packaging of **62,000MT of Vegetable oil**
- **Production of 20,000MT of Shea Butter per annum**



Benin Oil Mill in Bohicon



Benin Oil Mill in Bohicon

TGI's CSR efforts focus on farmers, women and the rural communities

CSR Objective

- TGI Agri's CSR efforts aim towards **promoting "sustainable development"** and is working towards **empowering the "poorest of the poor"** through
 - **integrated development** to include community based organisations
 - **strengthening capacity building, health and education** interventions.

Activities

- TGI Agri facilitates and supports the **farming communities** – to become empowered and self reliant through trainings, health camps and investments in education and health infrastructure
- TGI Agri supports **stakeholders** such as the

government and local administration to have a better relationship with the communities

Stakeholder Benefits

- **Benefits of TGI Agri's CSR efforts** for our stakeholders:
 - **Communities:** Empowerment, improved socio economic status, increased self-reliance, sustainability
 - **Government:** Recognition, confidence in the administration, stability and support

Capacity Building Example: TGI Agri has partnered with CARI to build rice farmers' capacity (1/2)

PARTNERSHIP WITH CARI

- TGI Agri has **partnered with CARI (Competitive African Rice Initiative)**, which is run by the GIZ and has been commissioned by the German Federal Ministry for Economic Cooperation and Development
- The project will run for a period of 3 years from 2015 to 2017 and **reach ~5000 farmers** during both wet and dry seasons
- Farmers are being **trained in good agricultural practices** with an aim to increase the productivity of paddy
- Farmers are given **soft skill trainings** such as leadership, trust building, etc.
- **Farmer Business Training Centre** is conducted under which the farmer is taught to treat farming as a business enterprise

IMPRESSIONS





Capacity Building Example: TGI Agri has partnered with CARI to build farmers' capacity (2/2)

Demo Farm visit by CARI's Director



Meeting with Women SHG at Tunga Maidawa



Meeting with farmers at Tunga Maidawa



TGI Group Acknowledgements Due

1. Fludor Cos & Vink Corporation, part of TGI-Group, are very keen to grow the RCN World Biz with your help:
2. RCN Top buyers in India, Vietnam,...
3. World's Best Leading Kernel Buyers
4. CNSL Buyers
5. Machinery/Equipment Suppliers
6. Logistics Cos
7. Bankers
8. Foundations, NGO's, Cashew Global Bodies...



TGI Group RCN last few Years 'Global' Support Journey... Sponsorships...

1. 2014: Bronze
2. 2015: Silver
3. 2016: Gold
4. 2017: Platinum...
5. State of the Art RCN Processing Plant in Benin!
6. ...Our RCN March Continues...



Thank You

Deepak Kacher
 Chief Executive,
 Dubai, U.A.E.
 &
 Executive Director, A-A-A-ME-R.





RCN Processing in Africa Opportunities and Challenges



Moderator: Mr Jim Fitzpatrick, Business Development Consultant and Mentor, Ingredient Sourcing Solutions

Mr Vasudev Barkur, Executive Director, ETG Group, **Ms Johanna Adotevi**, Commercial Director, Cajou Des Savanes

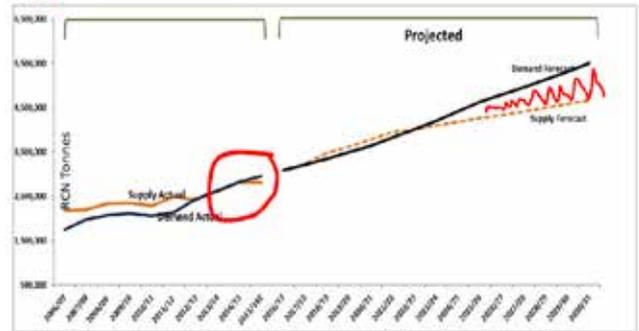
Mr Jayachandra Reddy, Technical Head, Vink Corporation DMCC, **Ms Shiru Mwangi**, Regional Topic Head - Agriculture
Debt Investments, responsAbility

Mr Jim Fitzpatrick on Cashew Processing in Africa: Opportunities & Challenges

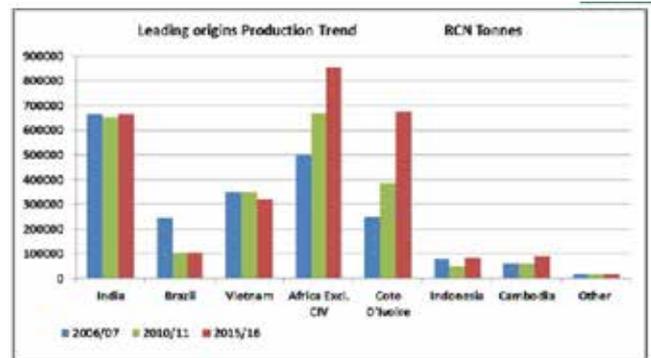
When we speak of African Processing, the fact is that less than 10% of cashews is being processed in Africa today, in 2016. For many of us this is a puzzle. From 1970s processing of cashew nuts in Africa despite growth over the years is still below 10%. So, while people feel negatively about Africa, some people see it as an opportunity. Success story of already established processors in Africa could bring in a change.



Outlook for Supply/Demand



Africa is the region of production growth



Cashew World 2017

- Rising demand
- High dependence on Vietnam
- Rising food safety needs
- Concern for environment and CSR.

- Supply deficit
- Falling production
- Dependence on imported RCN
- Food safety compliance

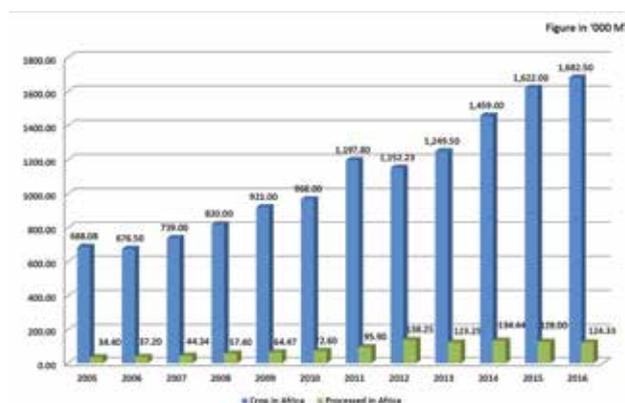
- Production drop
- Factory closures

- Rising costs
- Labour problems
- Fast growing consumption

- Lack of processing.
- Opportunity for growth.
- Need for financial services and upskilling.

- RCN trade
- Lost traceability
- Volatility and speculation
- Carbon footprint

Mr Vasudev Barkur, Executive Director, ETG Group



Current Support Structure

Countries	Preferential buy	Export Duty ON RCN	Other incentive	Tax Rebate
Benin	YES	YES	YES	YES
Burkina Faso	YES	NO	NO	NO
Cote d'ivoire	NO	YES	YES	YES
Ghana	YES	NO	NO	YES
Guinea Bissau	NO	YES	NO	YES
Mozambique	NO	YES	NO	YES
Nigeria	NO	NO	NO	YES
Tanzania	NO	YES	NO	YES

Africa-Crop production vs. Processing

Country	Production-MT	Processing-MT	Percentage
Benin	100,000	3,500	3.50%
Burkina Faso	80,000	5,000	6.25%
Cote d'ivoire	702,000	45,000	6.41%
Ghana	85,000	8,000	9.41%
Guinea Bissau/ Guinea	210,000	2,000	0.95%
Mozambique	105,000	35,000	33.33%
Nigeria	155,000	17,500	11.29%
Tanzania	185,000	12,000	6.49%
TOTAL	1,622,000	128,000	7.89%

Data: West Africa 2015 and East Africa 2015/16

Graph of crop production and processing

Opportunities

Proximity to standard raw materials- benefit of consistent quality

- Government support
- Access to human resources
- Traceability
- Opportunity to establish organic origins
- Challenges
- Higher Investment base
- Infrastructure and logistic challenges
- Skill set
- Carrying cost
- High cost of operation
- Lack of a domestic market for off-grades and byproducts
- Forex exposure
- Other challenges

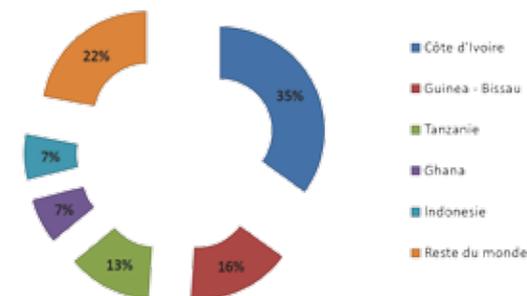
Ms Adotevi Johanna, Cajou Des Savanes, Cote d'Ivoire



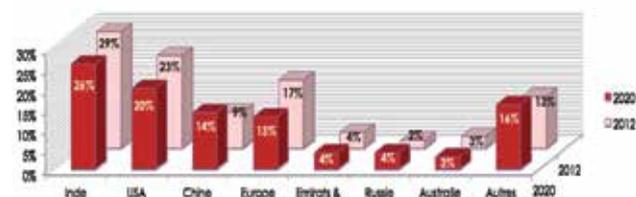
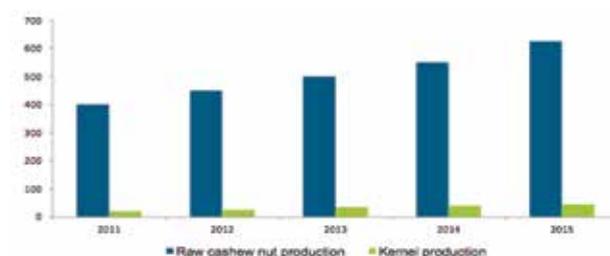
- Created in 2014 by IVOIRE COTON SA (40% of Cotton market share in Cote d'Ivoire) to enable cotton farmers to increase their net revenue
- Based on market analysis and growing trends in cashew production of Cote d'Ivoire, who became the 1st world producer of RCN (700 000 tons in 2015)
- Vision is to contribute to the development of the North West region of Cote d'Ivoire and be in line with the IPS vision to add value to raw material
- Objective was to also create employment and offer a success story in agro based business
- Initial business plan based on capacity of processing 5000 tonnes of RCN and to rapidly increase the capacity to 10,000 tonnes RCN by 2020
- ACA Seal - January 2016
- WALMART SCAN audit December 2016
- To be BRC certified - by end 1st quarter 2017

RCN world production

Côte d'Ivoire tops the global RCN production, but less than 10% processed locally.



Cote d'ivoire RCN and Kernel Production



CAJOU DES SAVANES - S.A

The **CAJOU - SA (Cajou des Savanes)** processing units created in February 2015.

CAJOU - SA has the mission, directly or indirectly in Côte d'Ivoire and the sub-region, to guarantee safe production and creation of the locally agricultural products, including roasting cashew nuts.

The initial project consisted of the creation of a semi-automatic unit for the processing of cashew nuts, located in Savanes with an annual capacity of 10 000 tons.

The Processing Plant started in June 2015 and now has a production capacity of 8000 tons in 2015. This capacity will increase to 10000 tons in 2016.

The processed nuts are aimed at international export markets (United States, Europe and Asia) for a final transformation (roasting, salting, cashew oil extraction and processing, etc.) under ISO 22000.

The project will have a positive impact on both the social environment (regular income, regular employment for young women and young people, etc.) and the economic environment (development of other sectors from Africa to international markets, as well as creating a transfer of technology and expertise).

CAJOU has been awarded a Quality & Sustainable Development Label by the African Cashew Alliance (ACA) in February 2016, becoming the first Ivorian producer certified with the RCN ACA.

The RCN ACA label guarantees cashew producer in units that comply with the most rigorous International Rules & Regulations concerning food safety, as well as social and environmental legislation.

CAJOU DES SAVANES –SA (CASA .SA) Cote d’Ivoire

Opportunities: World largest producer in terms of RCN availability, market in demand , good kernel price, Government policy to encourage the local processing, SIETTA 2016, subsidies paid to processors 400 FCFA / kg (kernel equivalent 80 FCFA/kg RCN exported).

- Cote d’Ivoire to host the CCIC (Government platform launched in November- 2016)
- Awareness on FDA standards and certification
- Good practices and expertises
- Motivated Shareholders

Challenges

- Very high competition from RCN exporters
- Price of RCN paid by exporters still very high and attractive vs what processors are paying
- High cost of production (labour, electricity, taxes, logistics)
- Poor local market (Non AFI grades, who have same cost of production)

	2015 estimé	2016 Budget	2017 BP	2018 BP	2019 BP	2020 BP
Quantité noix brute achetée (kg)	1 959 773	5 200 000	7 500 000	10 000 000	10 000 000	10 000 000
Prix unitaire achat (fcfa/kg)	530	530	500	500	500	500
KOR (Kernel Output Ratio) (lbs/sac 80 kg)	45	47	48	48	48	48
Production amande (kg)	712 757	941 600	1 500 000	2 000 000	2 000 000	2 000 000
Quantité amande vendue (kg)	759 367	928 780	1 500 000	2 000 000	2 000 000	2 000 000
Prix de vente moyen (fcfa/kg)	3 979	4 532	4 532	4 532	4 532	4 532
Chiffre d’affaire (fcfa)	3 021 438 454	4 208 933 205	6 794 400 000	9 059 200 000	9 059 200 000	9 059 200 000

Our Customers

2015-2016: * Clients directs | ** Clients indirects



2017: Target End Users




September 18-21, 2017 | Cotonou, Benin
11TH ACA ANNUAL CASHEW CONFERENCE
 A new vision for partnerships & investments

Join over 350 international cashew industry stakeholders at Africa's largest cashew event!

- BUSINESS-TO-BUSINESS MEETINGS**
Network and develop new business relationships
- PLENARY SESSION**
Learn from industry leaders and experts about the latest trends and best practices in the cashew industry
- WORLD CASHEW EXPO**
Grow your business by displaying your equipment and services to cashew stakeholders worldwide
- WORLD CASHEW FORUM**
Interact with fellow delegates in themed workshops
- FIELD TRIPS**
Discover Benin's cashew industry and beautiful cultural sites

For more information, please contact the ACA Secretariat at aca@afriancashewalliance.com or visit www.afriancashewalliance.com

Mechanical Cashew Processing – JC Reddy, Technical Head, FLUDOR, Benin S.A.



Cashew Project Synopsis

GROUP : TGI
 COMPANY : CAJOU Project/Fludor-Benin S.A.
 TECH EXPERIENCE : 20 years of mfg in Benin (veg oil)
 TRADE EXPERIENCE : 15 years of rcn trade in Benin
 LOCATION : Bohicon, Benin Republic
 COMMERCIAL RUN : JAN 2016
 PLANT CAPACITY : 18000 MT OF RCN
 FENCED AREA : 5.5 ha
 CONSTRUCTION AREA: 15,000 sq.m
 CAPACITY BUILT UP : 3 Phase PDCA Approach
 FORWARD INTEGRATION: CNSL PLANT/ Ingredient Centre
 BACKWARD INTEGRATION: Farmer's Development Programme
 INVESTMENT : Direct Foreign Investment
 INVEST THESIS : Origin based sustainable processing
 PROJECT COMPLETION: 14 Months

Primary African Challenges

- Project execution
- Low population density
- Expensive transportation
- Spare part availability
- No scheduled wage structure!
- Behavioural living wage contentment
- Government policies (make or break!)
- Mobilisation of broken & full fcl's
- Dependency on expert manpower
- High processing cost (+USD 200 pmt)
- High volumes in a short season (working capital!)
- Warehousing and drying yards (seasonal congestion!) and finally crop size, RCN cost and traceability.

Critical points for African processing

- Plant location (crop or convenience)
- Project design and execution (HACCP first!)
- Technical and product expertise
- Workers availability and transport
- Worker efficiency and training
- Plant maintenance capabilities
- Workers hygiene and food safety
- Cultural sensitivities
- Parity of broken
- Risk mitigation plan
- By-products management

Project Design

- Multi-level expert team
- Strong local technical team
- Project to process alignment
- Plant location and layout
- Local crop area vs convenience?
- Layout first, building next!
- Processing equipment and material flow
- Long life tailor made! For African maintenance!
- Uniform flow! Cross contamination!
- Site topography and challenges
- Minimal land fill and excavation / gravitational flow!
- Design against infestation and harmattan

Workers availability and transport

- Study on workers availability.
- Assess workers income levels
- Consider cultural challenges
- Minimise transportation

Workers efficiency and training

- Offline and online training
- Re-training and alignment of low performers
- Productive based compensation from day 1
- Incentive and motivation for best performers
- Brief local village heads on payments and performance

Workers hygiene and food safety

1. Isolation of toilets and canteen
2. Hand wash and leg wash system
3. Best of class toilet and canteen / change rooms
4. Pest control measures

Safety, health and environmental issues

1. Addressed hand burning issues from day one
2. Maintained health records
3. Effective EMS for stacks, drainage, STP
4. Health Centre
5. Comprehensive CCTV footage
6. High security access control

Workers cultural sensitivities

1. Tested toilet and wash room design
2. Food habits and canteen design
3. Local beliefs and concerns on envious impacts
4. Design of uniform for convenient and culture

5. Addressed high sweating issues
6. Discourage entry of school going and aged personnel

Government policies

1. Exemption of VAT and import duties on machinery
2. Earlier window for RCN buying

Risk mitigation plan

1. Crop failure and RCN availability
2. Workers efficiency and wage structure / Technology transfer
3. Viability / Scalability of operations
4. Competitive edge with Asia
5. Government policies

By-products management

1. CNSL Plant
2. Ingredient concept
3. Shell cake mobilisation Plan
4. Local Animal feed assessment for rejects
5. Initiate power plant assessment with agro waste

Shelling Lines



Manual Scooping Section



Steam Borma Section



Peeling and Grading Area



Filling Centre



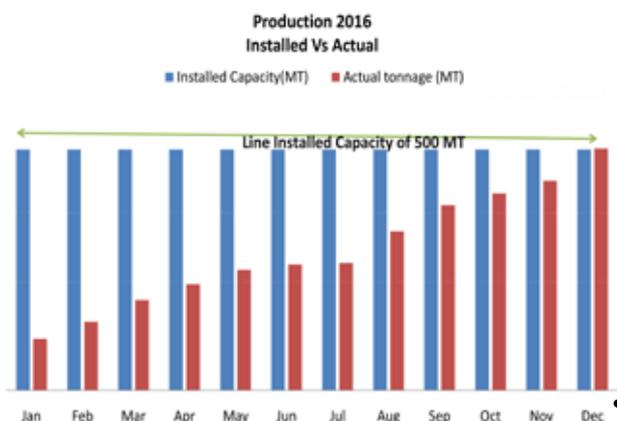
CNSL Plant Interiors



Targeted Operational Efficiencies

- Workers per bag: 2.5
- Capacity utilisation: 90%/q4/2016
- Un-cut at single pass: 5-8%
- Shelling wholes vs pieces: 90% + 10%
- Packable wholes vs pieces: 70% + 30%
- Processing time: < 9 days
- Fumigation: mandatory
- First pass fully peeling wholes: min 55%
- First pass peeling broken: around 12%

Actual Production Vs Installed(Phase-1)



Conclusion

- Single origin is an asset and liability.
- Inter-state RCN transfers are expensive
- Govt policies can make or break the processing - Africa is no exception.
- Low workers efficiency and min. wages are very critical to address – requires continual automation to mitigate the risk
- High volume game is mandatory for corporate
- Strong processing and technical teams makes all difference
- Adopt standalone mindset for processing and RCN trading
- Scheduling effective CSR and farmer’s development programme
- HACCP/GFSI/ETI outlook during project design and in-process

African processing is tough and challenging, exposed to risk and viable with sustainable manufacturing and business techniques.

