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INDIA'S COOL



[2009-18]









Ravichandran PurushothamanPresident
Danfoss, India Region

FOREWORD

The Hon'ble Prime Minister of India has set the target of doubling the farmers' income in India by 2022. He also identified cold-chain as an infrastructure gap, that must be addressed.

According to the Committee for Doubling Farmers' Income (DFI) report, the loss in farm-to-market link is a massive opportunity to add to the farmers' income, by expanding the range of produce and enabling itto reach the consumption centers fresh, where it can command a much higher price.

Food consumption patterns in both rural and urban centres are changing with increasing demand for meat, fish, milk, fruits and vegetables, all of which are highly nutritious, but highly perishable as well. This dictates that greater quantities of these perishable foods must be transported from rural areas to urban markets. Given their high degree of perishability, major problems exist with respect to food safety and quantitative/qualitative losses, owing largely to inadequate rural electrification, low levels of organization, limited knowledge of smallholders about quality management, temperature management and good handling practices. These losses negatively impact the nation's food security, nutrition and incomes of smallholders, while increasing the cost of food for low income consumers. The development of appropriate cold chain systems (including low emission, renewable energy, new technologies) from farm to market, holds considerable potential for enhancing the safety, quality and shelf life of fresh/processed food, while increasing returns to the producers.

It is against this backdrop that Danfoss along with GCCA and ICE instituted the Danfoss ICE Awards to specifically identify and showcase the best practices & excellence in Cold Chain to others. Various categories of Danfoss ICE Awards are presented fornoteworthy achievements and contributions to this industry, bringing in innovation and strengthening the full cold chain value system. Over the years, several entrepreneurs, business model innovators, farmers, consultants and more have been awarded. And now, we are pleased to see them acting as change agents in this sun rise industry, which we believe is the next big job creator for India.

Along with the award winners of the past 10 years, I take this opportunity to congratulate GCCA and ICE for instituting and showcasing this comprehensive coffee table book - 'Cool heroes' of Indian Cold Chain industry', capturing those winners who are now aiding in the development of the nation's food sector. We, at Danfoss, truly believe that this book will be an inspiration for many more in the industry, to innovate and create path-breaking solutions in cold-chain.

Together let us work towards engineering tomorrow's India, today.



Atul Khanna Director ICE

FOREWORD

Dear Friends & Fellow countrymen,

It is our proud privilege to dedicate this first of its kind coffee table book, to all of you associated with our cold chain industry.

Danfoss ICE Awards has had a fruitful journey from its inception in 2009 when the first of its cold chain awards were conceptualized in India. We have been fortunate to have recognized many talented entrepreneurs, innovators, Business houses who have all progressed to become the leaders in the cold chain Industry in India and the torchbearers of transformation in India's Cold Chain industry.

Danfoss, NCCD and Industry support has been unstinted throughout our journey of the last decade and when our award winners are recognized and acknowledged by otherstakeholders in the industry today, we feel extremely proud & happy for them.

We have traversed a completely new and uncharted path to reach where we are today. This book is a tribute to the pioneering spirit of our entrepreneurs, and industry colleagues who have created a wonderful platform to launch the cold chain industry in India.

We do believe that their journey can be an inspiration to many and are confident that this will lead to many more successful business enterprises coming up in this golden industry.

ICE Centre of Excellence has also been a proud training partner for NCCD, NHB and NIFTEM. We are committed to elevating the industry to a higher level using technological and training best practices to mitigate losses from food wastage and thereby support India's vision to be the food factory of the world and to double farmers' income.

We hope to touch more lives through ICE Centre of Excellence, creating a bright future for all stakeholders in the Cold Chain industry, with consistent connect, creative spirit and cohesive progress.



Corey Rosenbusch
CEO & President
GCCA

FOREWORD

In the 128-year history of the Global Cold Chain Alliance (GCCA) and its core partner associations, the cold chain industry has undergone significant transformations, evolving to where it is today – a critical component of the world's food and pharmaceutical systems.

GCCA has been highly focused on forging a universally strong cold chain, where every product retains quality and safety through each link and is also working towards growing the industry and leading the chain.

Over the years, we've certainly seen several changes – from different types of refrigeration and warehouse management systems, to a variation on the services offered by GCCA members. The changes continue to permeate the industry year after year, as new and exciting innovations hit the market every day. In the past ten years alone, we've seen many companies that started out as cold storage providers renting pallet positions to a handful of customers morph into providers of complete cold chain solutions, offering a broader base of customers a variety of value-added services such as case selection, transportation services, blast freezing, repacking, and more.

We've also seen a notable evolution in the design and structure of temperature-controlled facilities, as many companies with multi-story, urban warehouses utilizing forklifts transitioned to 100-foot-tall facilities featuring sophisticated automated technologies and robotics. The Global Cold Chain Alliance was formed in the year 2007 and serves as the focused voice of the cold chain industry. It is a platform for communication, networking and education for each link of the cold chain. It acts as a link to unite three separate trade associations and a nonprofit foundation representing key links within the worldwide cold chain.

In the ten years that GCCA has supported the cold chain in India, it has been a pleasure for us to witness some of these changes that have led to the evolution of the Indian cold chain. The businesses and individuals in the pages that follow, represent some of the top influencers of this evolution in the Indian cold chain. These innovators have made significant contributions to the region by bringing about a significant change, by offering fresh and new ideas to improve the region's cold chain.

We congratulate all the businesses and individuals that have been recognized as the Danfoss ICE Award winners and wish them continued success, as they drive growth and innovation.

Change is constant, and while we look back at the ten years of innovators and award winners, we will also be looking forward to the next ten years and the exciting changes to come as GCCA, ICE, our partners and all leaders, innovators and related stakeholders prepare to serve the cold chain industry.

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ANALABA

DANFOSS ICE AWARDS QUICK FACTS







8 CITIES
AHMEDABAD, CHANDIGARH,
DELHI, MUMBAI, AGRA, INDORE,
CHENNAI, HYDERABAD





INTEGRATING COLD CHAIN & ALLIED INDUSTRIES SINCE 2009



OVER 1000 EXHIBITORS
CONNECTING EVERY LINK
OF THE COLDCHAIN



THE VENUE FOR THE ANNUAL GENERAL MEETING OF THE FEDERATION OF COLD STORAGE ASSOCIATIONS OF INDIA SINCE 5 YEARS



OVER 100+ PRODUCT LAUNCHES AT THE EXPO



COMMON PLATFORM FOR BUSINESS CONNECTIONS AND NETWORKING MEETINGS

ABOUT DANFOSS



Danfoss engineers' technologies that enable the world of tomorrow to do more with less. They meet the growing need for infrastructure, food supply, energy efficiency, and climate-friendly solutions. Danfoss products and services are used in areas such as refrigeration, air conditioning, heating, motor control, and off-highway machinery. They also operate in the field of renewable energy, as well as district energy infrastructure for cities and urban communities.

Danfoss Group is a technology provider, divided into four business segments namely Danfoss Power Solutions, Danfoss Cooling, Danfoss Drives and Danfoss Heating. Danfoss Power Solutions is a leading player in hydraulic systems and components for powering off-highway machinery and Danfoss Cooling is a market leader in the air-conditioning and refrigeration industry. Danfoss Drives' key expertise lies in low-voltage AC drives, power modules, and stacks for several industries and Danfoss Heating enjoys leading positions within residential heating, commercial heating, and district energy.

Danfoss, a privately-owned company was founded85 years ago by Mads Clausen in Nordborg, Denmark, now has presence ino over 120 countries across the world today.

Intro to Danfoss India

Instituted in 1998, Danfoss India is headquartered in Chennai, amidst a sprawling 50-acre campus that serves as the application development center, not just for India but globally. Housed within the state-of-the-art campus, is a future-facing research & development center, customer focused testing labs, robust manufacturing processes and an efficient supply chain system that together puts Danfoss India on the global map. Danfoss India, with sales footprint in most states in India, is at the forefront in offering solutions that help create a better tomorrow for India, today.

Danfoss sees opportunities everywhere — from engineering a comfortable environment across buildings, to enabling the Indian farmers to double their income, to delivering energy efficiency across industries. They also strive to meet complex challenges through collective knowledge and constant hard work, that result in engineering innovative solutions, to achieve more with less.

Danfoss - Engineering tomorrow's cold chain

India is an agrarian economy, where agriculture contributes to 17.9% of the country's GDP, and employs over 50% of the rural households. From fruits and vegetables to fisheries and from meat to dairy, India finds itself amongst the global leaders in food production. However, up to 25% of the food produced is lost due to the lack of an efficient cold chain infrastructure in India. The annual harvest and post-harvest food losses are estimated to be close to 56 million Mt and worth approximately Rs. 92,651 Crores. As per the per capita food consumption in India, the amount of food lost can feed close to 15% to 30% more people.

With 85 years of engineering excellence, Danfoss has been enhancing the efficiency of the cold chain infrastructure and reducing food losses from farm to fork. Their deep application expertise and future facing technologies encompass refrigeration solutions for all types of food produce. Right from the post-harvest aggregation of the food to the final distribution to the retail stores, at every stage of the cold chain infrastructure, Danfoss technologies ensure food safety and security by sustaining the food quality, reducing food losses and by improving the shelf life of the produce so that more fresh food is available for the people in India.

Danfoss ensures food quality, safety and security through our solutions for all stages of the cold chain namely:

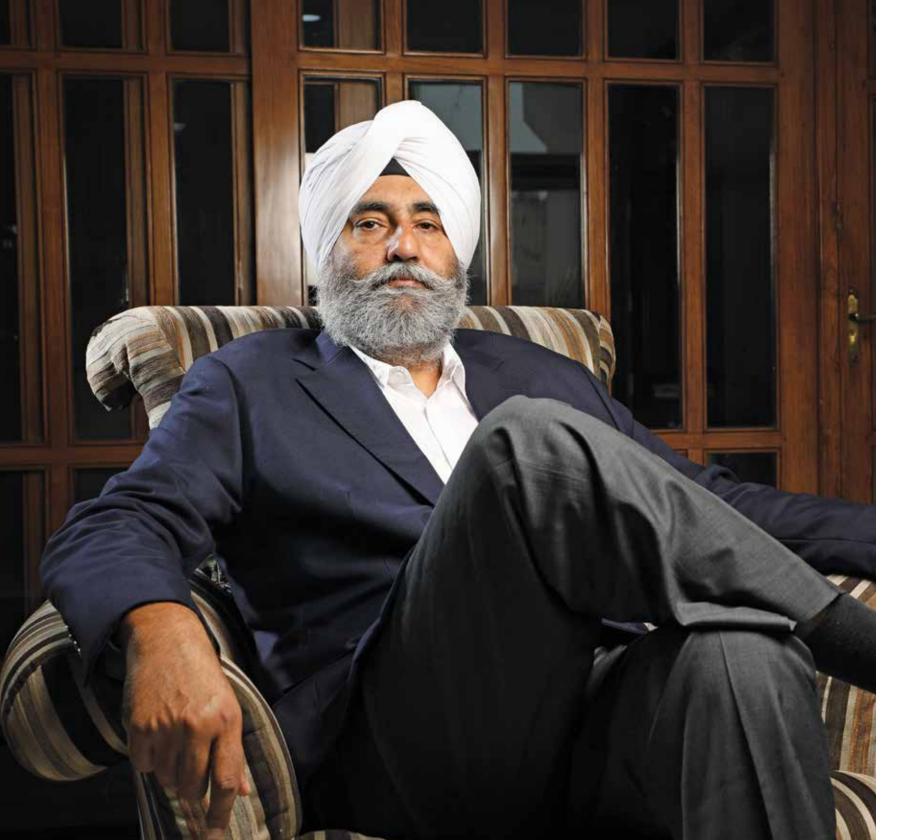
- Post-harvest and pre-cooling
- Pack houses with pre-coolers
- Bulk milk cooler
- Solutions for chilled water and block ice
- Ripening Chamber
- Refrigerated transport and supermarkets
- Display cabinets
- Deep freezers
- Walk-in cold rooms
- Refrigerated containers
- Walk-in freezer rooms
- Refrigerated display trucks
- Food processing and freezing
- Solutions for chilled water
- Solutions for ice making
- Individual Quick Freezers (IQF)
- Ice Bank Tank (IBT)
- Blast chillers
- Plate and blast freezers
- Cold storage and distribution
- Frozen stores
- Cold stores
- Chilled rooms
- Butter cold storages
- Controlled Atmosphere (CA) storages

Together with their stakeholders, Danfoss promotes energy efficient and climate-friendly solutions to engineer tomorrow's India, starting today.

We are happy that like previous years, this year also the ICE awards is bringing the Indian Cold Chain Industry together on one common platform. Efforts of ICE Centre of Excellence are definitely praiseworthy.

MAHENDRA SWARUP
PRESIDENT
FEDERATION OF COLD STORAGE ASSOCIATIONS OF INDIA







GURMIT SINGH

MANAGING DIRECTOR, GMH AGRI HUB PVT LTD

Alumnus of prestigious St. Columba's School, New Delhi, in his formative years, Gurmit Singh graduated in Mechanical Engineering, specializing in thermo-fluids from Worcester Polytechnic Institute, Massachusetts, USA. He is a certified member of Pi Tau Sigma, the National Honorary Mechanical Engineering Fraternity in USA.

Gurmit has over 30 years of experience in the manufacturing, design and installation of ammonia refrigeration systems and has been instrumental in introducing new technologies in process cooling and freezing in the Indian Dairy and Food Processing Industry. The stalwart pioneered in successful execution of various projects during his tenure starting as an engineer and as Joint Managing Director for Frick India Ltd till 2008. When he opted out to take over the reins of his family business in the role of Managing Director, Gurmit took impressive strides to establish GMH AgriHub Pvt Ltd.

GMH AgriHub Pvt Ltd. is an Integrated Rural Supply Chain Infrastructure Project in Punjab, a unique initiative for the facilitation of high quality commercial horticulture crop production and trade from remote agricultural areas, through strategic linkages with farmers, multinational producer companies and wholesale markets. The AgriHub doubles as a research centre on appropriate technology

and critical interventions for establishing sustainable perishable produce supply chain infrastructure, particularly in context to the prevailing agriculture scenario in India.

Gurmit is a part of 12-member Indian delegation invited by the US Trade and Development Agency (USTDA) in April 2011, participated in the India Cold-chain Reverse Trade Mission (RTM) designed to showcase latest equipment, facilities and logistics that could be beneficial to India's growing Coldchain infrastructure. He also represented the Cold Chain Technical Standards Committee of Confederation of Indian Industry (CII), contributing towards establishing Technical Standards and Protocols for the Department of Agriculture & Cooperation, Ministry of Agriculture, Government of India. He is a member of several reputed associations, committees and organizations in the industry including the National Level Technical Committee constituted by NCCD and ISHRAE, National Committee on Agriculture constituted by the FICCI and the CII Post-Harvest & Logistics Task Force 2018.

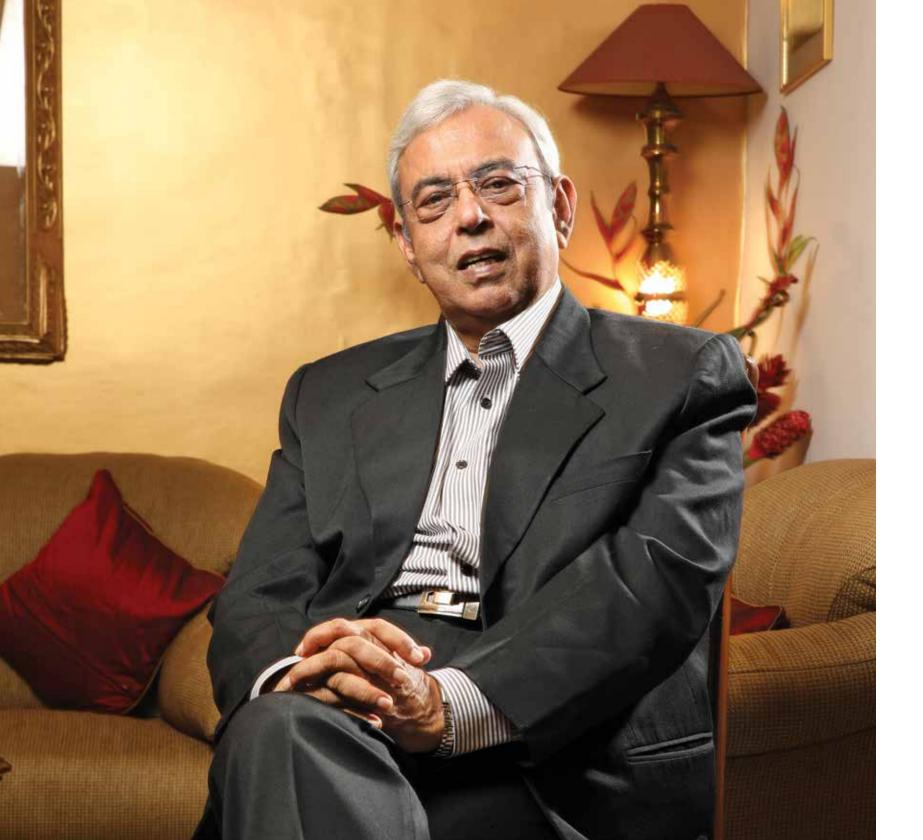
Gurmit Singh was recognized as 'Exemplary Thought Leader in 2009 for his thought provoking contribution towards refrigeration system applications and development of technical standards from CII side.

DANFOSS ICE AWARD

EXEMPLARY THOUGHT LEADER 2009



"Build a wellcrafted consumer engagement strategy. **Everything else will** follow naturally."





PADAM GARG

FORMER CEO & DIRECTOR, METAFLEX DOORS

The distinguished CEO & Director (former) of Metaflex Doors was never one to shy away from challenges. A commerce and management graduate from IIPM, he has proven repeatedly through his work that determination leads to excellence!

Padam Garg's journey began in 1976 with logistics, moved to manufacturing, international trade, startups, technology transfers and finally to turnarounds in diverse fields from transportation to textiles to engineering in ace positions.

His diverse industry experience of 36+ years has been an enriching learning curve of challenges and lessons. He created his niche in managing leading international startups for sustained profitable growth. He took up cash-crunched startups and Micro, Small & Medium Enterprises and turned them around to million-dollar portfolios.

Year 2009 presented him an opportunity to turn around a 2-year-old startup, Metaflex Doors, a leading manufacturer of insulated doors, then reeling under losses. Indian Coldchain was still at a very nascent stage then and conventionally viewed. Bigger challenge was to convince stakeholders to progress to advanced designs/technologies.

Padam took to spreading awareness on Cold-chain through various trade forums, conferences and shows. Steadily, it took a turnaround with 100% year-over-year growth in sales and the rate of loss arrested. Metaflex is now well-positioned pan India as a total solutions company.

His distinctive style as a coach and mentor to create a conducive environment to freely, collectively, ideate & innovate has borne fruits every single time.

Padam retired to do larger good in his pursuit to help more companies achieve their business ambitions in the subcontinent

Commitment to reach out to stake holders by creating awareness, sharing knowledge, providing best solutions, building sustainable technologies and creating newer/larger opportunities consumes his time now.

He says, "Success at 25 is very different from success at 55. One should define one's own meaning and measure of success and work diligently towards it. Distractions only happen when other's success becomes your focus."

Identification of the right Cold Chain technology, its indigenization and spreading best practices to users has really helped grow this industry along modern lines. Progressive Service Provider was a befitting award for Mr. Padam Garg in 2009. **DANFOSS ICE AWARD**

PROGRESSIVE SERVICE PROVIDER 2009



"Success is a journey, not an end. **Being successful is** the ability to make that journey."





SANJAY GUPTA

MANAGING DIRECTOR, INFRA COOL

INFRA COOL was established in the year 2004 in Delhi(NCR) to provide Cold Storage Solutions to the Perishable Food Industry. Over the subsequent years, the company worked on building a good reputation with its customers, while continuing to develop and expand.

Mr. Sanjay Gupta, the Owner & Managing Director of INFRA COOL is a mechanical engineer by profession and has over 27 years of experience in developing Coldchain solutions for Pharma, hospitality, fast-food chain, floriculture, ice cream and dairy industries.

Infra Cool specializes in Design, Engineering, Procurement, Construction, Operation and Maintenance for Fresh/ Frozen Food Industries. For the past two decades, they have also been involved in developing the Controlled Atmosphere (CA) technology in the country. INFRA COOL is a pioneer in the field of CA technology in India and has successfully constructed 100,000+ MT apple storages in the country. The team has also set up the country's/ world's largest Controlled Atmosphere (CA), Cold Store for Fresh & Healthy Enterprises Ltd. (a wholly owned subsidiary of Container Corporation of India Ltd). It is worth USD 15 mm and is situated at Rai in

the Sonepat District of Haryana. Equipped with a storage capacity of 12000 MT and built on a plot of 16 acres of land, this facility is indeed a state of the art facility with high-technology equipments to keep the produce fresh and safe.

In addition to this, INFRA COOL is also engaged in providing Cold-store construction, Cold-chain cold storages, PUF pipe section, and chillrooms facility to their customers.

The facility has been conceptualized as an industrial cold storage solution provider, offering high quality products and services to clients and building Their brand in the market.

Along with the continued sales growth of the Company, INFRA COOL has also been pioneering in their efforts to develop and expand their operation foot print, basis the needs of customers in various geographies.

With Sanjay Gupta leading INFRA COOL from the forefront to scale new heights, the company has gained immense repute and progress, thus making him a worthy winner of the 'Progressive Service Provider Award' for the year 2009.

DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2009



"Vision transcends voice and shines from within"





DR RAVINDER KUMAR SHARMA

CONSULTANT ADVISOR, NIFTEM

Dr. Ravinder Kumar Sharma, Former Director, National Horticulture Board concurrently Secretary, NOVOD Board of Ministry of Agriculture, Government of India was also an advisor to the Australian High Commission and a Core Expert at the Food and Agriculture Organization of United Nations.

After his retirement from NHB, Dr. Sharma served as a technical expert for the Ministry of Food Processing Industries' Cold Chain Projects and as a Consultant Advisor to the National Institute for Food Technology Management and Enterprise Development. Dr. Sharma has also published numerous papers on Agriculture and related topics. He serves as a fellow at the Global Cold Chain Alliance, USA and as an Agribusiness Specialist for various projects including those of the World Bank.

Dr. Sharma's highlight contribution was the introduction of 'integrated projects concept in horticulture'. Another milestone achieved by him was the development of coldchain initiatives, by introducing Technical Standards; linking the level of technology deployed with government assistance and upgrading skills of cold chain focused human resources through various training modules.

Dr. Sharma is a major contributor to the inspiration of cold chain development and has developed different business models to ensure creation of specific storage conditions. He also helped in formulating storage conditions pertaining to India-specific varieties and innovative packaging.

This churning process of data collation and practical approach of NHB motivated the government to create a 'Technical Standards Committee', with Dr. Sharma serving as the Secretary.

Thus, wider applications of cold chain led to the creation of new successful business models in Indian horticulture. His innovative practices of handling and storage are now being followed by most of the industry projects.

Dr. Sharma's thought process of producespecific storage conditions led to the creation of a novel platform, wherein all stakeholders give expert opinions based on real time experiences. His rich contributions to growth of Agriculture and Cold Chain earned him the Lifelong Dedication Award in the year 2009.

