

Indane Stories

Celebrating IndianOil's LPG Services





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LPG Services

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Brand Indane

Indane has come a long way since its launch in 1965 — with a range of products and services synonymous with safety, reliability, and convenience.

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IndianOil holds the **world record** of selling domestic LPG in **Komic**, Himachal Pradesh, the highest village in the world

Indane has been conferred **Consumer Superbrand** by the Superbrands Council of India

Brand Indane has more than **146 million** customers. It is one of the largest packed LPG brands in the world

33 lakh LPG refills delivered on April 30, 2021– the highest ever **single day, last mile delivery**

Brand Indane's LPG bottling plant in **Leh** is **3,500 metres** above sea level

IndianOil's LPG **bottling capacity** is **10,741 TMTA**

IndianOil is the **second largest global marketer** of LPG

IndianOil has **96 LPG** bottling plants

4.52 crore beneficiaries of IndianOil's LPG services under Pradhan Mantri Ujjawala Yojana

Indane has **12,838 distributors** across India

Figures as on 01-11-2022



Citation acknowledging S K Trading Company as the first Indane distributor commissioned in Patna.



Indane was introduced in Kolkata on October 22, 1965, marking a significant milestone in the progress of IndianOil and the nation. Two days later, on October 24, 1965, in Patna city, S K Trading Company banded over the city's first Indane connection to renowned doctor; S M Rehman.

Today, S K Trading Company holds the distinction of being the country's first Indane distributorship, after the closure of the first commissioned distributorship in Kolkata. Besides playing a remarkable role in popularising Indane in Patna in the formative years, S K Trading Company later also helped convert coal chulhas at the Missionaries of Charity facility in Kolkata to modern piped LPG stoves. Presently, the channel partner has 13,000 active customers with domestic cylinder refill sale of 11,000 per month.



“We are proud to acknowledge our contribution in keeping the flames of our war memorials eternal.”

Lighting Homes and Hearts

S M Vaidya
Chairman, IndianOil

In early 1965, the Government of India entrusted IndianOil with the marketing of LPG services. On October 22, 1965 we launched Indane in Kolkata, never imagining that one day it would become the most loved household brand. Today, it is a matter of great pride that Indane is a part of every second Indian household. We are also proud to acknowledge our humble contribution in keeping the flames of our war memorials in Kargil, Jammu, Amritsar, and Andaman & Nicobar Islands always lit.

As Indane's membership progressed, our challenge lay in making LPG services available in rural areas, hinterlands, the northern hilly areas, and the islands. We needed to overcome logistical constraints to take Indane to the remotest areas, and at affordable prices. Since infrastructure was the edifice on which we could market Indane, we ensured the setting-up of bottling plants and distributorships across the country. Various cylinder sizes were tested and brought forth for consumer convenience. The domestic, industrial, and hospitality sectors were served with various cylinder sizes that allowed rationalisation of production and transportation. For the hilly areas, we test-marketed 5-kg cylinders. In the 2000s, we also could cover more families with the introduction of small-format LPG distribution.

Consumers have always been at the heart of what we do: and our value-added products and services have enhanced the reputation and brand value of Indane. Today, Indane Chhotu is available at *kirana* stores and select authorised dealers. Indane Nanocut and Indane Xtratej, two differentiated products developed for commercial and industrial use with nanotechnology, have proved to be gamechangers. Composite cylinders for domestic use in 5 and 10 kg sizes have been yet another milestone.

The success of the government's PaHaL-Direct Benefit Transfer for LPG (DBTL) scheme brought laurels for the nation, and Indane led the campaign from the front. Thereafter, a social revolution was engineered by our own Mission Smokeless Village and then the Pradhan Mantri Ujjwala Yojana (PMUY). This has not only led to expansion of LPG connections to 9.56 crore in the country, of which 4.5 crore are Indane, but has also empowered rural women. PMUY has helped to provide clean energy access to millions and led to great health benefits as well.

From long-waiting lists to same-day delivery, customer experiences are now scaling new heights. Technological advances allow various modes of booking, from Missed Call to Single Helpline, SMS and more — all proving to be delights for our customers. Each year we are ushering in new initiatives to infuse greater agility to our customer service. Indane Tatkal Seva was rolled out in January 2022 for consumers to avail affordable and guaranteed LPG delivery within two hours of booking. Another addition to this bouquet is the Indane Family Connect, where consumers can book refill cylinders on behalf of family and friends across India.

Indane reflects the ethos that brand mascot #IndianOilRhino exemplifies — power and agility. From humble beginnings in Kolkata, our LPG services are now available in every corner of India. This coffee-table book celebrates Brand Indane and its eventful journey, even as we reiterate our mission to continue to light every home and heart.



The memorial flame at Kargil Jyoti in Dras, Kargil is kept eternal by Indane. The brand came to be associated with memorial flames dedicated to the valour and patriotism of our brave soldiers in 1971, when it first lit the flame of the Amar Jawan Jyoti memorial in India Gate in New Delhi. Today, Indane keeps the eternal flames burning at Balidan Stambh in Jammu, Amar Jyoti in Amritsar, and Swatantra Jyoti in Andaman & Nicobar Islands. (At Amar Jawan Jyoti, since 2006, piped natural gas is being used for keeping the flame burning.)



IndianOil's Leh LPG bottling plant is situated about ten km from Leh town, on the Leh-Kargil highway. Maintained against all possible physical and environmental odds, it takes care of the growing local demand for Indane.



“India’s progress and the evolution of IndianOil’s LPG services are interlinked”

Spreading Wings

V Satish Kumar
Director (Marketing), IndianOil

IndianOil has grown over the decades on the basis of a simple approach—delivering the greatest good to the greatest number and building on the values of freedom that our consumers enjoy. The thrust given to the household energy sector on October 22, 1965, with the launch of Indane has today helped the country offer LPG services to almost every household. Indane, in fact, has even become a byword for household energy—a key brand in the expansion of LPG use.

The sustained growth that we witness today, even in the face of alternatives that are being introduced in quick succession, rides mainly on the back of our consistent, customer-focused approach. We have built on our infrastructure to reach LPG to every remote area of the nation. Sophisticated bottling plants that have the capacity to produce 10,741 TMTPA and our cross-country pipelines have helped ensure the presence of Indane in every part of the country.

Production, transport, and last-mile connectivity have been remarkably harnessed by using the best emerging technologies. From humble beginnings in 1965, we today serve more than 14.6 crore households, with an average daily refill sale of 27 lakh cylinders. And we do so with value addition in delivery, safety, efficiency, and effectiveness.

Indane has now also been extended to rural and hilly markets in 5 kg sizes. For the commercial and industrial segments, 19 kg and 47.5 kg cylinders are common. However, to cater to the needs of high-consumption industries, 425 kg Indane Jumbo cylinders were also introduced in the market. Later, when automotive fuel was legalised in India, AutoGas was introduced.

As an organisation that is as nimble as it is large, we continue to extract great value from our core business. With the proud innovation of Indane Nanocut for metal cutting , Indane Xtratej for higher efficiency and introduction of new-age Composite Cylinders, Chhotu and Munna—all of which cater to different customer segments and markets—the equity of brand Indane has only grown in stature.

LPG marketing has created specific benchmarks for initiatives that are in tune with the expectations of technologically-driven customers. These have been rolled out in quick succession, much to consumer delight. The list is large, but great success has been achieved in ‘Missed Call Refill Booking’, ‘Hassle Free Connections’, ‘Doorstep DBC’, and ‘Refill Portability’.

This coffee table book will enlighten and refresh memories of the great journey that is Indane.

V Satish Kumar



The Pradhan Mantri Ujjwala Yojana (PMUY), introduced as a flagship scheme in May 2016, sought to make LPG available to rural and deprived households which were otherwise using traditional cooking fuels such as firewood, coal, cow-dung cakes — all of which are detrimental to health and the environment.



72-point flexi speed carousel at the Cheralpally bottling plant.

In March 2022, the Cheralpally and Salem LPG bottling plants were awarded GreenCo Platinum certification. Their 'Greenness' was evaluated under 11 well-structured parameters such as Management Systems, Energy Efficiency, Renewable Energy, and so on.

The Cheralpally plant was also part of Telangana State Government's flagship programme Haritha Haram 1250 for the year 2021-22, which encouraged stakeholders to take up plantation and rainwater harvesting. These plants took initiatives to reduce greenhouse gas emissions by altering packed and bulk trucks capacities and adopting innovative methods to increase production and automate systems such as inventory management. Unique facilities such as energy monitoring system for critical equipment, level-based auto refuelling system for diesel generator sets, FEs, water monitoring system for borewells, FWTs, and borewells and installation of motion sensor for automatic switching of lights in the buildings were also presented during the assessment process.



“Today, we are leveraging Indane in diverse sectors, ranging from transportation to fishing.”

Magic in the Smile

*P Jayadevan
Executive Director (LPG), IndianOil*

There's something magical in the smile of the woman of the house when all her chores are done. Her smile of satisfaction, happiness, and a job well done is infectious. And, it is the thought of this smile that inspired us to start Mission Smokeless Village, which then led to the Pradhan Mantri Ujjwala Yojana — a remarkable transformation thrust that has changed the lives of millions of rural women in our country.

Today, millions of households have moved from poverty to a relatively comfortable middle-class existence, all in the span of one generation. One of the key elements that has led to this transformation is the family and its cohesive progress; a major contributor to which has been IndianOil's LPG vertical.

From meagre consumption in the Sixties to 2022 now, we have witnessed manyfold growth in LPG usage. It was not easy to reach here. We have done so by overcoming huge constraints in infrastructure, marketing network including supply chain, education, and safety. Today, we have come to a point where we can proudly say that LPG is the primary fuel.