Ms Shiru Mwangi, Regional Topic Head - Agriculture Debt Investments, responsAbility



**Financing the cashew sector
 One investment platform -Two asset classes and three sectors**



**Agriculture debt financing
 Strong track record**



Sub-Saharan Africa Portfolio - Agriculture debt exposure in the region

Overall invested USD 60 Million in volume, spread over 11 countries, with 32 counterparties, spread over 14 commodities and in that long-term investments accounts for 21 percent.

Cashew financing

Structure: portfolio overview (USD)

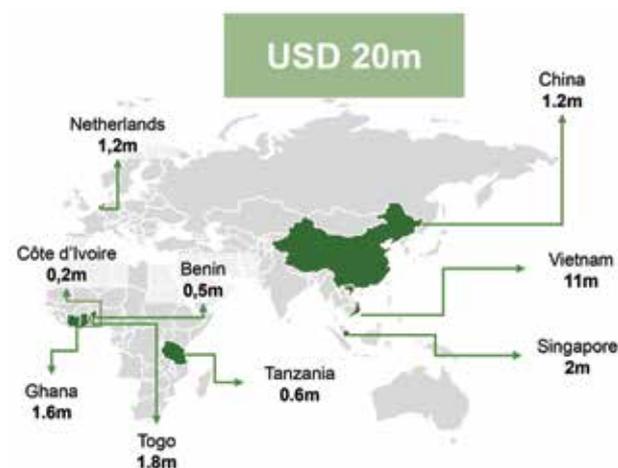
Targeted companies:

- Processors complying with S & E criteria
- Members of ACA network

Targeted countries:

- **WestAfrica:** Côte d'Ivoire, Ghana, Benin, Togo, Burkina Faso, Guinea Bissau
- **EastAfrica:** Tanzania, Mozambique
- **Asia:** India, Vietnam, Indonesia

Types of loans: Short and long term



Financing needs in the cashew sector

Raw cashew nuts traders:

- Financing the gap between payment of raw cashew nuts to farmers and payment from buyers (usually a few weeks/months)
- Financing of vehicles and warehouses

For processing factories:

- Financing the gap between payment of raw cashew nuts to farmers and payment from buyers (usually several months, up to 1 year)

- Financing of processing costs
- Purchase of vehicles, machinery and equipment
- Factory building

Jim: From the panel presentation, it is clear that the cashew processing can work in Africa. Johanna and JC Reddy spoke about some of the operational factors that are proved to be challenging such as labour practices, the availability of management, the management quality, and the use of by-products, the availability of expatriate experience and expertise. They also offered to us one or two strategies to deal with those challenges.

We saw responsAbility alone has invested USD 60 Million in Agriculture in Sub-Saharan Africa, in which about one third is invested in the cashew sector. We heard both working capital and long-term investment are funded.

JC Reddy told that there are large scale food safe certified mechanised, semi-mechanised processing factories in Benin. We know that ETG also has similar factories. Johanna told that there was lot of interest from buyers. What we have seen is a range of challenges and examples of successfully meeting those challenges and building processing.

We should never forget that processing in Vietnam took 25 years to mature. In India, it is at least sixty years. We should not expect it to happen overnight in Africa. The RCN trade will continue at a healthy rate for many years to come. As processing grows, it is clear from all the facts that production will also grow. We heard processing in Africa will bring value-add, but also social value. Processors in Africa should think about traceability, think about quality, to address risk. When factories address quality, they should also address quality at supply chain. Processing at origin will bring about quality.

Dr Bhoodes, CEPCI: Is there any analysis on the cost of processing in traditional markets like India or Vietnam and that in Africa?

J C Reddy: There is a 200 dollars advantage on a processor stationed in Africa, but the same 200 USD / mt they lose in the processing cost when compared with that of India or



Vietnam. Processing cost in India and Vietnam is around 300-350USD, but it goes up to 550-600 USD/mt in Africa. That’s how it is in Initial stages. As skill level improves, things are looking better now. With best mechanisation,if we are be able to bring down the gap to less than 100 USD, then the game will be entirely different.

Wanted to know whether the finances are interest-free or with interest, as they haven’t touched upon the % of interest?

Ms Shiru Mwangi: We are a fund. Therefore, we need to provide returns to our shareholders and investors. What I can say is we fund depending on the market rates in the currencies in which we are providing funding. So interest rate would differ with the profile of client, currency of borrowing and location. I can’t give you an arbitrary interest rate, as it will be driven by those three factors.

Mr Rajendra Sabat: As we can see that producing countries have lesser processing capacity whereas the processing countries have higher rates of capacity with the availability of skilled labour. What are the programmes taken up by the producing countries to attain self-sufficiency, improve the skill of man power which can thus meet the demand of processing?

Mr Vasudev Barkur: I cannot give a commentary on whole

of Africa. The size of African processing is increasing. Benin where nobody had thought that we can invest in processing, Vink has invested. It will definitely pave way for other investors to establish processing facilities. The same is happening in Tanzania and Mozambique. The same would have happen in many other countries. Every government has formulated its own programmes. Now we are focusing on indirect way of support as in provision of incentives and others. I think if the government provides other competitive incentives for the betterment, African processing will pick up over the years. It can happen just the way processing picked up in India not only due to government support but also due to private entrepreneur’s contribution. However, it evolved over decades in India. The same can happen in Africa. Despite all this,there will be surplus availability of raw materials and India and Vietnam need not have to panic.



Innovation/Technology Trend in Cashew Processing

Focus – Post Peeling Technologies



Mr Bruce, Sales Manager, Hefei Taihe Optoelectronic Technology, **Mr Evan**, Sales Manager, Hefei Meiya Optoelectronic Technology, **Mr Hari Nair**, President, Western India Cashew –Moderator, **Mr A Barathy**, Partner, GI Technologies
Mr Stefano Massari, MD, Oltremare and **Mr Sasisekar Krishnamurthy**, CEO and Co-founder, nanoPix

Mr Hari Nair: The expert with me on the dias are at the cutting edge of the cashew processing technology. Most of them provide solutions to sorting of cashews. Why are we concentrating on post peeling technologies? Last year at the same conference, we discussed about shelling. There hasn't been that much of changes in the shelling technologies in the last one year and the same are with peeling. Shelling and peeling are more mechanised. It has actually brought its own problems after-peeling. That is the reason we will stick to post-peeling technologies in cashews today.

The actual processes involved in cashews are removal of the shell and peeling of the testa and then the cashews are ready to eat. But to make it marketable, we need to

grade cashews according to specific needs. For example, for usage in biscuits, it may have to be chopped, to go as a snack it has to be of a particular size etc. Grading makes cashews marketable and then the next is packing, so as to reach the customers and the final end users.

Post peeling - what does it mean?

There are two actual processes in Cashew processing

- Shelling (Removal of outer shell)
- Peeling (Removal of adhering testa)

Further processes is carried out for marketability

- Grading
- Packing



Post-peeling Challenges

Natural issues arising out of RCN - Spotted, Speckled, Immature, Dessert, Yellow, Oily and Rotten.
 Manually sorted to White, Scorched and Scorched Seconds/Dessert
 Manual process also upgrades the quality of Cashews, by scraping, cutting out spots, etc.

Problems from the Factory - Shelling and Peeling

Shelling: Loose Shell, CNSL contamination and Dust

Peeling: Loose Testa, Adhering Testa and Dust

Much more in Mechanical Shelling and Peeling Infestation
 Post-peeling - Presently used technologies

- Air Aspirator (To remove dust – Cashews are soft and generate dust in every stage)
- Sifting and Sieving (remove small pieces)
- Gravity separator/Destoner (remove foreign matter and stones)
- Optical sorting

Post peeling – Optical sorting

- Colour sorting - Camera sorting (B/W, CCD, Infra-Red and NIR) and Laser sorting.
- Optical size sorting (W240, W320, W450, etc.)
- Optical shape sorting

Final Quality Control – Metal detection, X-Ray detection

Insect Control – Chemical and Low Oxygen Fumigation

Mr Evan, Sales Manager, Hefei Meiya Optoelectronic Technology

As a China based color sorting company, we always strive to give our customers basic sorting technologies for all grades of cashews. We provide solutions to all our customers about cashew grading. There are so many cashew grades available, almost can't give all the names of the grades. Typical questions from our customers are 1) Does your machine will sort all the grades? and 2) Is this machine totally replace the usage of humans?



We always try to give turnkey solutions to our customers, which make customers reduce the need for human picks. That is our package. We always strive for it.

There is no machine in the world, which can do 100% accuracy for cashew sorting without the help of humans.

With our four camera systems, we have been able to detect even tiny nuts, which are hard to detect earlier by normal colour sorters. In this also, we can't give 100% sorting only by machines, without the usage of humans.

In future, we can make use of humans to the least possible extent. Our research and development team is working on improving efficiency and also reducing human intervention in the cashew sorting. We sincerely thank our customers for their trust with us.

**Mr Bruce, Sales Manager
 Hefei Taihe Optoelectronic Technology**

We at Taihe, China have exported more than 2500 sets of colour sorters each year worldwide, which includes India, Vietnam, Africa, European countries and USA. We are helping our clients to save manpower and also to save the cost. Our sorters can be sorted based on the shape, size and also on the basis of colour.



With our sorters, client can set up huge factories with very less skilled manpower to run the machines. We give our clients much higher quality and capacity compared to manual sorting. I would like to thank our clients in Vietnam like Longson. In India, we are working with some of the huge processors like Srilekshmi. Finally, I wish everyone a bright future in the cashew processing industry.

Mr A Barathy

GI Technologies: We provide end-to-end solutions for the cashew industry. We sit with customer, under his operating environment such as- where is the raw nut coming from, what are the manpower skill-level available in the factory, supply of power and water, where is the end product sold etc. Based on these, we bring out the best solutions for the customers. Thus, our solutions work very well for our customers.



Mr Hari Nair: In Africa, the cost of causing broken is a lot more when compared with India, where the market for broken is huge.

Mr Sasisekar: First I would like to share how nanoPix came in to cashew business. Primarily I was working in the automobile industry to look at sorting of nuts and bolts used for assembling. Somebody called me and said there is a nut to sort and grade, can you come over. I looked that as a business opportunity and thanks to that accidental meeting, nanoPix came into existence.



nanoPix are a cashew machinery manufacturing company started in 2009. We have worked with lot of cashew manufacturers in Mangalore and Kollam area to really evolve the product that we have right now.

We developed a machine for grading cashews in a signal pass.

We have a machine that can actually grade all types of cashews. We believe that every kernel matters. In 2016, we had captured about 54 billion cashew kernel photos. The percentage of error is very low and it is exportable. If

you want to process for Indian domestic markets, you may possibly to have one more human screening process.

In 2012 we evolved a product 'Teja', which was not viable for the industry. Then we come out with product called 'Hamsa', which was reasonably good. Then we did further research and increased our capacity to 125 kg, a reasonably successful model in the cashew industry in India today. We are actually working on making the capacity to 200 and 400 kg grading machine, in fact we made an intermediate product called 'Garuda-X'. It gave the result that was needed, but it was too power hungry and not suitable for the cashew processing industry. Finally, we have come out with a technology called 'Mayur' which we believe is the most ideal for the cashew industry to grade cashews.

Mr Stefano Massari, MD, Oltremare

I would like to give a slightly different view on the post-peeling operations. In this sense, we have shelled, we have peeled and we think we had done. Now actually, all the post-peeling activities up to the packaging are the operations that add value to our product. Those planned activities that have to be sorted and engineered to build up on our product that responds to the customer's requirement. **We have to build the product or to manufacture the product that goes to specific customers and not rather generally through the markets.**



We have to focus on the process before choosing the right machines or technical solution to get the product we want. We have to focus on minimisation of the reprocess, which is bad for cashews, as it increases the lead time. We need to make sure that we shorten the lead time as much as possible. We have to be efficient in both the labour as well as capital utilisation. We have to keep in our mind the food safety of the product when we do all these operations and ensure traceability of the product and follow proper



management practices. Also we need to focus on all these operations until the packaging, that result in value addition of the product.

Mr Hari Nair: When we go to lot of cashew factories in both India and Vietnam, we see lots of machines sitting idle and not working and it isn't broke also. Sometimes, customers don't know what he is buying. However, technology sellers are selling those machines. How do we tackle that?

Mr Stefano Massari: We have to focus on the process. Before buying the machine, we need to define purpose, the operations involved in it and the type of processes required. By doing so, we are not wasting the capital and time.

Mr Sasisekar: Once the machine is sold to customers, we inspect every month for a year. We examine as to how the machine works, its operation efficiency, whether it is giving the right results, if not, what needs to be done. **We evolve the product, which actually fits into the customer's requirements, rather than selling the product with niche marketing techniques.**

Mr Evan: A lot of cashew processing machines are sitting idle and not working to its potential as the working environment is not conducive. In the last two years, the cashew processing industries are facing tough time as the cost of raw cashew nuts increased substantially. Labour costs had also increased. Most of the processors are coming out with their solutions to tackle the situation to save costs, to increase the capacity, to add more value to the product etc.

Mr Bhooedes: Processors feel that most cashew machineries that are being used in the cashew industry

were not designed properly for cashews. If we take peeling machine or sorting machine it was designed for some other purpose; however it was later on adjusted to suit the requirements of the industry. **My request is that the machinery manufacturers should know the process first and understand industries requirements before designing the machines for various operations.** Processors will be forced to buy the machines, but finally the end product may not acceptable to the market requirements. That's why most of the machines were sitting idle.

Mr Vu Thai Son: There are two main reasons why the machines are sitting idle in cashew processing factories. One is that some of the factories don't know how to choose right machines. Second reason could be sometimes factories are funded by government programs and they buy some machines only to fulfill the obligations. If the government continued to subsidise for machineries, these types of things could happen and may continue to happen anywhere.

Mr J C Reddy: In sorters, there are two types of flows. One is vertical and the second is horizontal flow of kernel transfers. Mostly processors are using belt and channel sorters. **The biggest issue that we are facing is in sorting cashews kernels with testa in the belly. Never in any sorter, has kernel travelled in absolute vertical mode. Exclusively vertical mode is not available now. This is one of the Research & Development that we need to focus, which would help the industry to great extent.**

■■■

Changes in Global Kernel Markets and Dealing with them



Mr Seshu Kumar, Head-Merchandising, Big Basket, **Ms Mary Adzanyo**, Director Private Sector Development ComCashew – Moderator, **Mr Bob Bauer**, President, Association of Food Industries, USA and **Mr Somnath Chatterjee** Head Procurement and Logistics, ITC Foods

Ms Mary Adzanyo: Though we are in the cashew industry, we aren't aware of the changes happening. Since 2001 the US food and drug administration is working on (FSMA) Food Safety Modernisation Act, and today this act has been put into enforcement. This goes beyond the US and includes the food suppliers all over the world. Anyone who exports into US has to comply with FSMA. What does this mean to us, as processors, as brokers, as exporters, as retailers? What does it imply to us?

We are aware of the changes in consumption patterns over years. In fact, in cashew processing, we have around 27-32 grades of cashews depending on the markets you are serving. In US as well as in Europe more than 80% of cashews are used as snack nuts and most of the buyers prefer whole kernels. Broken kernels are gaining popularity these days. The USA and India are pioneers in using cashews

as an ingredient as in cashew cakes, in salads and in many other food items in confectioneries and baking. We also have seen many trends in terms of commercialisation, in terms of marketing in several countries. We now have e-commerce, online super markets, and other platforms, which are bringing in commendable changes in the kernel market.

Mr Bob Bauer: AFI is the import trade association in US. We have 1000-member companies around the world. Our members are either US companies, which are doing importing or companies shipping products into the United States. As we are speaking of changing trends in Kernel market today, I am here to present on FSMA.

Food Safety Modernisation Act

- One of the largest changes made to U.S. Food Law



since 1938

- Similar to Laws in the EU and elsewhere
- Represents a shift toward attempting to prevent
- Food Safety problems before they occur rather than having to respond to problems after they occur
- Facilities that Manufacture, Process, Pack or Hold food intended for sale in the U.S. must comply with the preventive controls for human food rule
- Applies to U.S. facilities & foreign suppliers
- Main focus of the Preventive Controls Rule is that facilities must establish and implement a Food Safety System that includes an analysis of Hazards and Risk-Based Preventive Controls.
- Food Safety Plan must include:
 - o Hazard Analysis (Known or Foreseeable Hazards)
 - o Preventive Controls
 - o Oversight and management of Preventive Controls (Monitoring, Corrective Actions and Verification)
 - o Supply Chain Program
 - o Recall Plan

U.S. Importers must have documentation that shows they are importing Food that meets all U.S. Food Law Requirements.

If they have not already done so, your U.S. customers will be contacting you for the needed documentation. Most will require an annual Third-Party Audit that must consider all U.S. requirements.

Importers' Customers may have varying requirements.

Cashews as an Ingredient

- Cashews are Popular
- Supermarkets are displaying cashews more than in

the past

- Big Issue is reliability of supply i) Price fluctuations typically make manufacturers shy away and ii) Supply must be consistent, both in volume and quality.

Ms Mary: As we know now, the biggest consumer of Cashews today is India followed by USA. **If we need to export the cashews, we have to comply with the rules of FSMA, which in turn binds every actor in the cashew chain to take the responsibility to maintain hygiene and safety of food ingredients.**

Cashew Industry: Growth & Prospects in FMCG sector

Mr Somnath Chatterjee, ITC Foods

ITC is the fastest growing processed food company in India. We use cashew bits for mostly in confectionaries and in our cookies. The quantum of demand that exists in India is huge. Around 8 years ago when we started using cashews, the volume was around 150 tonnes per annum. In 2017-18 our plan is to buy 3000 tonnes, that's the kind of growth we have witnessed in the past 8-9 years, which is quite incredible.



Presentation Flow

- Quick facts
- Usage of cashew
- Emerging prospects
- Challenges & expectations
- Way Forward

Quick facts

- Tropical dried fruit
- Native of Brazil
- Introduced into India by the Portuguese
- Cashew planted along Indian coastline to arrest soil erosion
- India soon became a major producer of cashew

Wide usage of cashew

Traditional sweets, Breakfast cereals, Homemade foods to curries, Biscuits, Snacking, Confectionery, Bakery, Ice Creams, Chocolates, Beverages etc.