DANFOSS ICE AWARD

LIFELONG **DEDICATION 2009**



"A curious person is always in the search of finding something new and intriguing."





KK MITRA

SR. VICE PRESIDENT - TECHNICAL & MARKETING LLOYD INSULATIONS (INDIA) LTD.

KK Mitra, Sr. Vice President (Technical & Marketing), Lloyds Insulations (India) Ltd (1962), has 30+ years of experience in Thermal Insulation. He played a pivotal role in breaking the conventional mould involving brick & RCC structure by conceptualizing energy-efficient insulation and customizing genre-specific 'Modern Cold Store' across the country.

He played a pivotal role in drafting the "Technical Standards and Protocol for the Cold-chain in India" and participated in the BIS Committee for incorporation in IS:661.

An active member in several associations including both government and private sectors, KK Mitra promotes Thermal Insulation System for Green and Energy-Efficient Buildings.

KK Mitra has a three-point mantra in life that he follows religiously: to estimate the project well in advance, manage adequate time requirements and save as much energy as possible.

KK Mitra has been associated with Lloyds for years now. The company has pioneered pre-engineered steel structure, panel-manufacturing plant, insulated Modern Prefab Potato Cold

Store (Chatkaran), Indore, and stateof-the-art continuous technology panel manufacturing plants.

Lloyds has also worked on Energy audit and improvement drives that uses mechanical construction methodology, fire-safety measures, storage-pattern technology, pre-insulated pipes/valves, electric heat tracing of drainpipes, upgrading floor/ door insulation, trained manpower, implementation, quality construction, timely completion, technology and maintenance, extending turnkey concept to an another level.

KK Mitra has also prepared his own communication material, advocating modern technology & materials with damage-control solutions, that earned him the Outstanding Customer Focus Award for the year 2009.

DANFOSS ICE AWARD

OUTSTANDING CUSTOMER FOCUS 2009



"Adequate and appropriate usage of resources is what sets an organization apart. To emerge as a successful enterprise, one must adequately and appropriately use their resources: Time, Money, Energy and Manpower."

As responsible citizens of this world, while paving our way forward to take up challenges faced by the food industry, we must remain morally obligated towards conserving our natural environment. In this regard, the Global Cold Chain Alliance efforts of bringing all stakeholders together on the Danfoss ICE Awards day while showcasing new technologies and innovations for sustainable development of Cold Chain Infrastructure in India are indeed commendable *

GURMIT SINGH
MANAGING DIRECTOR
GMH AGRI HUB PVT LTD





ARVIND SURANGE

CEO & DIRECTOR, ACR PROJECT CONSULTANTS PVT LTD

DANFOSS ICE AWARD

EXEMPLARY THOUGHT LEADERSHIP 2010



Innovation and sustainability are golden words that we follow and live by

A brilliant IITian, Arvind Surange, laced BE (Hons.) with Masters in AC&R. Advanced Learning in Refrigeration Technology, Project Engineering and Cold-chain Concept in Germany and Denmark, rare in those times, proved to be hallmarks that sculpted his entrepreneurial skills.

To optimize and enhance his academic laurels and global industrial experiences, Arvind wore the proprietary hat in 1971, founding ACR Project Consultants Pvt Ltd (ACR PC). With his son, Harshal, ME, MBA, coming on board as Director/CEO, the Company transformed into ACR PCPL.

A trendsetter of sorts, Arvind focused on technical soundness, energy efficiency, and cost economics. He spearheaded the conceptualization of 'Total Project Consultancy Designing' providing integrated project designclient-advantage - playing pioneers in consortium formation working successfully for 45+ years now.

He has designed/commissioned 175+ HVAC and 400+ Cold-chain projects pan India encompassing precooling & frozen food and ice/ice-cream plants, dairies,

ripening chambers, breweries etc. Comfort air-conditioning & air-cooling systems is another dimension.

The credit of introducing India to 'multipurpose cold storages' and world to 'Green Cold-chain Design' goes to ACR.

Arvind advocates green concepts - energy & water-saving evaporative condensers; electronic controls for automation; refrigerant pumping (overfeed), waste heat-recovery & air-cooled HFC systems; sandwich insulation &steel roof panels; strip curtains; VFDs; LEDs; air-to-air heat exchanges; adiabatic-cooling energy savings; PLC controls; 'Net Zero Energy Cold Stores' using renewable energy, to name a few.

Catchwords for Arvind are Innovation and Sustainability. Imparting training at all levels is also considered quintessential rather than adopting unduly cost-cutting competitive measures.

With an overarching impact on the contemporary quality of life of people and environment in the industry, of the three basic human needs - food, shelter and clothing - he has a deep involvement in the first two. Environmental issues, energy-costs, high usage, availability, water-shortage, and food loss are major threats.

Steeped in servicing community and nation, he also gives scholarships to deserving & needy engineering students, and imparts technical knowledge on global fora.

Assisting institutions with technical scrutiny, appraisals, and final inspections of Coldchain projects are their value-added diversification services for growth. An active member of several associations, his contributions to the nation continue to grow.

His company is the sole recipient of "Consultants in Cold Storage & Refrigeration" accreditation and Arvind, the proud recipient of 'ASHRAE Fellow Award' - the highest international award in HVAC&R.

In view of Arvind's contributions in introducing the concept of green cold chains&net zero energy cold stores and for developing cold chain standards with National Horticulture Board, he was bestowed with Exemplary Thought Leadership Award in 2010.





RAO RAJA RAO SHREEKANT MANDLOI ZAMINDAR



DIRECTOR, RAO RAJA RAO CHATRAKARAN COLD STORAGE

Rao Raja Rao Shreekant Mandloi Zamindar, the present Rao Raja of Indore,10th generation down the line of Rao Raja Rao Nandlal Mandloi, founder of Indore city, carries distinguished academic degrees in Law and MBA & Management Information System from the East Texas State University, USA besides his Royal lineage.

In keeping up with the upkeep of the palace and its' traditions, Rao Shreekant Ji also takes care of the vast family landholdings. He was first approached by the farmers of Datoda village in the 1990s when their entire potato crop got spoilt due to lack of proper coldstorage facilities. In response to their plea for a cold storage, SGC-certified organic Rao Raja Rao Chatrakaran Cold Storage came into being, pioneering the concept of PUF Panel potato storage in India and usage of anti-sprouting on potatoes to make them last longer. At that time, the amount invested was five times the cost of a conventional storage and was one of the tallest in Asia.

Rao Shreekant Ji maintains organic farms spread over 200 acres. He heads Bhartiya Kisan Sangh, Indore Chapter, and takes up the cause of rights of the farmers and stands up for their grievances as and when required.

His contributing efforts in farming, agriculture and storage have been duly recognized, appreciated and awarded by MP State Government on Republic Day in 2011; Consul General, Kingdom of Netherlands, Marike van

Drunin Little, travelled to Indore to see what he does; During World Potato Congress 2015 held at Beijing, China, he showcased traditional Indian farming techniques to the participants from across the globe.

Furthermore, US President Barack Obama, on his India visit in 2008, invited Rao Shreekant Ji to Mumbai. The points shared by Rao Shreekant Ji were taken up by President Obama and put forward the next day in his speech at the Indian Parliament. Rao Shreekant Ji has been integral in fostering bilateral ties between Indian and US farmers, through the United States Trade and Development Association.

Rao Shreekant Ji takes the responsibility that comes with his royal heritage, very earnestly and upholds what he represents to the people of Indore in its' 300+ years of establishment. He holds Sthapna Divas commemorating the founding of the city to make people aware about the history of Malwa and, Martyrs' Day to honor their families; graced by dignitaries from all walks of life.

He is the first royal in the history of ICE EXPO to have direct participation in the processing world so as to help farmers of his ilk to increase the value of their produce.

Progressive Farmer Award 2010 was bestowed to Rao Shreekant Ji for establishing a connect between organic produce and cold chain, maintaining all its integrity.

DANFOSS ICE AWARD

PROGRESSIVE FARMER 2010



"Diligence and genuine hard work in what you do, is what differentiates you from others."





AJIT TAMHANE

MANAGING DIRECTOR, LISALINE LIFESCIENCE **TECHNOLOGIES PVT LTD**

Ajit Tamhane, MSc (Biochemistry), stepped into the Biotech world as a technical and application specialist. With Masters in Marketing Management and 17 years of sales and marketing experience, Ajit set up his firm, Lisaline Lifescience Technologies Pvt. Ltd., Thane, Maharashtra (1997). Lisaline introduced Vaccine Vial Monitors (VVMs) in India with innovative time temperature indicator technology to monitor vaccine vials for Polio eradication programme in India.

An opportunity to participate in WHO-PDA Pharmaceutical Cold-chainmanagement-on-wheels in Turkey and years of experience in vaccine Cold-chain, enriched Ajit immensely in understanding the challenges faced at each stages of the distribution level. Effective Cold-chain management has been Ajit's ongoing focus and passion for a glorious 20 years now.

Lisaline successfully introduced monitoring systems in cold chain and developed a sustainable market over the years. The team is keen in developing sustainable

solutions using combination of unique technologies as per customer needs.

The Lisaline focusses on Pharma, Vaccines, Biological, Hospitals, Food, and Logistics sectors with India division serving South Asia market and Dubai office for Middle East market.

Lisaline's time-temperature indicators for national immunization programme was a novel contribution to the Indian healthcare industry, which helped India to achieve a status of 'Polio-free nation'. Being successful in immunizing millions of children across India with safe and active vaccines using their VVMs is the highlight of his 20 years journey. Ensuring patients' well being and providing safe vaccines is Lisaline's contribution towards promoting a disease-free India.

Mr. Ajit's pioneering role in introducing innovative cold chain monitoring systems and maintaining a sustainable business for over a decade, has bagged him the "Progressive Service Provider Award 2010".

DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2010



"My Passion and purpose is in immunizing millions of children and in the process, helping India to become a diseasefree nation."



MANJUNATH MS

COLD CHAIN CONSULTANT

DANFOSS ICE AWARD

EXEMPLARY THOUGHT LEADER 2010



"Think for the **Future. Integrate** technology and spend for it. Be a visionary!

Manjunath MS, an Engineer with three decades of experience in Business, Applications and Marketing, has been connected with Cold Chain industry for years now, thanks to the various corporate roles he held over the years and donning the hat of an independent Consultant at present.

With his extensive experience working on Cold Chain business in India, Sri Lanka, UAE and Bangladesh, spearheading business creation, marketing, brand building and value addition for customers, he garnered deep understanding of the various segments and domains of the cold chain industry.

While at Rinac India Limited, he was instrumental in Rinac's foray into Prefab constructions and clean rooms in the food and pharma industry.

Amongst his innovative business creation initiatives, prefabricated Clean-zone Construction systems pioneered by him in India for large constructions of Food, Pharmaceutical and Auto industries stand predominant.

While he was at Ingersroll Rand University, doing an Innovation Masters' course in 2010, he introduced the innovative concept of Pathogen controlled air-conditioning of chicken hatcheries to boost productivity and reduce chicken mortality. This pilot project was commissioned in India in 2014.

Decades of global engagements & collaborations in the corporate sector in strategic countries like East Africa, India, Bangladesh, Sri Lanka & the Middle East as Advisor on Cold-chain Infrastructure and Perishable Produce Transportation led this self-starter to establish 'Innovation In-Sight & Cold Chain Consulting.'

With due focus on customer needs and concerns, coupled with his eye for business opportunities, Manjunath has always captured the market pulse right like no other. He brought a paradigm change to improve asset utilization and up-time for refrigeration equipment using machine learning and futuristic concepts like IoT & Predictive Maintenance of Cold-chain Infrastructure.

Agro-climatic zones creating room for regional Cold stores and Long Distance

Refrigerated Transportation of Fruits & Vegetables over Indian Railways, are few areas often highlighted in his discussions.

Manjunath's curated step-by-step business creation approach is: Ideation -Exploration – Innovation, enabling high risk with relatively low costs.

Though, the new generation lives in a different eco-system from the one he grew in, he believes Integrity, Communication and Empathy are keys to a stable future.

Manjunath's contribution in ideation, business development strategy, brand building & new applications bestowed him the 'Exemplary Thought Leader Award' in 2010.



66 Ice' signifies 'cold'
'Awards' bringing 'warmth'

"The ice award is just not only a recognition. It's been a motivation to achieve higher excellence!

ARVIND SURANGE
MANAGING DIRECTOR
ACR PROJECT CONSULTANTS PVT LTD







JASMOHAN SINGH

MANAGING DIRECTOR, FRICK INDIA LTD

Jasmohan Singh, MD, Frick India Ltd, holds B.Tech Degree (Electrical) from Worcester Polytechnic Institute, USA, with specialization in Computer Engineering. He has a professional career spanning more than three decades, with leadership positions in a total of thirteen companies, including Frick India Ltd (since 2006). He has also served as the Vice-chairman of India-USA Foundation for Industrial and Technology Collaboration.

Frick India Ltd, incorporated as a public limited company in collaboration with Frick Company, USA, is one of world's largest industrial refrigeration & air-conditioning equipment manufacturers. Jasmohan Singh, heads the operations, manufacturing and sales for both domestic and international markets.

The Indian counterpart is a premium turnkey solution provider& equipment manufacturer for industrial refrigeration in India since 1962.

Now a front-ranking company with collaborations, Frick India has been adapting

to new technologies from Japan and USA. It is also highly equipped to provide online Total Energy Management System (TEMS) to offer customers, the latest solutions for all industrial refrigeration applications.

Jasmohan Singh, is a passionate leader, who has been closely associated with various trade bodies and industrial associations. He is on the Managing Committee of PHD Chamber of Commerce & Industry since 1997, besides being associated with Indo-American Chamber of Commerce, Faridabad Manufacturers' Association, AIACRA, as well as serving as the Chairman of the International Affairs Committee for Oceania Alliance, Chairman of the CII Haryana State Council, and a Member of CII (NR) Regional Committee.

In light of his contribution in adapting new technologies and integrating with industry associations, Mr. Jasmohan was bestowed with the Progressive Service Provider Award in the year 2011.

DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2011



"It's your passion and courage that takes you forward in life."





GURU CHARANJIT SINGH SODHI

DIRECTOR, KARTARPUR COLD STORAGE AND ICE FACTORY (KCSIF)

Guru Charanjit Singh Sodhi, Director of Kartarpur Cold Storage and Ice Factory (KCSIF), acquired his degree in law from the prestigious Doon School, Dehradun and SRCC, Delhi. He joined his father's business in the year 1978, embracing the same values and principles.

Kartarpur Cold Storage and Ice Factory (KCSIF) is an independent facility which can store up to 15000 MT of apples, pears, kinnows, oranges, grapes, carrots, cabbages, beetroots, onions and potatoes. Their Reverse Osmosis block Ice facility can store up to 25T and 10T of ice cubes aday.

Always ready to go the extra mile, Sodhi ensured that their cold storage was installed with wooden bins (1200 kg/bin) to store vegetables, super-sized cooling coils for precooling, bacteria killing machines and 300 motors with Danfoss Variable Frequency Drives to get the accurate airflow for each product resulting in utmost quality of fruits and vegetables.

Currently, KCSIF is equipped with Control Atmosphere (CA) Plants, (95% for fruits), a rare practice in India, besides installing six CA testing rooms of 20T each for extensive research, exploration and

discovery of best practices to store fruits and vegetables.

Charanjit Singh visited several cold storage facilities in India and discovered that it's not up to the norms. He gathered various information and knowledge from all these errors and misconception which allowed him to perfect the systems at KCSIF. This fetched favorable results and helped him emerge as one of the pioneers in the cold storage industry.

"The Indian Cold-chain industry to reach its' full potential, need to learn & perfect the fundamentals, which would result in less wastage of money and optimum use of resources." says the stalwart.

Third generation, Amarinder Sodhi, is now being prepped to take the family business forward adding on to the trade strategy that his father learned& practiced over the last 40 years.

Guru Charanjit Singh Sodhi was awarded with the Exemplary Thought Leader Award in the year 2011, for exploring new technologies that can store onions and carrots in the Indian climatic conditions and also for the initiation of controlled atmosphere storage facilities in India.

DANFOSS ICE AWARD

EXEMPLARY THOUGHT LEADER 2011



"The leaders should strive to understand their organizational and community culture before fully implementing a change."





LALJI RAMJI SAVLA

MANAGING DIRECTOR, SAVLA FOODS & COLD STORAGE

Lalji Ramji Savla, a commerce graduate, when he joined his family business of 'onion and potatoes' trade, continued his quest to acquire systematic structured knowledge and applied it in business to achieve perfection and drive growth to new horizons, propelling him to intersperse real-time learning with IIM's Middle Level Management, Finance for Non-financial Executives, Change Management and Family-MBA' courses.

Lalji debuted, nearly 30 years ago, in a fledgling industry where limited products reached cold storages. Having had to experience monopolistic attitude of cold-storage management, poorly maintained infrastructure & hygiene in his early years, Lalji avoided making a visit to cold rooms, in spite of having his valuable products being stored there. Absorbing these as lessons, Lalji envisioned to develop, achieve and maintain his facility with differentiated standards of hygiene. He invited key players to send samples for quality storage and converted them to clients.

In continuous expansion mode, their infrastructure now ranges from conventional to modern storage facilities, with manual stacking to racking system &palletized handling. So is the case with their technology where the company has added numerous unique firsts to their track record over the years. - Pioneers in establishing cold storages designed to preserve multi-commodities at

multi-temperature zones and multi-humidity levels; customs bonded; computer-based inventory management(ERP); Online tracking; APEDA approved exports pack-house to EU; only Indian facility offering composite value-added services, commodity collateral finance and customized solutions, etc. Barcode/RFID application feasibility is now being tested by them for seamless material handling. On operations side, robust preventive in-house maintenance-schedule set performance benchmarks.

He says, "Entrepreneurs and end-users strive to identify ever-rising and ever-changing needspecific solutions. Last decade has seen advent of modern food-processing facilities, growing consumerism and rising demand for fresh quality produce. Industry is at a momentous tipping point. In a bid to make it a cost-efficient backbone of agro-based economy, forwardbackward integration, complete Farm-to-Fork Cold-chain, particularly in material storage, handling and energy-conservation technology is required." Lalji proudly shares the mantle with son, Vivek, and together, they continue to architect new successes.

Savla Foods' efforts to cultivate a culture of insistence for 'right storage conditions' and client awareness first before percolating to storekeepers, got them recognized as the **Outstanding Customer Focus Award winner** of 2011.

DANFOSS ICE AWARD

OUTSTANDING CUSTOMER FOCUS 2011



"Win the trust of people to win the world. Be a longterm player, you will never regret"





PANKAJ MEHTA

MANAGING DIRECTOR, CARRIER TRANSICOLD INDIA

Pankaj Mehta forayed into the corporate world in progressively expanding roles at Carrier Transicold India & South Asia in 2000. Previously, an engineer with a Management Degree (Marketing) and an alumnus of prestigious National Defence Academy, Pankaj Mehta joined the Indian Navy, where he served the nation for nine years.

Pankaj Mehta, Managing Director, Carrier Transicold India, has expanded his navigational skills to South Asia including Sri Lanka, Bangladesh, Nepal, Bhutan and Maldives. He steers the strategic direction and operating performance of the truck refrigeration business in the region.

An industry leader for 45+ years now, Carrier provides advanced, energy-efficient and environmentally sustainable container refrigeration systems & generator sets, directdrive diesel truck units, and trailer refrigeration systems, worldwide.

Carrier Transicold India, is also a part of the UTC Climate, Controls & Security and a world leader in high-technology heating, air-conditioning and refrigeration solutions. They help in improving transport and shipping of temperature-controlled cargo with comprehensive equipment &services for refrigerated transport and Cold-chain visibility.

Pankaj has been significantly focusing on spreading awareness about the benefits across India at several Cold-chain conferences to bring about this social change. Pankaj is also the Co-chairman of National Cold Chain Task Force, along with memberships in other conferences.

"It is important to be a customer-solution provider, understand the product and the application thoroughly before selecting the most appropriate technology for Indian-operating conditions, ambient temperature, road conditions and insulation quality. Better quality reefer trucks are a crucial need and we support our customers in providing the absolute best. We at Carrier Transicold India, also provide support with driver and operator training.", said, Pankaj Mehta.

Pankaj's naval phase groomed his disciplinary and administrative skills. He leads to inspire and provide a vision that motivates his team to perform as a single-entity.

Providing services for cold chain integration with rural pockets and helping prevent food losses has bagged him the 'Progressive Service Provider Award in 2011.

DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2011



"Patience, persistence and sheer determination is the perfect combination of success."





RAVIKANNAN

CEO, COLDMAN LOGISTICS PVT LTD

Ravi Kannan, is the Chief Executive Officer of Coldman Logistics Pvt Ltd, Sonepat, Haryana. It is the second largest cold-chain logistics company in the country, having around 55,000 pallets and a fleet of 100+ vehicles catering primarily to food, pharma and life sciences. It offers end-to-end solution from sourcing to the consumption point since 2012.

Strong academic background and his eagerness to acquire knowledge are the prime factors that helped him lay strong foundation in large national and international organizations, setting up supply chain, retail ventures and building cold storages across India.

Ravi has about 18 years of experience in Multi-Model ad supply chain industry. He is a qualified total quality management instructor. Coldman is backed by legendary investors from India and Singapore and it provides solution in Temperature-Controlled warehousing & Logistic Services to various Industries across India with a strong focus on technology driven operations.

Every project advents to a new technology which sets them apart. The focus has been on efficiency which impacts quality. Automation has been a key factor to increase capacity and reduce energy consumption at 100%. Multi-Temperature Convertible Coldchain distribution facilities with IoTs were also implemented in the facility.

The efforts benefitted the company as it got listed in the stock exchange with huge success rate of 67-time subscription, first-of- its-kind in the country. Ravi's efforts to integrate the Cold-chain industry fetched recognition and awards. The differentiation quotient being bringing in organized Cold-chain by building multitemperature (+220 to - 350) and fully convertible 40 states of warehouses across the country in a short time. A truly unique feat & feature!

He was awarded for 'Outstanding Customer Focus Award' in 2011 for his exceptional work in providing a wide range of support services in cold chain sector in India.