Affordable pricing of product to ensure cooking with a smile was a mission. At the same time, avoiding subsidy leakage was a major challenge. Aadhar and other related fintech solutions gave us the breakthrough for direct subsidy transfer to consumers. Anchoring in it, we climbed higher and created history through PaHaL and Ujjwala scheme — inspiring smiles in every home.

Through this evolution, it is Indane that has led the way. Firewood, the bane of ill-health in the rural family, has been steadily replaced by LPG. Further, we are on the path of leveraging Indane in diverse sectors, ranging from transportation to fishing. Several sectors, in fact, have already embraced the product. Progress is now in continuum and we are glad to be creating smiles everywhere.

With affordable and sustainable fuel and GreenCo Platinum and Gold rated bottling plants, we are striving towards IndianOil's ambitious goal of achieving Net-Zero emission by 2046. Capturing all these in a descriptive pictorial is this offering from IndianOil. This coffee-table book that takes us through six decades has been produced with an eye for detail. Savour and live the joy that brings smiles to the family.





The 8 MWp solar power plant at the Sanand bottling plant, commissioned on January 1, 2018, produces 10 lakh units of power per month which is used to run 17 wheeling locations. By helping to save ~ ₹10 crore per year on electricity bill, it aligns to the company's Net-Zero plan to achieve net-zero operational emissions by the year 2046, when India would be celebrating its 100th Independence Day.

Brand Indane

In October 1965, Indane began its journey in the by-lanes of Kolkata and Patna, with distributors campaigning from door to door to spread awareness about the new and safer kitchen fuel alternative. Overcoming initial scepticism, Indane today has come a long way — synonymous with safety, reliability, and convenience.

Indane has always been about customer satisfaction. Therefore, its product development process has been dynamic. It has accommodated the needs of various customer segments by making substantive changes in product form, such as different weights and sizes. This has expanded the choices for the end user — a housewife in an urban centre, a village family, a dweller of high mountains, or even bulk users like hotels and industries.



The first indigenously fabricated LPG cylinder from the Allwyn factory in Hyderabad was released in January 1967. Manufactured from deep-drawn steel, the product was a collaborative effort between Allwyn, IndianOil, Indian Standards Institution, and the Chief Inspector of Explosives. Its assured supply proved a fillip to IndianOil's LPG programme which was then trying to overcome a scarcity of cylinders.

R S S Rao
Former Executive Director, Telangana and Andhra Pradesh State Office

entrusted by the government with the mission of promoting LPG use, especially in households across the country, IndianOil began its journey with the launch of Brand Indane in 1965. The first LPG connection under Brand Indane was released with much fanfare on October 22, 1965 — a day we proudly celebrate as Indane Day. Indane, launched in the 12.2 kg cylinders, was followed by a cylinder capacity of 15 kg which was in use for two decades until the early 1980s.

In the 1980s, the cylinder capacities were optimised to 14.2 kg by tweaking the composition. The proportion of the heavier butane was reduced and that of the lighter propane increased in the cylinder. It has since become the standard size for domestic use. During this time, we also converted cylinders from F-type to self-closing.

In 1987, Indane test marketed 5-kg cylinders in the Garhwal Hills — a size that enabled us to extend our services to hilly and remote areas and rural households. Subsequently, this package size was expanded and extended to BPL families as well. With changing times, these mini cylinders, as they were known then, were relaunched again as Chhotu in 2020.

Available as Free Trade LPG at IndianOil retail outlets and *kirana* stores, Chhotu is a favourite among students and migrants who face problems providing KYC documents for LPG connections as well as those commercial establishments with less space. Over the years, Indane also spread its wings from domestic to commercial and industrial segments.

In 2000, following the legalisation of LPG as an automotive fuel in India, IndianOil introduced AutoGas, a high-octane, eco-friendly and clean fuel. IndianOil now boasts of 328 Auto LPG dispensing stations across 188 cities in India.



In order to meet varying requirements, Indane is now marketed for non-domestic use in 19 kg, 47.5 kg and 425 kg Jumbo capacity cylinders. The 19 kg ones are compact, easy to handle, safe to use, and suitable for hotels, restaurants, cafes, canteens, and industrial applications while the 47.5 kg cylinders are perfect for commercial kitchens such as those of hotels, hospitals, and restaurants, and industrial customers. The 425 kg Jumbos, on the other hand, are essentially for industrial customers with higher volume requirements.



In 2015, we introduced Indane Nanocut, a proud innovation of IndianOil that enhances the performance of LPG for high-flame applications like metal cutting and other high-temperature use.

Our product has facilitated industries concerned to slowly shift away from the hazardous oxy-acetylene gas. The commercial and industrial use cylinders are available in sizes 5, 19, and 47.5 kg. By 2017, we introduced the 425 kg Indane Jumbo — ideally suited for high consumption customers for whom space is a constraint.

The development of an indigenous additive by our R&D Centre in Faridabad paved the way for the introduction of Indane Xtratej in 2020. Xtratej has improved heat output and efficiency, resulting in reduced fuel consumption and increased savings.

The year 2021 was a milestone in the domestic LPG category for us, with the introduction of composite cylinders in 5 and 10 kg sizes. These cylinders have three layers: blow-moulded HDPE inner layer, middle composite layer of polymer-wrapped fibre glass, and an outer HDPE jacket. These cylinders are lightweight, rust-resistant, and aesthetic in design — an ideal input to modern homes. Their translucent form allows users to visually check the LPG level against light and plan their next refill booking accordingly.

The primary aim of launching Indane was to promote the use of LPG as the preferred cooking fuel in households. It worked well; enabling us to improve customer convenience by decreasing household pollution and cooking time, increasing efficiency and conserving forests. From a humble base of 2,000 customers, Indane now caters to 14.6 crore households across the country.


Our LPG journey continues to reach newer heights with the launch of Munna, a smaller two-kg variant of Chhotu, early in 2022. These 2-kg FTL cylinders have been introduced on a pilot basis in Uttar Pradesh's Gorakhpur and its surrounding areas and are now being expanded to various other markets in India. The service targets the economically-weaker sections of the society.

Much of this eventful journey of product evolution is a result of the constant and constructive feedback received from our valued customers. It is our endeavour to nurture happy homes and industries and spread smiles by continuing to innovate and improve our service offerings. ●



With the launch of Chhotu, the 5 kg FTL (Free Trade LPG) cylinder, IndianOil became the first public sector oil company in the country to replicate the international model of making available cooking gas cylinders from convenience stores. Customers can avail Chhotu from Indane distributors, or points of sale such as IndianOil retail outlet, select kirana stores, etc., without submitting any address proof.



A row of red Indane Nanocut LPG cylinders is shown in an outdoor setting, likely a storage or distribution area. The cylinders are arranged in a line, receding into the background. Each cylinder is red with white text. The word "NANOCUT" is printed in large, bold, white capital letters across the middle of each cylinder. Below it, the word "Indane" is printed in a smaller, white, stylized font, accompanied by a small white flame icon to its left. The cylinders have a red metal handle on top and a red metal base with four small holes. The background is slightly blurred, showing some industrial structures and greenery.

While working on ways to enhance the performance of LPG for high flame temperature applications, IndianOil's R&D Centre innovated the next generation Indane Nanocut. Based on a proprietary additive formulation that enhances the efficiency of LPG as cutting gas, it is a boon for sectors which typically involve metal cutting, heating, straightening, hardening, welding, soldering, brazing, coating, etc.

Indane Nanocut evolved after extensive field trials and testing by various laboratories and was honoured with the Breakthrough Product – Innovation in R&D and AI during a nationwide Innovation Contest held by the All India Management Association (AIMA).



Another differentiated LPG product developed with nanotechnology, Indane Xtratej is meant for commercial and industrial applications. Cooking time on Xtratej, when using a pressure cooker, reduces by a minimum of 14 per cent while flame temperature increases by a minimum of 65 degrees Celsius. Since the heat output is greater, there is a saving of minimum five per cent in consumption — a fact that has been evaluated in laboratories and validated at customer sites.



After the use of LPG as an automotive fuel — albeit within the prescribed safety terms and conditions — became legal in India from April 24, 2000, IndianOil began to market the fuel under the brand name AutoGas.

Until then LPG vehicles running in various cities were doing so illegally, using domestic LPG cylinders. A mixture of petroleum gases like propane and butane, AutoGas has a high energy content and impacts greenhouse emissions less than any other fossil fuel when measured through the total fuel cycle.

Today, IndianOil had 328 Auto LPG dispensing stations, covering 188 cities across India.

The new age lightweight composite cylinders, with their translucent bodies allow customers to accurately check LPG level against light. Aesthetically designed, these cylinders are ideal for the kitchens of today and available at select distributors in all major cities in 5 kg and 10 kg sizes.





INDANE

October 22, 1965

One of the largest packed LPG brands in the world today, as 5 kg and 14.2 kg cylinders that are largely meant for domestic use.

AUTOGAS

December 1, 2000

A clean, high octane, abundant and eco-friendly fuel for vehicles since the use of LPG as automotive fuel became legal in India on April 24, 2000. 328 auto LPG dispensing stations cover 188 cities across India today.

NANOCUT

March 10, 2015

An LPG variant enriched with proprietary additive formulation that is a safe and efficient alternative to oxy-acetylene gas used for metal-cutting and other high-temperature applications.

JUMBO

JULY 3, 2017

Available as 425 kg cylinders for high-volume industrial and commercial consumption.

XTRATEJ

September 1, 2020

LPG enhanced with additives developed through cutting-edge Nano technology and used in commercial and industrial applications.

CHHOTU

December 11, 2020

Mini cylinder weighing five kg and available at stores for the convenience of migrant populations in urban and semi-urban areas as well as commercial establishments with limited space.