India: Leading consumer of cashew

India is the leading cashew consumer with consumption of over two and half lakh tonnes per annum, due to the following reasons: Tasty, Healthy and Affordable.

Emerging prospects

- Higher disposable income levels resulting in increase in cashew consumption
- Rising local demand for value added products
- Increasing demand for organic cashew
- Increasing demand for cashew in the international markets

Price volatility

- Weather vagaries
- Currency fluctuations
- Factors leading to constrained supplies
- Government policies & regulations

Low crop productivity

- Mostly old plantations

Reasons for low crop productivity i) No increase in actual acreage and ii) scarce land resource

Supply chain constraints

- India produces around seven and half lakh tonnes of raw cashew
- India imports higher raw cashew than it produces
- Poor visibility on crop aspects pertaining to West Africa
- Frequent quality / traceability issues impacting cashew supply chain
- Geo political issues across producing West African nations impacting imports into India
- Unorganised and non-uniform trading platforms across nations

Quality concerns

Poor handling systems, Poor status of automation of cashew units, Infrastructural issues, Lack of awareness on FSSAI compliances, Unhygienic process areas and highly unorganised sector.

Way Forward

- Take steps to make the cashew industry organised, will help in providing visibility and collaboration across the supply chain
- Automation of labour intensive industry will result in driving efficiency
- Awareness of FSSAI compliance requirements will help in achieving quality standards

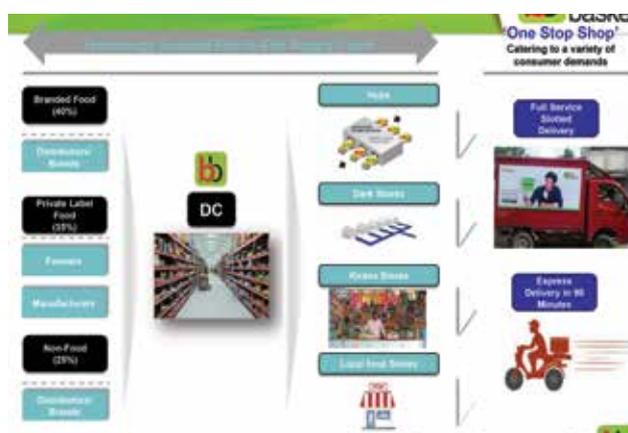
Mr Seshu Kumar, Big Basket



Big Basket is India's leading online grocery store, launched in December-2011. Currently it is spread across of 30 cities in India, with a work force of 12,000 and above. We are offering 20,000 plus brands, having monthly orders of 1.2 million.

We are India's most customer friendly brand with a sales turnover of INR 2200 million in FY-2015. It is has grown by nearly thrice to INR 6500 million in FY 2016. We are hoping to achieve the sales turnover of INR 90,000 million by FY 2020.

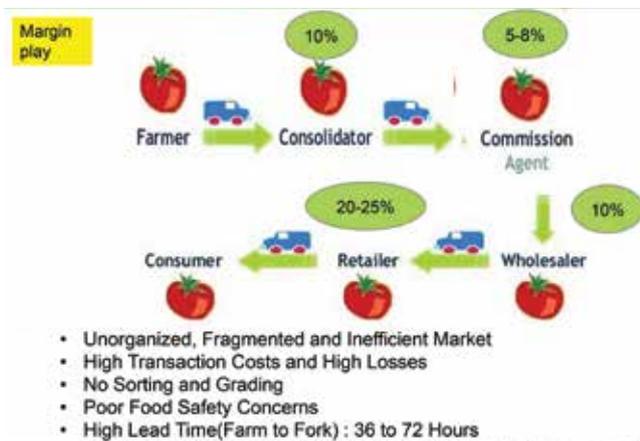
Consumer Centric Model Based on Strong Back-end Supply Chain



Category Leading Operational Benchmarks



Traditional Agri Commodities Supply Chain



Big Basket Farm to Fork Cycle



Farmer Engagement Pillars



Market Access

- Field Geo-tagged
- Monitoring sowing & harvesting progress
- Demand Forecasting
- Wider Assortment
- High Value Agriculture
- Market for Organic Products
- Price as per grade – Quality Enhancement
- Premium over Mandi Price
- Same Day Payment
- Automatic Transfer to Bank Account

Training and Skilling Inputs

- Agronomist stationed at each CC
- Pre & Post- Harvest Management
- Optimal Use of agri-inputs

Financial & Infrastructure Support to Farmers

- Access to institutional finance
- Financial and Infrastructure support
- Linking Farmers with Government Schemes

Sustainability Initiatives

- Organic Cultivation
- Sustainability
- Soil and Water Conservation
- Seasonal Crops

The Virtuous Cycle of bb Farmer Engagement Program



Social Responsibility

Big Basket launched zero-margin tomato sale

Big basket took the initiative to pay farmers at least the cost of production when the prices crashed by 30% of cost of production (Rs. 5 per kg) and thus helped in increasing the demand for tomato to uplift the market situation.

Ms Mary Adzanyo: At the end of the session, we are able to understand the trends of changing cashew kernel market, what are the ways to deal with them, the implications of these changes on our business, how do we adjust in order to meet the demands of the market. What we find interesting is that we looked at the changes; we looked at the innovations, as we started with food safety, FSMA. Here, we learnt about supply chain linkages that's where we can ensure food safety without linking up properly to your markets and to your suppliers.

Mr Somnath Chatterjee ITC, spoke cleverly about linkage to supply chain and also food safety issues and how well they are linked. Even in the E-platform markets, Food Safety plays a very vital role as they are interested in direct linkage with the suppliers in order to ensure quality nuts. What does all this tell us? Therefore, in our policies at the strategic level and the governments where we also make policies for the cashew sector, we need to be aware of changing market dynamics and how it affects retail sector, suppliers and buyers altogether.

Ms Mary Adzanyo: We all saw how the online markets is working for many produce, all I have to ask you one question particularly for cashews, what have you seen as a trend for cashew consumption on your E markets?

Mr Seshu Kumar: What we find is that, the range of products that a customer buys actually goes up as we are able to provide with various varieties, which are typically not available in a traditional grocery retail stores. As a customer is exposed to more varieties, he will be willing to buy more. We found out that products which are focused with more varieties are bought more and have high consumption. **Particularly in India consumers have huge preference for organic and natural products. There are only few sellers who can assure that its completely organic product.** So by communicating to people that it is organic, demand has actually gone up exponentially.

Ms Mary Adzanyo: Very interesting, can the same technology be used elsewhere, the panelists today have told us that the consumption is going up because it's easy for the product to be delivered as you can be still at home and cashews will be delivered at your door step and it can be consumed. Can this be the same trend change that can help increase the local consumption in Africa? Now I would leave this question for everyone to ponder.

Mr Tola Faseru: Thank you so much for your presentation. Big basket seems to be trading in so many commodities, am wondering how are you able to manage because this

seems to evolve and cover the government, whole chain, from growers, financing, linking different processors to final consumers. How are you able to do it under a single shop?

Mr Seshu Kumar: First, we are able to sell a large range of commodities as compared to a physical store. The best advantage we have is the distribution center in every typical city. From the distribution centers, we are able to supply orders to customers throughout the city. We are able to get far higher throughput as compared to retail store. As compared to a hyper market, we have the largest distribution center with the capacity equals to at least 6-8 hyper markets capacity because we are able to keep it in a single store; they are able to maintain a larger range. Second part with regards to the farmer integration, I think it's more of a necessity in the Indian market primarily, if we have to integrate with the farmers, we have to address all their problems. Otherwise there is no reason for a farmer to come and sell to you. The reason why we directly buy from farmer is; we have better control on quality. Besides, the price volatility is much lesser when you buy from a grower. Typically in India, the products are being sold between multiple traders before reaching a consumer. As a result of which there is a lot of volatility in price and decline in the quality. Hence, we support our growers and suppliers by providing them training, financial support wherever possible.



Ms Daria Gage: With improvement in post handling technology and with mechanisation of the processing, we see a change in the cost and complexity of differentiation



of grades. Is there any preference for the broken grade? Is it still as important as it was before? Will this shift your demand towards other grades?

Mr Somnath Chatterjee: Couple of years back, it used to always be like what we used to buy was a by-product of the cashew processing. There was time wherein there was a high institutional demand for baby bits, SWP, 8 pieces, that our vendor base started quoting prices which was higher or almost equal to wholes. That was because there was not sufficient production of by-product in accordance with demand. Hence the vendors were cutting the wholes to provide us with the brokens. Now, we need to recognize that the markets are changing and the demand patterns might soon dictate the price levels. We might have to face an uphill task. **In India, for instance we have demand for brokens at a far higher pace than other whole grades and this trend is likely to continue. All the grades are necessary, but the lower grades demand is actually growing at a faster pace. For instance, our usage in ice creams and cookies, the smaller grades have wider usage and demand. Even the cashew powder is used by us in making of curry paste. It's more likely that our requirement for brokens would be much higher than that of whole grades.**

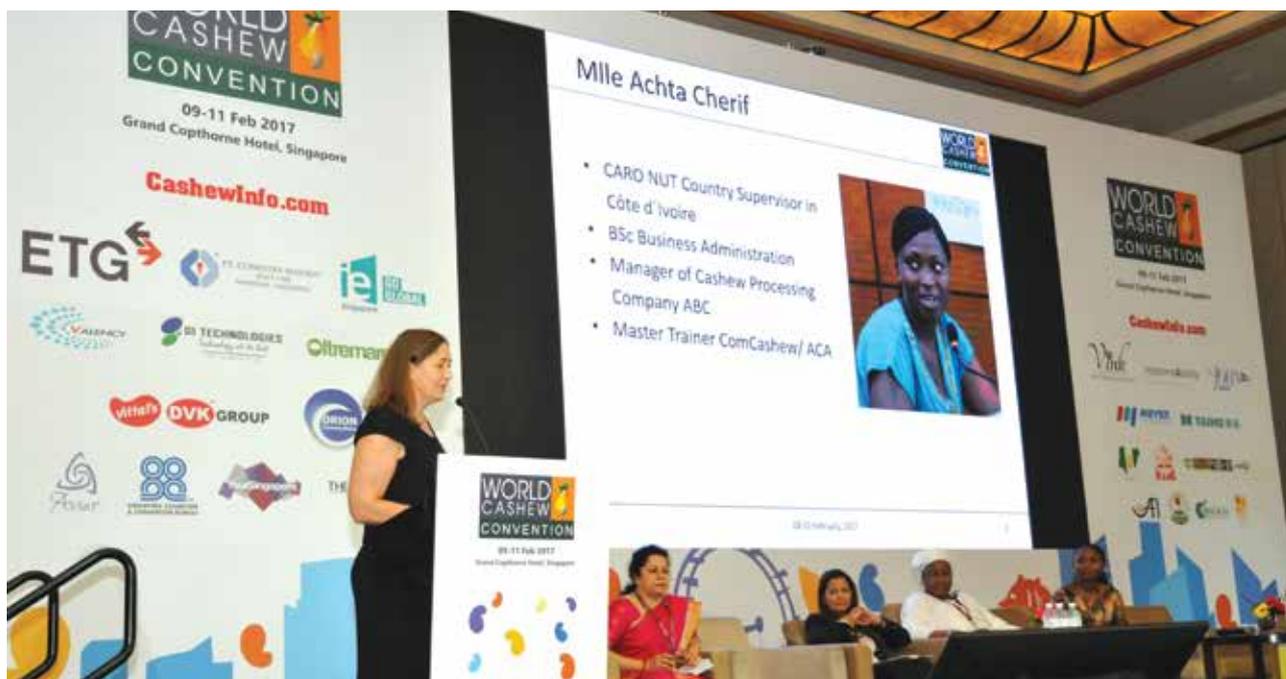
Mr James: As you have earlier mentioned about organic market as there is growing interest among people. Can

you please put some numbers on the growth trends and what kind of price premium can be achieved as you know the cost of organic certification is high?

Mr Seshu Kumar: In terms of the organic markets, today the growth is high because of the supply. The demand is far higher than that of supply. Currently around 10% of our total sale happens through organic products, but I think it can be far higher. Firstly, we need to be able to supply to the prevailing demand. Second, specifically to the Indian Market, Indians are interested to buy organic products, but are not ready to pay higher premium, which generally the growers expect for their product. Up to about 20% premium is being paid by the consumers and at that level, we find that the demand is higher many times than that of supply available in the market. I think the growth can be much higher than what it is today. In future we foresee wherein the customer might buy everything that is organic when it comes to agri-commodities. With respect to the certification, we really don't find it that expensive, percentage cost of certification is very less when compared to that total cost incurred. It's less than five percent of total cost, but we expect it would decrease even further as the volumes go up.

■■■

Women Ground-breakers in Cashew Business



Moderator: Ms Rita Weidinger, Executive Director, ComCashew, **Ms Vidya Kamath**, Bola Cashew

Madam Ferdjani, CEO, FMA Industry, **Madam Minata Kone**, Director, SOTRIA and **Ms Mlle Achta Cherif**, Caro-Nut

Ms Rita on Ms Mlle Achta Cherif: After her father passed away, she had to take over the processing factory, export to the Caronut, US and today she is also the representative of Cote D'Ivoire and she is continuously visiting various countries and factories, with that story you might feel it's a old lady but she is just 30 years.

Ms Rita on Madam Ferdjani Dalada: Ferdjani Dalada is from France. She did her masters in international trade and she wanted to come back to Africa, to do cashew business. She chooses Cote d'Ivoire, which is predominantly of cashews that's where she started in September 2015, and installed a company FMA Industry. Just within a year now she has the fourth container of kernel for export. This is indeed a short story of a very young business woman who has learned a lot from her pioneers.

Ms Mlle Achta Sherif - Caro-Nut

I have been exposed since very young to various aspects of the cashew, from the supply through the export of raw nuts and processing, until the export of cashew kernels today. My story begins at a young age at home with my father, may his rest in peace, who worked in the cashew industry as an exporter of raw nuts and president of a cooperative of processors, and who later founded Agri-Business Company in Touba in the North-West of Cote d'Ivoire. I actually joined the cashew industry when he died in 2011, and by necessity, I found myself running the family business. Initially it was not easy, but we were able to produce some containers and we became one of the first companies to sell in the American market from Africa, through Cashew International which became Caro- Nut today. Then, in 2011, following internal problems, I left the

family business to integrate Cashew International, which is now called Caro-Nut. Since 2012, I have been working with Caro-Nut to create a connection to enable local processing companies in Africa to have direct access to the American market. Hence, it has provided an opportunity for me to visit several processing companies in Africa, Côte d'Ivoire, Benin, Togo, and also in East African countries viz., Tanzania and Mozambique.



Dalada Ferdjani – FMA Industry, Cote d’ivoire

FMA Industry is a cashew processing company located in Korhogo- Cote d’ivoire and our raw nut processing capacity is 10,000 tonnes per year. I was born and brought up in Niger. I am a father of Algerian and Malian mother, so I know West Africa well. I studied in Europe in international trade and I began my career in banking, but my ambition is to return to Africa. To pursue my ambition, I resigned my job and I embarked on research for investment opportunities in Africa. So I traveled all over West Africa, Mali, Burkina Faso, Cote d’ivoire and Senegal by studying all the possibilities and all sectors including Agri-food. My choice then turned to cashew. I had visited several factories and exchanged with professionals of the sector of which Ms Kone, by whom everything began, she inspired me a lot. Since 2015, I have embarked on this adventure. Why did I choose Côte d’Ivoire? Because it is the world’s leading raw nut producer. So I settled there since September 2015, and I had received my equipment in February 2016. We started the processing activities in September and despite all the difficulties, today we are at our fourth container of exported kernels.



Madam Minata Kone, Director, SOTRIA-Burkina Faso

Hello everyone and thank you for being here. I am KONE Minata, I have two children and three grand-children. I started trading at the age of 8 when I lost my father. I had to help my mother to look after my other sisters; that’s where everything began. So from the age of 8, I used to leave school in the afternoons to trade, so that we could have something to eat. Thus, joining in this small business and stopped my schooling little earlier and I found myself working as an official at the Ministry of Agriculture for 16 years in Burkina Faso. During this period, my mother, may she rest in peace, recommended me to go into agriculture. She gave me a few hectares of land and made me to plant cashew. That was in 1992. This plantation was used as a test plantation for the GIZ-ICA project in 2009. That’s why I had to inform to the Ministry of Agriculture, which then turned into a resignation. So I started my activities in cashew and others.

I started exporting, Togolese and Beninese traders were coming to Burkina Faso and I was selling raw cashew nuts to them. In 2003, I had followed a lot of information through the Chamber of Commerce on the advent of cashew nuts in Africa and decided to set up my own processing company, SOTRIA-B. We are settled in the West of Burkina in a small village called Banfora, which is my home. The plant was established in 2005 and we started the activities in 2006. We met several of the people present in this room. We have exported to the sub-region, Nigeria, Benin, Maghreb, the Middle East, and then we met our real first partners, Global Trading International, which allowed us to have a performance, to produce quality and to be able to sell on



the produce to the European markets. So I thank Gérard for that. In 2009, we became members of the African Cashew Alliance. In 2009, through the ACA, we were visited by a large American group called Costco. When they came to Africa, they visited three factories, including mine; they then said, they wanted to work with me and we had to standardise the plant, which we did. With Mim Cashew, we were the first factories to send our first containers to the United States of America. Since then, we are working with CostCo intermediary on the field, which is Caro-Nut to export our nuts; we sell our kernels on to the American market.

I also would like to share about the cashew processing in Africa and the role of women. According to the ACA, in 2016, 148,000 tonnes of RCN were processed in Africa. Of the 148,000 tonnes processed in various factories, only 11 are owned by women. In Africa, for every 1000 tonnes of processed cashews, 300 people are employed, 210 of whom are women, accounting for 70%. Similarly, at the level of nut collection, the activity is mainly carried out by women.

According to ComCashew, by 2016, nut harvesting and post-harvest activities accounted for 80% of the total workforce used in production, and women accounted for nearly 60% of the workforce. You see those numbers. Now, how do all these women work so that they can look after their families?

We have seen the high technology that has been presented here; Africa is in a different situation. The factories herein are located in rural areas, where there are many illiterate and untrained women, who have to work, feed their families, pay for their children's schooling and take care of all the loads on their shoulders.

In Africa it is also said that poverty is rural, it is rural, and has a heavy impact on women; Women are poorer than men in Africa and we are looking for the empowerment of women. We therefore, urge all investors who have come here to participate in WCC to come forward and invest in Africa in the field of cashew processing in order to enable these women to live and leaving poverty behind.

We once again asked investors to come and invest in Africa, so that we do not see these boats loaded with women and brave young people, going to die in the Mediterranean in search of a hope often lost beforehand. It's a cry of the heart, so we're asking investors to come, we know there are difficulties in setting up plants in Africa, but ACA, in its new vision, will lobby with concerned African governments, to facilitate the business environment in the cashew industry. I believe that it is its role and it must play it fully. I say this because I am also the Alliance's Vice-President since 2016.