DANFOSS ICE AWARD

OUTSTANDING CUSTOMER **FOCUS 2011**

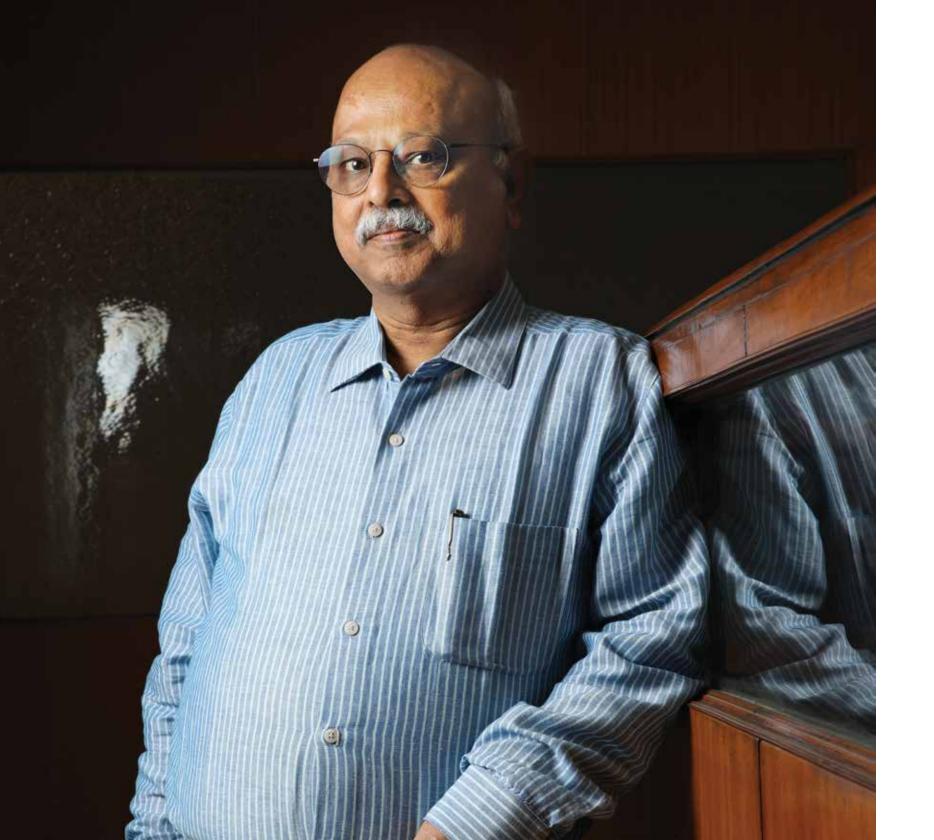


"If the speed of change is higher and you are willing to keep up the pace, you will succeed"

excellence in cold chain industry. The rapid development in the cold chain industry and emerging enterprises, definitely asks for such apex bodies to recognize the best of the lot. And the awardees have to be absolutely competent for withstanding their evaluation process. On the final note, I congratulate ICE for this milestone moment and all the winners over the period of years for their immaculate contribution to the cold chain industry.

NAGENDRA RAO GUBBA MANAGING DIRECTOR GUBBA SEEDS







AMIT SRIVASTAVA

REGIONAL HEAD, ACR & PROCESS GAS BUSINESS -KIRLOSKAR PNEUMATIC CO LTD.

Amit Srivastava holds a Masters in Engineering, MBA (Marketing) and a diploma in the Russian language.

He joined the Kirloskar Pneumatic Co Ltd, the largest manufacturer of ACR Reciprocating Compressors in the year 2004. The company has four divisions - Air Compressor Division, Air-conditioning & Refrigeration, Transmission and the Process Gas Division. They were awarded with, "The President Award" for their 'Sat Trolly & Suspension' placed in the Vijayanta Tank, the first indigenous battle tank of the Indian Army.

Amit is currently the Regional Head of the ACR & Process Gas Business -Kirloskar Pneumatic Co Ltd. He has led the business from the forefront by introducing several new cross functional technicalities, which boosted the overall process and systems.

He has been highly instrumental in building up an efficient team and providing the best after-sales service to their customers. As a result, the company's market share in Refrigeration Compressor business has increased by a significant 70%.

Amit continues to stay focused on customers' needs and puts in efforts to fulfill them on time.

His result-focused attitude and effective leadership skills has brought about a turnaround to Kirloskar business, thus speaking volumes about his contributions to the organization.

He has remarkable expertise working in multicultural environments and a distinction of understanding and exploring new markets for businesses growth and setting up / streamlining the operations.

With a track record that demonstrates selfmotivation, creativity & initiative to achieve personal & corporate goals, Amit Srivastava has been a role model, who consistently contributes to the growth of the company and development of the RAC industry.

To meet customer needs, Amit Srivastava introduced the concept of cross functioning, by removing the compartment system in his region, much to the appreciation of the Cold Chain industry, thereby making him a worthy winner of the Outstanding Customer Focus Award in 2012.

DANFOSS ICE AWARD

OUTSTANDING CUSTOMER **FOCUS 2012**



"A result- focused attitude combined with the right amount of initiation and interest is what sets a leader apart."





CRYSTAL LOGISTIC COOL CHAIN LTD

Established in 1962, Crystal Group is renowned as one of the oldest, largest and fastestgrowing companies of India, primarily operating as a truck-service provider. Even since the company began its cold chain operations in 2001, the company has exponentially grown and has been one of the largest and fastest growing player in India.

The company's mission statement is to become and remain customer's preferred choice in the cold chain logistics industry by providing high quality services at cost effective prices.

Akash Agarwal, Director and CEO, Naresh Agarwal, Director and Rajesh Agarwal, Director are the founding members of the organization.

Rajesh manages the technical operations of the organization and is highly focused on the company's development who has competently steered the company inprofitable directions.

The company grew from owning a single truck to an impressive fleet of over 150 refrigerated vehicles, and also built an avant-garde

technology-driven, temperature-controlled warehouse in Kolkata. Customer-friendly, cost-effective and market-oriented infrastructure provides a complete cold chain solution to their customers across the country.

Over 1,00,000 pallets, 500 reefer trucks and 1,000 portable containers form part of Crystal's 2020 vision.

The organization is also looking at involving infrastructure and facilities at all levels, customized value addition and processing including varied frozen cold storage, precooling chamber, mobile precooling; aircooled grading, raw material sorting and packaging hall for blast freezing and repackaging; controlled temperature logistics having multi-capacity reefer trucks for intracity and intercity movement of frozen products and refrigeration containers for storage.

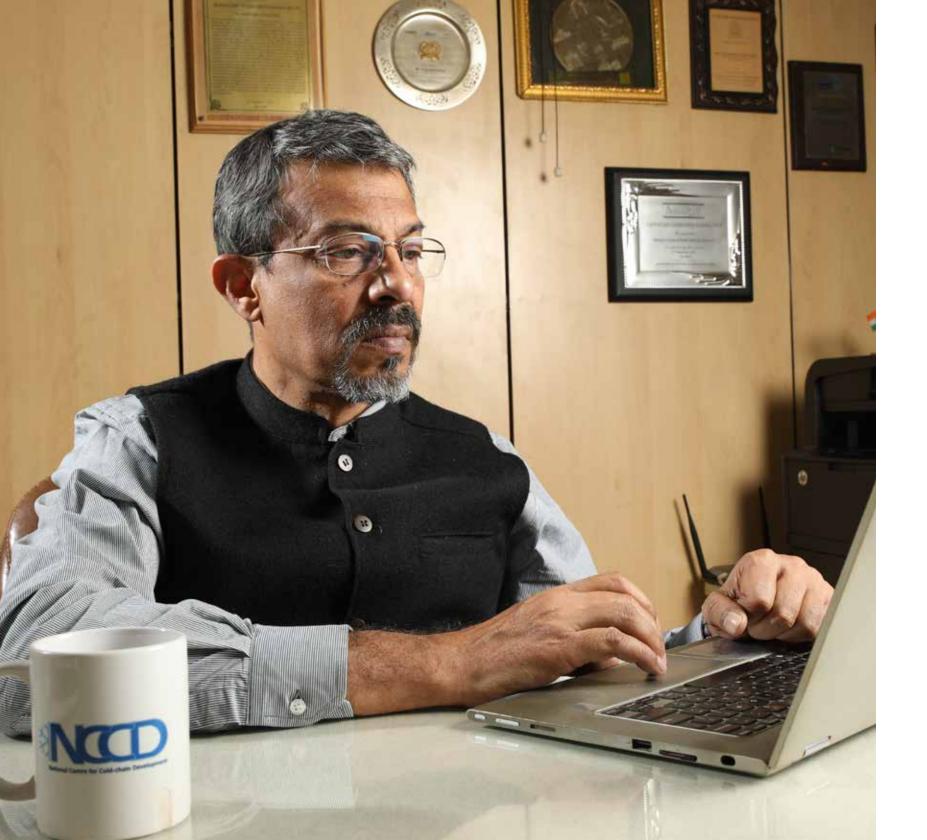
Creating seamless infrastructure in providing complete cold chain solutions without any break from farm to fork helped them bag the Progressive Service Provider Award in 2012.

DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2012



"A combination of passion, dedication, hard work, and being in the right place at the right time is the mantra for true success."



CAPT. PAWANEXH KOHLI

CEO & CHIEF ADVISOR, NCCD

Capt. Kohli - A medical school aspirant dreaming of air force, became a master mariner; moved into technology and infrastructure solutions, led businesses having free-trade zones, modelled strategies for business investments, progressed from hard-core operations to leadership roles; Commenced rendering his expertise at National Centre for Cold-chain Development (NCCD) from 2012, bringing with him decades of pioneering global experiences to contribute to the nation's development policies.

At NCCD, Capt. Kohli was closely involved in establishing a historic MoU of cooperation in cold chain between nodal Indian and French organisations and represented India as guest of honour at the International Conference on sustainable cold chain in Paris (April 2013).

He is a Council member/Chair of various national committees/task forces and an Advisor to industry bodies/organisations. He is a principal member of India government's Committee for Doubling Farmers' Income, set up in 2016 and has authored & coauthored several policy documents.

He successfully steers the ship of NCCD, with his executive/operational direction and strength. Quint essentially, remaining dynamic and responsive, based on inputs from members', government, and other stakeholders, NCCD has executed much in short time, with Capt. Kohli's able guidance,

bringing much needed conceptual clarity and policy focus on Cold Chain logistics & supply chain, agri-business models and non-conventional energy. At the grass root level, farmers are reached outen' masse to build awareness on Cold-chain best practices. Facilitating a convergent mindset between government partners, private and public, NCCD focuses on building synergies and creating cognisance to make decisive changes for a sustainable tomorrow.

His contributions at NCCD towards major schemes, has allowed for strategic redeployment of funds for development of critical components supporting efficiencies and scaling up of Cold-chain, at both fiscal and financial levels.

He offers valuable advices on setting direction, developing capacity-building programs and spearheading new concepts, like Cold-chain solutions for street hawkers, farmers, green energy options, and creation of model village hubs, concepts like 'pitstop' relay of sensitive goods. Years back, he stepped into help NCCD develop a road map for Cold Chain in India, little realizing that he would be helming it years later, accepting challenges as synonymous for opportunity to excel, and problems as mere precursors to finding solutions.

For his valuable contributions to cold chain and the nation, he was adjudged as 'Exemplary' Thought Leader 2012.



EXEMPLARY THOUGHT LEADER 2012



"Never take half measures.Stand tall and stand up to build your legacy! Do not seek escape, don't relish in past glories - instead build on them to give yourself an even grander future."





RAMESH PARANJPEY

CHAIRMAN, ISHRAE REFRIGERATION TECHNICAL GROUP

Ramesh Paranipey, with a career span of 40 years, has headed several reputed companies such as Kirloskar, Career Refrigeration & Voltas.

A post-graduate IIT alumnus, Ramesh was the first engineer to be appointed at the Kirloskar Pneumatic Ltd, Pune in their AC&R Department. He has been a part of several collaborative innovations with Grasso Holland (reciprocating compressors), Howden, UK (screw compressors), Hitachi, Japan (centrifugal compressors for chilled water generation), flake-ice machines and Sutrak, Germany (bus air-conditioning and truck refrigeration units).

He has also been a part of several turnkey projects including Koyna & Narmada Dams, Beas-Sutlej projects; chilled-water plants for airports in Metropolitans &5-star hotels; developing -60° cold chamber for HAL, Nasik; and for the refrigeration plant, IPCL, Baroda.

After his retirement, he took up the Chairman post at the ISHRAE Refrigeration Technical Group, where he conducts consultancy and training programs.

He believes in sharing his expertise with his competitors to improve the overall standard of refrigeration engineering in India.

Mr. Ramesh Paranjpey is a celebrated technical writer, who has contributed to several books and manuals. He is a proud author of the Kirloskar's Engineers, the User Guide for Danfoss Controls, ISHRAE-Basics of Air conditioning-2004, Duct design manual for LG-2004, Cold room manual for Emerson for Freon systems-2008, How to use ammonia controls-2015, which was exclusively made for Danfoss.

He has also prepared the Air cooler manual for Alfa Laval-2016, AAR-Cold Storage Design manual-2017 and a booklet for AARsuggested installation practices for closed circuit field erected ammonia refrigeration systems-2016.

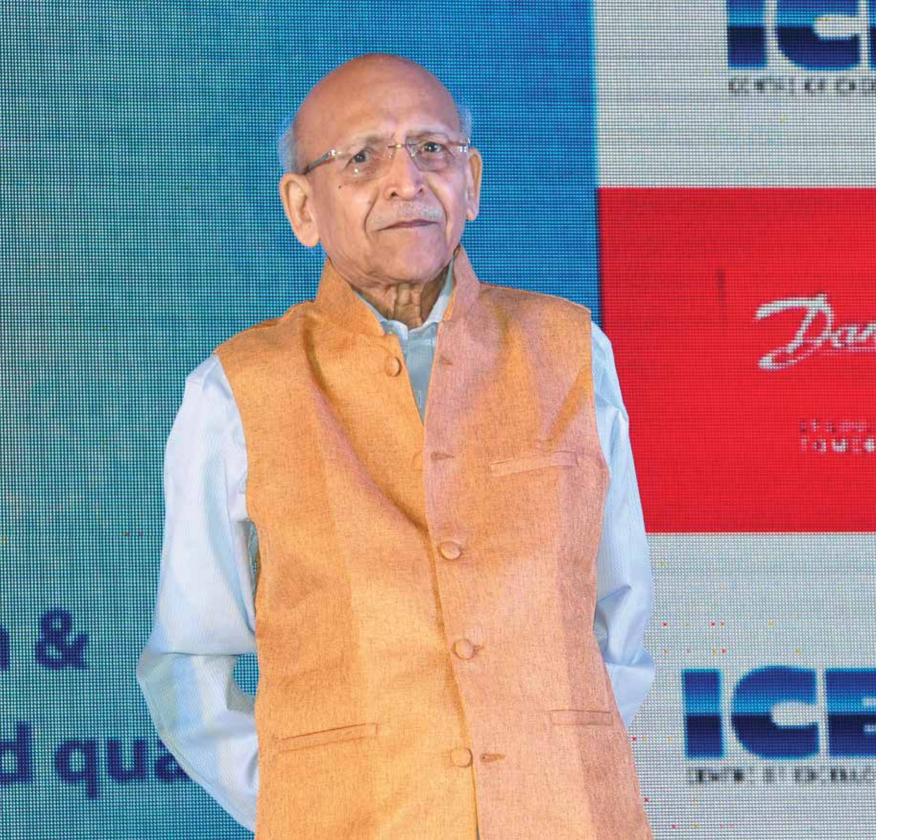
Mr. Ramesh Paranjpey, thus with his technical expertise, customer-focused approach and holistic understanding of the refrigeration industry earned the "Outstanding Customer Focus Award for the year 2012".

DANFOSS ICE AWARD

OUTSTANDING CUSTOMER FOCUS 2012



"With the right kind of energy and perseverance, you can conquer anything and everything."





MAHENDRA SWARUP

PRESIDENT, FEDERATION OF COLD STORAGE ASSOCIATIONS OF INDIA

Mahendra Swarup, established Federation of Cold Storage Associations of India (FCAOI) in 1999 to support the cause of Coldchain industry. The Doyen has 50 years of experience in running cold storages and about 25 years of experience in managing the Cold Storage Association in Uttar Pradesh.

FCAOI brings together members to share latest developments in cold storage technologies, capacity/legal knowledge, markets and efforts made in other groups.

As the Managing Partner for Swarup Cold Storage, leading various family group companies that includes 18-member states including Nepal, he is a dynamic leader and motivator when it comes to generating funds for his associations. He executes constructive strategies, innovates, draws out plans and organizes seminars and exhibitions.

Under Mahendra Swarup's relentless leadership, FCAOI is focused on creating climate-friendly multi-chamber storages and supports first-of-its kind initiative of having maiden Asia Cold Chain Show, Bangkok, ushering international perspective.

Mahendra Swarup has been always concerned about significant loss of food grains and potatoes and evaluated the role of cold chain in reducing it, enhancing food safety, balancing demand and supply and indirectly aiding growth to the food industry.

Storage and quantity is maintained via innovative ripening facilities for fruits like bananas and mangoes, vegetables like carrots and onions, and food grains like pulses, rice, wheat and spices. Despite the absence of global competition, the services offered are much cheaper in India as compared to China or other countries, stimulating momentum and propelling more cold-storage projects that are benefitting industry's future.

The challenges that are faced by the industry is scarce and expensive power supply, interruptions, fluctuations, and, changing frequency. He developed logistics of refrigerated vans and awareness about purchasing stored goods. He also worked on formulating national policy, special incentives in power rates and substantial subsidy for solar-power generation.

Despite formidable prophecies of industry's dark future with multiple cold storages sprouting; Mahendra has remained stoic on the point. Latest technology, insulation quality and control on power expenses is the way forward to control total expenses and beat competition. He has been proven right in his optimism.

One of the biggest contribution of Mr. Mahendra Swarup had been his proactive role to develop and implement the standards which led to development of modern cold chain facilities. He was awarded the 'Lifelong Dedication Award' in 2012.

DANFOSS ICE AWARD

LIFELONG DEDICATION



"Only hard work combined with luck pays."



JANG BAHADUR SANGHA

DANFOSS ICE AWARD

PROGRESSIVE FARMER 2012



"It's all about trusting your dream and believing in yourself." Jang Bahadur Singh Sangha, also known as the, "Potato King', is the youngest in the line of Sanghas, who has taken the family enterprise to an all new level.

Potatoes are the fifth-largest food crop in the world and India is the second-largest producer with around 40 million tonnes after China. Even so, the potential to grow is enormous. Sangha family is the largest potato and maize producer in India with more than 5,000 acres of land spread across Punjab, from Jalandhar to Ludhiana. A tech-savvy, Jang Bahadur is known for his innovative and new-age ideas, that has helped him take the family-run organization to a new dimension.

Two decades ago, Jang Bahadur returned to his roots, after completing his Masters in Potato Seed Pathology and Physiology from Cornell University, USA. He came back with a resolve to produce high-quality potatoes, that are of higher grade, quality and taste. With efficient cold storage and crop management, Jang Bahadur was able to deliver this dream and emerge as one of India's largest, contemporary & technologically advanced farming operations.

Observing the challenges faced by most farmers - of investing directly, struggling with small-sized farms, and the Land Ceiling Act which bars amassing land, the Sanghas prudently scaled up to cultivate 3-forked association with other farmers, taking their

land on rent; helping the farmers grow better crops, guiding them with their knowledge and experience or through contracts.

The Sanghas invest in the biggest and the best technology– their farms have state-of the art farming equipment and uses technology to turn the humble potatoes & maize to proud money spinners.

Jang Bahadur, known for his innovation, changed the entire traditional potato seed production, by isolating disease-free clones of potato varieties and laying the ground for rapid multiplication of seedlings. They supply potato seeds to farmers across the country.

Despite growing corporate involvement in agriculture, Sanghas prefer spot options to corporate deals and stays a staunch opponent of foreign direct investment in retail. Jang Bahadur's decision to break away from conventional methods, has helped raised annual production by 15-20%. "The recipe for their success also lies in their flair for marketing," says, N.S. Brar, Addl. MD, Punjab Agro Industries Corporation.

The Sanghas harvest 45,000–50000T of seed potato tubers and 7,500T of maize annually using innovative farming models, thereby emerging as one of India's largest growers and cold storage organizations. Jang Bahadur, thus truly deserves 'Danfoss ICE Progressive Farmer Award 2012'.

GUJARAT COLD STORAGE ASSOCIATION

Gujarat Cold Storage Association (GCSA) has completed a proud 50 years of existence and celebrations are on for their Golden Jubilee Year.

In year 1968 the Gujarat Government raised Electricity duty from one paisa per 3 units to 2 paisa per unit, and impact was 600% high duty. Hence, it was considered desirable to form Gujarat Cold Storage Association to represent the case of cold storage industry before the Gujarat Government and to protect the interests of the industry at State and National level. This incident paved the way for the formation of GCSA.

With a membership of 300+ successful cold storage entrepreneurs having capacity of 28 lakh MT the Association now ranks fourth in the country.

Progressive farmers are helping the Cold-chain industry to flourish along with the generous support from the State and Central Governments. GCSA helps its members to modernize their plants by imparting suitable recommendations of support policy of the government.

Association has also undertaken solar mission by installation of more than 50 solar cold storages of 4 to 5 MW capacity thereby reducing carbon depletion and energy costs.

The Association conducted farmers' education programs at Vijapur and Deesa with the coordination of the Gujarat Chamber of Commerce and Agriculture University. It advises farmers on ways to increase their income. Over and above, believing in giving back to the society, GCSA brings out a newsletter to educate, inform and keep their members updated about the latest trends & best practices in Cold Chain industry.

GCSA has been a recipient of the Best Association Award conferred by the Federation of Cold Storage Association of India.

GCSA has been providing excellent support to the farming community in Gujarat, by improving their awareness levels and helping in the modernization of old mono-commodity based cold stores, acknowledging which GCSA was adjudged as 'Best Cold Storage Association 2012'.



DANFOSS ICE AWARD

BEST COLD STORAGE ASSOCIATION 2012



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Cold Chain Industry has observed substantial growth in India. The refrigeration industry is core of Cold Chain Industry. In India natural refrigerant Ammonia has been used for cold chain since first cold storage in India. Since its inspection in 2012, Association of Ammonia Refrigeration has focused its energy to promote safe and efficient cold chain. ICE was the first organization that started recognizing stalwarts of Industry who contributed growth of Cold Chain Industry. AAR associated with ICE and appreciates ICE's efforts to bring industry in one platform.

ANAND JOSHI
PAST PRESIDENT ASSOCIATION OF AMMONIA REFRIGERATION
MEMBER ASHRAE (USA), ISHRAE, IGCC, IETE, IDA, RATA



AP KARUPPAIAH

PRESIDENT, TN BANANA GROWERS FEDERATION

DANFOSS ICE AWARD

PROGRESSIVE FARMER 2013



"Adopt and adapt agriculture in India. **Transformation** via innovative and affordable approaches, integrated pre/postharvest methods, proper supplychain management, collective farming, agri-tourism, organic farming, etc. will bring prosperity to farmers and the nation."

Adapting to innovative cultivation techniques, procurement of best available technology,processing and marketing of value-added products- This is what AP Karuppaiah practices at home and preaches to his peers, thereby driving the establishment of successful banana farming and supply chain initiatives in Tamil Nadu.

His professional career lessons, including special learning at MSU, USA became his life lessons, turning homewards to manage one of the most popular fruits-bananas - in its' biggest producer-State, Tamil Nadu.

He is the President of TN Banana Growers Federation and a board member of TNAU, Coimbatore and President, Theni APK Golden Banana. He is the founding Chairman for TN Banana Producer Co. Ltd. (TNBPCL), formed in association with Banana Producer Societies and Groups spanning13 bananagrowing-districts & comprising 1000 banana growers as shareholders.

He has played a pivotal role increasing the farm income by cultivating area expansion, supply of quality planting materials, providing technical knowhow, financial support through Nationalized Banks, implementing scientific cultivation, adopting drip irrigation technologies and following 'Fruit Care' methods. He also introduced mobile sprinklers/rain gun during peak summers, etc. to lower temperatures in tropical banana gardens.

