



Issue 2/2017: Olam SVI: Replicating success across regions

A grower in India harvesting chilli.

Olam's Spices and Vegetable Ingredients business already has a clear and sustainable growth platform anchored on its leadership position in the USA. However its longer-term future will be defined and its business differentiated by its spices and vegetable ingredients supply chains which are being developed in Asia, Middle East and South America as part of its global strategy.

In this second issue of **Olam Insights** for 2017, the Olam SVI team discusses how they have been sowing the seeds of growth in Vietnam, China, India, Egypt and Brazil to develop a competitive edge and capitalise on future market opportunities.

Positioning for future growth through integrated supply chains

By Greg Estep, Managing Director & CEO, Olam SVI

Olam's Spices and Vegetables Ingredients (Olam SVI) business has grown from a whole spices supplier to a global, vertically integrated producer of spices and vegetable ingredients. We supply the world's leading food companies in more than 70 countries, with manufacturing taking place across six countries and sourcing from 12 countries.

Our leading market position, anchored by a sizable presence in California, is

the result of a highly targeted growth strategy. In 2009, we undertook transformational acquisitions to expand and deepen our reach from both a value chain and geographical perspective. In the space of four years, we acquired and integrated Key Foods Ingredients in China, tomato processing, onion and garlic dehydrates businesses from Gilroy Foods & Flavors in the USA, spices processing operations in India and Vietnam, and Dehydro Foods in Egypt.

Since then, we have integrated, scaled up, realised synergies across products, capabilities and geographies and invested heavily in dedicated R&D. Today, Olam SVI is the world's largest dehydrated

onion and garlic manufacturer, a leader in value-added grinding of black pepper from Vietnam, is among the top five largest producers of processed tomatoes and is the largest organic tomato processor.

Organics, natural and clean products here to stay

Consumption patterns of food products and food ingredients as well as Olam's own market research with customers point to a trend of consumers being increasingly discerning in selecting what they eat. Healthy eating, food safety and social responsibility are key factors in consumer choice in developed markets in the USA and Europe, and in emerging markets such as India and China where



there have been major food quality and safety scares in the past.

Global food companies are working to differentiate themselves through responsible sourcing, “clean” labelling, taste profiles, flavours and colours and actions to stimulate consumption. Natural products will increasingly replace artificial flavours and colours, and critically will lead to a reduction of salt as a seasoning in products, for example. With this as a backdrop, demand for organics, naturals, sustainable and clean-labelled products over the last decade will continue to rise.

Innovating and focusing on responsible sourcing and origin manufacturing is therefore important and relevant. To be the foremost ingredients supplier in this space, Olam’s strategy is to integrate our supply chain in selected spices and dehydrated vegetables by investing selectively in upstream plantations, specialised processing at origin and expanding our product range to include other seed spices, herbs, vegetables and blends. By integrating our value chain, we can ensure the quality and integrity of our products, from farms to our customers’ factories.

Tailored integration across key origins

As we integrate our supply chains, we cross-deploy the know-how, expertise, and leadership attributes we have established in the USA to our key origins in Vietnam, India, China, Egypt and Brazil. We approach each origin differently based on the unique opportunities and competitive advantages in each country.

“Olam SVI’s leading market position is the result of a highly targeted growth strategy and we are positioning ourselves for growth by selectively integrating our supply chains and building differentiation through responsible farming, sourcing and origin processing across our global network.”

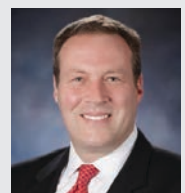
Greg Estep, Managing Director & CEO, Olam SVI

For instance, in India, which produces up to half of the spices in a global market of US\$12 billion, our focus is on the premium segment – originating and developing sustainable spices that meet demand in the USA and Europe for “clean” and sustainable products. There is also opportunity in the domestic India market, where changing consumer behaviours means increased demand for safe products. Our focus in India is therefore on building robust Sustainable Spices Programmes that source and market spices that are traceable and farmed in a sustainable manner with comprehensive Integrated Pest Management and proper post harvesting practices.