Ms Rita on Madam Minata Kone: Madam Kone speaking is like all the experience of West Africa speaking. Madame Kone has two children and three grandchildren. Since she was eight years old, she is involved in trade. She was working in the ministry of Agriculture for 16 years, when her mother reminded her to invest in agriculture. In 1992, she started a cashew farm which eventually became a test farm for Com Cashew. She works in trading of RCN since 2003 and in 2006 she started her own processing company- SOTRIA-B, where she has exported within West Africa and then with the help of Trade and Development Group to European Union and today she is working with Caronut, US. She reminds us that from 148 processors in West Africa. According to ACA only 11 (less than 10%) are managed by women, also 300 women are working under her producing per 1000 tonnes of processing out of around 70% women are under post harvest management as we have seen. She reminds us about technology and risks if we invest in rural areas, poverty which strikes in rural areas and which influences more on Women.

Therefore, she invites investors to come and invest in Africa and do not want women to migrate but to have an income, to have a life around communities. Madame Kone is also the vice President of the African Cashew Alliance which has just reshaped its vision and in their new vision they want to pressurise the government to increase processing in Africa. This was just a short summary of Madame Kones story that has an experience of 25 years.

Ms Vidya Kamath

We have gathered here today at the 3rd edition of world cashew convention to deliberate on the theme of “embracing change”. I am thankful to the organisers for inviting me to be a part of the panel on “women ground breakers in cashew business.”

It is an honour to share some of my thoughts on my journey so far in the cashew industry amongst this august audience. As I stand here today it makes me realise that age is just a number to start out. It doesn’t matter who you are and where you come from because the ability to triumph always begins with you. I was just an ordinary girl with a management degree married into a business family. For almost 15 years, my world was my home / kids/ family. Then in year 2005, a change in family business made me a part of it which I embraced wholeheartedly.

What just started out as a helping hand in managing business, which I readily and happily obliged over next 12 years completely, changed my life? With each passing day, the passion I developed towards the job I was doing and holding on to my integrity helped me to stand out. The journey no doubt has been fulfilling one, but had its own challenges.



It was at that phase a lot of changes were taking place in the digital world and new innovations in technology. Mechanisation was changing the face of cashew processing. Adapting to these structural changes in the cashew industry was a challenge even for the experienced players. Being a new entrant, learning the ropes of business from this phase helped me in good stead.

It made me to take up every challenge as an opportunity with the determination to excel.

Due to the faith, the family had in me, over the years I was assigned to taking on higher responsibilities in business, in spite of being a woman in man’s world. I have never felt any gender discrimination interacting with men on the job I was doing. Ultimately performance counts and when you can deliver results, all reservations are dispelled.

The biggest challenge for business women is to balance home and work. You have to prioritise your work and being organised in every aspect of your day, which helps you to strike a right balance. Family support plays a very important role, especially if you enter the business world as a mother. I was fortunate and blessed in striking this delicate balance due to the support of my husband / parents / in laws and specially my daughter.

The cashew industry is a very interesting case study to reflect upon women’s role across the value chain. In our factories, more than 95% of the workers are women. But women do less than 5% managerial work and when it comes to higher management position the percentage is almost zero.

With more than 95% of our industry being family managed businesses. I’m sure there is lot of hidden talent in each of these families. In today’s generation when women are all well-educated and extremely talented, with a little support and push, this talent which is honest / loyal and trusted can be part of business which can surely make a difference. If, given a chance, the hand that rocks the cradle can surely rule the world complementing / contributing / creating a better tomorrow.

I sincerely compliment and congratulate the organisers for taking up issue of women participation in leadership roles in cashew industry on this global platform. It’s an eye opener and welcoming step forward. I hope the panel discussions will facilitate and encourage more women participation in future.

Questions from Rita

Ms Achta Sheriff, we have known that successful women have to do business differently. In your age, you still have the privilege to dream very big. What’s your dream for women in cashew business?

My dream is Africa producing, Africa processing, and Africa consuming Cashews.



Madam Ferdjani Dalada: I can imagine that starting a new business is a huge task and you need a lot of advice. You mentioned that you have the zeal to learn new technology, you have asked funding, what did you encounter there? Did you find helpful hands? Where did you get your support and finance from?

Ferdjani had to call for a lot of technical assistance in the business plan development, access to finance; she had to look for funding with the help of which they were able to buy thousand tonnes of RCN and also technical assistance for setting up a processing plant. **TechnoServe has provided a very technical and viable support which she is thankful for.**

Madame Kone: your experience as to how to associate with others, you have been a pioneer and a role model for so?

She advises new business people into cashews sector not to have the same experiences, but have to keep open their ears and eyes because, there is a proverb in Africa that says keep your ears and eyes open and learn as much as possible, also attend schools, so that you learn from others and develop partnership skills.

Ms Vidya Kamath: I would like to know your advice to women, daughters and family in the cashew Business as to how to utilise the immense potential of women?

Just has RCN once being processed comes out as a high value product, in the same way women once given a chance to come out of homes and support, with a strong support system can definitely contribute immensely in the business as well to the world. In today's digital world, which is changing the way we live and do business, being a lifelong student and learning the new technologies and

innovations has to offer will make us successful in life

Questions Section

Probably everyone in the hall would like to hear, as they say behind every successful man there is a woman, I would like to know is vice-versa true?

Ms Vidya Kamath: I would say behind every successful women there is a husband, who supports her whole heartedly because, if that support is not there you cannot achieve much, that's been my experience. So I think family support system is essential for a lady to move forward and make a mark in the society.

How to find Women in the middle management, as we find only the top managers being recognised?

Madam Kone: Generally, in the middle management, we have a deficit of women as we have to recruit and train the people in the companies. I have not only recruited women for middle management positions, but also have trained them.

Madam Ferdjani: It's a new industry for women and they are taking more and more head of unit's position these days, but it's a question of time where it all develops effectively.

Ms Mille Achta Cherif: She insists and emphasis on the importance of education in all levels for women.

Ms Rita's final comments: if we can have only men in the governing sector without women, it will be difficult to change. But, if we want cashew to be an innovative and a modern sector, we need to have different prospective and the challenge is to integrate women in the areas, which they haven't been a part so far.



Financing the Cashew Value Chain



Moderator: Mr Rahul Kamath, Partner, Bola Surendra Kamath & Sons, **Mr Vipul Sardana**, Senior Director, Strategy & Transformation, Maersk Group, **Ms Suhasini Singh**, Head - Agriculture Debt Investments Asia Pacific, responsAbility
Ms Fanja Ravoavy, Senior Operation Officer, Cote d'Ivoire, IFC and **Mr Sumit Aggarwal**, Head - Product Sales Standard Chartered Bank

Mr Rahul Kamath: Cashew industry today is in an expansion mode and the prices of cashew kernels or cashew products have doubled in the last three years. The volume involved has also gone by at least 20 percent. So effectively the fund requirement for any cashew business has gone up by at least three times in the last three years. This is the biggest challenge being faced by most of the people in the industry and there is no better place to discuss this than Singapore, the hub of the global financing trade. Most of the banks and most of the countries are becoming risk averse across the world. India is having huge NPA problems with banks and the same is the case with Singapore and Dubai. Presently most of the banks are seeing cashew trade as a risky trade and are becoming risk averse. This is our collective responsibility to impress up on the financiers to say that cashew is not a risky trade to finance.

Last time I was of the view, the way in which funds were required for this industry; we need to go to World Bank.

Today, I am happy that IFC, part of World Bank group, is participating in this forum.

Mr Vipul Sardana, Senior Director Strategy & Transformation, Maersk Group

Maersk Trade Finance

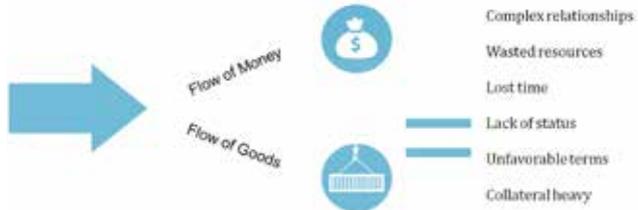
Single window: Flow of goods and money
 Maersk is the world largest container shipping line.



Trade finance made simple. In future containers you know that financing and shipping can be cumbersome, due to heavy takeover and incompatible systems, trade finance takes a lot of efforts and time. This causes a lot of waste to your company, worldwide it sums up to a lot. We understand that you are tired of wasting time and business opportunities. That's why we have decided to merge trading and finance and combined it to provide in a single window for the flow of goods and money. By doing this we are offering you fast access to capital, fast and single processes, reliable transport, and access to global markets.

We are able to finance both pre and post shipment, so that you can focus on expanding your market share globally. We call it trade finance made simple.

The Structure of modern trade is difficult for small teams



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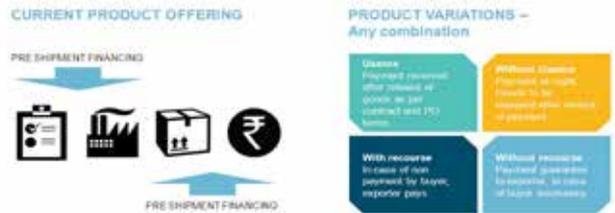
We want to partner with you to simplify your trade finance process.

We understand what is needed for a successful 2017 Raw Cashew Nut season



*** USD 1.5 Bn is the total expected market for raw cashew nut cross border trade in the 2017 season**

Trade Finance product offering



We have an instant Export Finance up to 50 K USD

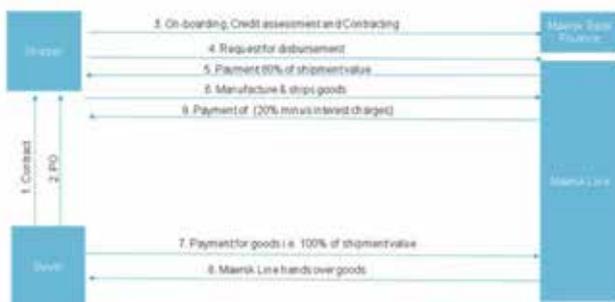
Product Post shipment finance transactions on CAD basis

Salient features

- Minimal documentation (The only financial doc we are asking is latest audited financials)
- Eligibility criteria *
 - Basic financial checks
 - Credit limit upto 50 K USD
- Digital process- Completely paperless

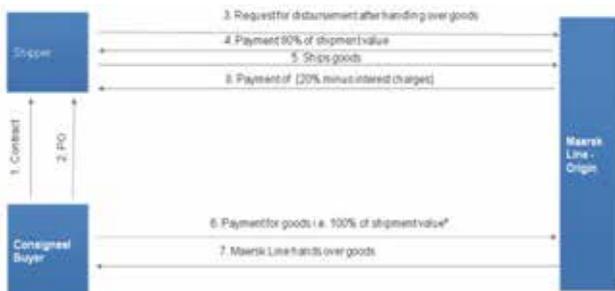
Pre+Post Shipment finance process:

High level overview: Flow of funds and goods



Post Shipment finance process:

High level overview: Flow of funds and goods



We have an instant Export Finance up to 50 K USD

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* Terms and conditions apply

Mr Rahul Kamath: Hopefully when Maersk is financing cashews, the cargo will move faster. For a commodity like raw cashews, the transit time is very critical. Sometimes we find our cashews making world tour rather going to the specified destination.

Mr Rahul Kamath: When it comes to finance one of the biggest grievances of cashew industry is that our banks are not responding. When the organisation name itself is 'responsAbility' that means we are sure that they will respond to us very quickly.

Ms Suhasini Singh, Head - Agriculture Debt Investments Asia Pacific, responsAbility

Ms Fanja Ravoavy, Senior Operation Officer Cote d'Ivoire, IFC

responsability is a Switzerland based asset manager focused on three main sectors, which includes Finance, Food & Agriculture and Energy (both in debt and equity) and started our operations in 2003. Currently we have invested in 90+ countries and 500+ institutions.



IFC is a member of World Bank group. The World Bank group has committed for 64 billion dollar during last fiscal year, in that 70 percent are from IFC.

Working Capital	Fixed Asset Financing
<ul style="list-style-type: none"> • Inventory • Sales contracts • Transaction documents • Bank account pledge • Others 	<ul style="list-style-type: none"> • Plant & machinery • Land & building • Share pledge

In terms of financing, we are providing finance from the downstream of the value chain to the producer of the input like fertilizers or for agricultural equipments, for farmers to improve their plantations and to improve the livelihood, also for processors and those who are working on the logistics. This is the same scenario for all the value chains. For cashew value chain, we have acknowledged the importance of working capital, in addition to what we are providing in each segment of the value chain.

Financing needs and available financing structures

Borrowers – Investment Criteria

- Audited financial statements
- Translated versions of audited statements (Vietnam)
- Sizeable owners' equity and low risk taking!
- Debt / equity ratio
- Track record – compliance & discipline!
- Buyers (contracts) and lenders (repayments)
- Members of cashew associations
- ACA, VINACAS, CEPC
- Complying with social and environmental criteria
- Legal structures:
- India – partnership firms Vs private limited companies

For supporting the product company in terms of funding working capital every year, we have supported the government of Cote d'Ivoire to set up warehouse receipt system. This is the mechanism that is already functional in India, East Africa, but the system is not there in francophone African countries.

For any company to deposit any raw material, we will give them storage facilities, and then the collateral company will deliver the property title based on the amount of raw material stored. Then they can submit the property title to any financial institutions for getting loan or working capital. Usually the institutions are giving loans between 70 and 80% of the stored raw material. Sometimes we are

providing restructuring facilities to financial institutions mainly on the cashew sector, because it is quite new, the commercial banks were not fully aware of the sector and they are risk averse and it depends on the need of the banks.

We have started the process in Cote d'ivoire last year. This year we would look out for more developed mechanisms in Cote d'ivoire and certainly in Senegal and other francophone countries.

IFC: A MEMBER OF THE WORLD BANK GROUP



IFC Investment/Advisory Services Involve in the Agribusiness Value Chain "From Farm to Fork"

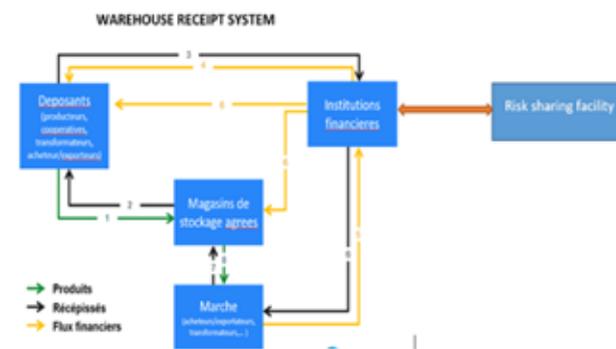
Our Interventions and Goals - The Six themes that drive our agenda



IFC Investment/Advisory in cashew value chain



Cashew processing – Working capital – IFC response



Mr Rahul Kamath: Cote d'ivoire, the world largest producer of RCN is expected to produce 800,000 tonnes of raw nuts during this season. Availability of easy credit especially from farm to export in Cote d'ivoire can really change the game.

Mr Sumit Aggarwal, Head - Product Sales Standard Chartered Bank



For a cashew processor and given the seasonality of cashews, procuring raw cashew nut is a key activity. For handling procurement a lot of cash is needed, which is unpredictable considering huge fluctuations in price of raw nuts. The processor should have good network at the ground level with the suppliers.

We are working with one of the largest commodity supply

chain company in the world from Asia; also they are very active in Africa. They have their own mobile application, where they are working with farmers to help with crop management and other activities. We are adding mobile wallet in their app, whereby we minimize the amount of cash handling. Now markets like Vietnam have mobile wallet is working. But markets like Kenya, unfortunately that very relevant. Have huge amount of money supplied through mobile wallet and we are looking at the perspective of digitizing. In Africa, in many markets, some of our biggest clients, actually developmental organisations a lot of money are circulated through them.

Mr Rahul kamath: When it comes to financing the first and foremost question comes in to everyone's mind is that of rate of interest. I would like the panelists to give us a fair idea of rate of interest for a factory which is of reasonably good size/secured business.

Mr Vipul Sardana: In most trade finance across the world, generally the pricing will be very much competitive with the rates that we are getting today in the markets. Sometimes, the cost of financing is the difference between whether to trade or not to trade. Some of our existing customers have come back and reported significant cost savings and also reported lots of other internal savings (in total to the extent of 15-17%) and time due to ease of doing business with us. In our trade financing, there is a fixed deal and fixed rate of interest, billing will be predictable and you will come to know all those things at the time of signing the agreement itself.

Ms Suhasini: It's hard for us to indicate an interest rate. Since you want us to indicate a number, I heard somebody from the audiences say below 8 or 9%, so I will say below 10%.

Ms Fanja Ravoavy: For us it is not possible to indicate a number on interest rates as it depends on various other parameters. We have at least four criteria. First is related to the owner. Does he have enough experience in the sector and to know about the other team members of the company? The second is related to the business -the project size. We can finance more than five million, but we can consider three million depending on the country, where the company is located. The third criterion is about the market position and competitiveness of the company. The final one is regarding the social impact of its activities. Based on the profile, we will decide about the nature of loan and other applicable terms and conditions.

Mr Sumit Aggarwal: Our approach right now is that we look into the entire ecosystem. Among the various variables that one takes in to account as a bank, one is the pricing risk of the counterparties. We want to tie-up



the eco system, to the point that we are even be talking to the last mile where probably the unbanked can also be convinced. The whole idea of digital is that we have less operation risks and we can bring down the price. The degree of interest is definitely very high, trade finance is far better than lending, digital is better than paper. So, if you are able to plot your entire eco system, we basically take the benefit of better rated counter parties, shorter flows, to bring down the prices. Quoting a price is out of the system that doesn't make any sense.

Mr Rahul Kamath: It seems all the organisations are very interested in providing finances to cashews, but not willing to state the rate of interest.

What are the regulatory challenges when it comes to countries like India? Can you really finance Indian companies or is there any restriction?

Mr Vipul Sardana: There are some regulatory restrictions. One benefit of not being a bank or financial institutions, we are not under the preview of the local regulatory authorities such as RBI or any other governing authority. We are a financial services company regulated out of Copenhagen, Denmark. As a foreign entity outside of India, we have now asked RBI permission to provide export funding if not the LC to Indian exporters. Yes, there are some regulatory restrictions. We have to be in compliance as per the law of the land. But we don't have to comply with lot of things that financial institutions have to comply.

Currently our product is designed only for the exporters. Very soon we are going to launch for both financing supply chain as well as port financing.

Question: Usually when we ship we give our BL (Bill of lading) to the banks. We do cash against finance through banks. It takes lot of time and hence our financial needs keep increasing. Is it possible to shorten the time period?

Vipul Sardana: BL is a piece of paper that the bank is funding. So they are right in not releasing the funds to you till they have the piece of paper. But, we (Maersk) as a shipping line, the generators of that paper, we don't have to wait for the papers to be generated to give you money.