He also introduced integrated-production approach, which bypasses the middlemen and sends bananas straight to the market. His updated pre/post-harvest management technologies like washing, sorting, grading, packing and banana pre-cooling techniques, has led to reduced post-harvest loss and increased income for the 900 farmers of APK Golden Banana. He also established 8 ripening chambers across the State. Government acceded to his recommendations and announced 10 Food Parks - 3 integrated and 7 Mega with backward-forward linkage infrastructures.

Karuppaiah has also travelled to various countries to learn advanced agricultural technologies & practices- to Israel to study corporate hi-tech agriculture, to Philippines to study spotless banana cultivation techniques and to Thailand to understand Solar Dehydration Technology.

Karuppiah's contributions to integrated Banana Farming and his service to farming community especially his efforts in establishing a Pre-cooling chain for bananas, which has helped farmers to export their bananas and get the right price is commendable. He has also been instrumental in motivating farmers to form associations and take up updated processing technologies in banana production. His never-ending efforts for doubling income for Banana farmers, has bestowed him "Danfoss ICE Progressive Farmer Award 2013."







RAJESH GOYAL

CEO, GT COLD STORAGE PVT LTD

Rajesh Goyal, established GT Cold storage Pvt Ltd at Agra for vegetables, majorly, potatoes in 1999. He is also the Secretary of the Agra Cold Storage Owners Association (ACSOA) as also Federation of the Cold Storage Associations of India (FCSAI).

Rajesh has 20+ years of expertise in directing Cold-chain businesses and operations. He has been inspirational, collaborative and has initiated a variety of visionary ideas for the development of Indian Cold Chain sector. He has also tenaciously served to unite all the cold storage associations throughout the nation and bring them on a common platform. He has worked for the upliftment of the Cold-chain sector by contributing in organizing international level interactions, technological exchange and training & development programmes on regular intervals all year round to enhance the Cold-chain scenario.

It is interesting to note that though Agra may be world famous for its Wonder of the World, TajMahal, the city is equally exclusive and has created a niche in the Cold-chain industry along with its surrounding areas when it comes to cold storages.

Expansion in potato farming around Agra District by late 80s gave a fillip to the demand for storage capacity which further

indicated a sound investment opportunity, thus, several cold storages cropped up in early 90s. The region holds 7% of India's cold-storage capacity, or more than the combined cold-storage capacity of Madhya Pradesh, Maharashtra and Karnataka put together; even more so, Punjab potato being the main produce stored.

Agra now boasts of a cold-storage capacity of 2.2 MT. Within 24 hours of harvest, potatoes are stored at 150 C. Gradually, temperature is lowered to about 2-40C and potatoes can be stored up to a year, though usually for 8-9 months. The district has certainly benefited from the growth in cold storages where the ability for a farmer to cash in his crop when he needs has become a key factor in the transformation. Furthermore, cold storage owners are not mere passive receptors for storing potatoes. They provide active financing link between banks on one hand and farmers on the other. Undeniably, coldstorage owners fulfill the need that banks are less suited to provide - quick, hassle free, if not necessarily cheap, credit. It is all about access of ease sans bureaucracy.

Rajesh's representations before government bodies to seek solutions and uniting regional cold stores associations into National Federation was recognized to award him "Dynamic Leadership Award" in 2013.

DANFOSS ICE AWARD

DYNAMIC LEADERSHIP



"A leader is the one who can inspire, motivate and turn the organization's vision into reality





GUBBA COLD STORAGE

Gubba Group was established in 1879, a solid 135 years ago. It was a trading company then dealing in agricultural commodities. Later, this paved the way to set up A.P's 1st cold storage in 1987. Today, Gubba Cold Storage is a 11.8 million cubic feet company, known for its passion for Preservation. With 30 years of expertise and experience, Gubbas have perfected the art of preservation over the years, embracing technology and innovations.

Gubba Cold Storages are managed Gubba Nagender Rao, Managing Director, Gubba Kiran, CEO and Gubba Prashant, Innovations & Technical Head of the company.

Gubba Cold Storage Pvt. Ltd focuses primarily on preservation with perishables like seed, food and pharmaceuticals being maintained in hygienic conditions. Gubbas innovated and engineered the 1st of its kind rack supported cold storage in India.

Gubba started the facility with a 500Tof storage capacity, which today has increased to 1,20,000T with 16 cold-storage plants in Hyderabad and Aurangabad.

In 1998, Gubba realized that the seeds preserved in their cold storages were losing germination in spite of the temperature maintained being intact. That is when Gubba introduced the concept of dehumidified cold storages, thus controlling amount of moisture in the atmosphere in accordance with the requirement of the commodity preserved. This paved way to a huge development for the enterprise.

Gubba has always worked on improvising the technology and bringing world-class infrastructure to the Indian supply-chain industry.

They have been delivering class-apart service including customizing cold rooms as per client's requirement and have become their voted choice in cold-storage preservation.

They believe that development of Coldchain logistics is the only way to control food wastage in India and support farmer development. Hence, the Gubba approach to create impact is to increase awareness about preservation, cold-supply chain and logistics through workshops and events.

Indian Cold-chain industry has tremendous scope to make India far more productive in produce-utilization.

Gubba's initiative of providing services for diversified range of agri-products and standardizing cold seed storage under tropical humid conditions, helped them bag Danfoss ICE' Progressive Service Provider Award' in the year 2013.

DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2013

"Work with a vision and work hard. **Being ambitious** always works."





ECOFRESH COLD STORAGE & WAREHOUSING PVT LTD

Ecofresh Cold Storage& Warehousing Pvt. Ltd (2004), part of the Efficient Group of Companies with interests in Engineering, Manufacturing, Cold Storage & Logistics,is one of the few private sector companies in Maharashtra to provide complete Cold-chain solutions with ISO 22000 certification.

Bipin Revankar, the Director of Ecofresh Cold Storage & Warehousing, has been a major part of this family enterprise's growth and success.

Ecofresh was launched in the year 2003 as Efficient Group's first foray into the Agriculture Industry. It is a state of the art, Cold Storage and Deep Freeze facility, capable of supporting a huge range of preservation needs. It has a capacity of 1700 MT and can maintain a temperature range from -20°C to +10°C.

Ecofresh focuses on amending work culture, modernizing infrastructure, expanding capacity and investing in refrigerated trucks. The organization also has a well-maintained facility with preventive maintenance to Zero Downtime and providing a safe, hygienic and secure workplace.

EcoFresh commenced their dedicated focus on operations and food-safety by replacing evaporative condensers with aircooled condensers in their Pune facility, as a first step. This resulted in the elimination of dependency on water and scaling issues, thus enabling consistent efficiency and environment-safety.

The facility uses Ammonia DX systemcontrolled electronic expansion valves and air-cooled condensers, making it a state-of-the-art facility with efficient commissioning by Danfoss.

Within a short span of time, EcoFresh has become the first choice of storage for several food processors and dairies in Western and Southern Maharashtra.

The EcoFresh Group's success is derived from their consistent focus on quality, reliability & delivery, thus making them the deserving winner for Danfoss ICE 'Best Maintained Cold Storage Award 2013.

DANFOSS ICE AWARD

BEST MAINTAINED COLD STORAGE 2013

"To be successful in business, understanding one's strengths and weaknesses is key. Learning to embrace and overcome struggles & failures is essential to success."





ALFA LAVAL INDIA LTD

DANFOSS ICE AWARD

OUTSTANDING CUSTOMER FOCUS 2013

"We create better everyday conditions for people. We do this by contributing to a more sustainable future through engineering innovation." Alfa Laval India Ltd (ALI), the Indian subsidiary of Alfa Laval Ab of Sweden, set up its independent manufacturing facility in Pune. Alfa Laval founded in 1833, traces its presence in India since 1937. The company has strong global presence and manufactures and sells a wide range of heat exchangers, separators and flow equipment to key industries.

The customer centric company is recognized today as a leading high-quality productsupplier. The core of Alfa Laval's operations is based on three key technologies: heat transfer, separation and fluid handling. All three have great significance for industrial companies and Alfa Laval holds 2500+ patents and invests 2.5% (approx.) in R&D launching 35-40 products annually. Alfa Laval's products are sold in approximately 100 countries, 50 of which have their own sales organizations. The company has about 42 large production units and more than 100 service centers. The company has about 18,000 employees worldwide – where Sweden, China, Denmark, USA and India are the largest countries in terms of employee's head count.

The company's equipment, systems and services are dedicated to assisting customers in optimizing the performance of their processes. The solutions help them to heat, cool, separate and transport products

in industries that produce food and beverages, chemicals and petrochemicals, pharmaceuticals, starch, sugar and ethanol. It's also used in power plants, ships, mechanical engineering industry, mining industry and wastewater treatment, as well as for comfort climate and refrigeration applications.

Alfa Laval has aced the complexity of planning solution for HVAC cooling systems using specific refrigerants, configurations and air-conditioning equipment, including commercial, marine and industrial refrigeration with comprehensive range of high-quality heat exchangers for residential/commercial climate applications. The high thermal efficiency withstands temperature up to 2°C and has the ability to operate with crossing temperatures in a single unit.

For the food industry, high efficient air coolers combined with compact AC line of brazed plate heat exchangers with high thermal efficiency is required to deliver maximum heat recovery on minimum floor space, utilizing small footprint and cutting energy expenses.

Alfa Laval was felicitated with the 'Outstanding Customer Focus Award in 2013', for its innovative solutions and for satisfying its customer needs.

MP COLD-CHAIN INDUSTRY ASSOCIATION

Madhya Pradesh (MP) Cold-chain Industry Association, Indore, was founded by BL Jajoo has with a consortium of 250 members from various cold storages. Hansmukh Jain Gandhi is the current president of the association. It is a registered association with an elected body of governors. Various cold-chain events are conducted in a national/international level. The ratio of participating members at these events are higher compared to any other such association.

Hansmukh Lal Gandhi anticipates a huge influx due to higher subsidy, leading to an overcapacity in the region.

The capacity is expected to double next year, with Indore surfacing as the logistic hub in the state. Location, price and other facility conditions are conducive to setting up more cold storage facilities in Indore, with demand and supply acting as a positive factor, Indore has been the most successful cold storage hub in the state.

Government and cooperative cold storages are also members of this association which as a norm is usually a rare feat in the Cold-chain industry.

In addition, it is also associated with Refcon Cold-chain Pvt Ltd, Farmtech, agri Event (Ukrainian Agribusiness Club), and a member of industry associations, MP, and CII.

MP Cold-chain Industry Association has played a key role in getting 15% additional subsidy from the State Government. It represents its members-industry issues and takes them up with the ministry. The association has managed to acquire many such reliefs for the benefit and betterment of the industry.

The Association takes its social responsibility very seriously. It funds the education and peripheral needs of the girl child in the society by donating cycles, school fees, uniforms, books, bags, etc.

The Associations efforts to provide quality service to its members in relatively traditional mindset and attending to all social cause of girl child care bestowed them the 'Best Cold Storage Association' in 2013.

DANFOSS ICE AWARD

BEST COLD STORAGE ASSOCIATION 2013







FRUIT MASTER AGRO FRESH PVT LTD

An integrated cold chain facility in Kashmir called the Fruit Master Agro Fresh Private Limited was jointly ventured by the Suri Brothers, Sudhir Suri and Hiten Suri and by Mr. Faizal Burza & the Bhat Brothers.

The cold chain facility is a 5000MT integrated controlled-atmosphere, which is situated in the heart of a high-altitude apple-growing orchards. The facility has been built in accordance with international standard norms and has been equipped with latest machinery and equipment from U.S.A and Europe.

Sudhir Suri, the chairman and CEO of, Suri Agro Fresh is a veteran cold- storage player, who along with his brother Hiten Suri, Sr. Vice President, All India Cold Storage Association, carried the baton of their family legacy and continues to deliver high-quality and efficient cold storage solutions to their customers.

Sudhir with his brother Hiten Suri, have also been effectively running the cold storage and pack-house operations for the organization for years now.

Fruit Master Agro Fresh Pvt Ltd, a true bona fide winner has also been renowned for having installed a one-of-a-kind machine which has the capacity of grading and packing of 10T fruit produce per hour. The process is highly systematic and grades apples according to its quality, size and color.

In addition to this, the facility also has a state-of-the-art grading, packing and waxing machine, that follows a systematic mechanical operation using forklift, ensuring zero damage to the produce.

Fruit Master Agro Fresh Pvt. Ltd, a deserving winner of the 'Best Maintained Cold Storage Award in 2013', is one of the first movers in the country to have reached the production clusters with the latest technology and infrastructure and with its Controlled Atmosphere Storage System, high-quality apples have been made available to its customers throughout the year.

With his grit and determination, Sudhir Suri has been able to successfully uplift the infrastructure of the organization and take it to new heights of success and growth.

DANFOSS ICE AWARD

BEST MAINTAINED COLD STORAGE 2013



"A satisfied customer is the best business strategy of all"



ALLANA FOODS

DANFOSS ICE AWARD

BEST FOOD PROCESSING FACILITY 2013

"Passion is infectious, as it not only ignites your soul, but also of those surrounded by you."

The Allana Group is India's largest processed food products and agro commodities exporter. It established its core operations in Mumbai in the year 1865 and initiated the export trade in 1930. The group represents a magnificent history of quality, innovation and excellent customer service and has been recognized as a Five-star Premier Trading House, the highest and rare distinction, conferred by the Ministry of Commerce and Industry.

The Agri Food Products Division of the Allana Group is acknowledged as the largest manufacturing global leader. They manufacture and export various branded processed/frozen consumer products and agro commodities. They transport their products to over 85 countries, while maintaining the highest standards of quality at all stages. Their facilities and product safety systems are highly certified which includes the(ISO 9001:2000) HACCP, Environmental Safety (ISO 14000) and Occupational Health and Safety Management Systems.

A key figure in Allana's rise to prominence is its founder, Abdulla Allana, who with his flair for business, single-handedly undertook the business and succeeded in developing it. The group also flourished under the stewardship of Khan Sahib Ahmed Allana, who took the group on a path of global domination.

The Allana group is also the world's singlelargest producer and exporter of frozen Halal Boneless Buffalo Meat. They are also amongst the three largest exporters of coffee to Italy and France, and a dominant exporter of spices, pulses and cereals across the globe.

With the inherited values of PACE (Performance-oriented, Ambitious, Competitive and Enthusiastic), the organization has been able to provide high quality and fresh produce to their customers all across the globe, making them the deserving recipient of the APEDA Diamond Trophy in 2011-12.

Allana's world class integrated processing units and cold storages along with stateof-the art machinery has helped it evolve into a multi-dimensional and multiproduct conglomerate earning it the Best Food processing Facility for the year 2013.



In view of cold chain getting integrated with the best technology, infrastructure and market-led cold chain, and business models, numerous efforts were put in by various stakeholders, with National Horticulture Board providing a platform, around 2008-9. GCCA played a pivotal role through food storage conditions and practices data base. While collaborating all these efforts over the years, contributions of many were of immense help-leaders amongst whom were felicitated by GCCA, ICE and Danfoss bestowing them Danfoss ICE Awards. These torch bearers are really the gems in this vibrating business. Feel proud to be a prominent player in this journey!

DR. R.K SHARMA
AGRIBUSINESS SPECIALIST
FORMER DIRECTOR, NATIONAL HORTICULTURE BOARD; SECRETARY TO NOVOD BOARD;
CONSULTANT NIFTEM, GOVT OF INDIA; AGRIBUSINESS SPECIALIST, WORLD BANK-HPHDP AND
CORE EXPERT FAO, UN







SAHYADRI FARMS

Sahyadri Farms (SF) conceptualized in 2000 is one of India's leading farmers' producer company consisting of a collective group of 8000+ marginal farmers, who grow fruits and vegetables on less than one hectare of land.

The 'marginal farmers' account to India's 63% of total farmer population. Their prime goal is to support every farmer in India marginal, small or large and ensure that farming stays profitable.

The year 2011, was a turning point for Shayadri Farms, who were rebranded as a Farmer Producer Company (FPC), with the tagline being, by the farmers, of the farmers and for the farmers.

By overcoming significant challenges, such as the lack of basic infrastructure, right advisory, quality agri-inputs, fragmented supply chain, poor cold-storage facilities, high post-harvest losses and exploitation by multiple intermediaries, they have been able to establish themselves as 'farmersentrepreneurs', who have set up their own

agro-advisory team, a world-class packhouse and cold-storage facility.

Sahyadri Farms' growth has been tremendous and worth mentioning. They started out by setting up necessary infrastructure that is APEDA approved and exported their produce to the European market.

Sahyadri Farms, is now India's leading exporters of fresh and high-quality grapes, with a total shipping quantity of 625 containers (9000MT), valued at US\$ 17 million.

Sahyadri Farms has also set up two divisions, namely Retail Division - for reaching domestic consumers directly with safe food that is 100% traceable and Processed Foods Division - for value addition and processing farm produce.

Sahyadri Farms, is thus, the deserving awardee for the 'Exemplary Thought Leader' Award 2014. With their effort to bring together farmers from different parts of the city, they have been able to provide safe and quality food to their customers across the globe.

DANFOSS ICE AWARD

EXEMPLARY THOUGHT LEADER 2014

"Agriculture is our wisest pursuit, becausein the end, it is the one that contributes most to real wealth, good morals and happiness."



E O

SURAKHSHA TRANSPORT SYSTEMS (INDIA) PVT LTD

DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2014

"Quality is never an accident; it is the result of sincere effort and skillful execution." Suraksha Transport Systems (India) Pvt Ltd., was established in 2000 and is involved majorly in auxiliary transport, storage, communications and travel agencies services.

The directors currently on Board are Mr. V.P. Vargheese, Managing Director; Mr. V.D. Sasindran Nair, Director; Mr. Babu D., Director.

Being an active partner in the development of Cold-chain in India, Suraksha understands its customers' unique needs and develops, manufactures and supplies custom-built reefers. Their products include Aluminum/ Steel Composite Refrigerated Containers, GRP Sandwich Panel Containers, PUF insulated Containers, Dry Cargo Steel Containers, Stainless Steel Water Browser and Water Tankers and Stainless Steel Diesel Dispensers.

Products are available for all makes and models of any commercial vehicles in India and suitable for any reputed make of reefer units.

The Company has pan India presence serving more than 1000 satisfied customers from marine, meat, poultry, dairy, ice cream, fruits, vegetables, food-processing, QSR, Pharma and logistic sectors. They are also approved reefer container suppliers for big brands like Ashok Leyland, Tata and Eicher.

Suraksha Transport Systems (India)
Pvt Ltd was awarded with the
'Progressive Service Provider Award in
2014', for producing complete range of
transportation and cold storage solutions
with quality and support.

A SRINIVASA RAMANUJAM

ADVISOR, ADANI AGRIFRESH LTD

An Agriculture Engineer with MBA from the Institute of Rural Management, Anand (IRMA), Srinivasa Ramanujam, has over three decades of experience in working with agri-business enterprises, namely, National Dairy Development Board (NDDB), Mahindra Shublabh Services Ltd, Triveni Engineering & Industries Ltd and Reliance Retail Ltd.

He served as senior vice president and business head at Adani Agrifresh Ltd (AAFL), since 2008, Srinivasa has now moved on to take up the advisory role. AAFL pioneered in setting up of Controlled Atmosphere pack houses for apples in the country. This includes buying of loose apples at the pack house without conventional packing, purchasing directly from farmers, paying the latter based on grading using automatic colour and size-sorting machines.

Poor pre-harvest practices lead to major challenges, as a result of which the quality of apples available were not at par with its imported counterpart. Srinivasa established three farmer service centers for apple growers not only to buy quality agri-products but also avail their technical knowhow on best cultivation practices from in-house experts. This was augmented by the apple experts conducting various meetings to educate and demonstrate the best practices, thus enabling apple growers to produce good quality apple.

AAFL has a capacity to store around 25000 MT of apples year-round and also has extensive distribution network covering 20 major cities, the need arose to undertake extensive branding and marketing activities nationwide.

Wholesale distributors' and big retail stores stocked AAFL's products and promote the brand extensively in Delhi using various methods. In other towns, the rear of an auto is used for maximum visibility. At modern retail outlets, promotion was done by sampling.

Small packets containing 6 apples each were introduced in the market. The efforts gave high visibility to 'FARM-PIK' and consumers' awareness about the brand increased tremendously.

Indian Cold-chain industry is still evolving with a plenty of challenges. For those who are passionate about cold chain will have ample opportunities to contribute in this evolutionary process and feel proud of their participation in this momentous growth and can benefit from it.

Establishing a new concept in valuechain and delivering high value products, made him bag the Progressive Service Provider Award 2014. DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2014



"Quality is everyone's responsibility."





HARSHANA NATURALS

Harshana Group of Companies, is a Delhi-based, family-run trading company, that has been in the business for close to five decades.

With integrated Cold-storage facility (40000MT) and pack house with reefer logistic lines holding bases at Delhi, Kashmir and Himachal, Harshana Naturals has been able to grow and develop alongside neverending diversification and modernization.

Harshana Naturals' is a success story for generations to follow. They were selected as a case study at the Agribusiness Seminar, by the Harvard Business School. Their workforce boasts of young and energetic minds, who are provided with an equal playing platform to innovate and generate creative ideas and designs.

Introduction and production of high-density apple plantations, are one of Harshana

Natural's major focus and the pioneering work has been progressing in full speed to bring about a change in the Kashmir valley.

At Harshana Naturals, the main aim is to provide the best-quality produce to the customers, by incorporating latest farming techniques in the pre-harvest stage. They also religiously follow the traceability model, that connects them directly to their end-users.

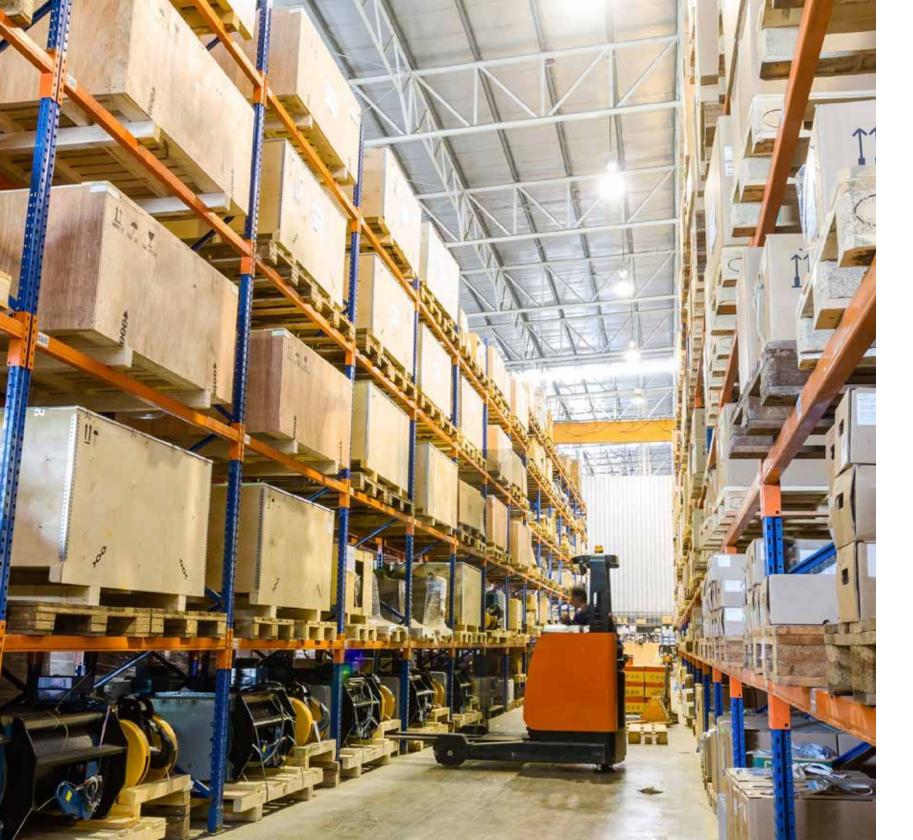
Today, with a consortium of 10,000+ growers, efforts continue to provide first class services by cutting non-value-added costs and maximizing their profits.