COMPOSITE CYLINDER

March 27, 2021

A three-layer cylinder in 5 kg and 10 kg sizes and made up of blow-molded HDPE inner liner, covered with a composite layer of polymer-wrapped fiber glass, and fitted with a HDPE outer jacket.

MUNNA

April 1, 2022

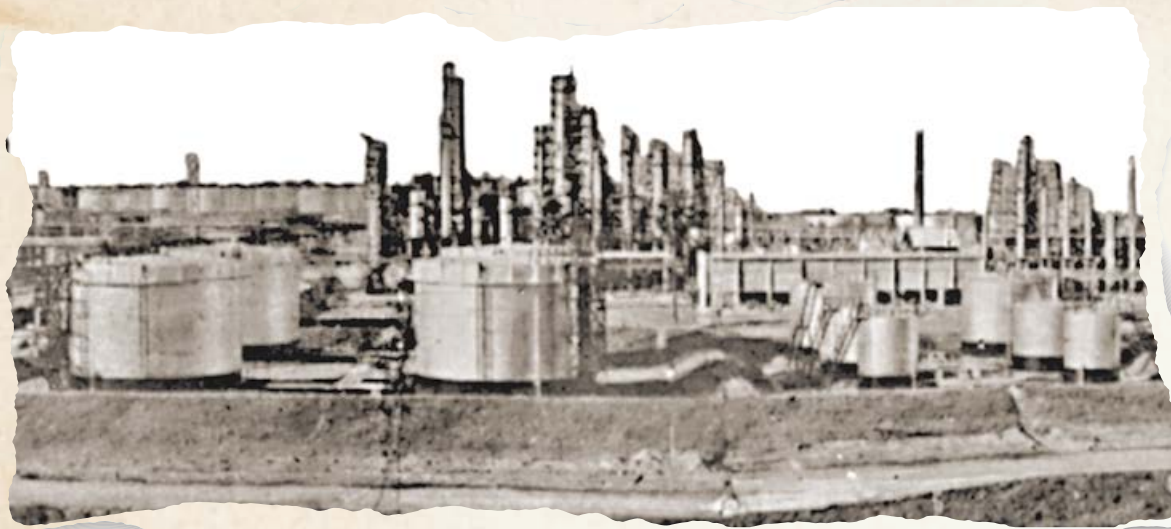
A 2kg free trade LPG cylinder for low consumption usage, launched in Gorakhpur and surrounding areas.



Bottled with Stories

A superbrand, Indane is today the second-largest packed LPG brand in the world. Bottled in plants in strategic locations across the country, whose equipment and machinery have advanced and transformed with time, IndianOil LPG reaches more than 146 million customers and rolls out 27 lakh refills a day.

In a way, IndianOil and Indane have grown in tandem, from humble beginnings to the nation's flagship icons, from initial uncertainties to Superbrands, and from fuelling the nation's growth to attaining global recognition for the scope, size and scale of their operations. Herein is the story.



Set up in 1965 with an initial capacity of 10,000 metric tonnes of LPG, Barauni Refinery transported the kitchen fuel to important cities in West Bengal, Bihar, and Uttar Pradesh.



A 1968 photo of bottling of Indane cylinders at the LPG bottling unit of Gujarat Refinery.



Personnel check accuracy of cylinder weight at the LPG bottling unit of Gujarat Refinery in 1968.

Dilip Rai

Former Executive Director, Contracts Cell, Marketing Head Office

bottling plants to produce LPG cylinders were a crucial part of the greater scheme of making LPG available and promoting it for domestic use in India. That is why IndianOil's first concern was setting up of sufficient LPG bottling capacities to fulfil the demand foreseen.

In the early phase of LPG marketing, LPG bottling plants were operated only by IndianOil refineries. The first bottling plant was set up in Barauni Refinery, Bihar in 1963-64, before the merger and incorporation of IndianOil. After 1965, IndianOil began setting up bottling plants in the refineries at Haldia in West Bengal, Mathura in Uttar Pradesh, and Baroda in Gujarat.

As LPG use gained popularity in the country, the need to set up many more LPG bottling plants was felt. Subsequently, the company decided on setting up standalone LPG bottling plants. The initial plan was to establish such plants in the major demand centres. By 1968, IndianOil was able to add a bottling plant in Guwahati Refinery to facilitate supply to markets in the Northeast, East and Central India. Later on, bottling plants were commissioned in Salem in Tamil Nadu, Panki in Kanpur, Shakurbasti in Delhi, Rajkot in Gujarat, Bangalore (Whitefield) in Karnataka, Kalyani in West Bengal, Bongaigaon in Assam, and Jalandhar in Punjab.

Over the years, the number of LPG plants increased in direct proportion to the expansion of Indane services. As on date, IndianOil has 96 operational LPG bottling plants, besides two LPG terminals. IndianOil also has one LPG plant each with Oil India Limited and Chennai Petroleum Corporation Limited (CPCL) and in collaboration with five private bottlers to meet demand. Some more bottling plants and private bottlers are on the verge of commissioning.



Mechanical carousel

Ever since IndianOil founded its first bottling plant in the 1960s, the LPG cylinder bottling operations have evolved in terms of technology, a transformation that helped IndianOil improve the production and safety aspects of the bottling process. Indane adapted the best of both indigenous and global technology for use in its bottling plants from suppliers such as Siraga, Kosan, PAM (all a part of Makeen Energy now), INM, Kosel Industries India, Menon and Patel, and HT Process Controls.

During the early years, UFM (Unit Filling Machines) were utilised for bottling operations. Filling used to be monitored and controlled manually by the operator. Cylinders were circulated through overhead and roller conveyors. The process also involved manual setting of tare weight, dial rotator, mechanical scales, etc. with primitive pneumatic systems and almost no electronics. A Remote Operational Automatic LPG Filling system (RALF) was introduced in 1992-93 at Kozhikode bottling plant in Kerala, which allowed the operator to handle the filling system through a remote-controlled panel. However, due to cumbersome circuitry, large numbers of FLP components and congested equipment layout, the RALF system could not make further advancements, though at that point of time it was considered an advanced system of LPG bottling. Some other innovations were also made in UFM, a notable one being the use of the pneumatic gas stop valve that improved accuracy of filling.



Mounded LPG Storage at the Mysore bottling plant.



LPG pump and compressor house at the Mysore bottling plant

This contraption ensured that the filling process automatically stopped upon reaching the desired gross weight. Pre-filling and post-filling concepts were also introduced for improving the productivity and accuracy in cylinder filling. ABACUS based filling system was also introduced, which enabled automatic tare weight feeding through pneumatic system and offered auto lifting, auto commencement of filling and auto cut-off system.

During this period, further improvements were made in the mechanical UFM by incorporating a mechanical carousel in variations of 12/18/24 filling units. These carousels were not completely electronically operated, but they had the feature of setting tare weight on each filling unit, enabling relatively faster filling of cylinders. The overall system still lacked integration with check scale; as a result, manual labour was still essential to cross-check weight through a standalone check scale.

During 1987-88, IndianOil imported first batch of semi-automatic filling systems from Siraga, France and Kosan Crisplant, Denmark that included 24-point mechanical carousels with chain conveyors, cylinder introduction/ejection units, check weigh scales, valve testing units, water test baths, etc. The filling system had tare weight setting on individual machines, cylinder clamping, auto filling gun lowering along with automatic cylinder introduction and ejection.

Post filling, the cylinders went through mechanical check scale and through manual CVT (Compact Valve Tester) which checked both O-ring leak and valve leak cylinders. To improve the productivity DCVT (Double-head Compact Valve Tester) came into use.



Unloading of empty cylinders from Packed LPG Trucks at the unloading shed of the Mysore bottling plant.



Checking and insertion of O-Ring in the SC valves of cylinders at the Bhopal bottling plant.



Punching of tare weight of LPG cylinders at the Mysore bottling plant.

All subsequent post-filling equipment were mechanical / pneumatic. First indigenous mechanical carousel was manufactured by Messrs Menon and Patel, which offered faster filling rate and robust mechanical design.

Due to safety concerns, electronic systems were not being used in LPG bottling operations in the earlier years, mostly on account of non-availability of proven indigenous equipment. However, during 2000, first imported electronic carousels were installed at the Cherlapally and Patna bottling plants. These carousels used common tare weight punching stations at the input conveyor and transfer of tare weight data to individual filling machines electronically and load cells for weightment/filling of cylinders.

Later on, all existing mechanical carousels were converted into electronic ones during 2008-10 in a phased manner. In subsequent years, further automation in bottling operations were adopted with integration of check scale to the carousel for effective cross-checking of the weight of cylinder being filled and also weight correction unit for automatically correcting the weight of an overfilled/underfilled cylinder.

Around 2014, Vision Reader units were introduced in the bottling system, which enabled automatic reading of tare weight of cylinder without the requirement of an operator to punching the tare weight. During the initial transition period in the late Eighties and early Nineties, a number of semi-automatic systems were put in place at different bottling plants using available pneumatic elements such as auto

crimping (for sealing cylinder valves/safety caps with aluminium seals), auto safety cap hammers, SC valve air blowing/cleaning, etc. These innovations carried out by the plants provided inputs to development of many of the automatic online equipment that are used today.