In Vietnam, which is the largest pepper grower in the world, we are one of the largest grinders and exporters of pepper and other tropical spices. Our scale

About the author: Greg Estep

Greg Estep is Managing Director and CEO of Olam SVI based in Fresno, California. Greg joined Olam when it acquired Gilroy Foods & Flavors in 2010. He previously worked 11 years for ConAgra Foods in Omaha where his last position was President & General Manager of Gilroy Foods. Prior to joining ConAgra, Greg spent 14 years with Continental Grain Company and held various commodity trading and management responsibilities in Hong Kong, Chicago, Portland Oregon, and Minneapolis. Greg earned his Bachelors of Science in Agricultural Economics from Virginia Tech and holds a Masters of Business Administration from the Fuqua School of Business, Duke University. Greg is on the Executive Committee for the California League of Food Processors and a member of the Foundation Board of Trustees for University of California, Merced and the Business Advisory Council for California State University Fresno.



allows us to source the best raw pepper from all over the country, and from other origins in our network. This provides us with a distinct competitive advantage over other processors as we have broad-based and cost-effective procurement leverage, ensuring our factories run at full capacity.

We believe Vietnam will continue to be the most cost-competitive producer of pepper in the long term so our growth approach is focused on moving upstream. In 2016 we commenced development of a 325-hectare pepper plantation in Vietnam. To complement this and to mitigate our upstream risks, we are also developing a 400-hectare pepper plantation in Brazil. In combination, by 2022, we will have crops available from these origins for processing and sale to our customers all-year-round.

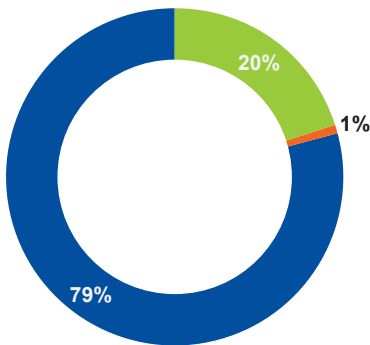
In Egypt, apart from accessing the growth in exports into Europe, Africa, Americas and Japan, we are leveraging our proprietary onion seed developed in the USA to partner with farmers and reproduce fully traceable white onions using half the amount of water and energy used in traditional farming. This reduces our carbon footprint and delivers a significant competitive edge.

In China, we are the largest dehydrated garlic player with a growing market share in a competitive space where there are more than 300 industry participants. We stand out in many respects – in particular, we have achieved the highest level of productivity, two times the industry average, both from the deployment of automation as well as human capital productivity. Our focus on

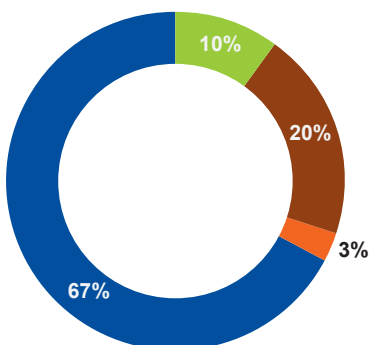
food safety, traceability, allergen control and customised specifications has earned us a reputation for producing high quality output. Our differentiated market positioning puts us in good stead in the current context where quality issues around allergens are leading buyers to want to work with operators like us.

Olam SVI's prospects for the future are very attractive. With our leadership positions globally and within each major origin, as well as our differentiated approach to farming, origination and processing, we have the right ingredients to capitalise on the current market opportunity. We are confident that our investments in Asia, Middle East and South America will turn out to be growth catalysts for Olam SVI.

Sourcing volume by region



Sales revenue by region

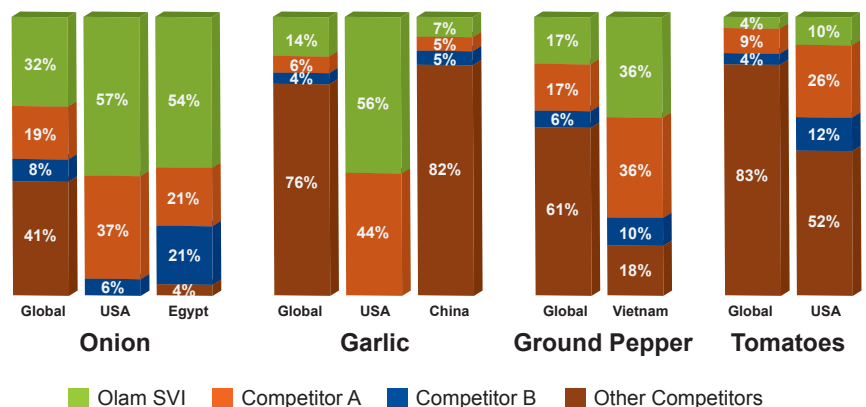


- Asia & Middle East
- Europe
- Africa
- Americas



Olam SVI in China is the largest dehydrated garlic player with a growing market share in a competitive space.