Harshana Naturals is renowned for their best-in-class facility, usage of high-end technology and infrastructure, making it a leading cold-storage providing organization in the country. Recognizing their efforts, they were bestowed with 'Danfoss ICE Outstanding Customer Focus Award 2014'.

DANFOSS ICE AWARD

OUTSTANDING CUSTOMER **FOCUS 2014**

"It's time to grow, widen your horizons and conquer the world."





WEST BENGAL COLD STORAGE ASSOCIATION

West Bengal Cold Storage Association was founded in 1967 by some of the enterprising cold storage owners to provide a common platform for addressing various issues concerning the fellow cold storage owners and the cold storage industry in general.

It provides all possible guidance to the members covering statutory, technical and business related matters for running their cold storages in the most efficient manner. Regular meetings are convened to update the members with the latest developments in the related fields. Seminars conducted by different agencies/organisations are attended by the members under the banner of the Association. The Association also organises such seminars for the benefit of the stakeholders of the industry.

Knowledge acquired from various premier institutes regarding improvement in agricultural processes & products and

cost-efficient preservation of the agricultural produce is shared with the farmers and the store-owners. They are suitably encouraged to put the learning in action.

In recognition of the capability and competence of the Association, the State Government consults the Association in deciding important issues for the industry. In case of any natural calamity members and the Association always extend all possible help to the fellow citizens and the Government.

The Association is taking regular initiative to address various social issues; the branch units of the Association are conducting voluntary blood donation camps, free thalassemia detection and free eye care camps in different districts of West Bengal.

In short, services of the Association is not limited to its members only; the society and the state is also served by it.

DANFOSS ICE AWARD

PROGRESSIVE ASSOCIATION 2014



"Consistent responsibility driven behaviour of organisations generate business and benefit the entire ecosystem."



BANAS DAIRY

BANASKANTHA DISTRICT COOPERATIVE MILK PRODUCERS UNION LIMITED, PALANPUR



Galba Bhai Nanji Bhai Patel founded Banas Dairy (Banas Kantha District Cooperative Milk Producers' Union Ltd) in 1969, as a cooperative organization in Palanpur, Banaskantha District of Gujarat. It was established under Gujarat Cooperative Societies Act 1961 with the support of National Dairy Development Board (NDDB) as part of Operation Flood Program, launched to bring about white revolution in the country.

Banas is currently top-ranking in milk production in Asia. They manufacture many dairy products under AMUL, SAGAR and BANAS brands, with the entire product range involving milk and allied milk products being marketed through Gujarat Cooperative Milk Marketing Federation, Anand. Banas provides technical inputs to over 1.8lakh farmer households, organized through 1200 odd registered Villagelevel Cooperative Milk Societies. Setting-up of chilling, milk powder, cattle-feed & Feed Milling plants (100MT/day), animal husbandry services, skimmed milk powder, cheese, paneer & ice-cream production, milk-chilling centres (100MT/Day) and tetra-packing under Banas-II, were soon topped by Banas-III Dairy Complex Project.

Daily collection of milk averages 50lakh liters. They run four dairy plants with astounding capacities of 7, 24, 18&10 lakh liters/day, respectively, and a cheese plant (900MT/ month).They also have Asia's largest Cattle Feed Plant, Katarva, with 1000MT/ day capacity while the cattle-feed plant at Palanpur Plant accommodates 600 MT/ day. They also have a Dairy Development & Production in Cooperative Sector - Product

Plant and a Semen Collection Station, which are all integral to their system. Banas Diary is equipped with state-of-the-art processing plants that pasteurize products using Ultra High Temperature (UHT)technology, hence, also known as UHT milk. The preparation does not involve any use of preservatives but ensures zero microbial activation, while ensuring maximum flavor, taste, and nutritional value. The unique aseptic packaging system protects milk from air and light and guarantees a long shelf life of 180 days without refrigeration. All products meet Special Grade specifications of the Agmark Scheme (1938).

Banas exported the first consignment of whole milk powder to Oman in 2001. They had also flagged off a train carrying four lakh litres of milk from Palanpur to Kanpur, marking the commencement of milk packing & marketing at the destination town (Kanpur). Numerous awards for excellence in production & quality have come their way. They have made impressive inroads in their efforts to replicate Gujarat milk cooperative model in their Kanpur Dairy Plant in UP. Taking their social responsibility equally seriously, they did a record mass Tree Plantation Drive (16.37 lakh trees) across several villages and started 'Swavlamban', a National Pension Scheme for dairy workers, a first of its kind initiative in the country.

Outstanding Customer Focus Award 2014 was bestowed upon Banas Dairy for focusing on the needs of milk producers, creation of adequate cold chain technologies and their efficient marketing systems.

DANFOSS ICE AWARD

OUTSTANDING CUSTOMER FOCUS 2014

Stakeholders of cold chain in India. Over the past 10 years it has grown to be a much anticipated and sought after date in our calendar. Kudos to the team for bringing the event to us and looking forward to many more years.

PANKAJ MEHTA
MANAGING DIRECTOR
CARRIER TRANSICOLD INDIA





ABHIMANYU NARANG

COO, NARANG COLD STORAGE (NCS)

DANFOSS ICE AWARD

GENEX 2015



Abhimanyu Narang, the Chief Operating Officer at Narang Cold Storage (NCS) is a dynamic leader, who along with his father, Mr. Sunil Narang, transformed the cold chain industry in the state of Madhya Pradesh.

Narang Cold Storage, Madhya Pradesh's first cold storage is a family- run organization that was incepted in the year 1969. An Ice Factory with a total output of 120 quintals per day, was built within the Cold Storage. The cold storage is an integral part of Central India's food industry and has been rebranded as Narang Group, owing to the ever- changing business environment and dynamics.

Narang Cold Storage pioneers in providing fruit-ripening chambers, that promotes multicommodities unit, offering a one-stop solution to all refrigerant- storage requirements and requisites. They also pioneer in providing refrigerant- storage facilities temperatures ranging from -25C0 to +25C0 in specialized humidity-control chambers.

Abhimanyu Narang, the next-gen leader is now taking the Narang family's legacy forward with his leadership skills and new-age ideas. With his involvement in the business, the family business has accelerated within a short span of 5 years.

Abhimanyu Narang says, "Through our work, we at Narang Group, aim to bridge the existing gap between the cold chain demand and supply and provide one stop farm to fork solutions to all cold chain services in the central part of India."

He is also continuously working towards reducing lead-time in all processes and increasing efficiency, making NCS as lean as possible.

Innovation is a key attribute of the Narang family, who have set a high benchmark of producing 150 kilograms of produce in 30 hours, which is significantly above the usual industry standards.

Customer satisfaction and successfully meeting customer's expectations are two key priorities for the Narang family, who believe in providing the absolute best to their customers.

"Our business is dependent on our farmers, who work relentlessly, on supplying fresh and quality produce to us, that we in turn supply it to our customers. They are our major support system and we make sure in encouraging, supporting and helping them in all ways possible.", said, Abhimanyu Narang.

Thus, with key skillsets in food industry, systems management, time and customer service management, Abhimanyu has been able to study and understand the cold storage market well and provide customized solutions to their customers, making him a bona fide winner for the 2015 GenEx Award.

He is a clear example of a next-gen leader, who not only followed his predecessor's footsteps, but also came up with new and dynamic ideas that set him apart from others.

The Narang legacy is sure to continue for years to come, with achieved new heights of success and innovation.

Following his father's footsteps, Abhimanyu Narang has sure raised the bar for all cold storage organizations in the country.

With increased demand for fresh produce in the country, its organizations like Narang Cold Storage, that will carry the baton for providing high quality produce to their customers.







SENTHIL NATARAJAN

CEO, KOVAI PAZHAMUDIR NILAYAM (KPN)

Established in 1956 by Patriarch, N Natrajan, Kovai Pazhamudir Nilayam (KPN), pioneered fruit and vegetable trade in Coimbatore. Now they have grown from a small shop into a household name with 54 brand outlets all around Tamil Nadu and with presence in all major cities of South India. They are also one of the largest retailer-importer-exporter in the country.

KPN has 1500+ employees on roll, and a combined annual turnover of INR 275 crores and they are expecting to grow by 20%+ in the coming year, which is equal to any leading MNC expanding on a fast-track.

Natrajan, the current CEO, has a Masters in Software Engineering and came on board in 2006, post an internship at Microsoft and running his own software company, which is still going strong with a 2.5 crores turnover.

Senthil involves himself in the family business, delving into formulating strategies, franchising, procuring supplies, e-commerce development, online sales, data mining and clearing of new projects. In 2011, KPN Farm Fresh Pvt. Ltd. came into being. Realizing the limit to consumer's need for fruits and vegetables, in a strategic move, KPN added dairy products, confectionery, breads, etc.

Backbone of perishable business is supply chain. KPN's biggest strength is its sourcing strategy, which ensures that only the freshest produce reaches the outlet.

Refrigerated trucks transport Kinnows from as far as India-Pakistan border and apples from Shimla and Kashmir.

KPN has a 5-acre warehouse and cold storage in Chennai. On an average, 150T of fruits reach the warehouse every morning at 3:00am, undergo quality-control checks, get graded on sweetness level, appearance, size, etc. and get dispatched according to their ripeness and maturity, by 7:00 am.

Avermi composting plant with a capacity of 750 kgs is also being constructed to turn fruit wastage into manure, supplied to farmers and kitchen gardens.

Despite having ambitious goals, the family believes in safe and steady rise to success. Profit is 2% of the total turnover. KPN does not borrow capital and expands depending only on internal accruals for growth.

'Systems' being quintessential to contemporary growth, Senthil wrote software for his business.

Senthil believes in word-of-mouth and their product quality being the best marketing tool.

Senthil formulated strategies for e-commerce and software development at KPN for a successful business using long haul reefer transport bagged him 'GenEx Award in 2015'.

DANFOSS ICE AWARD

GENEX 2015



"Your product is your best marketing tool, focus on quality and on-time delivery."





THE AGRA COLD STORAGE ASSOCIATION

DANFOSS ICE AWARD

BEST COLD STORAGE ASSOCIATION 2015



"Cold storages and their owners are an active part of the food supply chain, as they not only help in producing and storing the produce, but also in delivering them to the endcustomers." Agra Cold Storage Association, has been working towards the upliftment of the cold storages in Agra for over 30 years now. The association acts as a linking interface between the Government of India and its 250+ members in Agra.

The city is also known as India's Cold Storage hub and has 7% of the cold storage capacity in the country which is more than whole of Punjab.

In the late 80's and 90's, Agra was an industrial city, with hundreds of small-scale establishments, that produced metal castings. But by the end of the 80's, the establishments started exploring new opportunities of potato farming and storage around the area, and that's when newer cold storage investment were looked into.

The ACSOA consistently strives to adhere to the grievances of the cold store owners

thereby providing them excellent support.
The association helps its cold store
members and farmers to develop by

educating them on the latest government support policies, introduces the farmers to the latest modern techniques to enhance and upgrade the quality and quantity of their agricultural produce.

"Potatoes effectively became a cash crop for the farmers," says Rajesh Goyal, director of GT Cold Storage and secretary, ACSOA.

Most of the cold storages in Agra comprise of potato storing facilities.

The ACSOA is spreading awareness and encouraging the development of multi-commodity cold storages to empower farmers with any variety of agricultural produce. The ACSOA has also provided its members with global exposure by hosting international agricultural and trade delegations to elevate the standards of the cold storages in Agra.

The Agra Cold Storage Association has been the recipient of the Best Cold Storage Association Award in the year 2015.

COLD STAR LOGISTICS PVT LTD

Cold Star Logistics Pvt. Ltd (2010), Mumbai, one of India's young and fastest growing integrated Cold-chain solution providers, offers the latest solutions across the total supply chain involving production, storage and distribution of perishable products that require precise temperature-controlled logistics services. This helps to retain product characteristics, freshness and nutritive values for longer durations.

ColdStar Logistics is promoted by Tuscan Ventures, one of the few logistics-focused investment firms in India which practices a unique philosophy of scaling up businesses through the twin combination of growth capital and operational excellence.

ColdStar offers end-to-end seamless refrigerated storage and transportation solutions for temperature-sensitive consumables and perishable food items. They help to deliver products with higher quality, and thereby increased profitability. This also ensures enhanced consumer safety and protects the brand equity, enabling their customers who are leaders in Food, Retail, FMCG and Pharmaceuticals - to preserve the product value across the supply chain.

The company's brand promise, 'Freshness Delivered' and their strict quality controls make sure that all commodities in their care are delivered fresh, on time and as per expectations. They move perishables in Company-owned fleet of 70+ temperature-

controlled reefer/freezer trucks which operates with the highest efficiency, retaining freshness and natural qualities from the point of produce to warehouses, to distributors and retail customers. This ensures fast turnaround time with increased efficiency, transparency and end-visibility of the logistics chain.

Their Controlled-atmosphere reefer technology leverages product quality & shelf life and decreases dehydration. They have specialized material handling, palletization, inventory management, shipment history, production scheduling and stock replenishment processes in place, with tremendous focus being given to product integrity and conformance with Environment, Health and Safety (EHS).

ColdStar covers 47+ logistics locations, with a capacity of 8000+ MT under management, covering 4.52mnKms. ColdStar aims to be a pan-India player with planned footprints across all key distribution hubs (cities) providing specialized refrigerated storages, warehousing, transportation, distribution and logistics services for fresh and frozen commodities.

Investing in India's consumption and infrastructure-led growth story and bringing in best-in-class technology, professional experience and on-ground execution skills for safe and efficient solutions in the food supply-chain contributed to ColdStar winning 'Danfoss ICE Progressive Service Provider Award 2015'.

DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2015



ROYALE MARINE IMPEX PVT LTD

DANFOSS ICE AWARD

BEST FOOD PROCESSING FACILITY 2015

"Success is the result of perfection, hard work, loyalty and persistence."

Chigurupati Vijay Kumar, Director, Royale Marine Impex Pvt Ltd, is known for his dedication, commitment and integrity. He is a front-runner, with a vision to establish Royale Marines as a leading Indian Shrimp Processor and Exporter. Vijay Kumar looks after the maintenance, machinery care and daily operations of the organization.

Vijay, has played a major role in establishing Royale Marine, for which he explored far and wide, gaining knowledge about the existing and upcoming cold storage technologies. He understood the guiding factors to setting up the best facility for shrimp processing and their exports. After long months of efforts, and in-depth analysis, Vijay discovered the technical beauty of machinery-solutions. His impressive efforts have been acknowledged as one of the most recognized and organized establishment in the Cold-chain industry.

Royale Marine Impex has core expertise in procuring, processing, supplying and trading wide variety of squid, cuttlefish, octopus and other sea foods. They have set a benchmark in marine exports and are renowned for

their bulk supply of best quality products and services, uncompromising practices with state-of-art food-processing unit, an astounding export facility that boasts of handling 70T of raw materials, a day.

Royale Marine Impex also provides automated refrigeration plant, Programmable Logic Controller (PLC), and Supervisory Control & Data Acquisition (SCADA) for Compressors, which are cost-effective viable economic solutions.

Acknowledging the responsibility that comes with success and recognition, Vijay takes proactive measures to maintain & sustain the initial standards, improving them and integrating with the best international equipment for long-term operations along with minimum maintenance, making the system energy efficient and inspiring.

This venture of interpreting energy efficient modern equipment, with an added dimension to the Indian cold chain industry, made Royale Marine Impex, the winner of 'Best Food Processing Facility Award' in 2015.

BHATTI AGRITECH

Established as a small farm unit in the year 1965, Bhatti Agritech is now a leading potatoseed producer and serves as a hallmark address for sourcing highest quality of potato planting materials.

Encompassing three generations, the organization has a progressive history of servicing the Indian potato farmers, while continuously innovating and experimenting towards their quest 'For the Best'.

The organization's self-sufficient infrastructure houses multiple sets of requisite farm machinery, quantum of tractors, implements, equipment, machines, devices for pre and post handling operations, logistics facilities, and timely clockwork schedules.

The annual winter produce is stored in coldstorage capacity of 30000MT. The facility also houses modern gadgets that maintain an ideal temperature, humidity and CO2 concentration. The Potato seeds that are produced are well positioned and supplied as premium quality produce. All instruments are calibrated semi-annually ensuring proper functioning.

The facility capacitates 4m virus-free propagules annually equipped with sensitive techniques: ELISA, PCR and Real-time PCR.

The initial in-vitro seed stocks are tested for viruses using molecular diagnostics and produced under insect-proof net houses after each multiplication cycle. Utmost care is taken for optimum fertilization, irrigation frequency, minimal two rogueing operations; insect, pest and disease protection, scheduled haulm removal, adequate curing and shock-free harvested crop handling.

Sukhjit Singh Bhatti, Director, is a 2nd generation farmer with over 35years of experience in seed-potato production. He is the President of the Confederation of Potato Seed Farmers, the only registered body of seed potato growers.

The organization has successfully spread its wings across the national potato landscape, generating more than 1 million in revenue, earning them the Progressive Farmer Award in the year 2015.

DANFOSS ICE AWARD

PROGRESSIVE FARMER 2015

"Right from producing high-quality produce to delivering them to our customers, every stage is crucial and needs to be taken care of with due diligence."





MOTHER DAIRY

DANFOSS ICE AWARD

BEST MAINTAINED FACILITIES 2015

"Happy Food. **Happy People"**

Mother Dairy was commissioned in 1974 as a wholly-owned subsidiary of the National Dairy Development Board (NDDB). It was an initiative under Operation Flood, the world's biggest dairy development programme launched to make India a milk-sufficient nation. Over the past several years, Mother Dairy has contributed significantly in achieving this objective through a series of innovations and programmes. Today, as one of the most popular consumable label, Mother Dairy manufactures, markets, and sells milk & milk products including cultured products, viz., ice creams, Paneer (cottage cheese) and Ghee (margarine) under its brand. The Company has a diversified portfolio of products including edible oils, fruits & vegetables, frozen vegetables, pulses, processed food like fruit juices and jams, to meet the daily requirements of every household.

Established systems and SOPs of the Company play a pivotal role in increasing the efficiency of the Organization.

Comprehending, innovation and continuous efforts that breed results, innovative practices were adopted to reduce the usage of

ammonia gas in the refrigeration plant from 20T to 2.0T, thereby reducing by 90% at their Patpargani Plant in Delhi.

The company has continually taken significant measures that focuses on technologies to ensure energy saving in their cold stores and entire units. Mother Dairy recently received the National Energy Conversation Award 2017 with 1st position in Dairy Sector, presented by the current Hon'ble President of India, Shri Ram Nath Kovind.

The upliftment of farmers under the aegis of Dr. Verghese Kurien, known as the 'Father of the White Revolution' in India and 'The Milkman of India', starting with his 'billion litre idea 'under Operation Flood,has been highly inspirational and motivational. Pioneering in Cooperative Environment wherein farmers, animal husbandry, infrastructure creation in villages were given top priority, which has stood the testimony of time.

These wide range of activities undertaken by Mother dairy on its cold chain initiatives to bring out the high-quality products gave Mother Dairy the Best Maintained Facilities for the Danfoss ICE Awards 2015.

SURI AGRO FRESH PVT. LTD.

Suri Agro Fresh (Pvt) Ltd also known as SAF was incorporated in the year 1947. The organization was jointly ventured by the Suri Family and by Total Produce Ireland, one of Europe's largest fresh produce organization. It is now one of India's largest fresh produce company, and one of Asia's largest fruit market. Suri Agro Fresh is a leading distributor and importer of fresh produce handling over 65,000 MT of produce every year

Hiten Suri, Joint Managing Director and Sr. Vice President of All India Cold Storage Association joined the family business in the year 1985. He is responsible for the infrastructural development and for successfully running of the cold storage and pack house operations. Manay Suri, Vice President, Cold-Chain Operations, a graduate from the London School of Economics, is the fourth generation to come on board. He is currently looking after the trading and warehousing operations of the company.

Suri Agro Fresh (Pvt) Ltd, headquartered in New Delhi, is the authorized distributor of Zespri (New Zealand) and Unifrutti (India). It runs operations in Mumbai, Ahmedabad,

Jaipur, Hyderabad and Kolkata, and also has sourcing offices in Shopian (J&K), Kullu-Manali (Kullu), and Narkanda (near Shimla), HP.

The company supplies to a range of customers from small wholesalers and retailers to large retail chains such as Wal-Mart, Reliance Fresh and Big Bazaar.

In line with the emerging requirements of high-end technology in the Cold-chain industry, SAF has come up with a new world class facility in Food Park, Sonepat (Haryana). A State-of-the-art Multipurpose Fresh Fruit Handling Complex (DC) has also been constructed, that offers controlled and modified atmosphere chambers, pressurized banana ripening rooms, separate rooms for orange and mango de-greening, deep freezers, dry warehouse and reefer trucks, to cater to the immediate demand for logistics. Apart from the Distribution Centre, SAF has also constructed two more controlled atmosphere facilities in Kashmir.

Suri Agro Fresh, thus with its customercentric approach and attitude, won the Progressive Service Provider award, in the year 2015.

DANFOSS ICE AWARD

PROGRESSIVE SERVICE PROVIDER 2015

"It's all about your customers and meeting their requirements. A happy customer equals a happy organization."

66 The Danfoss ICE Awards have evolved magnificently over the decade, acknowledging and encouraging the new talent and innovations in the cold chain industry. Great Job! 99

JASMOHAN SINGH MANAGING DIRECTOR FRICK INDIA LTD





PAGRO FROZEN FOODS PVT LTD

DANFOSS ICE AWARD

BEST PROCESSING FACILITY 2016



"Human ethics come first. The journey cannot be capped in financial figures." In its nascent years, Pagro comprised of a small team of 40. Today, the brand provides employment, directly or indirectly to 800+ people following their fair business ethics. A leading frozen foods supplier in South East Asia, Pagro has transformed the lives of many farmers.

The brand is synonymous with 'quality'. 'Quality' echoes totality and completeness, and today, Pagro has grown 500 times more in South-East Asian Pacific region. The discerning buyer spoilt for choices chooses Pagro products over hundreds of others due to their quality. Sartaj Brar, CEO of Pagro Foods, states that the measure of success for them comes from number of hearts they have touched over the years.

Pagro caters to almost all organized QSR chains. A large part of its revenue comes from exports. It is the only IQF (Individual Quick Freezing) vegetable processing enterprise to export and sustain in the highly demanding markets of Japan, US and Europe. Pagro is equally active behind the scenes and is directly & indirectly involved with 2000+ farmers as Pagro does contract and captive farming in 5000+ acres. Pagro has etched a tall example of 'farm to fork' and agridiversification in the otherwise staid cropping horizons of Indian agriculture sector.