In a simple post-shipment CAD (cash against documents) equivalent of is that when the stuffed container comes into our possession in the ICD or at the terminal is when we pay you. The BL is generated electronically and will be given to the consignee.

When you give us the stuffed container and if you are contracted with us as trade finance customer, we give you 80 percent of the purchase order value as soon as the container is in our possession. When the goods reach the destination, we hand over the documents to the consignee once they pay us 100 percent of the purchase order value. In that we will keep 80 percent with us, because we already paid the money and with the balance 20 percent, after deducting charges, the remaining money will be paid back to the customers.

When compared with typical banking channels on time, when dealing with Maersk trade finance, depending on where you are located, whether you have dry port or not, the waiting time in the terminal is 8 to 15 days is what you can save in getting access to money faster as compared to other financial instruments.

Bhavook Sachdeva: How do you finance pre-shipment and what are the criteria for new start ups?

Vipul Sardana: Pre-shipment is more-risky, for us the collateral is the goods that you are placing with us for transportation. Our product is more based on simplifying the things to enable global trade. When we started in 2016, we did only post-shipment. The more and more when we started interacting with customers like you and largely other traders, we found that, if you are not financing pre-shipment, then we are not truly enabling the business. In India as a foreign entity we have not started with pre-shipment finance, but in Singapore, we are providing finance to both pre and post shipments.

Question: If you are not an existing customer of Maersk

how do you deal with them?

Vipul Sardana: The way we evaluate the line and interest rates of customers is on the basis of three parameters. One is our own mutual history and second we will look at some basic financials and finally the subjective assessment of how long you are in the market, track record, credentials etc., Initially you will be priced differently when compared with old customers, but over a period of time upon mutual trust you can also expect better pricing.

Rahul Kamath: If people are in logistics, will you finance?

Vipul Sardana: Recently during winter of 2016, Maersk has segregated energy and transportation logistics business. We brought all our transport businesses under one umbrella. By doing so, our intent is to give the customers one window of end-to-end enabling global commerce. Today we are funding only those containers that are shipped on Maersk line live branch but in future we may have the ability to do other lines also.

Rahul Kamath: Most of the peoples from India or Vietnam, are doing financing through Cote d'ivoire for procuring raw cashew nuts. Can they do financing through you where they stand guarantee for their loans and do financing the farmers at the bush through your organisation? Is it possible?

Ms Fanja Ravoavy: Yes we can do. It's not individual farmer, but farmer co-operatives. We are working with more than 100 companies across the globe.

■■■

Cashew Market Outlook for 2017



Moderator: Mr Pankaj Sampat, MD, Samsons Traders, **Mr Ranjeet Wallia**, CEO, CHI Commodities Handlers Inc.
Mr Vu Thai Son, General Director, Long Son Joint Stock Company, and **Mr Rohit Bajaj**, Fairways Trading Company

Mr Pankaj Sampat: Cashew kernel market saw stable prices in 2013, 2014 and 2015. Prices moved in a very narrow range of USD 3.25 to USD 3.75 with occasional spikes and dips which were fairly short lived. But in 2016, we witnessed a change, which we haven't witnessed over last 6-7 years. Prices started moving up gradually. From January to April, the price ranged around USD 3.50-3.80, which slowly moved up to USD 4 - 4.25 in May, June and July. Further, it kept increasing to 4.25 - 4.50 in August, September and October. And finally, the last quarter saw the fireworks, the prices moved up early during early November from USD 4.50 - 5, which was never seen before in Cashew history. It, then, slowly came down to USD 4.75 by end of November and then to USD 4.50 at the end of December, indicating a price volatility of about 10% in less than 3 months.

In January 2017, the prices have again moved up by 10-20 cents, but now (that's Feb) the markets have become quiet. The average price in 2013 was about USD 3.25. In 2014-15, it was around USD 3.50. In 2016 it was USD 4.25.

The RCN prices have steadily kept increasing from last 3 to 4 years. In 2014, the average price of RCN was around USD 1200-1300/ton with a short-lived Tanzanian peak of about USD 1700/ton. In 2015, we saw the price move up a little bit of about USD 1300-1400/ton with a Tanzanian peak of USD 1850. In 2016, the average price moved up substantially to almost USD 1700-1800/ton with a Tanzanian peak of about USD 2400, which was never seen before. If we just look at History every peak is witnessed only in Tanzania probably that's because that is the period wherein the availability of cashews would be lowest.

With this background of stable prices from last three years and one year of constant increase in prices judging the outlook for 2017 is very difficult, especially considering that the other tree nuts which were earlier high priced are now coming down.

The world cashew trade today in kernels is about 700-750,000 tonnes out of which 150,000 tonnes is being consumed in North America and other 150,000 tonnes in

Europe, about 50,000 tonnes from rest of the world and finally Asia is consuming 350,000 tonnes. which is 50% of the World Consumption. If we go back 10-15 years ago, it was North America, which was consuming more than 60-70% of the World Consumption, but now it's Asia, which is consuming 50%. This change in the power of pricing and consumption pattern has shifted from North America to Asia, which is a significant change that has occurred in the last few years.

Statistics comparing 2016 with that of 2015, India's import of raw cashews were down by 260,000 tonnes, India's export have decreased by about 30,000 tonnes, which means that the supply of kernels into the Indian domestic market was down by about 30,000 tonnes. If you take into account that the India crop was relatively shorter than normal then shortfall might be even higher.

Contrasting that RCN imports by Vietnam have gone up by 275,000 tonnes, its kernel exports have gone up by 22,000 tonnes, which means that the inventory in Vietnam (Kernels and RCN together) might have gone up by 40,000 tonnes, which is unclear as the Vietnams crop was smaller this year.

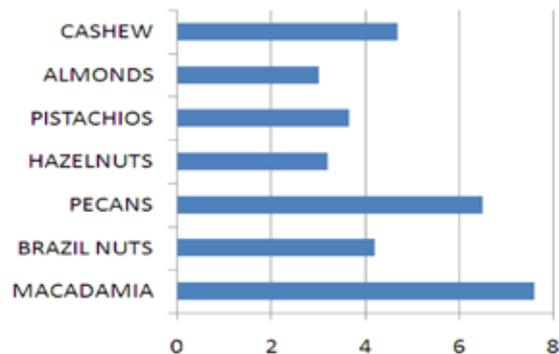
Exports of RCN from the African countries to India and Vietnam have remained unchanged at about 1.78 million tonnes, which means the crop in Africa has remained all most the same. Supply of kernels from India and Vietnam has almost remained the same at about 425,000 tonnes. Despite the steep increase in price of cashews from USD 3.25 to 4.25, the quantum of exports from India and Vietnam has remained the same. With these remarks, now am passing on to the panel for further discussion

Mr Ranjeet Wallia on USA and Canada Cashew markets

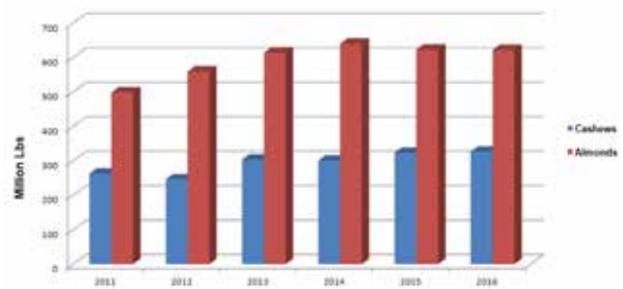
SWOT	
STRENGTHS	WEAKNESSES
<ol style="list-style-type: none"> SUPER FOOD WITH HEALTH BENEFITS WEALTHIER MIDDLE CLASS TASTE PREFERENCE- Love Cashews POPULATION GROWTH (7B TO 9.8B BY 2050) GENERATIONAL CHANGES: The Rise of the Millennials + Baby Boomers 	<ol style="list-style-type: none"> SLOW ARRIVALS IN 2017 MUCH LIKE 2016? TRANSIT TIME - 7/8 MONTHS FROM FARM TO FORK
OPPORTUNITIES	THREATS
<ol style="list-style-type: none"> QUALITY SOCIAL MEDIA MESSAGE > Sustainability > Farmers livelihood/income 60 PCT of the world productions in the next 3 months TASTE /PRICE/ HEALTH BENEFITS are the main drivers of snack food purchases MECHANISATION increased productivity 	<ol style="list-style-type: none"> QUALITY SOCIAL MEDIA " CASHEWS PRICE ARE GOING NUTS" - Bloomberg SLOW ARRIVAL IN 2017 MUCH LIKE 2016? UNCERTAIN PRICING IN 2017 TRUMP FACTOR: Buy Made in USA STABLE ALMOND PRICES resulting in " Store Promotions" USA ALMOND consumption is up 12% over last year. FORMULA CHANGES in premium mixed nuts



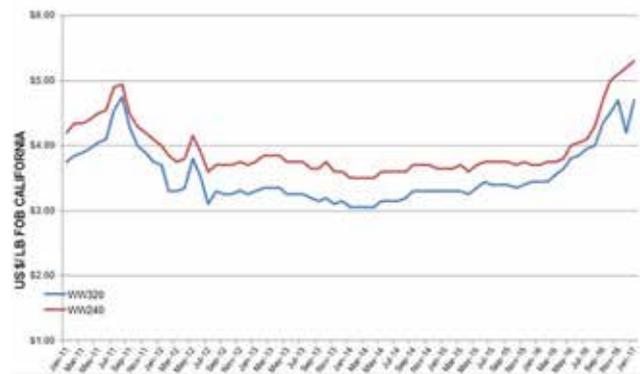
Prices of cashews Vs Other tree nuts
Price as on December-2016 (Unit: USD per lb)



Cashew Vs Almond USA Consumption



WW320 vs. WW240 Market Price Trend (Last 6 years Jan-2011 to Jan-2017)



Almond NP price from Jan 2014 to Jan 2017



Cashew Vs Almond prices (2014-2017)



(Note: The above works were cited from INC, WCC, AFI and Almond Board of California)

Mr Vu Thai Son on China Market



Buying power: By 2016, population of China is around 1.380 billion, about one-fifth of world population. Average per capita income US\$ 7,200 and growing faster (above average). Chinese like to eat nut including cashew, so buying power should be good.

Eating habit: Very famous in the world for their own way of foods and flavor. They like to eat nut as snack as well as cooked nut with foods. Good market for low quality of cashew kernels. When mixed and cooked with other foods, it is hard to know that they are low quality cashews. Like to

add flavour, so they can buy even off flavour cashew.

Food safety: Not demanding high food safety, HACCP or very clean factories. Also they are not checking pesticide residue and other chemicals. An easy market for food safety, also it is easy for small and medium scale factories to supply.

Quality preference: White color and dry cashews are liked. But in fact they can pay for all quality. Good quality to fetch good price, bad quality (not AFI standard) fetch less price. For sure they like uniform, not mixture of lower grades.

Business culture: Very similar to Vietnamese culture. Most of them can speak Vietnamese. Like gentleman agreement, words and fax scan of grades, price is enough, no written contract needed. No third party to make inspection, before loading and mostly all goes on the basis of mutual trust.

Cash payment is still popular, that's why still like to buy through land border (with higher freight) but manage to pay less VAT. Not very many direct sales to roasters, mainly through trading companies, because trading companies will give roasters credit. Often buy much volume linking to big event like: Lunar New Year, Mid Autumn Festival.

Conclusion

With very big population and good buying power and eating habit, Chinese market plays an very important role especially, if you process African cashew wherein you have many lower grades.

Chinese have its own culture, which is very different from Western culture. So to be successful in Chinese markets, you need to understand and follow their culture.

Mr Rohit Bajaj, Fairways Trading Company INTRODUCTION

- Cashews can lose their space to other nuts (almonds & walnuts) if the price is not corrected.
- Demand fallen by 15-20% due to high prices
- Almonds imports grown by 54% to India since the last year due to high cashew price.
- Need to make cashew farming more scientific.

Problems in 2016 especially to Indian processors – leading to fall in exports from India

- Hike in RCN import duty in India
- High RCN prices at origin centres
- High labour wages
- Depreciating currency



Almonds can replace cashew demand in India in the following segments due to high prices

- As a table nut in households
- In gifting segment during festive season
- Confectionary and snacking segment

USA and China are getting bigger in Walnut crop, which may also pose challenge to cashew sector in the coming years.

BREXIT Impact

- Fall in pound sterling was more than Euro so possibility of fall in UK imports due to high costs in comparison to other nuts.
- Rest of Europe demand may not be impacted as Euro has almost recovered.
- India & China looking more towards almonds due to high cashew kernel prices.
- Vietnam dong has been devalued regularly.

Demonetisation and GST

- Demonetisation in the month of November and December, led to big fall in sales and prices of all the nuts
- Demonetisation will lead up to GST and will be good for the industry
- GST will help not only the government, but also the cashew industry to increase revenues in the future
- GST will lead to tax rationalisation and will give a level playing field to all the states.

Conclusion

Reasonable price fall in cashews vis-à-vis other nuts will push the cashew industry into the growth mode again in years to come.

Questions Section

Mr Paul Rath : What value would you quote on price increase from the opening prices in Vietnam which was

USD 3.50-3.60 per lb and then in last quarter when the price really took a jump , how much of that price would you attribute to false, lies, in a lot of contracts most of traders, importers, roasters who had made contracts, once they get shipments from June-July-August-September because of the lies confuse the market which in turn becomes a cycle. How much difference in price would two different western buyers experience, as one has brought in USD 3.50-3.60 per lb and other for USD 4.50-4.60 per lb?

Mr Vu Thai Son: This happens many times, not only last year when the market was rising upwards and Vietnam or other country default the contract. It has happened in the past in 2008, 2011, etc. When a western buyer gets defaulted contracts from one shipper they have to buy from other shipper, and the defaulted shipper will sell it to other western buyer. For last year, it will contribute to, may be 50 cents per fob which is my guess. If everyone in Vietnam or other country will perform according to the contract, the price will be 50 cents lesser. When we in Longson started first supplying to the super market, the opening price was around USD 3.70 -3.75 per lb for W 240 and in season ending in November the same W240 we sold it for USD 4.40 per lb, which is a big difference.

Ranjeet: In November 2016, at the Vinacas conference, we were asked as to where the prices would be 2017. There was silence and we remember that the audiences were 99% Vietnamese. I threw a number of USD 4 and I was laughed at. I suggested USD 4.50 then there was little bit of tweaked interest in the room, but the majority in the room felt that the market should be at USD 5 for W320s. This was the opinion, which was less than 90 days ago in Vietnam.



The other interesting fact is that there is a new generation of buyers and operators in the cashew industry in the last 2-3 years. The percentages of people like Sampat and me, who have 30-40 years of experience, have a different way of thinking. We believe, USD 5 per pound is very expensive, but the majority of the buyers who are making



the purchases of kernels now when they took over the positions of purchasing directors it was 4.60 cents today, 4.70 cents yesterday, we got a 20% drop in the market it's a purchase, the recycled contracts were primarily on the W240s, that sort of translated a bit on the W320s, but if you look at the broken grades (pieces and splits) have not moved at all in the last 2-3 years.

I think it's the new generation, which has changed the way of thinking and I feel it's like a threat, maybe we are wrong, 3.50 is not the right price maybe 5 dollars is the right price, may be 2300 for raw nuts is the right price I think this is a huge threat at these levels and if we don't have a sharp drop in prices, and if we don't find a giant stone in promoting the nut, we might lose our consumers for a couple of years. That's just my opinion.

Mr Hari Nair: The volume to China has been very difficult to estimate because of the informal nature of the business. Secondly last year the volume of processing in Vietnam has increased significantly. At the same time, the prices also went up. So in a price conscious country like China, how has higher prices affected consumption of cashews?

Mr Vu Thai Son: We might not have a perfect figure of imports of China as most of them occur through land border and will not be declared, because all exports are tax free from Vietnam to China and the government encourages Vietnam to export more. Secondly, many people assume that when the prices of a commodity increases may be consumption in China drops, which according to me is wrong as buying power of China is very

steady, living standards of Chinese are very good and they spend more money on expensive food and travelling.

Mr Walter D'Souza: Almond prices dropped considerably last year. What would you attribute it to? Is it due to increase in production or Almond Board of California has spent a lot of money on promotion, which lead to significant rise in the consumption pattern? In spite of all these, there was a huge drop in prices which is surprising. Do you please throw some light on that?

Mr Rohit Bajaj: First of all almond prices went up to crazy heights and the production-base of almonds has always been there. If you see the past, the production of almonds has never been low. The buyer purchased the goods at an unreasonable price the seller had to offer the product but it is for the buyer to decide whether to buy or wait, as we were discussing in the RCN whole of the factor is the crazy Indian market before the crash happened last year. We purchased at 20-30 cents higher than the world because of the incoming Diwali season as a result of which at the seasons beginning the prices moved up even further than it was post Diwali season. Though the crop base was good at a reasonable level, the average price we had earlier set up was too high at the start. As the Diwali season got over, the slide started internationally because the crop was present. So, the reason is clear, waiting game has to be played cleverly before we take the first initiative of buying decision. And Indians pre-Diwali usually jump the gun and start catching up to the product as if it will never be available later on. So, I guess the same reason holds true even for almonds.

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Country Forum: India



Moderator: Mr Walter D'Souza, Chairman, Fernandes Brothers, **Mr Rajendra Sabat**, President Odisha Cashew Processors Association, **Mr Kalbavi Prakash Rao**, Director, Kalbavi Industries and **Dr D L Maheswar**, Vice-Chancellor, University of Horticultural Sciences

Mr Walter D'Souza: Ever since this wonder nut found its roots on the sands of the Portuguese colony of India, it has been a relentless battle, a saga of a roller coaster ride for the cashew industry in India. It has been a journey of passion, having fire in the belly, a struggle not so sweet but, the never die resilience leading to success.

India has always been the largest producer of raw cashews, largest Importer of RCN, processor, consumer and also the second largest exporter of Cashew kernels in the World. From there, it has embraced change and today we find ourselves still the largest processor of RCN in the world and more importantly our efforts to promote this nut has resulted in India emerging as the largest consumer in the World. From the very beginning, India has had the largest processing capacity, empowering more than two million households. More than 10 million people are being on the cashew processing industry. From a household industry into a small-scale Industry, it has spread its wings far and wide to the length and breadth of India and to all parts of the world.

'Make in India' is a strong buzz word which is making its success rounds in India today. We have an eminent panel today, who will be throwing light on various aspects in India Forum

Mr Kalbavi Prakash Rao on 'Make in India'





Why India??

- Seventh largest, most populous and vibrant democracy
- Politically – very mature and stable
- GDP growing above 7 percent consistently and
- Fastest growing economies in the world today

Why make in India?