Leading positions and market potential



India: Spicing up the world with clean, sustainable products

By Munish Minocha, Senior Vice President, Olam SVI

The world has always loved Indian spices, with India currently being the largest producer and exporter of spices accounting for US\$6 billion annually, half of the global market.

The key trends in the global spices industry are clearly evident within India's spice industry.

Food safety is of utmost importance as safety norms and pesticide and allergen requirements remain the top priority for buyers. Branding around sustainability, traceability and organic produce continues to gather steam among consumers. Purchasing habits are shifting towards a preference for branded, processed and pre-packed products and away from buying loose or in wholes. Consumers are also becoming more discerning in their selection of spices where taste, colour, heat, ethnic flavours and clean natural labels now matter much more than ever before.

In line with these shifts in consumption habits and preferences, and as a global supply chain manager with a purpose of growing profitably and responsibly, our focus in India has been on developing origination, processing capabilities and exports of traceable, sustainably sourced ground spices to major markets in Asia, Europe and the USA.

Clean label, sustainability focused

In India, we participate in five major spices – chilli, cumin, black pepper, turmeric and curry powder. Collectively these spices account for about 70% of India's spice exports. Chilli is the largest segment in volume terms, followed by cumin, turmeric, pepper and curry powder.

Our acquisition of the bulk spices assets and businesses of Vallabhdas Kanji Limited (VKL) in 2011 set the stage for our current participation in India. The assets acquired included VKL's spice processing facility in Cochin and its sales and distribution operations in North America. With these assets, we now process and offer a range of value-added spices, including heat treated, dehydrated and naturally steam sterilised spices, and blends in various forms which are customised to the needs of industrial customers across the USA and Europe.

The transaction catalysed our entry into new, attractive product segments,

particularly red chilli and turmeric, and we have further invested in improving the infrastructure and testing capabilities of these assets. Our testing lab in Kochi tests 100% of our products before they leave our factories for the port. It also provides analysis for the establishment of proprietary processes, such as those for reducing pathogens. These elements contribute to the clean label objective.

Importantly, our Sustainable Spices Programmes (SSP) focus on sourcing and marketing spices that are traceable and farmed in a sustainable manner with strong Integrated Pest Management (IPM) and proper post-harvesting farming practices. Pesticides and toxins are often the challenge for spices exports to the USA and European markets. Based on our SSP under the Olam Livelihood Charter, we work with farmers to educate them on the correct usage of pesticides and chemicals and preventive techniques for pest control and mycotoxins. This training enhances farm productivity and income, and ensures that the crops produced meet or better pesticide limits set by USA, EU and Codex standards.

For example, in the three major states of Andhra Pradesh, Karnataka and Telangana where chilli is grown, we have been successful in building a robust IPM programme that involves working with more than 1,200 small and medium farmers to develop sustainable agricultural practices and generate a higher return for the farmers.

Small but growing addressable market commands a premium

The key markets for Indian spice exports are the USA (between US\$300-350 million), China and Vietnam. Together China and Vietnam equal the USA market in size. The EU and Asia Pacific (excluding China and Vietnam) markets