India is an agri-state and upcoming sector with tremendous potential. Metaphorically, there are 'miles to go', and more rightly, 'acres to go' through the 'greener pastures'.

Listing the challenges looming in the agrisector, self-reliance, depleting per capita land holding, climate change, and, the fact of it being the most unorganized sector affecting Indian economy, there is a big disconnect between demand and supply trends. The farmer goes by gut instinct rather than by statistical data to decide crop patterns. The result is evident in the price of onions, potatoes and tomatoes. The way ahead is to move the agri-sector out of cereal and starch production and add some value. Coloured revolution is the need of the hour. It would go a long way to help the farmers reach a sustainable standard of living which they deserve.

Sartaj Brar's vision is to be recognized as the world leader in manufacturing of frozen fruits and vegetables. He believes that cold storage is a very important aspect in the frozen food industry as the fruits and vegetables sourced during the peak season, are processed and stored fresh for the entire year. A robust cold chain can increase farmers' income manifold as an efficient cold storage facility can make farmers more enterprising by enhancing the shelf life and the quality of their harvest.

Pagro frozen foods was awarded with the 'Best Processing Facility Award in 2016', for being one of the largest processor of frozen vegetables with materials sourced through local growers in South East Asian Pacific region.

KIRLOSKAR PNEUMATIC CO. LTD

Established in 1958, Kirloskar Pneumatic Company Ltd (KPCL) is one of the core group companies which scaled to commendable heights under the chairmanship of late Shri Shantanurao Kirloskar. Kirloskar group has contributed immensely in every field of its operation during its 130 year-long journey, and holds a place of repute in the industry for its good business value and customer focus. KPCL is certified for Integrated Management System (IMS) Certifications of ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 by TUV NORD.

During the initial stage, the company had started its operations with the manufacturing of air compressors and pneumatic tools.

New product lines were then included, such as air conditioning and refrigeration systems, marine HVACR, process gas systems and hydraulic power transmission machinery.

The company had also earned an enviable reputation for its systems engineering and turnkey project expertise.

KPCL is a leading manufacturer of KCX & PC Series' reciprocating open-type refrigeration compressors which are used in applications like food-processing, preservation of milk, ice-cream, fish, meat, breweries & beverages, vegetables, agro products, chemicals, pharmaceuticals and process refrigeration.

The company has been involved in various projects that includes planning, designing,

manufacturing, installing and commissioning of refrigeration systems. KPCL has distinguished sales &service network across the country, where its products are primarily sold and serviced through its regional offices.

Over the years, KPCL has developed various sophisticated and superior technology products, with over28,000+ air-conditioning compressors installed to cater the demands of various industrial sectors in domestic and international markets. KPCL has established numerous joint ventures and technology partnerships with leading global companies. It has earned worldwide recognition and they serve multinationals like Pepsi, Coca-Cola, Unilever, Nestle, Reliance, UOP-Inter Americana, Lurgi, UHDE, Linde, Oil & NGC, NTPS etc.

KPCL has always been developing customized advanced products to suit Indian conditions and has been continuously updating them to maintain the highest standards of quality and reliability in the Cold-chain industry. It is also a member of International Institute of Ammonia Refrigeration (IIAR).

The Kirloskar Pneumatic Company Ltd (KPCL) was felicitated with the 'Danfoss ICE Best Manufacturer Award in 2016', for developing advanced and indigenized version of refrigeration compressors with the highest standard of quality and reliability.

DANFOSS ICE AWARD

BEST MANUFACTURER 2016

"In an everchanging world one thing that should remain constant is our commitment."





MONSOON FOODS

The fact that best quality fruits are exported for higher profits troubled Ravi Kiran, Founder, Monsoon Foods. Driven by the intent to make safe, fresh and tasty fruits available to the people in India as well led Ravi Kiran to institute Monsoon Foods.

Since their debut in 2007, Monsoon Foods, Nashik, Maharashtra, have grown by leaps and bounds. From starting with just one client in Germany to currently having 10 clients across Germany, UK and Vietnam and from shipping across 3 containers per annum to currently exporting over 100 containers per annum, Monsoon Foods is a brand to reckon with and is prominent in catering to the best supermarkets in the EU.

In parallel, backed by a transparent supply chain system, the company has been successful in catering to the domestic market with good quality fruits at competitive rates. Fair trade practices instituted by the company is helping the farmers become sustainable and more profitable.

A movement that started with just 5 farmers has now led to a robust association with over 250 farmers who have been certified on Global Good Agricultural Practices. The association improves the farmers' competence through collaborative knowledge transfer sessions.

Pre-cooling after procurement as well as throughout transportation is quintessential. This is where Monsoon Foods has been able to bring about a positive impact. For the first time in India, fruits have been tagged with a Traceability Identification Number. Adhering to the International Food Safety Certification standards, the laboratories within the company have put a cap on the residue pesticide levels found in the harvest.

To sustain the water level and the nutrients till the point of purchase, these tested and processed fruits are pre-cooled in a packhouse compliant with European hygiene standards and transported pan India through an efficient cold chain network offered by the company's partners.

They have established a sophisticated ripening facility for bananas, enabling carbide-free ripening(using natural ethylenebased ripening agents) giving Spotless Natural Monsoon Bananas. Their specialized packaging and ripening process ensures a longer shelf life thereby reducing food losses which are a major concern currently.

Providing a wide range of services for native farmers to overseas high-end markets & ensuring supply of safe, traceable fruits, has bagged Monsoon Foods the 'Danfoss ICE Progressive Farmer Award in 2016.

DANFOSS ICE AWARD

PROGRESSIVE FARMER

"Our motto is to provide India with safe, fresh and traceable fruits."





RAAJ L JOBANPUTRA

DIRECTOR, JWL COLD STORE PVT LTD

Raaj Jobanputra, a second generation descendent and a commercial pilot aspirant, joined his family business in 2011. He pursued management studies from NMIMS institute, Mumbai which enabled him to navigate his way through the nuances of the logistics businesses and project implementation under the guidance of his father, Lalit C Jobanputra, Founder Director, who established JW Group in 1982 and has virtually revolutionized the Indian Logistics Sector.

Doing things differently can lead to something exceptional, and the company has expanded and diversified into the Cold warehousing business with the total capital outlay of Rs 200 crore. Raaj Jobanputra worked closely with workers at all levels to comprehend and connect. He was elevated to the Board of Directors in 2014.

Raaj plays a crucial role in carrying the business legacy of the JW group of companies in a short span of 4 years with his strong business insights and knowledge in advanced technology. He has brought a niche for JWL Cold Store Pvt. Ltd. in cold chain warehousing and distribution. Their customized logistics services across India resulted in cost and time savings that witnessed multiple growth.

The indigenous facility on their home ground at Panvel, near Mumbai has evolved to develop 2 new hubs which is spread across

17 acres. The facility is equipped with endto-end temperature-controlled warehousing along with distribution services through reefer vehicles for domestic cargo and export & import movement with container-tracking system. This ensures smooth operation catering to the growing needs of JNPT area with six-sigma services.

The JWL pharma hub with its ultra-modern facilities and design has brought to India's pharmaceutical industry that capacitates 7,300 pallets. JWL's Food Hub serves the perishable food industry with an augmented capacity for 14,500 pallets. The food hub-II claims to provide world class Cold-chain solutions.

With constant system upgrade and by adopting to various cost-effective and innovative methods, the company has invested in a robust ERP system which is further integrated to the in-house mobile application.

Temperature controlled storage facility adheres to the requirements of food & agriculture industry by following Food Grade requirements, contributing towards combating 40% of India's agricultural food loss.

Raaj Jobanputra has been rightly acclaimed as the Next-Gen business leader and has bagged the Danfoss ICE Award 2016 for the GenEx category.

DANFOSS ICE AWARD

GENEX 2016



"There is no substitute to Hard-Work and **Performance with** Purpose"



BHAVANA VISHWANATH

DIRECTOR REPRESENTATIVE, TOLSMA TECHNIEK EMMELOORD BV

A strong believer in gender equality, Bhavana Vishwanath completed her Bachelor of Law (LLB) in Pune and Master of Business Administration in Kolhapur, Maharashtra. She proved to be consistently good in her academic achievements and also showed interest in agriculture & infrastructure and moved into engineering.

After gaining initial experience in agricultural product procurement, marketing and infrastructure in states like Himachal Pradesh. Uttarakhand, Uttar Pradesh, Andhra Pradesh, Gujarat and Maharashtra, she shifted her focus to supporting various agriculture & food processing companies in India and overseas.

Bhavana belongs to an illustrious family of Pre-Independence society/political/ farmers. Her deep-rooted upbringing in native Andhra Pradesh, staying closer to Agri-Food/ Infrastructure sector, tempered her with an understanding of the grassroots, enhanced with scientific and a progressive outlook.

Her unique thought process gave way to a free market. She started interacting with farmers from various states on behalf of various organizations. Later, these interactions shifted furthermore towards farmers with many a farm labor and the industry at large getting benefitted.

She procured fruits and vegetables from the farmers through agents and supplied them to various stockists/cold store owners and traders all over India, working with various organizations.

In 2010 she officially joined the Tolsma Techniek Emmeloord BV, Delhi as their Director Representative in Indian Sub-Continent and continues until this day. They specialize in intelligent storage technology and the company is renowned for automating and optimizing the processing of agricultural products.

The combination of technology and storage advice results in the highest possible storage efficiency for customers. Their strength lies in the company's very broad expertise and experience in storing and processing agricultural products. This is reflected in customer-specific installations and turnkey projects for storing, processing and packaging.

Tolsma Techniek Emmeloord BV caters for the comprehensive pathway of receipt, transport, storage, bunker storage, cleaning, sorting and packaging, combining separate components into intelligent total solutions. These total concepts stand out by virtue of their innovative character and Bhavana's rich experience over the years adds glory to it.

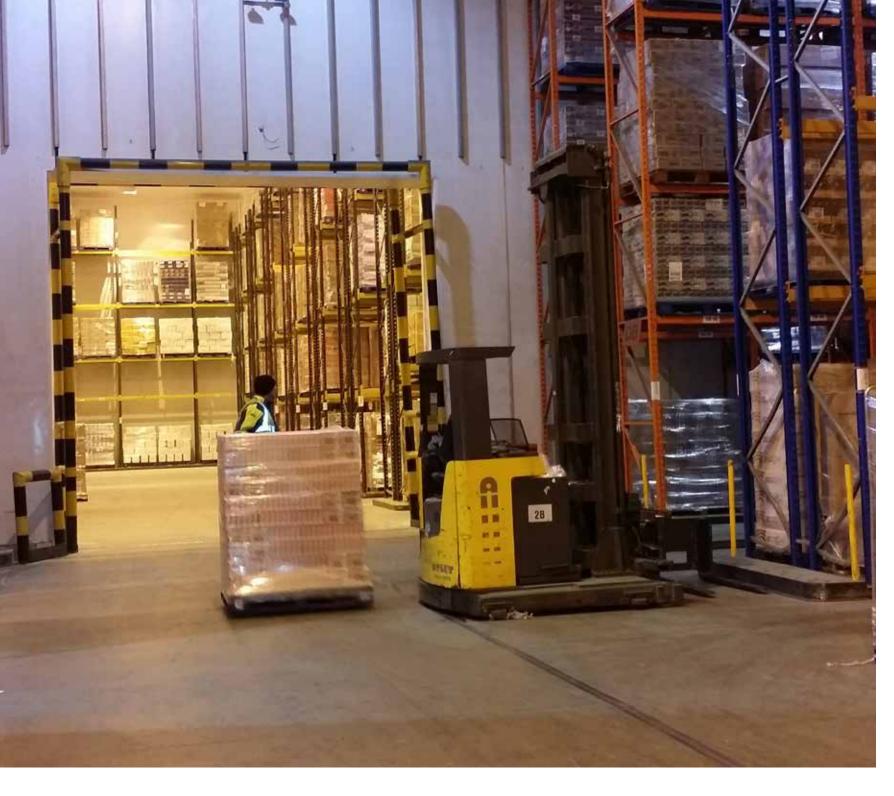
Bhavana Vishwanath was felicitated with the Danfoss ICE 'Women Achiever Award 2016', for her outstanding contributions to Indian agriculture, especially her efforts in sourcing the latest technologies from Europe and implementing it in native farmers' fields which has resulted in increased productivity and income for them.

DANFOSS ICE AWARD

WOMEN ACHIEVER 2016



"The key to success lies in the adaptability of the technology wherever it is being used, rather than where it is manufactured."





ROSHAN FROZEN & COLD STORAGE

Roshan Frozen & Cold Storage is a Cold-chain conglomerate of Sabharwal Food Industries (P) Ltd. It is a certified food company, operating three facilities in Haryana and Delhi-NCR. The company has strong global relationships with some of the most respected brands, in retail, processed and frozen food markets.

It also has a first-of-its-kind, Model Green Cold Storages, designed as per European benchmarks for aesthetics, design, technology, energy, and space utilization.

The cold storage center is in compliant with the FSSAI Food Safety norms and is equipped with the latest software and equipment for monitoring room temperature and delivery tracking. It also has 7 high mobile racking installations, a fully automatic shuttle retrieval system and 3 Blast Freezing Chambers with a capacity of 45 degree Celsius.

Anil K Sabharwal, Director, Roshan Frozen & Cold Storage has taken several initiatives to reduce the existing gap between demand and supply.

He has also taken the initiative to install multi-commodity cold storages with value-

added superior facilities, that are closer to consumption centers, thus bridging the gap between demand and supply; and reducing losses by cutting food inflation and lowering export volume.

The entire gamut of cold storage services including blast freezing, racking and palletized storage, ripening and antiripening, transportation, material handling, and swipe-card entry to minimize human intervention, makes the unconventional facility a one-stop-distribution-hub.

The cost-effective and energy efficient facility also capacitates 5000MT along with a 300+ workforce.

Developing sustainable farm-to-consumersolutions-strategy, is the company's longterm goal and the path towards that, has already begun.

The organization prides itself in providing a safe and secure working condition for their employees, by monitoring the refrigerant emissions from time to time, ensuring a 100% environment- adaptability, zerowaste facility and by providing best in class controls, earning it the Best Maintained Facility Award for the year 2016.

DANFOSS ICE AWARD

BEST MAINTAINED FACILITY 2016

"Diligence and genuine hard work in what you do, is what differentiates you from others."





ELLE FARMS

Elle Farms, is the conceptual creation of Seema Gulati, a reputed producer of mushrooms, fresh fruits, exotic vegetables, ornamental plants, saplings and seeds, flowers, oils, pulses, vinegar & pickles, honey, pollen and its by-products. The brand is also engaged with refrigerated transportation, post-harvesting and training & consultancy services for setting up end-to-end cold-chain and logistics facilities, commercial mushroom farms and green houses.

Seema's journey originated from a small village in Karnal District, where she established Elle Farms in 2007.The company teams up with scientists, farmers and stockists to consciously curate and produce natural food products globally.

Elle Florist was founded by Elle Farms which soon expanded into a seedling and plants nursery with green house precision and protected cultivation. Elle Mushrooms encapsulates the solar-powered pump and power backup with batteries and UPS installed for general electric needs.

Seema undertook several national & international trainings, attended technology workshops and conclaves. She was also trained in polyhouse management and mushroom production, practiced hi-tech farming in the region where wide range

of mushrooms are cultivated, followed stringent quality measures and used worldclass natural raw materials. The team's overall passion is reflected in each and every stage of the production process, from cultivation to transportation in local markets

Envisioning mushrooms in the grocery basket of every local kitchen, the brand today has raised the bar in terms of taste and quality, striving to increase awareness about its globally accepted nutritional health benefits.

As a conscientious farmer, Seema promotes urban green cover by planting trees and encouraging solid waste management.

Seema believes: "If you win the morning, you win the day". Planning the first 60-90 minutes of the day is crucial. She is a progressive, proud, autonomous woman farmer and a mentor to rural women. An avid reader, her favorite place to be on any given day is Elle Farms.

Seema Gulati, Elle Farms was felicitated with the Danfoss ICE 'Woman Achievers Award in 2017', for the range of produce handled; starting as a florist and reaching the stage of managing a successful reefer storage and transport through cultivation and marketing managements.

DANFOSS ICE AWARD

DANFOSS ICE WOMAN **ACHIEVERS 2017**



"Passion brings commitment and determination, when guided by desire it has the potential to create a better world."



MAHA COLD STORAGE ASSOCIATION

DANFOSS ICE AWARD

PROGRESSIVE ASSOCIATION 2016



"The way to a customer's heart is much more than a loyalty program, their perception is our reality."

Maha Cold Storage Association (MCSA) was established in 2015 with the main purpose of addressing the issues faced by various cold storages and in providing a positive platform and to allow the exchange of ideas between cold storage owners that leads to the enhancement of quality standards and functioning of Cold Storage sector in the State of Maharashtra. Formation of MCSA enabled superior customer service thus setting up excellent standards. MCSA is also an Honorary Member of Federation of Cold Storage Association of India.

During its inception, the Association saw a conglomeration of 28 registered members. It also successfully petitioned Maharashtra **Electricity Regulatory Commission** (MERC) for removal of Commercial Tariff and application of Agri Tariff (other) for cold storages.

Though the Association was still at a nascent stage in December 2016, it organized a series of Technical Seminars with a tremendous success rate.

Maha Cold Storage Association was awarded with the 'Progressive Association Award in 2016', for providing numerous support and services to its members.



India's cold-chain reposes various challenges, but I see these as opportunities and find it easy to remain positive about a grand future for India's cold-chain - it has a very compelling future, and my only hope is that it happens faster. The Danfoss ICE Awards is a wonderful platform that has always encouraged expertise, innovation and new talent, especially the youth, to come forward and partake in the growth phenomena of India's cold-chain ??

PAWANEXH KOHLI CEO & CHIEF ADVISOR NCCD







ECOZEN SOLUTIONS

Ecozen solutions was incorporated in the year 2009 by Prateek Singhal, Vivek Pandey and Devendra Gupta.

As young graduates, the trio involved themselves in several energy conservation projects and had the opportunities to interact with farmers, where they identified the losses incurred due to poor storage facilities, in result developing the 'Ecofrost'.

Prateek is indeed the driving force for the company and has directed the company's sales to 100 crores, leading from the forefront.

Ecozen enables Farm-To-Fork value chain for perishables with three core offerings: Ecotron: IoT enabled smart controllers for irrigation pumps (12,000+ units); Ecofrost: IoT enabled mobile solarpowered cold rooms, using thermal energy storage, to empower onfarm cooling (100+ units); and, Eco connect: a real-time platform enabling users of both products to connect with organized buyers and ensure reliable operations, working across the production, management, and marketing

of perishable agro-commodities. It uniquely encapsulates pre-cooling and transportation using refrigerated truck from source to destination, thus maintaining high quality till the last stage.

The Ecozen team has curated specific cold rooms that are portable with thermal backup to work efficiently in power-supply challenged areas. This, along with Ecozen's forward-linkage portal redefines the way perishables are handled in the country. Mandi Model is a One-of-its-kind unique concept, wherein a community/group of farmers can keep their produce in Ecofrost which is installed at the Mandiat nominal charges.

Development of Web/mobile application for marketplace would enable sellers meeting the buyers-organized retailers, e-commerce players, wholesalers, traders, etc. to buy/sell perishables.

Inventing and providing innovative solar based solutions for preserving the produce quality and linking it with latest IT applications has bagged Ecozen the 'GenEx Award' in the year 2017.

DANFOSS ICE AWARD

GENEX 2017



"We strive to create and deploy efficient and reliable products for our customers."



NEW LEAF DYNAMICS

Alumni of IIT, Kanpur and Tennessee Technological University, USA and with 35 years of rich experience in mechanical, electronics and software design engineering and management, Anurag Aggarwal is the Director and Co-Founder at New Leaf Dynamic Technologies (P) Ltd and Virtual Engineering Services (P) Ltd (VEST).

New Leaf provides their design services globally in the domain of Fluid Power Systems and ultimately graduated to creating software products as well for the industry. His products are now being used by world leaders to design their equipment.

Apart from donning the CEO's hat at New Leaf, Anurag is a member of the "Committee on Application of Non-conventional Energy Sources in Cold-chain Infrastructure, Govt. of India".

Anurag's vision to reduce food wastage and provide energy access in remote areas in India led him to exploring new horizons in Cold Chain, further resulting in New Leaf streamlining their R&D through a tie-up with IIT, Patna.

IIT Patna and New Leaf have now setup an engineering lab at IIT premises for further research and development on Green CHILL refrigeration system. The lab has been funded by the Department of Science and Technology, Government of India.

Within the pilot year (2016), a manufacturing line was successfully established to

indigenously design, develop and install 'GreenCHILL', an off-grid, compressor-free refrigeration system, benefitting millions of Indian farmers. This system will allow safe storage of agricultural produce at farm level before transportation to market.

One GreenCHILL unit can cool 1,500 liters of milk or 30 MT of perishables eliminating the need for grid power or diesel generator. Being powered by low-cost and plentiful farm-waste such as cow-dung, biomass pellets/briquettes, wood, rice husk, biogas etc. ensures 70% lower running costs.

This multi-purpose storage unit with a temperature range of -50 C to +250C can be used as a cold storage, pre-cooler or ripening chamber. Its cooling technology has zero global warming potential and complies with UNFCCCs Kyoto Protocol 2020.

GreenCHILL stores the produce fresh till the time it can be transported to larger frozen food facilities located miles away. In Gujarat, these units are sold directly to individual farmers and they are now able to retain their produce freshness, reduce food loss and eliminate middlemen, thus realizing better price yields and increase in livelihood.

Successful design and installation of Green CHILL - an off-grid, compressor-free, renewable energy-based refrigeration system has bestowed New Leaf Dynamic, 'GenEx' Award 2017'.



DANFOSS ICE AWARD

GENEX 2017



"Do not expect the world or anybody else to present to you the change you wish to see. Make it yourself."



TAMIL NADU BANANA GROWERS FEDERATION

DANFOSS ICE AWARD

BEST PROGRESSIVE ASSOCIATION 2017



"If we believe that the long-term benefits our worth is, protecting the culture and sticking to core value is a long term value." Tamil Nadu Banana Growers Federation formed in 2005 in Mohanur, Tamil Nadu, with the help of senior scientists at Tamil Nadu Agriculture University (TNAU) and National Research Centre for Banana (NRCB) is a State registered apex organization that unites the grower associations of major banana growing districts in Tamil Nadu. It was started with the primary objective of effectively working for the holistic development of the production and marketing of their produce. They also help in disseminating the technological development in the field of horticulture and agriculture.

The federation encompasses 16 banana growing districts in the state with most of the associations in the banana cluster being its members.

The Federation is supported and guided by the expert faculties from the NRCB, Tiruchirappalli and TNAU, Coimbatore. The benefitted members of the Federation have taken up commercial ventures in individual capacity towards value addition and have been successful partners in transformation of banana business in TN.

The Banana Festivals are organized in Chennai and Coimbatore by the Confederation of Indian Industries to facilitate sales. It is attended by over 50 companies that includes cold room and ripening companies, institutions, logistics companies and exporters.

Dedicated endeavors of stalwarts like A.P. KARUPPAIAH, President, Ganapathy Ajeethan, General Secretary, and other governing body are behind the tremendous success of Tamil Nadu Banana Growers Federation.