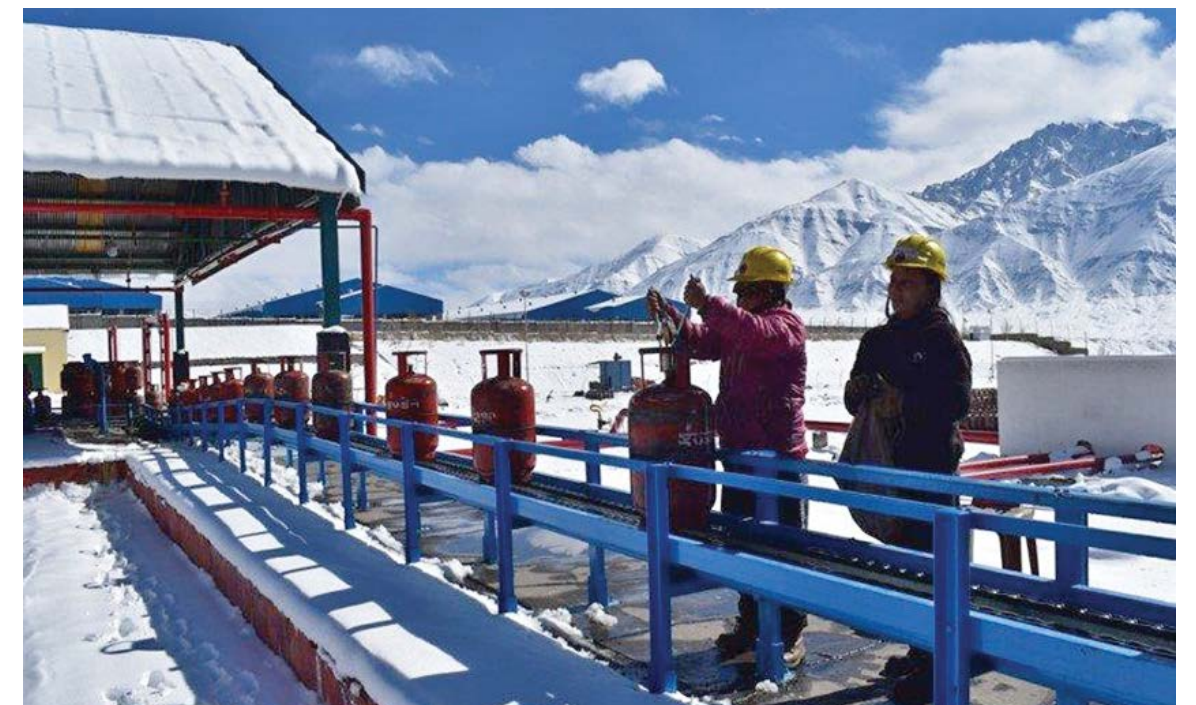
Meanwhile, there have been continuous improvements in the technology of LPG equipment and process. A global leader in LPG bottling equipment, Kosan Crisplant, Denmark developed flexispeed carousels with 36/48/72 units for large-scale bottling of cylinders in mega bottling plants.

In 2016, IndianOil introduced flexispeed carousel to take advantage of this technology, which not only was highly accurate and efficient, but could also change its speed and capacity in accordance with the requirement of production. The check scale, O-ring leak detector, and valve leak detectors were also a part of the carousel, thereby making the system a fully integrated and compact one. IndianOil's LPG bottling plants at Cherlapally in Telangana, Devanagonthi in Karnataka, Tikri Kalan in Delhi, Gorakhpur in Uttar Pradesh, and Patna in Bihar boast of this state-of-the-art equipment. The 72-point flexispeed carousel installed at Cherlapally has only five load cells which can control all the 72 filling units. This is a remarkable development from when each filling unit required a separate load cell.

The transformation of LPG bottling technology and IndianOil's continuous adoption of the latest systems allowed the Corporation to constantly improve the capacity and efficiency of bottling plants. Currently, the Devanagonthi plant tops the list, bottling 300 TMT/PA of LPG in various capacities of packed units. It is followed by the Patna plant (270 TMT/PA). The Kanpur plant in Uttar Pradesh and the Tikri Kalan and Madanpur Khadar plants in Delhi complete the top five list, producing 240 TMT/PA of LPG.



Vision Reader Unit for automatic capture of cylinder tare weight at the Salem bottling plant.



Leh bottling plant



Gantry robot.



Post-filling Automatic O-Ring Leak Detector unit.



RQC (Random Quality Control) unit.



Statutory cylinder testing and painting facility at an LPG bottling plant.



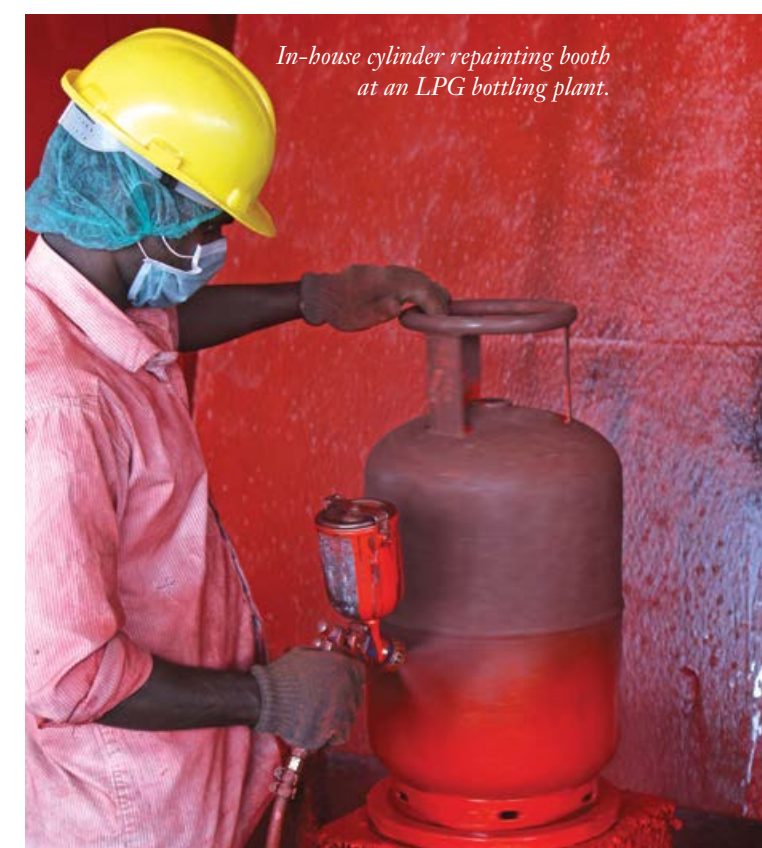
The Valve Change Without Evacuation (VCWE) unit.



Checking for correct torque setting for SC valve replacement in cylinders.



Filled cylinders moving towards the loading shed after fixing of Tamper Evident Seals (TES) on safety caps at the Hot Air Sealing unit.



In-house cylinder repainting booth at an LPG bottling plant.



LPG bullets at the maiden Indane bottling plant in Chunabbatti village in the archipelago of Andaman & Nicobar Islands.

IndianOil has expanded its bottling and distribution networks to every nook and corner of the country, enabling the Corporation to supply to remote parts of India such as Leh in the Ladakh Union Territory and Port Blair in the Andaman & Nicobar Islands. The Leh plant supplies LPG not only for domestic use but also to the Indian Army stationed there. The Port Blair plant ensures supply to the population of different islands, eliminating the need to transport LPG cylinders from the mainland. The bottling plants at Leh and Port Blair are also wonderful examples of how solar power can be harnessed to run a bottling plant.

Other LPG plants in remote locations include the Awang Sekmai plant in Manipur and the Gopanari plant in Assam. Setting up of LPG bottling plants requires adequate storage of bulk LPG for uninterrupted bottling operations and supplies to the markets.

Initially, in the 1960s, LPG bottling plants had small bulk storage units in the form of above-ground bullets for storage of bulk LPG. However, as LPG penetration in the country increased with improved availability of bulk LPG, both imported and indigenous, a need was felt for bigger bottling plants with larger storage vessels. Hence, in late 1970s, IndianOil introduced the use of Horton Spheres. The uniform stress resistance of these storage vessels allowed it to store LPG under various pressure and temperature parameters in large quantities. This adaptability ensured economic advantage for the company.

Horton Sphere pressure vessel at the Dhanaj bottling plant.



The electronic filling carousel at the Cheralapally bottling plant.

As time and technology progressed, IndianOil shifted to mounded storage vessels in the 1990s. These containers were buried underground under thick soil/sand layers, enabling safer and larger storage of LPG with lesser land requirements / safety distances. These storage systems are continued to the current period.

IndianOil has always strived to be in every part and every heart of India with the apt slogan #PehleIndianPhirOil. IndianOil's effort to promote the use of LPG and improve its nationwide penetration has been supplemented with infrastructural and technological development in the LPG bottling processes and equipment. It is our endeavour to continuously adopt the best available technology for constantly improving safety, quality, and productivity in the LPG bottling operations. ●

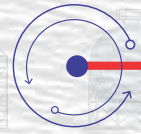


The LPG bottling plant in Phey village in Ladakh is:

- The world's highest such facility
- Situated at 11,800 feet
- Runs on solar power
- Supplies LPG to the Indian Army and far-flung areas of the region.
- Has a storage capacity of 1,500 kilo litres

Bottling Plant Evolution

The first LPG bottling plant was an integral part of Barauni Refinery, while the first independent LPG bottling plant was set up at Shakurbasti, near Delhi. Today, with 96 operational LPG bottling plants, capacity has increased to 10,741 TMTPA, from approximately 500 TMTPA in the Sixties.