- Largest producer, manufacturer and consumer
- Sustainable growth
- Most efficient converter
- Supportive Government

Cashew legacy in India

Cashew legacy in India

Year	Production	Processing	% Growth
1970-80	250,000 MT	250,000 MT	
1980-90	375,000 MT	500,000 MT	100%
1990-2000	520,000 MT	825,000 MT	65%
2000-10	615,000 MT	12,65,000 MT	55%
2010-17	725,000 MT	172,5000 MT	38%
2020-30	15,00,000 MT	27,00,000 MT	58%

Raw Material

- Produces 750,000 MT of RCN in about one Million hectares
- Directorate of Cashew Research(DCR), ARS and UAS
- Directorate of Cashew & Cocoa Development (DCCD)
- Cashew grown in over 17 states
- Production of cashews are set to double in the next decade
- Highly viable and sustainable crop in India

Industry Status

- Industry -a pan India phenomenon
- Size of the industry- over 2000 ...SME sector
- Processing 1.7 million tons of RCN
- Well established processing technology
- Mechanisation- still evolving
- Labour component: > 600,000 rural women

Indian Markets

- Largest consumer in the world and consumes about 300,000 tonnes of kernel
- Growing at 7-8 % per annum
- Organised retail growing at 10-12%
- Growth segment-as an ingredient
- Prices of broken =wholes!!
- Highest value realisation in processing-the sustenance factor

Banking Sector

- 93 commercial banks-public, private and foreign
- 27 public sector banks
- Flush with funds... low interest regime
- Excellent network, technology
- Overall... very strong sector

Government Support

- State subsidies, incentives for new industries
- Central incentives for exports
- National Horticulture Mission(NHM) incentives

Destination India

- Over seven decades of experience
- Time tested business houses- great opportunity for strategic partnerships
- Biggest tax reform on the anvil-GST
- Skilled workforce-available pan India

India

- Is a land of peace and diversity
- People are said to be intellectual and spiritual

Mr Walter D'souza: We count our blessing step-by-step and the steps were so well articulated by Mr Kalbavi Prakash. **You have indeed provided us a crisp presentation and a road map to India, which is most preferred destination for cashew processing and cashew consumption. We also have a challenge and India has to embrace change of doubling its production of RCN.** Also we need a production increase of 4 million tonnes. As we need to go ahead in mechanisation and automation, we need skills and from the word growth, India's growth story in terms of processing was primarily attributed to the manual skills of the Indian labourers mostly the women folk. We have Mr Rajendra Sabat with us, a person who has worked a lot on HRD and skill development. He will focus more on the requirement of cashew Industry and what has been done in this way ahead.

Mr Rajendra Sabat - 'India', the most preferred Cashew Destination

Cashew timeline – India

- The Portuguese brought Cashew to India in the 16th Century
- Gradually cashew saw a boom in cultivation from West Coast to East Coast
- India was one of the first countries to process & export

- cashew from Kerala for over 100 years
- India still is 'one of the most favoured & trusted' nations for cashew trade



Health benefits of Cashew

- Cashew is one of the most healthiest dry fruits
- It contains rare minerals like zinc, copper, magnesium, manganese and phosphorus, and is of high nutrition value
- Cashew is an antioxidant with essential vitamins and monounsaturated fat such as Oleic Acid



RAW CASHEWS Calories

Nutrition Facts

Raw Whole Cashews(1/4 cup)

Weight 28g	Calories 160
Calories from Fat 68%	Calories from Carbohydrates 21%
Calories from Proteins 11%	Total Fat Content 13g
Saturated Fat Content 2.5g	Polyunsaturated Fat Content 2g
Monounsaturated Fat Content 8g	

Organic Raw Cashews(1/4 cup)

Calories 170	Calories from Fat 68%
Calories from Carbohydrates 22%	Calories from Proteins 10%
Total Fat Content 14g	Carbohydrate Content 10g
Protein Content 5g	

Organic Raw Cashews(1 oz)

Calories 150	Calories from Fat 68%
Calories from Carbohydrates 20%	Calories from Proteins 12%

*Based on a 2000 calorie diet

http://www.caloriecounter.com

Source: <http://www.whfoods.com/genpage.php?tname=food-spice&dbid=98>

Cashew – India facts

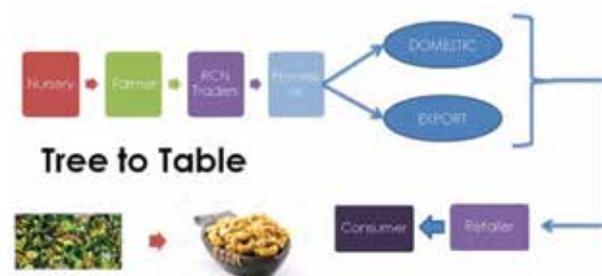
- India is number one in cashew cultivation, production, processing and consumption
- Vietnam beats India when it comes to cashew exports
- India has around 10 lakh hectares of land under cashew cultivation

- Total RCN production stands at 7 lakh tonnes per annum
- More than 16 lakh tonnes of RCN is processed in India
- We see around 9 to 10 lakh tonnes of RCN is being imported
- The reason for low cashew production: i) 30-40% of plantations are old, senile and belong to government organisations and ii) in the past 5 years has seen 5-7 lakh hectares of new cashew plantation, which are yet to provide the optimum yield.

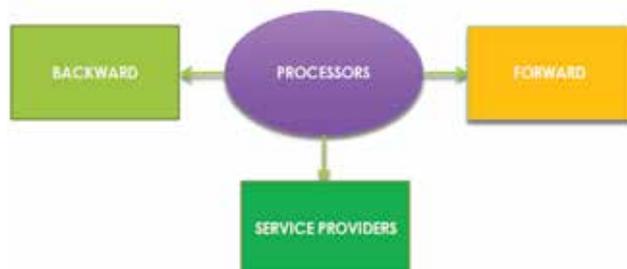
Cashew – Economic importance

- Cashew is one of the highest earning crop with minimum care
- All the products of the cashew tree have global demand
- Cultivation Tips:
 - Usage of latest technology – high-yielding hybrid grafts
 - Drip irrigation and water harvesting system
 - Mulching, timely fertigation, pruning of plants
 - Pest and disease management
 - Post harvest management
 - More than 20 kilograms of yield per tree can be achieved with the above techniques in mind.
- Usually 200 trees can be planted per hectare, which can earn up to US \$4000 with a scenario of 2 metric tons yield per hectare, as per Indian market
- Inter-cropping can help to maintain the cashew plantation with extra earnings

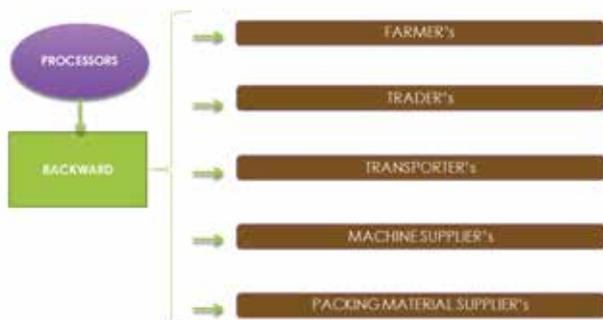
Cashew value chain



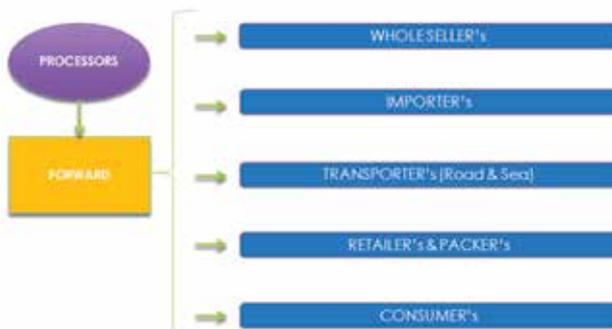
Linkages of Processing



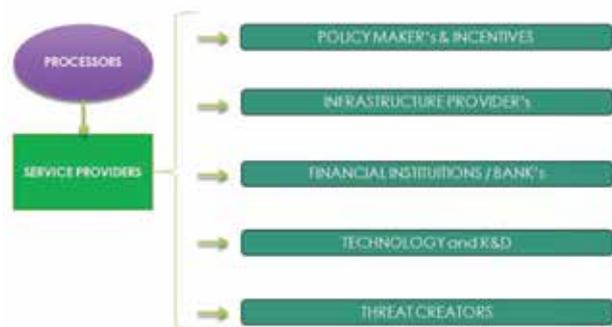
Linkages Contd. – Backward



Linkages Contd. – Forward



Linkages Contd. – Service Providers



Cashew value chain – India's importance – Skills and expertise!

Nursery: R & D Centers and role of scientists

Processors: Latest automated machinery, Sanitation, Quality management, Packaging, Taxation and flexible government policies.

Farmers: Land development, Selection of graft, Space management, planting procedure, Farm management, Water management, Fertigation, Pest & disease

management, Post harvest management, Inter-cropping and Organic farming.

India -Vision-2025

- Looking at the current cashew prices and earnings – farmers are enthusiastic to grow cashew
- Expected production is estimated to be about two million tons per year
- Cultivation areas is expected to reach 1.5 million hectares by the year 2025
- Old and senile plantations will be replaced with high yielding hybrid plants to reach the vision 2025 production goal
- To provision the yield, Govt. of India is proactive and encouraging farmers to cultivate Cashew R&D centers in India are constantly in search of quality planting materials to increase yield
- Research centers are also engaged in finding best possible solutions for pest management and disease control (stem borer)

Conclusion

Looking at the potential of India in R&D, availability of land, proactive farmers and domestic consumption, utilization of broken kernels, export potential, commitment – INDIA will continue to be the pioneer in Cashew Industry, and will regain its number one position as an Exporter by 2025!

Mr Walter D'souza comments on Mr Sabat Presentation

Everyone agrees on one point, when the writing is on the wall and that the world needs more cashews, India is committed to have its own road map for growing more cashews within India as well as getting more cashews from the rest of the world.

We have Dr D L Maheswar, who is the Vice Chancellor of University of Horticultural Sciences India, who has done a lot of research works on improving the productivity of cashews in India. I am sure his presentation will throw a lot of light to the rest of the world, as to how getting lateral growth in Production, making it happen in terms of the productivity which is the key to success in getting what we need in terms of the phenomenal quantities we are looking at, may be to the turn of 2020 and beyond.



Dr D L Maheswar - Augmentation of Productivity in Cashew – Challenges & Approaches

During the last two days, the commercial tone of the cashew industry is being elaborated plus we were able to get a clue on the reflections for requirement of scientific farming. Unless there is proper scientific base provided for both horizontal and vertical growth of the cashew crop in terms of scientific farming it will not be able to end up with any quantum jump that we are planning to make in another 5-10 years down the line. As you all are aware especially in countries like India, the agricultural slogan is ‘Doubling the farmers Income’, which is almost a mandate with the help of any of the sustainable practices So, with that background now all the investments all the plans,

programmes of several crops have been addressed as to how can we improve the vertical dimension of the crop in terms of productivity. Here are a few things I have to share with you

Cashew in India - An overview

- 7.25 lakh tonnes production (2015-16)
- Domestic kernel demand: 2.5 lakh tonnes (2/3rd of production)
- Export - 1.2 lakh tonnes of kernel
- Import- 8.5 lakh tonnes of raw nuts
- Raw Cashew Nut Productivity- 720 kg/ha.
- National Raw Nut requirement - 16-17 lakh tonnes
- National target by 2025- 20-25 lakh tonnes
- Potential yield- 3-4 tonnes/ha.

Constraints in cashew promotion in India

- Large area (30%) under senile plantation, yielding less than 200 Kg/ha
- Lack of focussed attention due to competitive crops
- Mainly grown on marginal lands
- Lack of availability of quality planting material
- Limited adoption of good management practices and technologies
- Under utilisation of processing capacity of Industries
- Inadequate utilisation of cashew apple and by-products
- Lack of remunerative prices
- Lack of organised farmer groups/institutions

Varieties to augment productivity

State	Recommended varieties
Karnataka	NRCC Sel-2, Bhaskara, Ullal-1, Ullal-3, Ullal-4, UN-50, Vengurla-1 (Uttara Kannada), Vengurla-4 (Uttara Kannada), Vengurla-7 (Uttara Kannada)
Karnataka (Plain part)	Chintamani-1, Chintamani-2, Dhana (H-1608)
Kerala	BLA-39-4 (Madak-1), NDR-2-1 (Madak-2), K-22-1, Kanaka (H 1598), Dhana (H 1608), Priyanka (H 1591), Amrutha (H 1597), VRI-3
Maharashtra	Vengurla-1, Vengurla-4, Vengurla-6, Vengurla-7 , V-8
Goa	Goa-1, Goa-2, Vengurla-1, Vengurla-4, Vengurla-6, Vengurla-7 , V-8
West Bengal	Jhargram-1, Jhargram-2, BPP-8
Orissa	Bhubaneswar-1, BPP-8, Dhana
Tamil Nadu	VRI-3, VRI(cw)5
Andhra Pradesh	BPP-4, BPP-6, BPP-8

Commercial varieties:

Ullal-1, Ullal-3, UN-50 and Chintamani-1 were some of the commercial varieties.

Yield performance of rejuvenated trees			
Varieties	Yield/tree (kg)		
	1st year	2nd year	3rd year
VRI-1	1.62	3.19	8.01
ULLAL-1	2.95	4.42	8.84
VTH-30/4	1.81	4.61	9.30
NRCC Selection-1	0.72	1.23	8.10
Unpruned (Control)	3.25	3.01	5.59

Technological Interventions

- Cashew varieties viz., Ullal - 1, Ullal -2, Ullal – 3, Ullal -4, UN-50, Chintamani – 1, Chintamani – 2 were released and recommended.
- Fertilizers application of 500:250:250g of NPK/per plant/year
- Sealer & healer treatment for management of CSRB.
- Rejuvenation of low yielding, poor quality producing trees was standardised.
- Technology for improving fruit setting with growth hormones (2,4, D and NAA).
- Medium high density planting technology (6x6 mt, 5x5 mt)
- Inter cropping and mixed cropping technologies.
- Canopy pruning once in 2 to 3 years for increased productivity

Cashew substituted mango plantation - Mr Nagaraj, from Kaalanayakana Halli, realized 90,000 net profits per acre.

Road map for cashew promotion

- Promotion of Cashew Farmers Producer Organisers
- Mission Mode programme through PPP-ICD
- Hands on support for processing industries
- Development of an exclusive cashew promotion policy
- Liberalized incentives for area expansion & technology promotion
- Promotional plans for industry status
- Enhanced R & D support for PHM ad value addition
- Massive planting programme in non-traditional areas
- Transfer of technology – ICT, Crop Apps, FLD, Exposures etc
- Creation of exclusive crop experts group for cashew
- Skill enhancement courses for young cashew growers

Mr Walter D'souza: I thank Dr. Maheshwar for providing a road map for sustainability for both increase in crop size and vertical and horizontal potentials, I would like to share with you that Karnataka Cashew Manufacturers Association is becoming a role model for rest of India with a small start of 500,000 grafts being distributed and they see to that proper care is being provided to the grafts and in the same way remaining part of India if it falls in line and emulates this particular model, I think our dream of having 1.5 million metric tonnes of RCN by the year 2025 is going to be a reality.

Question & Answers

Mr Baskaran Pillai, nanoPix: What kind of mechanisation and adaptation that's happened in the Indian Cashew processing Industry to match the level of exports as well as that of domestic consumption volumes?

Mr Prakash Kalbavi: Well, the most important point is that we have had plenty of labour availability until recently and our policy was never to restrain anybody. So, mechanisation indeed has become a little slow so far. Also India is very sensitive towards its domestic market which requires a very high quality. With the current set of mechanisation plans we are losing out a little on quality. So we are looking at a little more stable mechanisation to come in. Of course, with Vietnam now being a better league as far as mechanisation and cost cutting is concerned, India is in for a big revolution when mechanisation is concerned in the near 4-5 years.

When we are talking about the promotion of exports, production, processing and everything, the government of India last year imposed Import duty on RCN. Is it justified?

Mr Walter D'souza: The simple terms it's not justified. Imposition of custom duty which could be an internal trade barrier, the government is imposing on itself leading to a deficit of over a million metric tonnes being imported. As an industrial raw material, by any stretch of imagination, it cannot be justified. Efforts are on to roll back, but results are yet to be seen.

Mr Tola Faseru: In light of Climate Change whose impact is being revealing now, I think the industry must have a



strategy to increase production. What are the strategies which have to be adopted to match the climatic Changes and still be able to reach production targets for the industry?

Mr Rajendra Sabat: All the producing countries putting their heads together to make sure that we register an exponential growth to keep in phase with requirements of the Industry. India is both a producing and a processing country. So indeed, we need to improve the productivity, we need to hire experts, provide training, increase skill, technology, good farming practices, post-harvest management etc.,. All these are highly essential. Once all this is ensured, well sustainability can be achieved.

Dr. Maheshwar: Let me just supplement. Regarding the climatic change, this is definitely going to influence and affect the crops very adversely. Several varieties are tending to alter their characteristic very differently in the given areas. In the front, the government has initiated a “Center of Excellence and Climate Resilience” under which we are studying the climate vagaries from the last century and we are relating to the present conditions. Am sure that today what we have as the traditional cashew growing regions may not be so in another decade. Cashew production may shift to other areas. That’s the kind of trend we have already observed in certain other crops such as grapes, pomegranate, sapota etc. So am sure that the same tendencies are likely to occur in cashews and lets

all be ready to see to that non-traditional areas are also going to be covered with cashews.

Final Comments from Mr. Walter: I think, the name of the game is the theme of the convention “Embracing Change”. Gone are the days where industry could say production of RCN are not our baby, we got to invest in production of RCN primarily. Otherwise days are not far when the industry will be starved of raw material. We have to look at it as an investment and not as expenditure. With this final note, I thank everyone for your participation in the session.



Dr R K Bhodes

Vice-Chairman, CEPCI

I appreciate your efforts in mobilising different stakeholders together, when I say there is a criticism that it concentrates mainly on RCN trade, I must congratulate WCC for choosing the most neglected area of cashew industry. All the very best for the next year, am hoping that next year it would be even more fruitful.



Country Forum: Vietnam



Mr Vu Thai Son, General Director, Long Son Joint Stock Company, **Moderator: Mr Ashok Narayanan**, Director Orion Commodities, **Mr Alex Tran**, Trade Promotion Director, VINACAS and **Mr Dang Van Tuyen**, Mekong Technology

Ashok: ‘Embracing Change’ will start with how change is initiated and how it is embraced. We will start with how India has changed for the worse by imposing duty on RCN, which is not the right way to do, while Vietnam has removed the duties that they have for their factories. Earlier factories used to get refund, now they don’t want pay duty.



Mr Alex Tran, VINACAS
 Vietnamese government has changed the face of the

cashew industry in a big way especially since 2014 by the way of changes in its tax policies for its agriculture industries dealing in exports. The export tax which was there prior to 2014 is no more since then. VAT, which was 10 percent, reduced to 3 percent from 2014 and for the ASEAN countries no VAT, also from 2014.