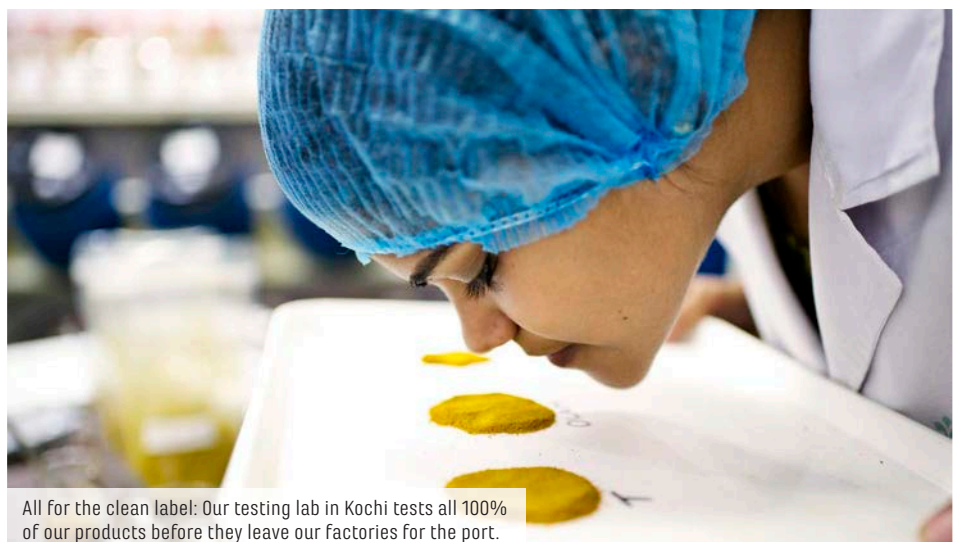


Ground chilli, India: Our business model in India ensures a sustainable production of spices by farmers who adopt the integrated pest management technique on farming.

each consumes about US\$200-250 million worth of Indian spices.

While the addressable market size for IPM spices is still a fraction of India's overall market – roughly 100,000 metric tonnes or US\$200 million – it commands a premium and is growing on the back of changing consumer behaviours. Olam is well-positioned among the top five players in India to meet the stringent requirements of this market.

With our SSP differentiated products, we will grow our domestic market in whole, ground and spice blends segments, which have traditionally relied on local traders for their needs. Our Olam brand, clean label, traceability and sustainability focused strategy put us in an advantageous position and ahead of other global food companies as well as private labels operating in India.



All for the clean label: Our testing lab in Kochi tests all 100% of our products before they leave our factories for the port.

“Demand for safe, clean and sustainable products is the key reason for our Sustainable Spices Programmes in India, which centre on sourcing and marketing spices that are traceable and farmed in a sustainable manner.”

Munish Minocha, Senior Vice President, Olam SVI

About the author: Munish Minocha

Munish Minocha is Senior Vice President of Spices & Supply Chain, Olam SVI based in Fresno, California. Prior to assuming his current role in 2014, he was Senior Vice President of Information Technology at Olam, overseeing the Americas and Europe regions. Earlier in his career, Munish was the head of Olam’s Cocoa and raw cashew origination operations in Indonesia. He later co-founded Eximware Inc, a provider of cloud-based commodity management software and eCommerce solutions for agricultural commodity companies, and became its COO. Munish earned his B.A. Economic (Hons) from Hansraj College at Delhi University in India and a Master of Business Administration from Manchester Business School in UK.



Vietnam: Leading the pack through value chain integration

By Nitin Bansal, Vice President, Olam SVI Vietnam

We started our pepper operations in Vietnam in 2001 as a one-step adjacency to our coffee operations as pepper and coffee are grown in similar areas. Initially, Olam was primarily an aggregator of raw pepper from Vietnam exporting to processors and grinders overseas, who would clean, sterilise and grind it. Fifteen years on, Olam has successfully migrated from a raw material aggregator to an integrated processor supplying sterilised ground pepper and tropical spices to buyers globally who use our ingredients directly in their food recipes, seasonings mixes or spice packs. Today we are a leading processor and exporter of pepper and tropical spices out of Vietnam.

Traditionally pepper grinding has been dominated in destination markets by

buyers either having captive in-house grinding for pepper or sourcing from grinders closer to home who provide consistent quality and product integrity. This model had been a characteristic of the pepper supply chain for centuries.

However, we have witnessed a huge growth in pepper grind exports from origins over the past several years. Many buyers have become less sensitive to supplier proximity and are increasingly seeking spices that are ground in the origins. They see a greater economic advantage in setting up their ground pepper supply chain directly from origins.