Awareness to develop value chain for Tamil Nadu Banana vis-à-vis increasing farmer's share in the consumer price is a very good example of the catalytic role played by Tamil Nadu Banana Growers Federation resulting in awarding them as the 'Best Progressive Association in 2017.

HATSUN AGRO PRODUCT LTD



Hatsun Agro Product Ltd. (HAP) is a leading private sector dairy player in India. HAP manufactures and markets products that cater for both cooking and consumption, like milk, curd, ice creams, dairy whitener, skimmed milk powder, ghee, paneer and lots more.

RG Chandramogan, Chairman & MD, started the ice cream business in early 1970s expanding gradually into milk and milk-related products. Arun Ice-cream, leading brand in South India; Arokya Milk, country's largest private sector milk brand; Hatsun Dairy Products, a rapidly growing brand; Ibaco, premium chain of ice cream outlets; and, Santosa, a fast-growing cattle-feed brand are testimonies of the company's growth.

HAP procures fresh milk directly from the farmers. To facilitate this process, they have around 10000 plus Hatsun Milk Banks' (HMBs) covering over 13000 villages in the South..

Everyday 3.2 lakh plus farmers pour their milk at these HMBs. A new and advanced process of procuring and instant chilling of milk (within 2 hours) at the village level using Active Bulk Cooler (ABC) has been introduced in 400+ locations. This improves quality and retains freshness, avoiding milk spoilage & spillage, reducing can usage and improving Methylene Blue Dye Reduction Testing (MBDRT) hours (a quick method to assess the microbiological quality of raw and pasteurized milk).

The procured milk undergoes weight checks and at least two types of quality-testing
- Gerber Method & Eko Milk Analyzers,

pasteurization, homogenization and bacteria clarification by professionals.

They have technologically advanced systems in place along with time-tested business processes across their 16 state of the art processing and packaging units in TN and Karnataka - Modern laboratories, closely monitored food-safety management systems, timely delivery, communication of relevant food safety issues throughout the chain and periodic upgrades for milk producers, to spell a few.

An efficient and large cold-chain network ensures daily reach of fresh milk to the customers, thanks to their strong logistics chain connecting 14 strategically located cold-room distribution points,1400 distribution centres, 650 milk and curd dealers and 2305+Arun Ice-creams parlours. HAP's puff-insulated trucks cover 200000 km daily, carrying milk across TN, Karnataka, Goa and parts of AP. HAP enjoys a healthy global presence in 38 countries, primarily in USA, Middle East and South Asia. Arun Ice-cream area favorite as far as Seychelles and Brunei Unexplored markets always being on the cards, AP, Telangana and Maharashtra are next on the radar.

HAP's state of the art facilities, efficient and large cold chain network and timely communication of relevant food safety issues throughout the chain, ensures daily fresh, tasty, healthy and safe product deliveries to their customers. Danfoss ICE Awards recognized Hatsun with 'The Best Processing Unit Award' in 2017.

DANFOSS ICE AWARD

THE BEST PROCESSING UNIT 2017

"Our foundation framework is built on intensive quality controls and extensive customer satisfaction."





SMV EXPORTS

SMV Exports (2015), under the leadership of VG Sivamani has established itself as the leading merchant exporter and supplier of premium quality varied agricultural products. The organization is based out of Theni (Tamil Nadu) and their export grade Cavendish Banana is a much sought-after produce in the international domain.

SMV is also renowned for supplying high-grade qualities of domestic bananas all over Tamil Nadu and to several parts of Kerala.

Apart from being a banana grower, packer and exporter, SMV also encapsulates a well-developed logistic network in place to maintain high quality produce & ensure food safety. SMV is also involved in offering an enormous quality range of Fresh Green Bananas too. Around 325 containers of Cavendish bananas are exported, providing total satisfaction to customers across the globe.

Dr. VG Sivamani, a veteran in the industry with over 50 years of experience and specialization in marketing, envisages serving various food industries worldwide

with focus on total customer satisfaction and meeting buyers' requirements with customized packaging.

SMV is a highly equipped facility, with a state-of-art manufacturing unit and production facility. Quality analysts conduct stringent quality control measures on various parameters at every stage of production to ensure durability.

The Company has a core strength of more than 220staff and site-working team possessing sound knowledge and experience of grading and packing processes.

The success story of SMV Exports is quite thought-provoking and the journey is worth knowing. From sourcing ripened bananas from traders and using the best leased facilities for ripening them, to procuring directly from farmers and ripening in-house, to cultivation of banana on leased land and implementing advanced cultivation technology; then, progressing to supplying export grade Cavendish banana to exporters; SMV Exports has grown leaps and bounds, earning them the Best Progressive Farmer Award in the year 2017.

DANFOSS ICE AWARD

BEST PROGRESSIVE FARMER 2017

"Dream big. **Work hard. Stay** focussed."



FRICK INDIA LIMITED

DANFOSS ICE AWARD

BEST MANUFACTURER 2017

"A successful leader is the one. whose actions inspire, motivate and encourage the people around them."

Frick India Limited (1962), Faridabad (Haryana), was incorporated as a public limited company in collaboration with Frick Company, USA. It is one of the world's most experienced and largest manufacturers of industrial refrigeration & air-conditioning equipment.

Frick India, comes with 50+ years of experience and is the largest equipment manufacturer and premium turnkey solution provider for industrial refrigeration in India.

Frick's products cater to Food & Agriculture processing, Beverages & Brewery, Dairy & Ice cream, Meat, Poultry & Seafood, and Logistics& Warehousing. Frick's product range includes compressors, condensers, Frigid coils, packaged chillers, Ice Makers, Freezers and electrical control panels.

Additionally, modern technology to design, manufacture, package, install & service tailormade fully automated refrigeration solutions for Ice Production & Storage of Seafood, Meat & Poultry - quick freezing, freezing and storage at low temperature frozen chambers; and oxy-chlorination, brine chilling, acid cooling, Compressed Air cooling, SO2/CO2/chlorine liquefaction, heat recovery system, process industry, ammonia Liquefaction for chemical & pressure valve for Chemical & Pharmaceutical industry is also available.

Frick India has an extensive experience in cold/chilled storage, blast freezer and pressure vessels. Ammonia

pumps are used for liquid refrigerant recirculation systems with one or two main accumulators. Company offers various highspeed reciprocating, twin screw and rotary compressor units in 7 high-efficiency models, capacitating 225 CFM-2000 CFM.

They produce customized refrigeration plants for pre-cooling (98% RH), Controlled/ Modified Atmosphere/high-humidity cold storages/ warehouses, cold stores for fruits & vegetables, ripening rooms, IQF, frozen stores, quick chilling rooms, chilling units, distribution rooms, water chillers, pre-chillers, chilled water plants, ice cream/butter/cheese storage, ice cream freezing, hardening tunnel, glycol& calcium chloride brine chilling, hops store, Beer/Malt/Wort/Yeast cooling, and rotator cooling system.

With their competence further extending to Marine Air-Conditioning & Refrigeration. Frick India has designed, supplied & commissioned air-conditioning & ventilation plants for different ships and reputed shipyards, and undertaken turnkey projects for 6 refrigeration plants for INS VIRAAT and western Naval Command.

Recognizing the fact that Frick India has been showcasing consistent success in providing Total Energy Management Systems (TEMS) for almost all industrial refrigeration applications with high quality and innovation, 'Danfoss ICE Best Manufacturer 2017 Award' was bestowed on them.

ADANI AGRIFRESH LTD

Adani Agrifresh Ltd (AAFL), part of the Adani Group, is industry's game changer and has redefined the way apples are handled in India. In a country where there is enormous wastage of fruit and vegetables owing to lack of coldchain facilities, Adani Agrifresh has instituted the largest integrated apple (F&V) supply-chain initiative with ultra-modern infrastructure for storage, handling and transportation to provide fresh farm products to its consumers and improve the livelihood of apple farmers across the Himalayan states.

In Himachal Pradesh, AAFL has set up 3 Controlled Atmosphere (CA) facilities to store 23,000 MT of apples. These are located at Rampur, Rohru and Sainj in Shimla district with an initially capacity of 6000T each. The storage capacity at Rohru has subsequently expanded to10400+ MT. Though located in remote areas, they are still close to the farmgate. Hence the growers have an easy access, thereby curb significant postharvest losses.

The facilities at Adani Agrifresh come with fully automated sorting, latest high-end 4-lane automatic equipment, integrated software, Infrared and color CCD cameras for size-grading &color-sorting and special cups to aid the process. The facilities also has apple-washing in bin dumper with chlorine treatment before packing, along with refrigerated vans to maintain the cold chain from CA store to market. All machine parts

that comes into contact with the fruit are made with food-grade material.

Agrifresh purchases apples from a network of 15000+apple growers in Himachal Pradesh comprising of 90+% small and marginal farmers from Shimla, Kinnaur and Kullu Vallevs spread over 700 villages. These farmers no longer need to travel to Delhi and Chandigarh to be dependent on commission agents who sell their produce at a highly opaque system. Adani Agrifresh has opened 5 shops under their brand 'FARM-PIK' as Farmer Service Centers (FSC). FSCs provide agri-inputs, soil-testing facility and extension services to farmers. These services include support from a pool of renowned scientists, experts and a trained field team who provide advisory services, education to growers through intensive contact programmes, group meetings, orchard visits and one-to-one contact regarding the quality crop-care

Produce is marketed under 'FARM-PIK' across India through an elaborate distribution network. Consumers now get quality Indian apples throughout the year.

Agrifresh has created a monumental change in the dynamics of apple supply chain, besides saving foreign exchange for the nation, making it a worthy winner of the Danfoss ICE Best Maintained Facility Award 2017.

DANFOSS ICE AWARD

BEST MAINTAINED FACILITY 2017

"Producing and delivering high quality produce is what takes to be successful in the agri-business"



CLIMATE CHANGERS TECHNOLOGY SOLUTIONS PVT. LTD.

DANFOSS ICE AWARD

DANFOSS ICE BEST FACILITY 2017



"Our strength is commitment, quality & performance-oriented processes, in all that we do."

Climate Changers Technology Solutions
Private Limited are a Bangalore based
HVAC & Refrigeration integrating/consulting
company formed in May 2007 by few
enterprising engineers.

Formerly known as Climate Changers, Mr. Dharmendra S, Managing Director leads the organization strengthened by his experience of nearly 1.5 decades in Design, Planning, Project Management, Service and Projects, both in HVAC & Refrigeration.

Now they have spread across India in all major cities to support any Project & Service related activities.

Climate Changers offer globally competitive products from worldwide reputed manufacturers and executes projects involving Cold rooms, deep freezers, blast freezers quick chill rooms, Hypermarkets, Cash& Carry Stores, Convenient Stores, Mega Food Parks, Hospitality projects, Industrial Refrigeration, Food Processing, Pharma, Hospitality, Process Cooling, etc. to the utmost satisfaction of customers.

They hold rich experience in Refrigeration Industry delivering prestigious projects with quality, technology, time management, customized / client specific solutions and more as their USP. They have served many an esteemed Refrigeration companies, especially in the construction industry.

Energy, Economics and Engineering are the strategic tools with which the company drives its' projects. The company has showcased immense expertise in design, plan & executing of large projects - Cash & Carry Stores, Hypermarkets, Hospitality projects, Industrial Applications, Food processing, etc.

They are well equipped with necessary infrastructure and hi-tech instruments to capture project specific requirements including after market requirements.

Additionally, they also have a separate department to take care of Service which is fully fortified with hi-tech tools, experienced technicians and more to meet all Maintenance/Warranty issues on time.

Another experienced team captures all their procurement requirements, as most of their fabrication is done at their associated in-house factory to have complete control on the timelines of their projects.

Climate Changers were awarded
Danfoss ICE Best Facility Award 2017 for
their focus on quality and innovation
and novel initiatives to offer integrated
solutions in HVAC & Refrigeration sector,
with excellence in all areas from project
planning to execution to after service.

ALL INDIA COLD STORAGE ASSOCIATION

The All India Cold Storage Association (ICSA), Delhi was founded by a group of enterprising cold storage owners to provide a common platform for addressing policy issues and to establish common trade rules for fellow cold storage owners.

For over six decades now, ICSA has provided all possible guidance to the members for running their cold storages in the most efficient manner. Regular meetings are convened to update the members with the latest developments in the policy changes, laws affecting the industry, new technology adoption and other related fields. ICSA also organises such seminars for the benefit of the stakeholders of the industry.

The knowledge acquired from various premier institutes regarding improvement

in agricultural processes & products and cost-efficient preservation of the agricultural produce is shared with the farmers and the store owners and are encouraged to put the learning in action.

The ICSA works towards creating awareness among users about the benefits of using cold storage services; stabilising the market supply of agriculture produce to consumers and saving farmers from sharp downward movements in prices during harvesting season.

ICSA also provides services to its member cold stores in the country's biggest Fruits& Vegetables terminal market, with varying nature of new commodities and at competitive prices that makes it worthy of the Progressive Association Award 2017.

DANFOSS ICE AWARD

PROGRESSIVE ASSOCIATION 2017

"By learning new concepts, we are changing our own personality and opening up a world of endless opportunities."





DRK RAMASAMY

VICE CHANCELLOR, TAMIL NADU AGRICULTURAL UNIVERSITY

Dr. K Ramasamy, Vice Chancellor, Tamil Nadu Agricultural University (TNAU) completed his Post-Doctoral Fellowship in Electron Microscopy and Gene Cloning from Belgium & USA, and has a specialization in Fermentation Technology and Industrial Microbiology.

Earlier, he served as Vice Chancellor at Karpagam University; as a Dean at the School of Biosciences and Bioengineering, SRM University and is currently serving as a member at the Tamil Nadu State Planning Commission (Agriculture and Irrigation).

With a total experience of over 36 years in TNAU, he has created new academic programs in Bioenergy, Environmental Science, Environmental Biotechnology, Microbial Technology and Biochemical Technology in Universities across Tamil Nadu, Kerala, Goa and Maharashtra.

He is also a recognized Environmental Biologist, offering solutions on waste-water recycling and disposal. He has worked with industries like M/s Southern Petrochemical Industries Corporation (SPIC), M/s Tamil Nadu Newsprint and Papers Limited (TNPL), M/s Seshasayee Paper and Boards Limited, M/s South India Viscose (SIV), M/s Sakthi Sugars Limited and M/s Bannari Amman Sugars Limited to solve problems related to the environment.

Dr. K Ramasamy has more than 151 research publications including 8 books and 23 bulletins to his credit. His credentials include, 21 awards, 2 medals & 6 fellowships of which 2 are International and 4 are National.

Dr. K Ramasamy was awarded the Best Vice-Chancellor of State Agricultural Universities (2014) by All India Agricultural Student' Association and recognized as the Fellow of Association of Microbiologists of India in 2014.

He was the source of inspiration for the establishment of six Centers of Excellence. three new Research Stations and four AICRP Centers across TNAU during his first term as the Vice-Chancellor.

He played an active role in the establishment of a State-funded Insect Museum, a first-of-its-kind in the country at the Department of Agricultural Entomology, TNAU, Coimbatore.

Dr K Ramasamy is a complete team player, a solution-seeker and a man-ofaction, who has developed / customized several need -based solutions, making him a deserving winner of 'Danfoss ICE Dynamic Leadership Award 2017'.

DANFOSS ICE AWARD

DANFOSS ICE DYNAMIC LEADERSHIP 2017



"Success follows those, who commit to succeed."

facilitating Danfoss ICE awards, though the years. The award process is professionally handled and passionately executed by the organizing committee, making our entire journey a most enjoyable one. Through the award process, I have had the opportunity to meet many stalwarts & young achievers from the cold chain field, whom I am privileged to count as friends today. Danfoss ICE Awards has also been a way for me to connect to a wider community and spread awareness on what's the latest in Cold Chain. I congratulate all the award winners who are shining stars in this sunrise sector.

NAGAHARI KRISHNA DIRECTOR DANFOSS, INDIA REGION





SANNA MASOOD

FOUNDER & CEO OF SEED SOLUTIONS (SEEDS)

DANFOSS ICE AWARD

WOMEN ACHIEVER'S 2018



"A group of determined women can achieve anything."

Sanna Masood, Founder & CEO of SEED Solutions (SEEDs), a consulting firm, endeavors to stimulate sustainable economic, social and ecological development in the State of J&K.

Sanna's numerous initiatives through SEEDs, extend totaling sustainable initiatives in Crafts, Agriculture and Allied Sectors; providing Youth Engagement and Development and Women Empowerment Initiatives for the State.

As the Director &CEO of the Post-Harvest Vertical of Farm2U Group, Sanna provides pre- and post-harvest solutions to more than 10,000 apple farmers, that has increased their production return through quality orchard plantation, management support, innovative value-chain management, technological interventions and access to markets and financial institutions.

She was also instrumental in creating the first woman farmer's cluster 'Thimram', that cultivates high-altitude medicinal plants,

in the Shangus Valley, Anantnag that has benefited more than 70 women.

'Vasiknag', a craft cluster provides sustainable livelihoods through the creation of Self-help Groups, that benefits 90+ households across 5 villages; while an embroidery cluster, 'Hunarmand', in association with INTACH, J &K Chapter and AIACA, caters to 114+ women, through microcredit, design intervention, skill up gradation and capacity building.

'JK Sports for All', a grass-root sports initiative for positive engagement of the youth, had an outreach of more than 50,000 youth from 3,000 village clubs covering 10 districts. 'Baaman' provided more than 2,000floodaffected students access to transitional educational spaces, study material and tuition support, in association with Heart Head Healing and J&K Chapter.

An experiential program, 'Skilling & Knowhow Initiative for Lifelong Leadership Development', has a unique value-based curriculum to create global mindsets and cultivate values, life skills and leadership amongst students through involvement of teachers.

A flood relief and rehabilitation program, 'Zainab', in association with Asian Heritage Foundation reached out to over 5,000 households across 7 districts with essential supplies and medical care and provided safe space to more than 150 craftswomen.

'Women Orchardists' provides expertise, and technical support for setting up State High Density Orchards through innovative credit models in association with Root2Fruit. The first batch of three progressive women orchardists encouraged many more to join the revolution.

Sanna Masood's contributions to the society for the socio-economic upliftment of masses through various initiatives helped her bag her the Women Achiever's Award 2018.







ANANDA FOODS

Ananda Foods (1994) a.k.a. Ananda Aqua Exports, a unit of Ananda Group (1939), is the First Integrated Shrimp, Prawn and Fisheries unit in India which is well renowned for having 2 Shrimp, 2 Prawn & 1 Multi Species Fish Hatchery (for Red Tilapia, Pangasius & Indian Major Carps). They also have 100 hectares of grow-out for Shrimp, 100 hectares for Fish3 Modern Processing Plants with EU & USFDA approved facilities and a Floating & Sinking Fish Feed & Shrimp Feed Manufacturing facility with distribution network across the country.

UKV Raju, the visionary Chairman of Ananda group, has bagged the 'Pioneer Award' presented at an International Conference in India for establishing the first commercial hatchery in India way back in 1993and running it most successfully till date. He is the only member from fisheries sector nominated by AP Government for the taskforce on VISION-2020.

Recognized as a leader in the Indian seafood processing industry, their export unit is established in Bhimavaram, AP -the capital/ hub for farm-raised aquaculture. Their affiliate Company initiated shrimp and prawn exports to Japan in 1991, later expanding to EU and USA markets, all duly certified. Their brand is well noted in Japanese markets for superior quality and trough traceability.

Their processing facilities are certified with BRC(British Retail Consortium) and ISO 22000: 5000 standards. They started off with HACCP

(Hazard Analysis & Critical Control Points) but soon upgraded to E.U norms to deliver the best quality standards and now, it is also certified by the USFDA. One of the processing plants namely Ananda Aqua Exports is BRC Level 6 certified.

An in-house quality-control lab is installed with Randox, UK, which has antibiotic testing machinery for due analysis during preprocessing & processing. R&D teams continuously monitor for microorganisms and safety standards, to develop contaminationfree probiotics substituting it for antibiotics and for maintaining the water quality during the complete culture period.

Their Bhimavaram processing plant, equipped with advanced machinery helps offer an exceptional array of fresh, frozen and breaded seafood products in the market, with varied varieties of shrimps & prawns, both cultured and sea-caught.

The Family-managed Group has not only strengthened their existing businesses but also developed new business and is transitioning into a professional corporate entity.

Their complete range of facilities for preprocessing, processing and freezing, international standards compliant quality control labs and adherence to food safety standards along with Traceability facility has attracted the 'Energy Efficient Facility Award 2018' for Ananda foods.

DANFOSS ICE AWARD

ENERGY EFFICIENT FACILITY 2018

"Changing **Horizons, Creating Opportunities**"





EGGWAY INTERNATIONAL ASIA PVT LTD

Eggway International Asia Pvt. Ltd. (2009), a 100% Export-Oriented Unit, is located in Shabad, RR District, Telangana - the largest egg-producing region in India.

Eggway is renowned for the manufacture of dried, liquid and frozen egg products for Exports and Domestic markets, backed by experts having 6+ decades of experience in egg-processing technology.

Practicing integrated approach, procurement of raw material is done from select and approved farms to maintain strict quality control standards. Farm supervisors monitor the hygiene of poultry farms. Veterinarians ensure that chicken feed is totally residue-free from pesticides and antibiotics. Quality Control Manager ensures traceability at every Coldchain link, from chicken-feed to final product. The entire processing area is airconditioned. Positive pressure is maintained in packing & pasteurized product storage area. Eggs are stored between 15-200C to have better separation and better recovery. Shell eggs are labelled to ensure First-In, First-Out. Pasteurized, non-pasteurized liquids are stored(<4oC) in double-jacketed storage tanks.

Since eggs and egg liquids are vulnerable for spoilage when exposed to higher temperatures, the role of Cold-chain is critical. Eggway has installed 700TR capacity of various refrigeration facilities including chillers for producing glycol water at sub-zero temperatures. Some common Cold-chain

processes and temperatures to a point, after which product-specific steps flow, are carried out in a fully automated and controlled microbe-free environment.

Eggs are received and randomly tested in a fully-equipped quality control laboratory before being accepted for processing. They are then washed before proceeding to the egg-breaking machine (less than 7-dayold). Liquid is filtered, chilled, pasteurized, stored in insulated jacketed tanks (<40C/48 hrs.). Thereafter, eggs are spray dried, sieved,packed, egg-powder dispatched in temperature controlled containers (20°C-25°C) - dried egg; blast freezer (<40°C), liquid storage (<18°C), dispatched in reefer containers(<18°C)- frozen egg products; and at <40C) for liquid egg products. Eggway's array of products include egg albumen, yolk powder binding, specially developed for uses in curing, delicatessen, preserves, fish products, bakery products, dressings etc.

Eggway is all geared up to spread to other regions in India, SEA and ME maintaining the highest international standards within the food industry.

Eggway International has demonstrated the use of high-end automated machinery in Egg processing following innovative cold chain process, resulting in high quality multi-temperature zone products - which bagged them 'Danfoss ICE Best Processing Unit Award 2018.'

DANFOSS ICE AWARD

BEST PROCESSING UNIT 2018

"Quality is never an accident; it is always the result of high intention, sincere efforts, intelligent direction and skillful execution, making the wise choices from many alternatives."