1983
Jalandhar
Kalyani
Salem

2002
Allahabad
Pattikalan
Lakhimpur Kheri
Guna
Jharsuguda
Gopanari
Leh
Lucknow
Jhunjhunu

2004
Una
Coimbatore
Gurgaon
Shimoga
Etawah

2003
Vadodara
Aligarh
Bokaro
Dimapur
Port Blair
Bongaigaon
Chengelpet

2005
Ilayangudi
Barauni

2007
Sekmai
Raipur

2009
Mathura

2012
Muzaffarpur

2014
Mysore

1986
Durgapur
Kanpur

2001
Devanagunthi
Vizag
Malda
Loni
Erode
Shahjahanpur
Jammu
Ujjain
Mannargudi

2000
Ennore
Nabha
Raninagar
Sarpara
Jaipur
Patna

1988
Hazira
Tikri Kalan
Karnal
Haldwani

1989
Ajmer
Balasore
Bhopal
Haridwar
Jamshedpur
Baddi

1999
Cherlapalli
Budge Budge
Manmad
Madurai
Thimmapur
Gandhar

2016
Paradeep LPG Terminal

2019
Bhatinda
Tirunelveli

1990
Kondapalli

1998
Kadapa
Bhavnagar
Myladuthurai
Dhanaj

1997
Bikaner
Ahmedabad
Farukhabad
Quilon

2020
Banka
Gorakhpur
Goindwal Sahib

2021
Agartala

1991
Silchar
Varanasi

1996
Belgaum
Madanpur Khadar
Kandla LPG Terminal
Trishundi
Rangpo
Trichy

1992
Calicut

1995
North Guwahati

1993
Pune
Cochin
Pondicherry

2022
Jabalpur
Korba
Motihari
Nagpur

Across Geographies



Indane is one product that has truly lived up to the IndianOil tagline, 'In every heart, in every part'. Investing heavily in logistics and delivery, it has navigated into new territories across the length and breadth of the country and carved its own place in the hearts of the people.

And, in its entire glorious journey of 57 years, its associates — from transporters and channel partners to delivery personnel, tank truck drivers, and contract workers — have been transporting and delivering Indane across geographies.

Their zeal is exemplary and evident in the unique, annual winter-stocking exercise that happens from May to October — when LPG stock is built up in the Leh-Ladakh region for the defence services and civilians. Since the Rohtang and Zoji La passes that connect these high-altitude areas to the rest of the country become inaccessible due to heavy snowfall between November and April, tank trucks that ply LPG from Ambala in Punjab and Jammu in Jammu & Kashmir carry only part load due to gradient restrictions — usually taking almost eight to ten days for a round-trip.



Above and left: Tank wagons for LPG supply and the first truck of Indane leaving the premises of Gujarat Refinery in 1967.

Sushil Kanodia
Kanodia Transport, Kanpur

When IndianOil forayed into the LPG market in the 1960s, the challenge lay not only in encouraging the use of LPG among the masses but also supplying it nationwide to cater to the demand that would expectedly arise. To distribute its LPG cylinders to every nook and corner of the country, it was crucial to have a reliable mode of transporting them from the bottling plants. And for this purpose of bulk transportation, IndianOil used what are considered the lifelines of our country — railways and roadways.

Our transport company started off with a joint ownership with IndianOil for 5MT LPG tankers in 1976. The tank was provided by the company while we owned the mover. Back then, everyone said that the venture was bound to flop. But IndianOil stood by us each step of the way and the rest, as they say, is history.

As far as road transportation is concerned, LPG cylinders are ferried in Bulk LPG Tanker Trucks and Packed LPG Trucks across the country. Earlier, IndianOil Tanker Trucks had capacities of only 7 MT and 12 MT; now this has increased to 18 MT and 21 MT. Likewise, the capacity of Packed LPG Trucks has increased from 306 cylinders per vehicle to 360, 525, etc. units per vehicle, depending on the capacity of the truck.

In the 1970s, the company acquired 66 tank-wagons jointly with Indian Railways. LPG was supplied in these tank wagons to different parts reachable by rail. In the 1990s, such special tanks were used to ensure speedy supply to bulk consumers. When the company realised that bottling plants near railway infrastructure could improve the cost-efficiency and speed of transport, four plants were connected to the railways: Tikri Kalan in Delhi, Kanpur in Uttar Pradesh, Bhopal in Madhya Pradesh, and Devanagonthi in Karnataka. The plants are positioned in such a way that they serve major locations in the country: be it North, South, East, or West.

In case of transportation by road, what is crucial is the way cylinders are stacked. Until the mid-Eighties, Indane cylinders had an F-type valve mechanism, which meant that they had to be stacked horizontally during transportation. Thereafter, of course, IndianOil switched to the safer pin/self-closing type of valve which needs to be transported in a vertical position.



A truck carrying Indane cylinders drives up a mountain road after heavy snowfall near Dalbousie in Himachal Pradesh.

Yet another crucial factor that needed correction was the way in which Packed LPG Trucks were loaded. The haphazard way of loading them in the trucks in the early period meant that each truck had different quantities of similar weighing cylinders — all of which led to problems in inventory management. This had to be standardised, which the company did after thorough research. Now, each Packed Truck is equipped to carry 324 units of 14.2 kg cylinders.

Rail and road transportation, while efficient, did not always entail the best. Considerable efforts were required to load and unload LPG in tankers and cylinders in trucks. So IndianOil began a gradual shift to pipelines for the transport of LPG. As a matter of fact, pipeline transportation has proved to be the most efficient and safest among the three modes of LPG movement.

The first LPG pipeline in India was commissioned in January 2001 by Reliance Industries between Jamnagar in Gujarat and Loni in Noida, Uttar Pradesh. However, it was not until 2008-09 that the country received its second pipeline through the initiative of IndianOil — the company laying its first pipeline between Panipat in Haryana and Jalandhar in Punjab.

Today, several of IndianOil's LPG bottling plants are now connected with pipelines: Ajmer and Jaipur in Rajasthan; Karnal and Gurgaon in Haryana; Jalandhar and Nabha in Punjab; Madanpur Khadar in Delhi; Loni in Uttar Pradesh; Banka in Bihar; Durgapur, Kalyani, and Budge Budge in West Bengal; Balasore in Odisha; Cherlapally in Telangana; Kondapalli in Andhra Pradesh; and Kochi in Kerala.

Interestingly, all the above locations serve as nodal locations for distributing LPG to other plants and agencies. The plants at Jammu in Jammu & Kashmir, Sarpara in Himachal Pradesh, Tikri Kalan in Delhi, Kanpur in Uttar Pradesh, Bhopal in Madhya Pradesh, Raninagar in West Bengal, and North Guwahati and Gopanari in Assam do likewise.

IndianOil's LPG transportation modes are now both traditional and modern — rail, road, and pipelines. Among them, it is pipeline transport that is more efficient, time-effective, and cost-saving. It is also a safer alternative and the reason why the company intends to shift largely to this mode. With several pipeline projects already under way, it appears that soon the current 55:39 road:pipeline ratio will upgrade to 39:56. ●



Fully-automated gantry used for filling LPG in rail wagons.



The Kandla LPG import terminal which was commissioned in 1996 for the import of propane and butane and distribution of LPG is the starting terminal of the world's longest under-construction gas pipeline, with a total length of 2,757 km from Kandla Port in Gujarat to Gorakhpur in Uttar Pradesh via Madhya Pradesh. Its capacity has also been raised four times, from 0.6 metric tonne to 2.5 metric tonnes per annum.



The Devanagonthi bottling plant in Karnataka is:

- Set to receive LPG through a pipeline. Now, it receives bulk products by road
- One among four plants across the country equipped to receive products through rail
- Fills more than one lakh cylinders every day



Packed LPG Trucks and Bulk LPG Tanker Trucks at the Mysore bottling plant.

Kumari Thammi

Indane Delivery Personnel, Neelam Gas Agency, Darjeeling

When IndianOil undertook the mission to promote the use of LPG across the country, one of the critical aspects that came into play was the delivery of LPG cylinders. While most households in urban areas were more or less accessible, reaching rural customers, especially those living in difficult terrains, proved challenging.

I have experienced this challenge first hand as a delivery personnel associated with Neelam Gas Agency in Darjeeling. I have been an Indane delivery associate since 2004 and, as a woman, was one of the first in the field. While delivering LPG cylinders is my primary responsibility, I have also undergone training as a gas mechanic and acquired knowledge of LPG safety, refill booking, and digital payments. IndianOil has left no stone unturned in its endeavour to develop a robust delivery system, training personnel like us who are an integral part of it. As part of our training, we are also taught how to interact with the customer and ensure safe delivery. After all, we are the face of IndianOil!

I serve hilly areas, where it is often impossible to manoeuvre normal vehicles, let alone ones carrying LPG cylinders. I serve 14-16 households a day, carrying cylinders strapped to my back and head to the destination. It is not easy, but the zest to serve my customers keeps me going.

It is also part of my responsibility to conduct pre-delivery checks on the cylinders; we do it in order to ensure safety of our customers during and post-delivery. During delivery, we demonstrate the quality and quantity of the cylinder to the customer. It includes checking the seal for intactness, inspecting the valve to ensure there is no leakage, and examining the overall condition of the O-ring. The most basic check is whether the cylinder has visible damage; we usually avoid picking such cylinders for delivery.





"I have never seen an LPG connection before!" exclaimed Omi Marati when she received Indane for the first time in 2017. A tribal from Badabag village under Bhatkal Taluk in Uttara Kannada, she along with other women would trek through the forest each day in search of firewood. Today, Indane delivery associates walk three km on foot, and also over a hanging bridge, to deliver refills to 45 families in the hamlet.





Delivering in hilly terrain is only one part of our nationwide delivery system. I have heard how delivery personnel like me perform their duties in other parts of the country. In some parts like Assam and Bihar, where waterways are common and easier, they use boats to reach consumers. Boats are also a common mode in the northern regions like Srinagar. We also use bicycles and motorcycles to deliver Indane to rural areas. My peers working in the desert regions often use camel-drawn carts to reach Indane to households. In some areas, we deliver cylinders via three-wheeler cycle carts and on foot across slushy roads.