Origin grinding has a significant intrinsic advantage over destination grinding due to market structure and cost. While the USA and EU are the largest pepper export markets, these markets have different preferences on particle size – the USA market prefers the coarser grain whereas the EU prefers finer particles. Both are willing to pay the best price for the grade.

As the grinding process generates both coarser and finer particles, an origin grinder is able to secure premiums by placing both course and fine grades at best prices in both markets, achieving higher realisation compared to a destination grinder who has to sell co-products at a hefty discount due to the lack of liquidity in the local market for those grades. In addition, lower costs of processing and access to multiple sources of raw materials enable origin grinders to tap lower production costs.

With this trend, the share of grinds in export volumes from origins has been increasing faster than that of wholes and is projected to more than double from 43,000 MT in 2015 to 90,000 MT in 2022.

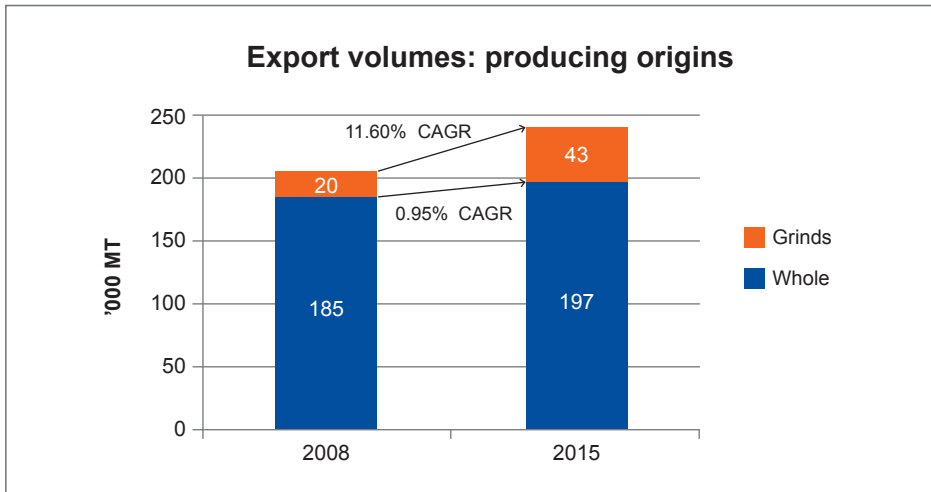
Olam has been investing in Vietnam which is the largest producer of pepper globally – Vietnam’s pepper constitutes 40% of global production and 70% of global trade. Our sourcing network extends beyond Vietnam to India, Indonesia, Cambodia and Brazil. Our model enhances our ability to optimise our cost of purchase and seek out the best raw materials for our customers, while also providing optionality to maximise trading returns through our in-depth understanding of the origins, and the supply and demand forces affecting the trade.

Our pepper grinding operation in Vietnam acts as a hub-and-spoke, gathering pepper from within the country as well as from other origins and grinding them all-year-round, which ensures our factories consistently run at optimal capacity. This also enables us to offer our buyers multi-origin optionality for processing in our facility in Vietnam. By doing so, we “out-originate” local players who only have access to local raw materials.

Olam SVI pioneered the process of steam sterilisation of black pepper in



Grinding black pepper, Vietnam: Share of grinds in export volumes from producing countries is projected to more than double from 43,000 MT in 2015 to 90,000 MT by 2022.



Vietnam and has been offering steam sterilised pepper to our customers since 2008. Over the last six years we have invested in state-of-the-art equipment with multiple milling configurations that enable us to handle steam sterilised pepper grinds, which is the method preferred by buyers due to its “cleaner” label. Our production process involving infrastructure, equipment and material flows is designed so that individual spices are processed separately to ensure zero cross-contamination and elimination of inefficiencies from product changeover due to time and material losses.

With subsequent capacity additions, Olam SVI is today one of the largest origin pepper grinders as well as the largest producer of steam sterilised pepper globally with a scale that has enabled us to achieve high capacity utilisation rates and correspondingly low unit manufacturing costs.

With production differentiation as our core strength and growing prospects for origin

grinding, Olam is well-poised to capitalise on continuing market growth.