With regards to cashews, we have launched a new grafting technology and from support through the scientist community to the farmers association, generated young cashew trees with high yields. Today, with the government’s encouragement, we are happy to see large number of new cashew farms. Some have already started yielding; some are young and some about to start yielding. Especially our Ministry of Agriculture and Rural Development, VINACAS and other agricultural institution are supporting processing and encourage trade promotion which is thus strengthening the rural development, rural farming in almost all the provinces where the cashew is being produced.

VINACAS receives fund from the central government of Vietnam, Ministry of Agriculture and Rural Development for mainly two programmes i.e., for Export Promotion and encouraging farmers, co-operatives, entrepreneurs and small enterprises. We have farmer representative, cooperatives from different province throughout the country. We have regular meeting with these representatives and farmers and guide them to use new technology, advanced farming, advanced pre- and post-harvest technologies, how to achieve clean cashews, organic farming and financing small enterprises. We insist finance organisations to support farmers; also we are launching a program mainly for steady and strong development of cashews farming and cashew industry.

For the cashew industry, we have launched a program on Processing in Vietnam and Food safety guarantee, which is a very strong message to our customers all over the world, and we have informed all the attendees, customers about our take on food safety measures in VINACAS event which took place in November in Da Nang. Thus we are striving both in Agriculture as well as in the industry prospects of cashew to achieve self-sufficiency and overall growth of cashew industry in Vietnam.



Mr Vu Thai Son- VINACAS policy initiatives on cashews from a business point of view

As a company in cashew business for about 26 years, I would like to speak about the government policies and how we view it from the business point of view. During the last few years, not much changed in the government policies on the cashew industry. For the import of RCN from Africa not much changed at all. Why? Because, we don't have to pay import duty. But in the customs declaration form when we

import, there is a clause that within 275 days if you don't re-export then you have to pay duty for the quantity of raw nuts left with the company. As the duration is very long, most of the factories managed to declare to customs that we have re-exported as cashew kernels and hence there is no need to pay tax.

For the export of kernels nothing has changed. Vietnam is a country which encourages exports, not only cashews; but most of the agricultural products from Vietnam are exempted from export duty. However, there is one change in the VAT system. Before, if I buy cashews from a small packer and then I export the same, I can claim back VAT from the government. (When you buy cashews, you have to pay a VAT of 5%). But in the last two years, it has changed. Now, when I buy cashews from small packer, the issue involves to my company LongSon as VAT is zero. This is because in Vietnam the control mechanism is still evolving.



During 1991-1992 lot of RCN was exported from Vietnam to India. During that time market was down, an Indian buyer defaulted. A lot of RCN was left with Vietnamese. Because traders can't sit with stock of RCN, as the industry was too small at that time. This has changed the cashew scenario in Vietnam.

The government of Vietnam has introduced an export duty of 14 percent of RCN exported from Vietnam. This has started the booming of the Vietnamese cashew industry. In Vietnam the availability of labour was cheap, later manufacturing of cashew machineries, coupled with hard work, all this paved way for the resounding success of the cashew industry.

**Mr Dan Van Tuyen, Mekong
 Automatic Cashew Shelling Machine**

We have designed automatic cashew shelling machines (from 2 heads to 10 heads) depending on the requirements of the customer ranging.

In the same way, we can increase the capacity of the cashew shelling system from 100 kg and above, based on customer's needs with complete shelling and scooping system.



Some of the advanced features in the machine are given below:

- The machine is automatic from the feeder to separating cashew kernel, cashew shell, un-cutted, haft-cutted.
- The machine is designed suitable for both steamed and roasting technology.
- The kernel is separated immediately after each processing, so as to minimize oil spill in kernel.
- High capacity, low broken, uncutted and saving labour.
- Chain gear, gear box, motor, electric component is imported from Europe or standard of CE to ensure the machine can operate continuously with high density.
- Whole mechanic part as guide bar, plastic mold, mold of blade, the blade is processed. CNC technology enhances durability and longevity of the machine.
- Machine is designed to simplify, suitable with skill of labour in cashew processing factory, easy to install, operation and maintenance.
- Investment cost reasonably good, high economic efficiency.

Mr Vu Thai Son: The Vietnamese cashew machine is the best in the world. If the African companies want to set up cashew processing industries, then they should prefer

Vietnamese machines.

LongSon is using Vietnamese machines (for mechanical) and the color sorter and sizing machine from China, which is of electronic. We combine both the machines. Mechanical machine is advantageous for wholes, while for broken we use electronic machine from China. Our processing cost is USD 135 to 150 per tonne of raw cashew nuts. In some African countries, the cost is in the region of USD 350 to 400 per tonne, which is very expensive.

In 2016 Vietnam imported 10,40,000 tonnes of RCN, much than higher that of India, which is a record high. Indian RCN imports declined due to imposition of import duty to the tune of 5 percent in 2016.

We export nearly 350,000 tonnes of cashew kernels, with value being nearly USD 2.9 billion. Last year Vietnam processed 1.4-1.5 million tonnes of RCN in 2016. Vietnam could process two million tonnes of RCN due to mechanisation, as most of factories are closed or working less than installed capacity in the month of December and January due to shortage of raw nuts. So if you want to grow more cashews in Africa, don't hesitate.

About the new crop scenario in Vietnam: As we know the impact of weather in Pacific Ocean viz, El-Nino and La-Nino. This happens in every six or seven years. The most severe weather (El-Nino) in Vietnam happened in 1997. This year Vietnam is facing La-Nino weather pattern. Until now Vietnam has received lot of rains. Normally in this kind of weather, you can't expect a normal crop. This means Vietnam crop is expected to be lower when compared with normal crop. But it is unlikely to affect the supply of RCN globally, considering Vietnam produces only about 350,000 tonnes.





Cambodia is very close to Vietnam, they are growing lot of RCN in the last few years, and Vietnam is supporting them by providing very good variety. Cambodian RCN crop is increasing year on year. Hence, if you combine Cambodia and Vietnam crop, the former crop is likely to be on the higher side and latter slightly lower, however; the overall combined crop is likely to be similar that of last year or a bit lower, which is not going to make a big impact.

During the last season the price of RCN was very high. Hence, in the beginning of the new crop the price will remain higher in the initial stages. But eventually prices are likely to come down during April and May.

Mr Walter D'Souza: For every ton of raw cashew nut you import, how much of cashew kernel you have to export so as to become eligible for exemption from paying duties? Is it based on quantity or value?

Mr Vu Thai Son: For getting exemptions, only quantity is considered. If we import RCN, the outturn is about 4.2-4.4 kg to process one kg of kernel. The government of Vietnam allows 5.6 kg of RCN equal to one kg of kernel export, which is much higher than the real outturn.

What is the finance cost for processing every one tonne of RCN?

Mr Vu Thai Son: It is not easy to calculate the same.

Sometimes we process fast, while at times we will import and then process and export, so it will take up to nine months.

In Vietnam we have two currencies applicable for borrowing money. One is in terms of USD and other in dong. In most other countries across the globe, only one currency is allowed. Processors like us, we export and we get money in USD from buyers. So we are allowed to borrow money in USD. For most of our business needs, we borrow money only in USD with interest rate of 4-4.5 percent per annum. However, for some of the small processors who sell cashews locally, they are allowed to borrow only dong, with an interest rate of 8 percent per annum. Vietnam is the only country where one can have two currency accounts.

What is the labour cost for every tonne of processing RCN?

Mr Vu Thai Son: The labour cost for processing one tonne of RCN is USD 110-120, which is rather low. We use of lot of machines as the productivity is very high in Vietnam.

In a mechanized factory how many workers are needed per bag or per tonne?

Mr Vu Thai Son: We have two types of factories. One factory maintains high accuracy and doing high quality exports to

supermarkets where peeling and grading has to meet the industry standards. For that we need to have more number of persons to work. For small to medium based cashew processors, they use less number of workers. In one of our factories, we use about 600 workers for processing 60 tonnes of RCN (Nigeria origin) processing per day. If you sell to local buyers and you mechanise, then you may need about 400 workers, but the shapes of kernels may not be perfect.

Mr Balakrishnan, Vibu Ventures: When you buy kernel for exports from small processors, VAT is zero percent. Do we have to show an export tax obligation to concerned Vietnamese authority? There are lot of small importers in Vietnam, who are importing just to resale raw nuts to domestic processors/markets. Is there a VAT for them? Or for RCN sales also there a zero percent VAT?

Mr Vu Thai Son: As per government policy, if I buy kernel from small processors, they issue me the invoice with price and all other descriptions of the product along with tax code number. In Vietnam every factory has tax code number, so there is no need to pay VAT. But, if you make profit then you have to pay co-operative tax.

As per law, if you import RCN and if you don't process and instead do trading, then you have to pay import duty. It depends on the countries from where you are importing. There is no need for cashew processors to pay tax.

Some of the trading companies when they import, they sell the RCN in cash, without proper invoice. However, if the trading company fails to re-export the imported raw nuts within the stipulated time, the company has to pay duty for the quantity remains with them. Trading company can also buy kernels by paying cash without paying VAT/invoice.

Mr Rajendra Sabat: Do I know the main reason behind the innovation of the new cashew machines in Vietnam within a short span of time, especially in automation and technology. Whether it is the contribution of the processor or machinery manufacturers or encouraged by the government?

Mr Vu Thai Son: Personally, I would give most of the credit to the industry. It is due to market economy, in which everyone try to compete with each other and they try to sell the machines cheaper in terms of quality and better price when compared with their competitors. Vietnamese people works very hard and they learn very fast.

■■■



Ms Sarah Sherman, Mr Kalifa Belem and Ms Mlle Achta Cherif of Caro-Nut

Sarah Sherman: We are looking to meet new suppliers and see our current partners. It's a very good platform to further get good connections through networking in the cashew industry and get knowledge as to what are the new trend and developments in the cashew industry going forward and all in one place.

Kalifa Belem: We can assimilate a lot of latest information, market updates and what are things happening around the world in the cashew sector on processing, new technology trends, farming aspects and thus benefits us a lot.

Mlle Achta Cherif: Its one place, where we can meet different actors of the cashew value chain i.e., farmers, processors, financial institutions etc., It's a very good place to meet people and network with.

Africa Investment Forum



Moderator: Mr Jim Fitzpatrick, Business Development Consultant and Mentor, Ingredient Sourcing Solutions
Mr Olusegun Awolowo, CEO, Nigerian Export Promotion Council, **Mr Karim Berthe**, Commercial Director & Technical Adviser to the DG, CCA, **Mr Jaoud Bruno**, General Director, Investment Promotion Agency, Guinea Bissau and **Mr Deepak Kacher**, CEO, Vink Corporation DMCC

Mr Jim Fitzpatrick:

In the context of Africa, RCN production in the African countries are growing rapidly over the years. Guinea Bissau is one of the fastest growing RCN country as well as known for producing one of the finest cashew nuts in the world.

If we look at the growth rate of traditional producers’ viz., India, Brazil and Vietnam, showing very low levels of growth. However, the growth rate in Africa looks promising. In fact, by 2025 over 60 percent of the cashews produced across globe will be from Africa. Cote d’Ivoire is likely to be the world largest producer of RCN during 2017. The investments in processing and value addition are not matching considering their growth potential in any of these three countries that are participating in this forum.

Risks involved with the processors:

Processor level risks are mainly operational in nature and relate to their ability to remain cost competitive. Some of

the key operation risks are lack of management skills, low cost competitiveness, high raw material prices as well as costs associated with energy. Other risks which occur are of working capital failure and failure to build supply chains.

How to turn production growth into value addition?

- Cashew processing entrepreneurs need investors. Investors need processors, who think business development is not just trading.
- Cashew processors need finance. Financial institutions need processors with good business plans, secure supply chains, management systems and markets
- Cashew processors need customers. Buyers need suppliers, who will develop relationships, are competitive, meet their quality and other requirements, develop their process and honour their contracts.
- Processors need developed supply chains. Growers need buyers, who pay market prices and develop relationships.

Mr Olusegun Awolowo

Advantages and Opportunities of Investing in the Nigerian Cashew Industry

Nigeria Cashew profile

- Among the top 10 global Raw Cashew Nut (RCN) producing countries
- 4th largest producer in Africa after Cote d'Ivoire, Guinea-Bissau and Tanzania
- 17 out of 36 states in Nigeria grow cashew in commercial quantities. Cashew grows in almost every state.
 - 325,000 hectares cultivation area, with 0.4MT/Ha average yield per hectare
- 175,000MT produced in 2016, with value being \$300M
- 160,000MT of RCN exported in 2015

Advantages

- 170 Million population in Nigeria, 72 percent work force under the age of 30
- 90 percent of the total land size in Nigeria is arable
- 300 Million people in ECOWAS
- Access to major international markets in Europe, America and the Middle East
- Captive work force – Young people and women
- Largely under-tapped sector
- Government focus on agriculture for economic growth
- Cashew is a priority product for the government
- Business environment is improving
- New financing provisions from the Central Bank through national banks, DFIs and ECAs

What the government is doing - Zero oil plan

The government of Nigeria has identified 24 major products to replace crude oil as main source of foreign exchange for Nigeria. Some of the product that comes under category A are Petro chemicals and Methanol, Gold, Sugar, Soybeans, Cocoa etc., and Cashew, Sesame, Ginger and Tomato falls under category B.

Agricultural Promotion Policy, promotes a government enabled, private sector led growth driver for agricultural sector. The policy thrust covers Research and Development, infrastructure, finance, mechanisation, storage, processing,

irrigation, market & trade, quality & standards and entrepreneurship.

National Economic Recovery and Growth Plan

The objective of this program is to articulate medium-term economic policies and to implement the same during 2016-20.

We would like to prioritise key turn around interventions and enablers to generate concrete as well as visible impact by 2017.

Moreover, key actions will be articulated based on the SIP and other national reports.

Presidential Enabling Business Environment Council

The council is to be chaired by the Vice President, which aims to position Nigeria among top 100 countries on the ease of doing business Index by 2019.

Areas of focus includes :

- Entry/Exit of People – including Visa reforms
- Entry/Exit of Goods (Trading across borders)
- Government Transparency and digitization (starting with websites and procurement process)
- Business registration
- Access to credit
- Paying Taxes
- Land Registration reforms (Lagos & Kano)
- Construction Permits (Lagos & Kano)

Statutory incentives and sector specific incentives

The Nigerian Investment Promotion Act 16 of 1995 allows foreigners to invest and participate in the operation of any Nigerian enterprise without restrictions.

- Pioneer status: 3 - 5 years tax holiday
- 100% repatriation of profits allowed
- Capital allowances:
 - 140% of R&D expenses incurred
 - 20% of infrastructure costs
- Low value added tax (5%)
- Tax relief on interest income in the agriculture/agro-allied sector
- 0% duty for power generation and distribution of machineries

- 0% import duty and import value added tax for commercial aircrafts and spare parts imported for local use
- 0% import duty and import value added tax for machinery imported to develop solid mineral resources



Mr Olusegun Awolowo and Mr Karim Berthe

To Conclude

- Cashew sector has witnessed progressive growth over the last few years
- The sector needs more investment and attention to reach its potential – e.g. Nigeria produces 400kg/ha compared to Vietnam's 1000kg/ha
- The Federal Government of Nigeria recognises agriculture as a key growth driver for the economy
- Agriculture contributes 40 percent to GDP
- The business environment is improving, there is more coherence and synergy in government planning, policy and actions
- We invite you to partner with us on our growth movement as Nigeria will be the next big processing hub of cashews.

Mr Karim Berthe

In 2016 Cote d'Ivoire produced 650,000 tonnes of raw cashew nuts and processed 41,000 tonnes. Also, Cote d'Ivoire produced more than 3.25 million tonnes of cashew apple.

By 2020, our aim is to produce 950,000 tonnes of RCN and 4.75 million tonnes of cashew apple.

From agriculture to agro industry: By 2020 Cote d'Ivoire aims to process 50 percent of the RCN produced in the country and would like to have 100 plants each processing

5000 tonnes of RCN annually.

Our aim is process 20 percent of cashew apple locally, which is app. 950,000 tonnes. For processing apple we need 20 plants, each with capacity of 50,000 tonnes per annum. For that the cost of equipments alone is 1.2 million USD.

What we need?

We need machinery, civil work (warehouses, infrastructures etc.), technical assistance, training and by-products (CNSL, shell, off grades). For cost of equipments alone we need to have 40 million USD. This is the huge market for investors and presents very good opportunity for doing business in Cote d'Ivoire.

Cote d'Ivoire is the world largest producer and processor of cocoa. So processing cashew is not a big issue, as our experience in cocoa will help us a lot.

Strengths and Opportunities

Product availability, rising demand in western markets, locational proximity to western markets, availability of dynamic and energetic work force, government support, adherence to global markets food safety and standards and environment friendliness.

Weakness and Threats

Lack of local expertise as well as on technology, lack of financial services and absence of domestic market for consumption.

But these weaknesses also provide investors an opportunity for doing business in Cote d'Ivoire.

Mr Jauad Bruno

Invest in Guinea Bissau

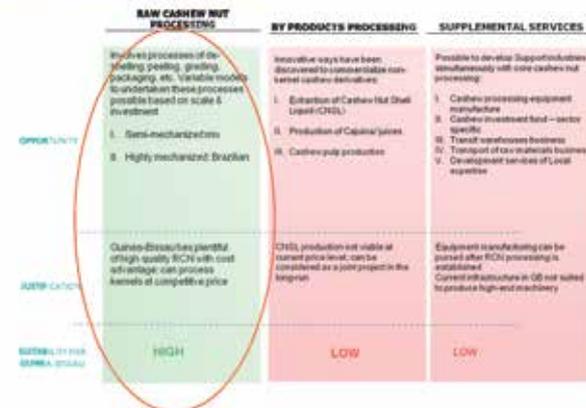
- Guinea Bissau government has an ambitious plan for the overall development of the country by 2025
- As oil is to Saudi Arabia, Cashew is for Guinea-Bissau; holding a critical role in overall economy
- Total land under cashew plantations is about 600,000 Ha in 2015
- 80% of the rural population is engaged in cashew cultivation and owned by small farmers
- Raw cashew nut trade constitutes 90% of country's exports
- Cashew sector accounts for 12 – 15% of the country's

overall GDP

- Guinea-Bissau cashew processing opportunity delivers healthy profits compared to West African peers (The analysis is being done based on the following criteria: i) Plants are of semi-mechanised with processing capacity of 5000 tonnes per annum and ii) are operating at 83 percent of the capacity in the last three years)



Under prevailing conditions, RCN processing opportunity most likely to yield benefit for investors in Guinea-Bissau



In Guinea Bissau, earning potential is better with higher volumes and automation; semi-mech. with Brazilian technology with 3000-5000 MT capacity well-suited for Bissau based on its capex and working capital requirements.