Apart from ensuring timely delivery, IndianOil also has a toll-free emergency helpline, 1906. I inform my customers during delivery that if they face a gas leakage, they can immediately contact us on this number. One question they often pose to me is that they are not comfortable with English and how will they understand the conversation on this number. In such circumstances, I simply smile and assure them IndianOil aims to be in every part and every heart. That is why the 1906 service is available to them in their language. The twinkle in their eyes when I tell them this information makes traversing with the weight of the cylinder worth the while. ●



In hilly locations across the country, LPG is promoted as the cleaner solution to traditional biomass such as fuelwood, cow dung, and coal for daily cooking needs. Many a time, cutting across the scenic Dal Lake in Srinagar, one can find boats carrying Indane cylinders for delivery to households and commercial establishments.

Photo by: Dr. Arun Khanna

Staying Safe

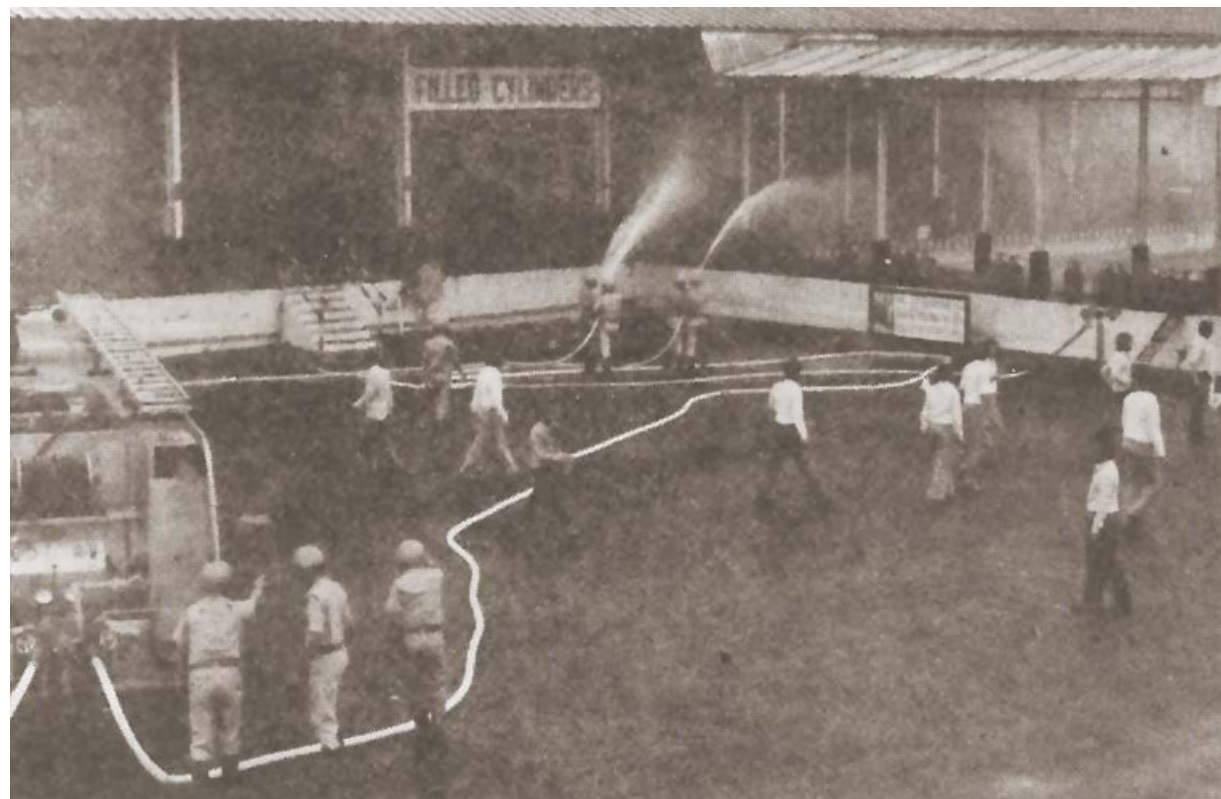


Safe handling of LPG gained significance as the number of Indane consumers grew following its launch in 1965. Myths surrounding the risks of the highly-inflammable fuel had to be dispelled and specific handling guidelines spelt out.

Safe equipment and safety training gained traction and seminars were organised across the country for distributors, technicians, delivery associates, and consumers.

Mock drills and firefighting demonstrations were regular at plants as was the screening of safety films. This helped greatly since, over the years, Indane bottling plants would go on to win several national and international safety awards.

Then and now, the brand's mantra has always been 'Staying Safe'.



Fire drills in the Eighties and Nineties at the Bongaigaon and Bengaluru bottling plants.

B S Giridhar

Former Executive Director (HSE), Marketing Head Office

As a company involved in LPG production and marketing, IndianOil has always recognised that safety — personnel and infrastructural — is crucial. That is why, since the very beginning, it has been implementing adequate safety measures to prevent accidents during bottling and transportation.

The safety standards for safe handling of cylinders, bottling and transportation, and installation in customers' premises has evolved based on past learnings and behaviour of personnel and other stakeholders in the supply chain. The standards were laid out on a collaborative basis with other oil marketing companies in India and coordinated by the Oil Industry Safety Directorate (OISD). Our standards are, therefore, more stringent than global standards, providing safety assurance to all stakeholders handling bulk LPG and cylinders — right up to customers' premises in India.

Process-based safety standards that are in place at ports, pipelines, and bottling plants ensure total safety integrity of all personnel involved in the handling of bulk LPG. As far as safety in bottling plants are concerned, two aspects have been always paramount: automated preventive actions for safety and fire-fighting facilities. The first ensures that preventive measures are immediately implemented so that there are no accidents or leakages or fires. The other ensures that any emergency at the plant, despite adequate measures, is taken care of.

In bulk LPG unloading from ocean tankers and road tankers, steel loading arms are used to eliminate the possibility of hose failure and ensure safe operations. Bulk LPG storage tanks are equipped with an automatic level gauging device to provide alarms to plant personnel. In case this malfunctions, a fail-safe overspill switch interlocked with remote operated shut-off valve comes into action and ensures shut-off of all plant operations.



LPG is highly inflammable and, therefore, the foremost in terms of plant safety is prevention of any source of fire, including static charge. All sources of ignition from matchboxes to lighters, mobile phones, and even fabrics such as nylon, are prohibited inside the Plant Licensed Area. Naturally, smoking is also strictly prohibited — both in and around LPG plants. Since static charge can also generate during various activities at the plant such as running of chain conveyors that carry cylinders, handling of LPG cylinders on the chain conveyor and plant floor, transfer of LPG inside pipelines and its filling into cylinders, etc., we have ensured earthing of all equipment, pipelines, machines as well as bonding of different segments of pipelines and equipment.

Inside the Plant Licensed Area, gas monitoring systems equipped with leak sensors detect potential sources of leakage and initiate alarms to enable personnel to take corrective action. As far as storage vessels go, safety relief valves release excess pressure just as high-level alarms check their overfilling. LPG bottling plant pipelines which experience extra pressure are adequately equipped with flow check and thermal safety valves and since LPG often generates vapours inside the plant floor, making the plant susceptible to incidents, an extraction system extracts the vapour and releases it at a safe height. Finally, all machines and equipment inside the plant are provided with safety interlocks which ensure that their parameters are within safety limits.

However, sometimes, despite all preventive measures and safety devices / interlocks, a fire or a leakage can occur — which is why even stray possibilities are taken into account when planning safety protocols and the reason why our bottling plants are well-equipped with efficient fire-fighting facilities such as first aid fire-fighting, fire hydrant network, sprinkler systems, fire trolley, and hand sirens.

The fire hydrant network at all plants are robust, with a series of hydrant pipes covering every nook and corner of the plant and supported by diesel-driven fire engines, fire water tanks, deluge valves and monitors, and double hydrants/nozzles. The sprinkler system is initiated through deluge valves which are located in critical areas; they start spraying water in and around the affected area as soon as they sense a fire. Deluge valves can also be operated manually from the control room or even from the field. Water monitors are controllable and high-capacity water jets are used for manual firefighting and shed-cooling. Double hydrants / nozzles dispense water at high pressure with the help of fire hoses and different kinds of nozzles.



We have always believed that only providing safety equipment is not enough; it is critical to educate personnel on how to use and maintain them. Hence, we conduct regular fire drills. They help us test the safety and firefighting systems available and the preparedness of plant personnel in handling emergencies. We have also created well-defined Standard Operating Procedures (SOPs) that outline how to operate an equipment or workstation — all of which are displayed on the designated equipment, where they can be easily seen and read. Additionally, safety devices in plant premises are rigorously and periodically tested and calibrated.

Fire trolleys, customised according to need, contain first aid fire-fighting equipment as well as fire proximity suit, Self-Contained Air Breathing Apparatus (SCABA), water jet blanket, resuscitator, first-aid box, stretcher with blanket, fire hoses, foam branch pipe, jet and spray nozzles, and public address system. With the hand siren, manual call points and emergency shut-down switches, plant personnel can be alerted of any emergency and even suspension of plant operations.

While safety at LPG plants is critical, safety while transporting LPG in Bulk TTs and Packed Cylinder Trucks is also important. So, before cylinders are loaded on trucks for despatch to channel partners, their valves are tested for valve seat/O-ring leak and body leak. Every cylinder is also fixed with a safety cap. Yet, there can be parameter changes and the remote possibility of leakage even during transportation — potentially endangering the environment and people in the area.