Backward integration: from ingredients to farming

As the largest producer and exporter of pepper in the world, Vietnam clearly stands out as a prominent origin for pepper. Its market position has been driven by increased acreage and significant improvement in yields as growing has shifted from traditional intercropping with coffee and rubber to mono-culture cropping. Yields from mono-crop cultivation range from 3.5 to 5.0 MT per hectare compared with those from inter-crop yields of 0.5 to 1.5 MT per hectare. The range is wide in both cases due to differing initial planting costs and annual operating costs among small growers.

The costs of mono-cropping are 50-65% of those for inter-crop production in India or Indonesia. With more than half of

global production still coming from inter-crop production, Vietnam’s mono-crop cultivation of pepper will remain cost-competitive compared to other origins in the near to medium-term.

With low-cost and high-yield pepper production and grinding on the rise in Vietnam, we see further growth potential for Olam to participate in upstream pepper there. Since 2016, we have embarked on developing 325 hectares of greenfield, sustainable pepper plantation in Gia Lai province in Vietnam. In order to serve markets all year round and to mitigate our upstream risks, we are also developing a 400-hectare pepper plantation in Brazil.

Our pepper plantations combine the best farming and pepper growing practices from all key growing origins across the world. These include land selection, in-house development of good varietal mix, drip-irrigated farming and improved cultural practices that ensure judicious fertigation, water and chemical usage and traceability back to every planted block of pepper in order to achieve a consistent profile in our crops.

Planting in both countries is scheduled to be completed in 2018, yielding approximately 3,000 MT of annual crop at maturity in 2022. With this development, Olam will become the largest pepper grower globally and we will be fully integrated from pepper farms to pepper ground ingredients, with full control over our supply chain.

By being an integrated player we will be able to create a differentiated offering for our customers who value traceable and sustainable products. This will generate attractive margins for Olam.



[Click here](#) to watch the video on our pepper plantation in Vietnam.

"From upstream pepper farming to midstream processing, Olam SVI is participating in Vietnam's comparative advantage in pepper production and the growth in demand for origin grinds."

Nitin Bansal, Vice President, Olam SVI Vietnam

About the author: Nitin Bansal

Nitin Bansal is Vice President of Olam SVI responsible for global pepper and tropical spices product lines based in Vietnam. Nitin joined Olam in January 2007 and was responsible for handling Olam's business in Edible Nuts, beans and spices in China before moving to Vietnam in 2014 to assume his current role. Prior to joining Olam, he was working in Ebaco Far East Pte Ltd where he was responsible for setting up their trading business in China, and in Piramal Glass in Mumbai, India where he was the head of international sales of the company's glass packaging business. Nitin holds a Bachelor of Business Administration from D.A.V. College, Amritsar and a Master of Business Administration from the Indian Institute of Foreign Trade, New Delhi.



Egypt: Replicating USA success

By Vinayak Narain, Senior Vice President, Olam SVI

Establishing a strong presence in Egypt was strategically important in the context of increasing weather and water risks in California. Our acquisition of Dehydro Foods Egypt, a leading producer of high quality onion dehydrates in 2012, catalysed our growth in this origin that is known for its high quality onions and competitive cost of processing.

Egypt also enjoys close proximity to Europe and Africa and preferential duty-free access for its exports to the EU. The EU consumes about 100,000 MT of dried onions a year and Egypt supplies about 15% of its requirements. As produce from competing origins, predominantly India and

China, ranks lower than Egypt in terms of quality and consistency of output, there is significant headroom for growth in Egypt.

Olam SVI has a strong customer franchise from Egypt that provides very strong potential for growth in exports into Europe, Africa, Brazil and Japan. Along with our assets and product lines from our acquisitions in the USA and China, we consolidated our leadership position in the global dehydrates space where we could bring about synergies in sourcing, value-added processing and distribution.

We have increased our annual capacity from 8,500 to 10,000 MT with enhanced processing capabilities. However, the value proposition for expanding into Egypt was more than just processing. To realise its full potential, we set out to achieve two targets. The first was to establish a strong supplier base for

native Egyptian yellow onions, which are prized for their consistency and flavour. The second was to develop a fully traceable and sustainable source of white onions – the ability to reproduce our proprietary, high solids white onions which accessed from California and produced on Egyptian soil.