	Semi-Mechanised			Highly Mechanised	
	Small	Medium	Large with CNSL	Brazilian medium	Brazilian Large
	(1500-3000MT)	(3000-5000MT)	(5000-10,000MT)	(3000-5000MT)	(5000-10,000MT)
Financials					
Investment (\$)	1361426	2161254	3381961	2493526	2619814
Total Equity (\$)	1361426	2161254	3381961	2493526	2619814
IRR	0.1673	0.1887	0.242	0.2033	0.2986
NPV	892846	1997333	4910853	2754413	5709685
Payback (years)	5.2	4	4	4	3
ROE	0.1245	0.1806	0.26	0.2348	0.3788
CAPEX					
Year 1 (\$)	1279858	2032244	3185792	2358002	2466502
Year 2-4 (\$)	407999	661990	924289	215525	1468602
Year 5-8 (\$)	294943	422833	610165	253825	264325
Total 8 year investment	1982800	3117067	4720246	2827352	4199429
OPERATIONS					
Utilized capacity	0.93	0.96	0.95	0.96	0.95
W. Capital Requirement (\$) year 4	1869171	3689164	6115325	3153942	6591504
SOCIAL METRICS					
Jobs created, Year 8	417	655	1132	430	756
Social IRR	0.25	0.27	0.31	0.21	0.28



Optimal processing locations are able to leverage proximity to producers, access to labour and other facilities, etc.

Northern region of Guinea Bissau has some inherent benefits when compared with other regions. This region contributes 50 percent of the RCN production. Cacheu and Oio form the northern region and have 27 percent of the country's total population. Moreover it is closer to Bissau, which has best infrastructure and access to other facilities within country.

Warranties and Investment Protection

Investment Incentives: Reduction of time and bureaucratic procedures costs ('one-stop administrative shopping')

Currency: CFA Francs , freely convertible and indexed to the Euro

Full membership of the Multilateral Investment Guarantee Agency (MIGA) / International Finance Corporation (IFC), World Bank Group.

Foreign Currency Transfer Warranty

- The state guarantees external transfer, through bank dividend and profit system
- Transfer operations, sale or liquidation of investments between non-residents and foreign investors are free and the export of disposals is guaranteed
- Guinea-Bissau seeks to attract viable investment projects:
- will create wealth generation for promoters/investors as well as wealth creation and value creation for the country
- Improve legislation and investment related regulation and
- Protect the investors investments and double taxation agreements

Mr Jim Fitzpatrick: Mr Deepak Kacher is one the biggest cashew processors in Africa. What are the key factors when making a decision to invest in cashew processing in Benin?

Mr Deepak Kacher: For us it is because of our existing capabilities in Nigeria and our familiarity with the region and our current premises in Benin. We have good quality of cashew crop going there. There were alliances possible in the current location, where we were doing seed cotton, soya and shea. The same LBAs who were actually supplying to Mr Nair and team there for the procurement of the above mentioned products, also had the capability

geographically and financially to support us in the supply of raw cashew nuts. That was one reason to chose Benin. Moreover land was readily available.

Mr Jim Fitzpatrick: To what extent government policy or support helped you in influencing your decision?

Mr Deepak Kacher: When we put our facility, the govt support was not there. But this year I understand from Mr Shakthi Pal and others who have been attending Government forums the government has come out with their proposals.

The challenges were of many such as political, economic uncertainties and social. language, culture and education disparities.

Infrastructure – Roads, energy,water and civil works, equipment availability to set up your facilities.

Skill of the women and availability of them to work, management skills, financial capability, logistics cost, higher freights, security and integrity issues.

Ability to attract global buyers for kernel is usually challenged by lack of hygiene. Procurement of RCN – there are hundreds of people coming to Benin, Guinea Bissau and Cote d'Ivoire every year because of the inadequate protection for the manufacturer.

Working capital and storage space requirements are huge. Working capital requirements are huge as the season spanned over two weeks to three months and you have to store it for the remaining period of the year.

Pre-financing of the LBAs. The local price is volatile. While the government fixes the minimum support price in Cote d'Ivoire and Benin, the LBAs, intermediaries and farmers won't stick to that. The price changes from the beginning of the season till the end of the season, like a sine curve.

The international price is dictated by the global markets, while in local market it is uncertain. Other issues such as currency management, technical management, non-availability of spare parts, environmental issues need attention. When everything is fine, we have weather issues such as El-Nino, Harmattan and other whole lot of issues.

Despite all the government support and policies, 92 percent of the raw nuts produced in Africa is exported mostly to Vietnam and India and only 8 percent is processed

within Africa. We have a farm gate price, Warehouse receipt, freight, insurance, transit loss, GST, clearing and forwarding, Government levied prices, pay duty in the incoming country, sellers margin etc after paying few of these dollars per tonne you can take raw nut from Cote d'Ivoire, process it in Vietnam and India and then export it to the kernel market in America cheaper than that we can do it in Africa. These issue needs to be addressed as we aren't serious about it these plans of growing 1.5 – 3-5 million globally. Africa being the major contributor with more than 50% of market share, you will have an issue of huge amount of raw nut and very little to process.

I have few humble submissions as to what can be done by the government apart from what has been mentioned. You need to have a duration for the manufacturers, need to have a levy, huge deposit to discourage weigh-bridge trade, land subsidy, exemption of duty on import of palnt and machinery, long term loans available at a reasonable price, low cost of interest, need experts to improve skill on sustainability, risk management, discipline in LBAs. Provide the manufacturer some or all of these incentives to improve manufacturing which inturn is a win-win situation wherein you can recover it on Levy and provide incentive on the manufacturers. The challenges should be addressed, the government needs to have discussion with geniune manufacturers and find joint solutions between private and the public sector.

Mr. Deepak Kacher's advice for new investor in West Africa: Do your homework well. Dont rush into things. Cashew processing is highly labour intensive which requires huge amount of mangement skills. In Cote d'Ivoire today, they have capacity of 105,000 tonnes current processing capacity only 41,000 tonnes is effective though. Its RCN production is over 600,000 tonnes. So my advice to investors is just don't rush to Cote d'Ivoire, India or Vietnam without analysing. Go to the ground and know the reality and countrys government authority must tell them the facts and kindly align with the poilcies of the government and if you can manage the initial 1-2 years without profits, only then, venture into these markets.

Suggestions from Mr J.C Reddy: From my experience in West Africa, the minimum wages alignment is a big issue, particularly foreign investors want to have as much clarity as possible in the social obligations, convincing various audits. The minimum wages in India is scheduled and all industries are moving forward with output productivity which inturn encourages the sector and now in few

countries the minimum wages are very high making it very difficult for the processor.

Questions

Mr Rohit Bajaj: Mr Deepak Kacher, kindly tell us about the processing cost/Kg in Africa wherever you have your factories.

Mr Deepak Kacher: Our facility is present in India and when we did a compartive anyalsis and we considered one benchmark. As processing cost is a relative term, we need to compare with another. In order to compare processing cost, we took Cote d'Ivoires RCN as a base, if Cote d'Ivoire RCN moves into a particular country then there is a certain phenomenon. If its goes into India, it incurs different set of costs as 50% is local and 50% is imported nuts, in case of Vietnam 30% is local 70% is imported. So we use this as a base. Unfortunately, we don't consider Benin crop as a base because crop size is small, competition intense and RCN costs could be very high. However, with Benin RCN, you get a high quality yield in terms of the better quality of nuts in terms of whiteness, grade, quality and size. It nullfies the high price. So you can say that the direct variable cost, for a 3000-5000 metric tonne plant, can come anywhere between between 1000 and 2000 USD per tonne.

Mr Rui Matos: Cote d'Ivoire is continiously increasing its production and from your presentation its clear that your aim is to increase by about 1 million metric tonnes by 2020. How are you intended to achieve it? Are there any specific incentives or measures which are put in place by the government?

Mr Karim Berthe: We are providing technical assistance to the farmers. Training the farmers in order to increase the yield. We have many new plantations coming up in different parts of Cote d'Ivoire. The old senile trees are rejuvenated and replaced. Hence we aim to increase the productivity of the existing plantations and increase the area under the cashew plantations.

Mr Jim Fitzpatrick: There are plenty of papers and studies done on increasing the yield. There are projections showing 1.2 million tonnes in the next 8-10 years. with this note, we will end this session, its very clear to me that west Africa is open to cashew business. They have many challenges and its essential to do your homework properly as Mr Deepak Kacher said in order to survive, grow and handle the cashew bussiness sensibly. i would suggest if you are interested to invest in West Africa go there, you will be pleasantly surprised.

■■■

Round-table: Vision 2025 for World Cashew Industry



Moderator: Mr Jim Fitzpatrick, Business Development Consultant and Mentor, Ingredient Sourcing Solutions

Panellists- **Somnath Chatterjee**, Head Procurement and Logistics, ITC Foods, **Mr Vu Thai Son**, General Director, Long Son Joint Stock Company, **Mr Vasudev Barkur**, Executive Director, ETG Group, **Mr Hari Nair**, President, Western India Cashew, **Mr Ashok Narayanan**, Director, Orion Commodities, **Ms Mary Adzanyo**, Director Private Sector Development ComCashew, **Mr Olusegun Awolowo**, CEO, Nigerian Export Promotion Council, **Ms Rita Weidinger**, Executive Director ComCashew, **Ms Shiru Mwangi**, Regional Topic Head- Agricultural Debt Investments, responsAbility, **Mr Shaktipal** Global Cashew Sector Lead, TechnoServe, **Mr Amit Khirbat**, Senior Vice President, Edible Nuts, Olam International Ltd

Raw Cashews

A. Projected production

1. Global raw cashew production is likely to increase by at least 50% from the current level of about 3.0 million tons in 2015. West Africa would contribute bulk of the growth in production. This will be followed by growth in raw cashew production in India. All increase in crop is expected to be from the Northern Hemisphere.
2. Raw cashew production was valued at USD 1.5 billion in 2005. It grew to USD 4.5 billion in 2015. It is projected to grow to USD 10 billion by 2025.
3. Priority: Increasing per-tree yield is must for sustainability. Like-wise, improving overall Kernel Outturn Ratio (KOR) from the current level of 44lb per bag to 50lb per bag should be the goal.
4. Priority: Infra structure in African countries needs

to be increased in a big way to cater the increase in production; new ports should be established in Cote d'Ivoire and Tanzania with the support of the government and other financial institutions.

5. Challenges to production growth forecasts:
6. Climate change and its impact on cashews is not fully understood. A concerted effort has to be taken by the industry to deal with this issue to avoid any shocks in future.

B. Where the Raw Cashew would be processed?

Local processing of raw cashews in Africa will grow from the current level of 10-12% to about 40% in the next 10 years. The main drivers for the same are

- Government support and incentives programme. Economics and efficiency; however, would decide the pace of growth of local processing industry.
- Technology development would also be crucial, as cashew processing technology is still emerging although last 10 years have seen huge improvements.
- Inter-African trade without duties would greatly reduce working capital burden of local African processors and spur growth in processing

Outside of Africa, processing would continue to flourish in Vietnam and India. Vietnam due to cost leadership while India due to its huge domestic markets.

Challenges

- Access to foreign currency in government could be a challenge in Africa.
- Change in commodity cycle could also affect the pace of growth of processing in Africa
- Frequent changes in government policies on cashews will also pose a big risk to the sector
- Food safety is being talked the most, but it has to be addressed in a proper way.

C. How will Raw Cashew and its processing be financed?

In Africa, it would continue to be the developmental

agencies and social impact funds.

In general, traditional financing institutions such as banks find cashew sector very fragmented, unorganised with no clear price benchmarks. Besides, the price volatility in raw cashews is too wild and sudden. Thus, banks see and associate with high counter-party risks, high price risks and high performance risks in the cashew sector.

The overall picture is very interesting. However, the industry has to collectively '*de-construct the big numbers into clearly identifiable components that are easier to finance*'.

Cashew kernels

Demand for cashew kernels is expected to increase by 85% from the current level. Repeated surveys have indicated the preference for cashews over other nuts. Cashews have become a common man's product in Europe, thanks to the collective efforts of stakeholders in spreading awareness on nutrition and health. Cashews are ideal as food ingredients due to its versatility and this segment is expected to grow exponentially. Thus, there is a space to grow the demand for cashews even at higher prices.

Key markets in 2025 for cashews would continue to be the USA, Europe, India, China and the Middle East. Nigeria is likely to emerge as the cashew consumer in Africa.

Priority: Need to find ways to promote local consumption of nuts as well as on the usage of by-products in Africa. Also we need to find new markets for by-product usage and for consumption of lower grades of cashews.

Key risks in cashew industry and ways to dealing with them

- i. Counter-party risks are high in cashew trade. It is estimated that the combined impact of counter-party risks is about USD 0.5 per lb. Two main causes of counter-party risks are (1) high volatility in prices and (2) lack of control over the quality of shipment (especially for raw cashews).

Possible solution

- a. A global body for the cashew industry that would focus on improving working relationships, standardising contracts and establishing an exchange for raw cashew trade.
- ii. Regulatory risks are on the rise in the global cashew sector. About 15 years ago, it was a free-trade. Then, there was export-levy. It was followed by a preferential buying for local processor; of late, a subsidy for local processor is also being given. Thus, at present African governments are going aggressively on promoting cashew processing within Africa. However, if they do not see the intended benefits, these concessions could be withdrawn or changed.

Possible solution

- a. A request for long-term and stable policy environment to be made to each of the governments in Africa. Stable policy environment provides right signals for investors.

One - wish for the cashew sector

1. Work together as one industry
2. Each tree treated fairly and optimally would do good for everyone
3. Transparency in pricing
4. Gains and opportunities for everyone
5. Sustainability through cooperation
6. More processing close to place of production of raw cashews
7. Cashews being sold as “super food”
8. Fairness across the value chain
9. Price should be competitive so as to keep consumption going when compared with other nuts
10. All stakeholders make fair share of the profits.



**Jim Fitzpatrick, Mentor
Ingredient Sourcing
Solutions**

Great venue, great time, I see double the participants than the last time around in Dubai. Though we talk together, we don't work together as we

couldn't say we have an integrated sector. I think, your idea at Cashewinfo is a forum for Vision 2025 and we can see a group of people from around the world coming together to work on it. Though it might have conflicting views, opinions, different ways of looking at things, the idea coming out for betterment is itself a major success. At the same time, it is so nice to see so many people from different countries coming together having only one thing in common- “cashews”. This is the most difficult product that somehow so many people make a living out of, at least, millions of those farmers around the world who grow it.

**Mr. Mahesh Patel
Executive Director
ETG Group**



This conference has brought people together, with lot of knowledge to share with each other.

We all have certain soft holes, which we are able to understand through this conference and improve on it. Also, on the future prospects, as the demand is increasing and I feel this demand can be fulfilled through Africa. It is an opportunity when people from other countries especially Asia like India and Vietnam to invest in Africa and help in improving the African industry further. As the African leaders are very encouraging and this is the right opportunity to think and move ahead. WCC opens door for everyone to understand and collaborate.





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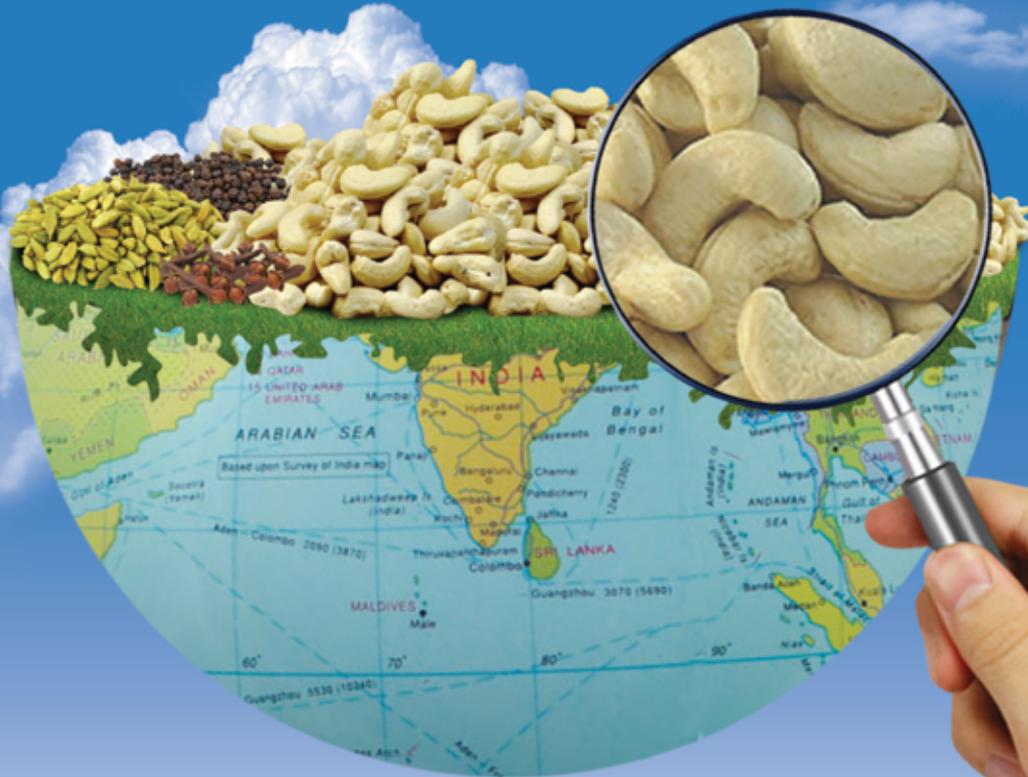








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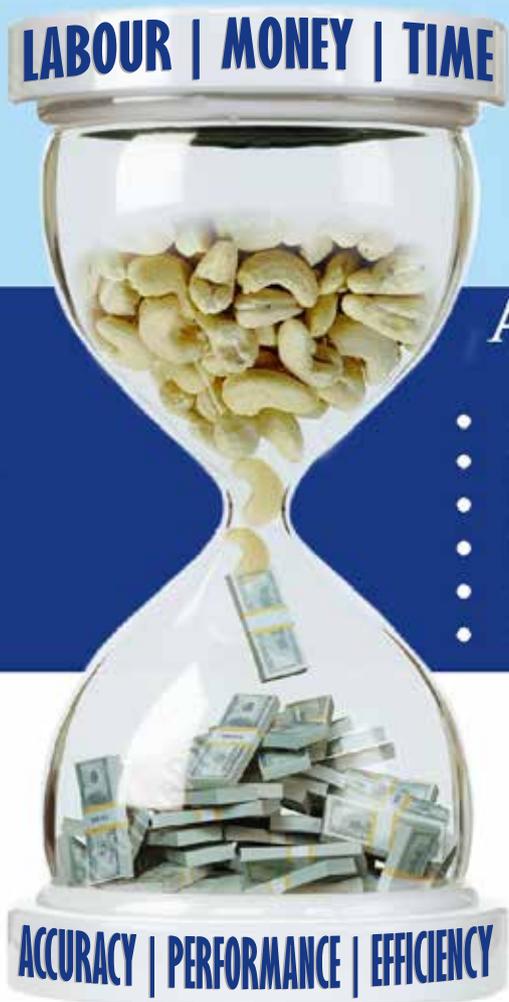
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