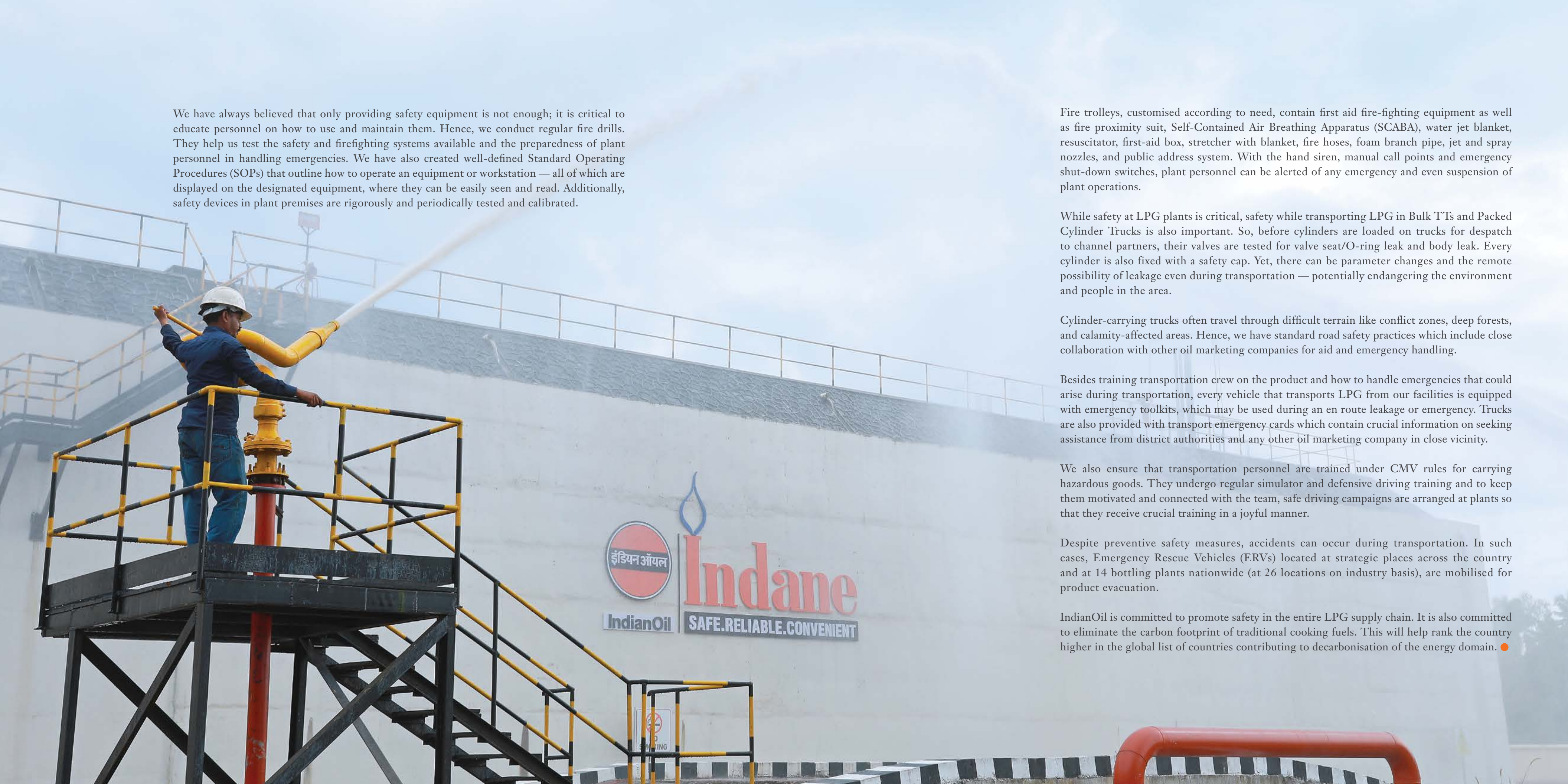
Cylinder-carrying trucks often travel through difficult terrain like conflict zones, deep forests, and calamity-affected areas. Hence, we have standard road safety practices which include close collaboration with other oil marketing companies for aid and emergency handling.

Besides training transportation crew on the product and how to handle emergencies that could arise during transportation, every vehicle that transports LPG from our facilities is equipped with emergency toolkits, which may be used during an en route leakage or emergency. Trucks are also provided with transport emergency cards which contain crucial information on seeking assistance from district authorities and any other oil marketing company in close vicinity.

We also ensure that transportation personnel are trained under CMV rules for carrying hazardous goods. They undergo regular simulator and defensive driving training and to keep them motivated and connected with the team, safe driving campaigns are arranged at plants so that they receive crucial training in a joyful manner.

Despite preventive safety measures, accidents can occur during transportation. In such cases, Emergency Rescue Vehicles (ERVs) located at strategic places across the country and at 14 bottling plants nationwide (at 26 locations on industry basis), are mobilised for product evacuation.

IndianOil is committed to promote safety in the entire LPG supply chain. It is also committed to eliminate the carbon footprint of traditional cooking fuels. This will help rank the country higher in the global list of countries contributing to decarbonisation of the energy domain. ●





Safety management is an integral part of the IndianOil ethos and the company's commitment to safe workplaces is reflected in its world-class safety management systems.

State-of-the-art Emergency Response Vehicles (ERV) have thus been deployed to handle LPG Tank Truck accidents. ERVs are fitted with a DG set, a KL stainless steel tank with water to take care of any ice formation by the leaking LPG, lifting and pulling equipment, telecast lighting, smart hoses that close on either side in case of any hose burst, GPS to track the ERVs, exclusive cabin crew arrangement, a five-seater front cabin for the rescue team, non-sparking tools, fire proximity, low temperature suit, water jet blanket, and air-breathing apparatus.

The newer ERVs also have an intrinsically safe mobile phone for use at the site during accidents.

Without any doubt LPG is an excellent cooking fuel. However, it does not take away from the fact that it is a hazardous chemical that has to be handled carefully. It is easy to ensure safe handling at bottling plants and distribution agencies by training personnel and equipping the premises with safety and firefighting equipment; it is difficult to extend the same facilities to customers’ premises.

In the early years after Indane’s launch, there was the urgent need to pre-emptively address misapprehensions that customers had about using LPG. Creating public awareness about safe usage has thus been an integral part of Indane’s promotion since 1965.

IndianOil had, in fact, developed and incorporated a system of pre-delivery checks by personnel, regular inspection in between refills, and even imparting awareness to the customer during delivery. However, sometimes the customer would not be at home to receive the delivery and the same would be received by neighbours on their behalf. This was often the case in metro cities where every member of the household would be employed, keeping them away from home during the major part of the day. Besides, there was a spate of household LPG-related mishaps in different metros.

As a result, IndianOil felt the pressing need to devise a better way to educate customers on the right way to use and maintain their LPG cylinders. That is how the initiative of organising safety clinics for customers in different parts of the country started — a practice that is undertaken regularly even now. Safety clinics extend to awareness programmes at schools and colleges to educate students on safe practices to be followed while handling a cylinder as well as to conserve fuel. Safety information is also transmitted through radio and television shows for creating public awareness at the mass level.

At safety clinics, besides live demonstration and training, a short film is screened on the safe use of LPG. It is recommended that consumers use the Suraksha Hose, a patented equipment developed at the LPG Equipment Research Centre (LERC) in Bengaluru. At the clinics, consumers are educated on timely replacement of the Suraksha Hose. Other aspects covered in these clinics include: precautions to be taken in case of smell of gas or suspicion of leakage; position of cylinder and stove in kitchen; appropriate clothing to be used while cooking; use of safety cap on the cylinder; and the correct way to light the stove, either by using matchsticks or BIS-approved appliances.

Why?



Because Mrs. Iyengar was so tired that day, she forgot to turn off her gas regulator knob before she retired for the night. Unfortunately, one of the burner knobs on the stove was not fully closed and the gas began to leak...

Early next morning she went into the kitchen to boil the milk. She smelt the gas, but her still sleepy mind paid no attention to that danger signal. And then she lit a match.

Mrs. Iyengar got away without major injuries. But you might not be as lucky...

How

can you make sure that such a thing never happens to you?



Always turn off the regulator knob at night. And follow Indane's two minute system for LPG safety:

The first minute in the morning—as soon as you enter the kitchen, check if you smell gas. If you do, follow the precautions given below. If you don't, then you can turn on the regulator knob. As you do so, check that the rubber tube is in good condition, without any cracks. And light a matchstick before you open the burner knobs.

The last minute at night—before you switch off the kitchen light, turn off the regulator knob and check that the burner knobs are fully closed.

- If you smell gas, act quickly—
- Close regulator and burner knobs
 - Extinguish all naked flames—even agarbattis
 - Open all windows and doors to disperse the gas
 - Do not switch on or switch off lights/fans as a spark might cause an explosion
 - If gas odour persists, call your Indane distributor immediately

Spare two minutes everyday for safety



Because



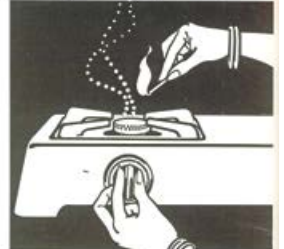
Mrs. Rao was running late that morning. It was almost time for the dabbawala and the rice will had to be cooked. She placed the cooker by the stove and turned on the burner knob. But the matchbox wasn't in its place. She searched all over for it. Then in exasperation opened a new box.

In her hurry she forgot about the open burner. She didn't smell the gas either. Just in the match...

Mrs. Rao got away without any major injuries. But you might not be as lucky...

Beware!

You can make sure that such a thing never happens to you.



Always light the matchstick and then open burner knobs. And follow Indane's two minute system for LPG safety:

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Spare two minutes everyday for safety



LPG and you

Dear friend
Do not dread
Use of L.P. Gas
Can be handled by every lass.

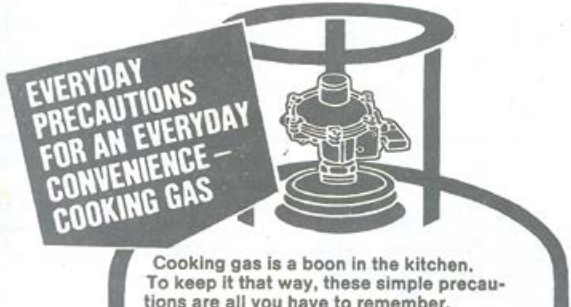
For every maid
See an ad for Customer's aid
For bettering the lot
We have Radio Spot & TV Slot.