We started a smallholder farmer programme through which we provide training on best agricultural practices and yield improvement for capacity building. This programme, which now involves 500 farmers, has bridged our access to the supplier base directly and reduced dependence on the middlemen while also providing knowledge on the crop and its growing conditions. We are working to enlarge this supplier base to 1,000 farmers who will potentially be supplying other products such as herbs and garlic to Olam SVI in the future.



Solid in Egypt: Growing highest yield, highest solids onions in the world with Olam SVI's proprietary, USA-bred high solids seed on Egypt's soil.

Growing high solids white onions in Egypt the sustainable way

Backed by two years of trials and our proprietary USA seed, in 2015 we initiated contract farming relationships with large, organised farmers and corporate farms in Egypt for the production of traceable, high solids onions over an eight-month harvest season – November to March in winter and April to June in summer. Our objective is to replicate our USA model that has been proven to work well with large farms as it utilises mechanised farming techniques and equipment, while maintaining our IP on high solid onion varieties.

The development is spread across six production areas covering four different

latitudes which have been identified to be closest to those in the USA. The project is supervised by agronomists from our Hanford farming headquarters in the USA to ensure that we achieve the world's highest yield and highest solids onion variety in Egypt.

After one year the farms successfully developed 1,500 acres and grew 2,500 MT of traceable, high solids white onions using half the amount of water and energy for each tonne of output compared to growing conventional onions. Our target is to expand planted area to 2,500 acres and grow 6,500 MT of these onions by 2018.

Having pioneered the production of the world's highest yield and highest solids content onions, our European and Asian

customers now enjoy the cost advantages we created by bringing together the best of USA seed and Egyptian production. To mitigate any liquidity risk that may arise from customer perception that these onions are new and unproven (despite being very similar to USA onions), we are actively conducting product trials with customers to increase their acceptance rate.

Following these achievements, Olam SVI is now Egypt's largest dehydrated onion processor and exporter with a lion's market share of 54%, and is a global low cost leader in this product category, putting us well ahead of the competition.

[Click here to watch our video on Olam SVI in Egypt.](#)

"Olam pioneered the production of the world's highest yielding and highest solids content onions in Egypt, and has developed cost advantages by combining the best of USA seed and Egyptian production."

Vinayak Narain, Senior Vice President, Olam SVI

About the author: Vinayak Narain

Vinayak Narain is Senior Vice President and Global Product Head for the dehydrated vegetables business vertical of Olam SVI based in Fresno, California. Vinayak has more than 25 years of experience in B2B sales, customer relationship management, commodity trading, product line and general management in both manufacturing and international trading environments. Before heading this business, Vinayak was in charge of Olam's global spice operations for five years based in Singapore and Netherlands. Prior to joining Olam, he was the head of the spices trading arm of Kewalram Chanrai Group from 1995-2003 and had worked for ICI India Ltd. from 1990-1995 in its surfactants and international trading business in India. Vinayak is a Post Graduate in Business Management from S.P. Jain Institute of Management and Research, University of Mumbai.



Facts on Olam SVI

12 origins	Americas: USA, Mexico, Brazil, Peru Asia: Vietnam, Indonesia, Malaysia, Cambodia, India, China Middle East & Africa: Egypt, Nigeria
Seed	50 years of proprietary research and plant breeding
Growing in 4 countries	USA: Contract farming on 50,000 acres, California Egypt: Contract farming on 2,500 acres Vietnam: 325 hectares Brazil: 400 hectares
Manufacturing in 6 countries	USA, Peru, Egypt, China, India and Vietnam
Annual processing capacities (MT)	India: 10,000 Vietnam: 10,000 Egypt: 10,000 China: 16,000
Products	20 product lines – Olam SVI is the world's largest supplier of dehydrated onion, garlic and capsicum. Tomatoes, purees, herbs and spices – black pepper, white pepper, red pepper, chilli pepper, cassia, ginger, nutmeg, turmeric, cumin, curry powder and coriander.
Major markets	North America: USA Europe: UK, Netherlands, Denmark, France Asia: Indonesia, Thailand, Greater China
Microsite	olamsvi.com