SICAL LOGISTICS LTD

SICAL Logistics Ltd was founded in the year 1955, and later was acquired by the Coffee Day Group in 2011. While traditionally known for its stevedoring, customs handling, trucking and steamer agency businesses, SICAL today has made significant investments in logisticsrelated infrastructure and equipment handling facilities, and has expanded in various business segments such as supplychain solutions, mining, port logistics, road & rail transport, container freight station, warehousing, shipping and surface logistics.

SICAL with a total of 800+Cr revenue, is India's leading multi-modal integrated end-toend logistics solutions provider, that delivers tailored and cost-effective solutions.

SICAL Supply Chain Solutions (SCS) carrying 'Legacy of Innovation' has emerged as a single window enabler of logistics and supply-chain solutions. SICAL has strong client presence in other industry verticals accomplishing value-seeking progressive client needs from 'conceptualization to implementation' pan India. Right from Food &Beverage, pharma, healthcare, medical devices, consumer goods, electronics to automotive, hospitality and lifestyle spaces, SICAL has been exploring opportunities in all domains across the value chain.

With expertise to handle all products ranging between +25°C to -18°C, the organization has been delivering fresh produce at all times. The market-trending technology and

latest software enables advanced features like Estimated Time of Delivery (ETD) and automated alerts for Next Multiple Point, enabling better connectivity and on time delivery to its customers.

A wide spectrum of warehousing solutions offers inbound and outbound logistic, storage and inventory management. The well-structured distribution network with updated technology comprises of primary & secondary-level transportation systems encompassing multi-temperature refrigerated vehicles and the footprint stretches to 25+ cities. This enables seamless flow of operations for handling, storage and transfer of consignment from one storage unit to another to reach across a larger distance of industry domains like Fast-Moving Consumer Goods, Pharmaceutical, Agriculture, Retail, and QSR organizations.

The cumulative operations make it possible to maintain and retain the temperature integrity of the products from source of origin to consumption point, a critical factor for ensuring product quality.

The 'Made in India' organization has independent operations countrywide and is renowned for handling more than 25 million tons of bulk and over 0.5 million TEUS of container cargo annually, making it a worthy winner of the Cold-chain Logistics Service Provider Award in 2018.

DANFOSS ICE AWARD

COLD-CHAIN LOGISTICS SERVICE PROVIDER 2018

"Delivering right products at the right time, and with 100% efficiency is an unsaid commitment, made to be fulfilled."



CITIZEN'S WELFARE SOCIETY

The journey for Citizen's Welfare Society (CWS), in Prakasam District, Andhra Pradesh began in 2015, with ITC providing them the bedrock. CWS with ITC's assistance started mobilizing farmers into informal groups adopting Good Agricultural Practices (GAP) from production to post-harvest management in individual farms.

In 2016 the two helped the farmers to create a formal Farmer Producer Organization, 'Citizen Welfare Society' to reap the benefit of economies of scale for purchasing of inputs and selling of produce. Later, ITC helped the farmers in establishing systems and procedures in implementing globally acknowledged certification standard called Fair Trade which now helps them in exporting their produce to US and Europe markets.

Support is provided for deployment of trained agri-extension experts in guiding farmers on crop-production practices, integrated pestmanagement tools & recommendation of green label tackling solutions, introduction of contemporary farm technologies and practices to reduce cost, increase in productivity and quality of mangoes, drip irrigation and mulching technology to save water without decrease in productivity, better canopy management to reduce pests and disease attack, timely pruning for higher productivity, recommendation of balanced nutrition; postharvest care and infrastructure to improve quality and reduce wastage; procurement at the farm gate for helping farmers in reducing their transportation cost; training farmers in formation of legal producer groups and establishment of organization structure.

The Organization has benefited the farmers in numerous ways, A 50+% increase in productivity due to deployment of best agricultural practices &technology, farm gate procurement and faster online payment within one week of purchase of produce, assured market with best price in the form of premium.

Today, with the additional value generated, the farmer group is currently constructing an Integrated Pack House nearer to National Highway in Prakasam. Lauding the Farmer Producer Group's progress, State Government has come forward in providing sanctioned funds from their Horticulture Department Scheme in building the pack house. It is being constructed with the objective of grading, sorting, cleaning and packing their produce collectively, ensuring further quality improvement and reduction of wastage.

Once operational, the pack house is also set to serve other fruits and vegetables farmers in the district. The facility would not only aid the farmer group in generating additional income by handling multiple products but would also facilitate in generating employment opportunities in the area.

CWS's support services to the farmers to enhance their productivity by 50 percent, introduction of good agricultural practices and produce aggregation in the region, followed by online payment bagged them 'Danfoss ICE Progressive Farmer Producer Organization 2018'.

DANFOSS ICE AWARD

PROGRESSIVE FARMER **PRODUCER ORGANIZATION 2018**



VIVEK SAVLA

DIRECTOR, SAVLA FOODS AND COLD STORAGE PVT LTD

Vivek Savla, Director, Savla Foods and Cold Storage Pvt Ltd (1992), Mumbai, is the GenNext scion of India's largest single-location provider of cold-storage services. Over the years, the Company has made pioneering advancements in preservation and has gained considerable experience in material management, and handling of a variety of perishable &temperature sensitive products. It has also been successful in positioning itself as a trendsetter and as a market-leader, providing value-for-money services.

A qualified Chartered Accountant, Vivek's directorial role includes general management, new business development, and managing group international finance &group-strategy formation & implementation.

Savla Foods and Cold Storage, situated in the Agricultural Produce Market Complex, Navi Mumbai, has the first integrated Coldchain facility with modern post-harvest management facilities.

Vivek played a key role in doubling the capacity (15,000MT-30,000MT) by introducing advanced technology like Controlled Atmosphere, specialized high and low humidity chambers catering to diverse needs and mechanized handling systems.

Indigenous environment friendly refrigeration system and technology upgradation are the key strengths of the organization. They are also renowned for developing a robust preventive maintenance schedule, that keeps

the plant in good health, ensuring safe and secure produce.

Vivek has also been instrumental in implementing a unique model of retail delivery, supported by ultra-modern, multitiered computerized inventory control. He was also instrumental in the Enterprise Resource Planning (ERP) and IT Systems developed in-house for seamless process flow. For cold storage plant room operations, a logbook was introduced to record operation data precisely. This has helped monitor delivery operations and required condition for product and analysis of available data, thus establishing benchmark standard.

The company has proposed solar energy system to reduce electricity expenses up to 45%.For movement of goods,the management plans to implement barcode and RFID systems along with real-time information on mobile apps. Anticipating customers' requirements and exceeding their expectations has been their Mantra.

Savla Foods, thus, is the first choice for storage solutions amongst farmers, traders, processors, wholesalers, importers, exporters, processed food companies and corporate, controlling about 50% of the market.

Vivek has been instrumental in taking the eponymous enterprise a notch higher through his innovative approach, earning him the GenEx Award in 2018.



GENEX 2018



"Setting the right goals is the first step in turning the impossible to possible."



RINAC INDIA LTD

DANFOSS ICE AWARD

MANUFACTURER OF THE **YEAR 2018**

"Innovation and creativity are the distinguishing factors of a successful organization."

RINAC India Limited (1994), Bangalore, is an integrated end-to-end seamless solutions company, focusing on the Cold-chain infrastructure and modular construction industries.

They provide total solutions including domain expertise, technology leadership, service excellence, and customizing capabilities to their well-established clientele. At RINAC, under the dynamic leadership of PV Balasubramanian, CMD, the company has flourished and provided innovative and intriguing solutions to their customers.

The business evolution of RINAC has been consistent. The facility consists of international level coldrooms and blast chillers, made exclusively for air-catering industry, that makes it a state-of-the art facility. RINAC is proud to call themselves, a pioneer in providing cold solutions in India. After all, RINAC does not import the technology fully as all cooling systems are designed by RINAC professionals for the ambient conditions of this tropical country.

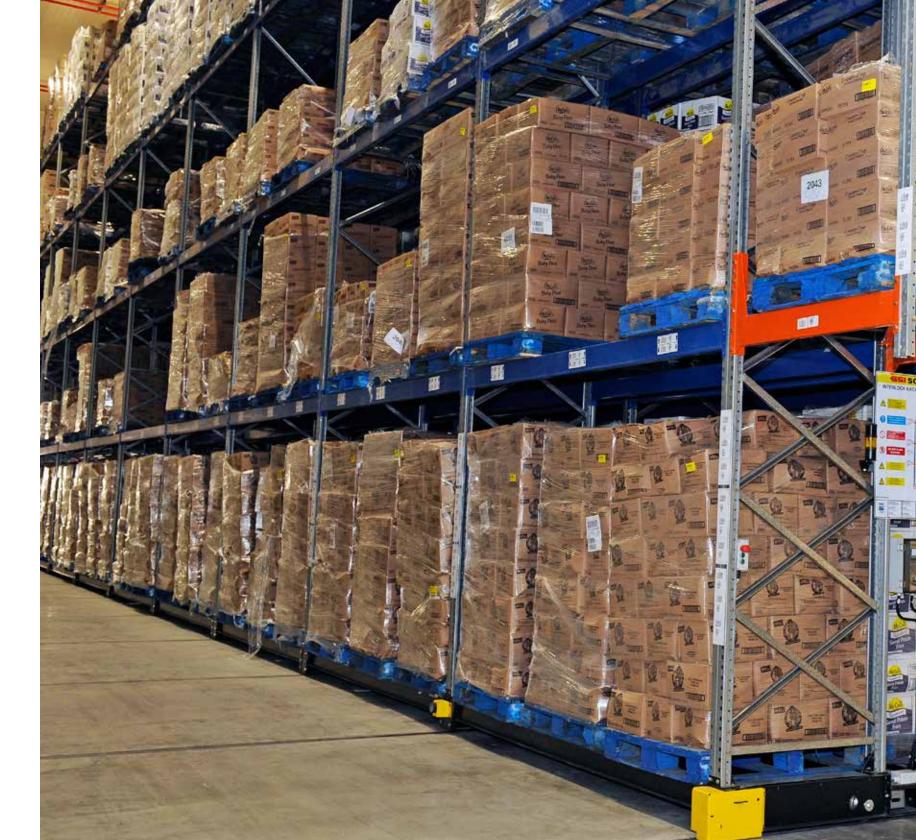
Having been in the business of insulated panels and refrigeration system for nearly two decades and to support the storage of perishable items, RINAC has entered the construction business to supply PUF

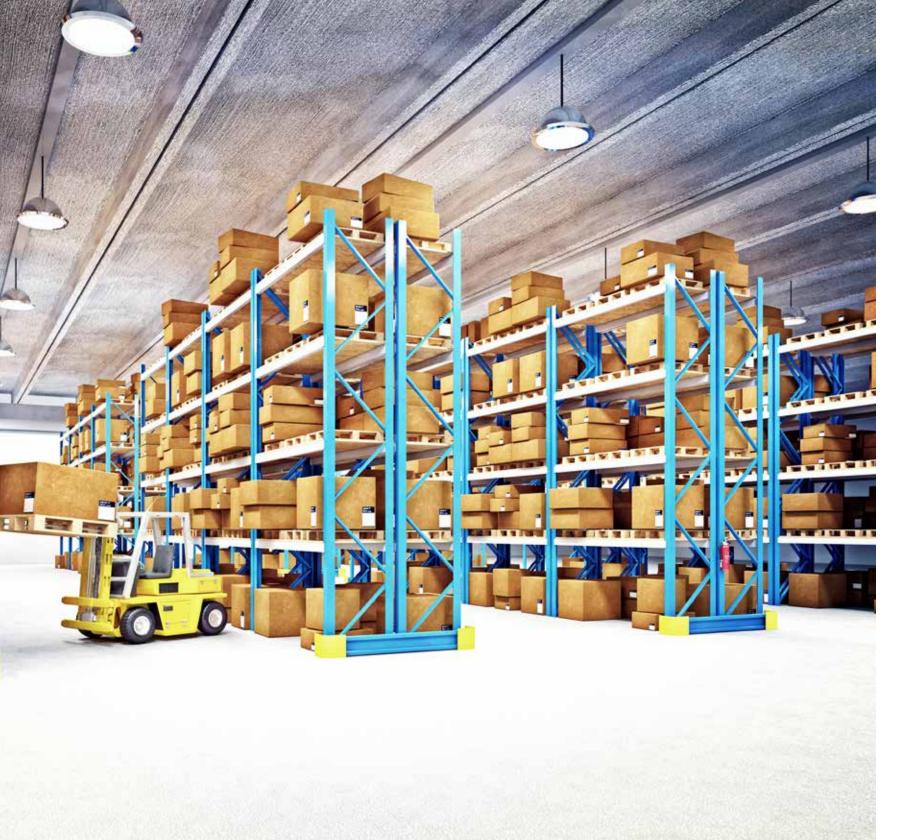
insulated wall and roofing panels to meet the needs of Pre-Engineered Building (PEB) concept towards the Green Building Movement initiated in this country.

At Bangalore, a covered facility of 35,000 sq. ft for manufacturing cooling coils upto 2,500 mm, Condensing Units, Evaporator units, Water Chillers, CO2 Chillers, Rock-Wool Sandwich Panels, EPS Sandwich Panels, Sandwich Panels with Camlock and insulated doors of all types has been constructed.

An integrated engineering solutions company,nothing excites the RINAC team more than engineering end-toend solutions for the cold chain and modular construction industries. The cost-effective Manufacturing Facility at Murbad in Maharashtra is the evidence for the commitment of RINAC Management to address this national requirement. The team believes that each customer needs is a solution unique to the need, environment, and aspirations. And RINAC delights in creating new possibilities that address each requirement perfectly.

RINAC, meets the national agenda on cold solutions and energy efficiency in every link through innovative reading of market needs, that earned RINAC, the Manufacturer of the Year Award in 2018.







DEESA COLD STORAGE ASSOCIATION

Deesa Cold Storage, incorporated as a 15 member-cold storage organization has now developed into a 200- member cold storage enterprise with a capacity of 16 lakh MT.

Deesa was formed to educate cold storage owners and farmers about the challenges, trends and technology upgradation processes in food processing, seeds technology and post-harvest management.

The team consisting of Ashish bhai Guru, Chairman, Gujarat Cold Storage Association Mahendra Swarup, Chairman, Federation of Cold Storage Association of India (FCAOI); and Rajesh Goyal, Hon. Secretary, FCAOI, and All India & Gujarat Cold Storage Association have been a major source of support to Deesa Cold Storage.

The district continues to be the hub for Drip Irrigation as well as for Sprinklers Irrigation. Deesa has also contributed for contract farming towards/for MNCs including Maccain Foods, PepsiCo, ITC, Balaji, HYFUN, etc.

During the 50th anniversary celebrations of Gujarat Cold Storage Association, Deesa Cold Storage Association in cooperation with the Sardar Agricultural University, Dantiwada,

arranged a program for more than 1000 farmers to discuss" How the income of the farmers can be doubled" and "Quality of Potatoes increased step-by-step"

The organization is a proud recipient of the Best Honesty Award by The Uttar Gujarat Vij Company and the Best Performance Award by the Gujarat Cold Storage Association and the All India Cold Storage Association.

Owing to its significant contribution towards the production of high quality potatoes, Deesa, was announced as "Gujarat's Potato City", in the year 2014. A beautiful sculpture reading, Deesa: Gujarat's Potato City', in Gujarati, has been placed at a prominent space in the city and the place is now famous as Potato Chowk (Potato Circle).

By inculcating best farming, production and distribution/supplying practices to the farming and cold-storage community and for raising the bar on high quality potatoes from Gujarat, Deesa Cold Storage was recognized with 'Danfoss ICE Progressive Association Award' for the year 2018.

DANFOSS ICE AWARD

PROGRESSIVE ASSOCIATION 2018



"Knowledge transfer is defined by inculcation of the right knowledge at the right time to the right set of people."





KOOL SOLUTIONS INDIA PVT LTD

Kool Solutions India Pvt Ltd (2012), Mumbai, is in the emerging Public Refrigerated Warehouse (PRW) business. Kool Solutions is focused on providing third party storage and logistics services offering accurate, timely and cost-effective solutions to its customers.

It was incorporated with the purpose to build and operate large, state-of-the-art PRWs in major Indian metros to store chilled and frozen foods such as fruits, vegetables, meat, poultry, food enzymes, dairy and pharmaceutical products.

Kool solution has also introduced an innovative technology, Under Floor Glycol Circulation for its refrigerated Warehouses. Glycol heating system allows circulation under the floor by utilizing heat from Ammonia compressor hot gas which also helps to keep discharge pressure low. This benefits greatly as there is no ice formation on the floor; forms moisture barrier between earth & floor of cold store; and reduction in hot gas temperature for refrigeration system that helps maintain the discharged pressure.

Furthermore, several advanced technologies

are implemented in its facilities to enhance business growth and client satisfaction. Under Floor Insulation with double layer of 100 mm allows thermal resistivity to earth, reduction in heat loss and no ice formation on cold store floor.

Kool solutions have also introduced VESDA Systems for smoke detection in their facilities Providing fire hydrant line with water inside cold store is an impossible task which has been converted into dry hydrant line by providing air pressure immerged inside. In case of fire, the VESDA (Very Early Smoke Detection Apparatus) System gets feedback from the system, activating the pneumatic valve to release the water through this valve, thus increasing the fire safety standards. The system has found compliance in Industrial Law.

Kool Solutions India's endeavor to tackle food loss and providing food security with integrated Cold-chain solutions in concurrence with their transportation partner, Schedulers, with a network of refrigerated trucks across India bagged them the Energy Efficient Facility Award 2018.

DANFOSS ICE AWARD

ENERGY EFFICIENT FACILITY 2018

"Stay focused on what you need to achieve and how."



ASHOK DALWAI

CEO, NATIONAL RAINFED AREA AUTHORITY

DANFOSS ICE AWARD

EXEMPLARY THOUGHT LEADERSHIP 2018



"The need of the day is to help make our farmers entrepreneurs, to link agriculture with value chain & processing and to generate additional farm and non-farm jobs."

Ashok Dalwai IAS, has a distinguished Civil Services background and strong academic foundation with Bachelors in Agriculture, Masters in Agricultural Economics and PhD in Economics. He was awarded Honorary Doctorate by The University of Agricultural Sciences, Dharwad, in recognition of his contributions to the society in general and agriculture in particular.

Ashok joined Indian Police Service (IPS) in 1981 and subsequently moved to Indian Administrative Service (IAS) - Odisha State cadre. He had an illustrious career in Development Administration where he implemented several reforms in the rural agrarian sector in the state of Odisha. In his capacity as the Collector of the District, both in Odisha and Karnataka, he has applied his deep knowledge of the Agricultural sector, spearheaded various reforms and formulated policies beneficial for Indian Agriculture.

Currently, as CEO, National Rainfed Area Authority, Department of Agriculture, he is responsible for creating knowledge platforms and developing strategy for achieving robust growth of agriculture and enhancing farmers' welfare under India's rainfed systems.

His remarkable career holds several notable achievements & positions in prominent government sectors in the States of Karnataka and Odisha, in varied leadership capacities, primarily in industrial, agricultural & textile sectors.

Ashok formulated Karnataka's first 'Textile Policy',introduced 'Self-Assessment Scheme' for property tax and contributed to 'Swachh Bangalore' initiative. He was also instrumental in drafting the first Agricultural Policy for Odisha.

In April 2016, the government set up a committee under Ashok Dalwai, then additional secretary in the Ministry of agriculture, to prepare a report on Doubling Farmer's Income. He played a key role in devising India's' Strategy for Doubling Farmers' Income by 2022' and 'Model Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act 2017'.

He has also chaired distinct offices in Medical, Mining, Industrial Development & Infrastructure, Industry Promotion &Investment, Finance and Small Industries Development sectors.

As Dy. Director-General, Unique Identification

Authority of India (UIDAI) he headed the Technology Centre, to develop & deploy state-of-the-art technology for biometric enrolment, de-duplication, authentication, etc. enabling UIDAI to enrol 100+ crore Indian residents.

He is on Advisory Editorial Board of Indian Journal, Goa, and Karnataka Journal of Farm Science. Ashok has participated in various state, national/international-level workshops and published technical papers on marketing efficiency, agriculturalgrowth dynamics, food & nutrition security, challenges of Indian agriculture, biometricdata security, financial inclusion, strategy for doubling of farmers' income, irrigation, drought management, resettlement & rehabilitation, etc.

He is the lifetime member of 'The Indian Society of Agricultural Economics' and 'Indian Society of Agricultural Marketing'.

His immense contributions in the field of agricultural economics and in particular the stellar role he has played in formulating the Doubling Farmers income strategy make him the ideal choice for "Exemplary Thought Leadership Award 2018"





Future of India 's Cold-chain

The year 2018 has seen a welcome shift in the agricultural policy, driven by the Reports of the Committee on Doubling the Farmers' Income, bringing to focus, market connectivity and market expansion

The Post-production supply chains are seen to be crucial, to bring about gainful & optimal returns on the output from farms or factories. Along with this, a robust market delivery mechanism is also recognised as the most important differentiator in the success of any agri-enterprise. This has great significance for the Indian Cold-chain Industry and adds momentum for improved storage and transport systems.

Productivity gains can only get impetus through ensuring that the output results in fruitful economic outcomes. The utilisation of cold chain logistics, which originates at source and includes refrigerated storage or distribution hubs, and the linked transport,immediately results in enhanced ability to connect with viable markets for greater value capture. Further, the inherent organisation in handling, brings added benefit of minimising loss of perishable goods, helps safeguard value for longer duration, thereby expanding the market range and scope of goods that would otherwise perish.

India's cold-chain reposes various challenges, but these are opportunities for a very compelling future. The demand is facilitated by government initiatives and the repeatedly expressed need of our farmers to 'connect them with optimal markets'. A market next door to a farmer is not necessarily optimal, and cold-chain allows the producer to link with markets farther afield, as the terminal demand-based markets are more optimal.

The cold-chain network should witness a transition from traditional cold stores to fully integrated cold-chain projects that will bring efficiency and increased economic value of cold-chain companies. Furthermore, the country

is commencing on an aggressive agricultural export strategy and high value goods such as seafood, meats, dairy products and other perishables.

Major players will need to suitably upgrade their facilities to cater to a wider range of temperature and handling system to leverage this opportunity.

Globally, cold-chains have increasingly become an integral part of supply chain management for the efficient delivery of temperature-sensitive goods, from source of production to point of consumption, establishing nutritional security for the recipients.

Favourable initiatives such as the Kisan SAMPADA and the Horticulture Mission (MIDH) – both are subsidy schemes of the government that support the full range of cold-chain components – incentivise investments in cold-chain business. Greater awareness in large corporates and e-commerce, who erstwhile had focused only on non-perishables, on the opportunities of using cold-chain will lead to growing investment and/or long term partnerships with existing asset owners. Service excellence will be the great differentiator in the future, which has been implemented and witnessed in the cases of dairy and pharmaceuticals.

Cold-chain players will have to up their handling protocols, relook at standard operating procedures and improve their manpower management to maintain their presence in future growth.

There has been renewed interest from equity funds and inventors, in both the infrastructure business and in the cold-chain businesses. With a positive mindset about the future of India's cold chain, we can go multi-modal and get widely recognized as the important contributor in safeguarding our environment and in carrying our country's agriculture landscape to greater heights.