Be our guest
Safety film is best
For residents
On how to avoid accidents.

Cooking gas pamphlet
In the form of booklet
Is handy (in the kitchen more useful)
For a lady (than other things more fanciful)

Tips don't ignore
Their importance is more
Precautions we have to take
As family's safety is at stake.

—Ratna



EVERYDAY PRECAUTIONS FOR AN EVERYDAY CONVENIENCE—COOKING GAS

Cooking gas is a boon in the kitchen. To keep it that way, these simple precautions are all you have to remember.

To prevent Gas Leaks:

- Keep cylinder upright. If horizontal, the liquefied gas can escape and leak.
- Change rubber tube immediately if you spot cracks/pores. In any case, change it every two years. Use only an approved tube.
- Close cylinder valve and burner knobs when not in use.
- Always strike the match first, then switch on the burner.

And in spite of all this, if you smell gas, act quickly:

- Close cylinder valve and burner knobs.
- Extinguish all naked flames—even agarbattis.
- Open all windows and doors to disperse the gas.
- Do not switch on or switch off lights/fans.

If gas odour persists call your Indane Dis immediately.

Indane COOKING GAS

Issued in the Public Interest by Indian Oil Corporation Ltd.



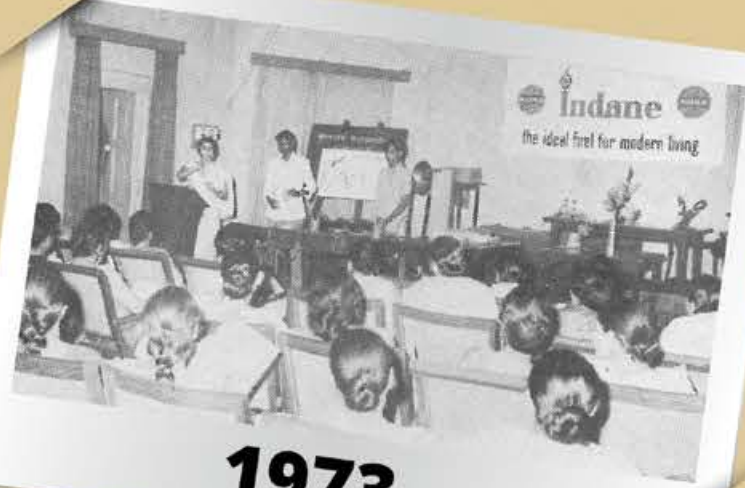
Safety clinics became common practice as Indane consumers grew in urban centres in the early years. Thereafter, as Indane penetrated more and more into rural areas, these clinics evolved into LPG panchayats. These panchayats — conducted as community meetings in tehsils and villages — serve as a platform for consumers to share experiences and promote mutual learning.

Safety clinics and LPG panchayats now are crucial tools in IndianOil's initiative to promote LPG usage across the nation. These workshops have proved critical in removing fears and doubts in the minds of consumers about adopting LPG as household fuel. The company will thus continue to conduct such awareness sessions as part of its mission to take Indane to every heart, and every part of India. ●



Organised regularly in various regions of the country, LPG panchayats — a peripheral of Ujjwala — are where beneficiaries interact with each other and with other stakeholders in the Indane eco-system to share experiences and promote mutual learning. These panchayats function like safety clinics, with each bringing together about 100 consumers near their place of residence to talk about sustainable and safe usage of LPG and the linkage between the use of clean fuel for cooking and women empowerment.

#LPGSafety



1973

Indane safety campaign in Bareilly.



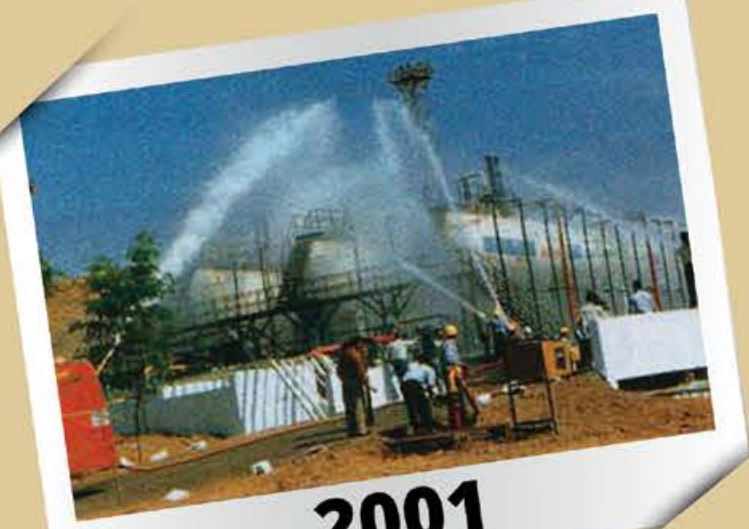
1985

Schoolgirls in Madras learn the safe use of Indane cylinder.



1989

An LPG sales officer demonstrating the safety aspects of the fuel to schoolgirls in Delhi.



2001

Emergency response drill at the Pune bottling plant.



1977

IndianOil officials explain safety measures to delivery boys in Kochi.



1991

Emergency response drill at the Hazira bottling plant.



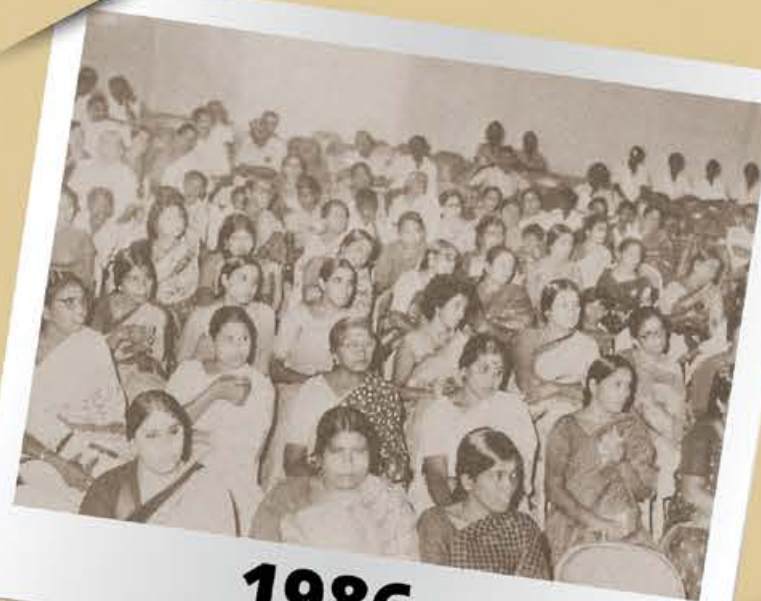
2004

Delivery personnel and mechanics at a safety training session in Raipur.



1984

Safety clinic for homemakers in Bhopal.



1986

Tuticorin homemakers at an LPG safety clinic.



1998

Live fire drill at the Sanand bottling plant.



2022

Safety clinic in Sojitar, Gujarat.

Delivering Happiness

Since its launch nearly 60 years ago, Indane today serves crores of households, commercial kitchens and industries across the country. Available through more than 12,800 distributorships, Indane has carved a niche for itself in kitchens and workspaces even in the remotest corners of the country.

Leveraging technology, Indane has traversed the digital platform to provide numerous initiatives for greater customer convenience. Web/IVRS/SMS and mobile app have eased the booking of refills or getting new connections.

Today, among novel marketing initiatives are LPG cylinder booking via Alexa and integrated transaction processing server at retail outlets.



The launch advertisement of Indane which listed out its benefits as faster cooking, cleanliness, instant heat at the turn of a knob, longer life for utensils, and quick replacement, also proclaimed that it was designed for modern living and the “intelligent housewife” who wished for “gracious living”.

Leela Choudhury

Indane consumer, Guwahati

As an Indane consumer for over fifty years, I have come to believe with all my heart that IndianOil does give utmost importance to “nurturing happy homes and spreading smiles”. For me, an Indane connection was meant to be a surprise from my husband, way back when the brand was launched in 1971 in Shillong, then the capital of undivided Assam.

I still vividly remember the day it came home, in a Willy jeep. The cookstove and the hose, I was later told had come all the way from Bombay! In less than half an hour, the smiling technician had set up my modern cooking system and answered all my questions about how to use it. In the days that followed, my house was the hub of the neighbourhood, with people visiting me all times of the day to see the ‘system’. Indane changed my life and in the months and years that followed, I got used to its ease of use. Also, today, refills happen simply through an SMS. In fact, only a month ago, the refill arrived at my doorstep in less than ten hours!

Since the day Indane was launched on October 22, 1965, consumer convenience has been at the heart of its every effort. There was a time, in the Eighties and Nineties, when getting an LPG connection was difficult — with loads of paperwork and long waiting periods. Once the connection was approved, the distributing agency would send intimation to the prospective consumer through postcard, after which the consumer had to visit the distributor to complete pending formalities. In fact, I remember how the demand for LPG connections reached such proportions in several urban centres that authorities had to resort to police *bandobast* to control crowds outside Indane distributorships.

Receiving the connection was again just the beginning. The consumer had to physically visit the distributor showroom for an LPG refill. Also, each connection then was only Single Bottle, unlike the ubiquitous Double Bottle now. Consumers had to be alert about LPG usage, which meant that they had to keep a close track on how long the cylinder would last. Refill requests in those days were through a queue system that was long; besides it had a lengthy waiting period. This, we were told, was largely due to limited number of distributors and delivery infrastructure, not to mention unexpected delays in delivery due to difficult terrain and roads.



A makeshift kitchen tent with an Indane cylinder in the Nagtibba mountains, Uttarakhand.

Distributors, on the other hand, had to manually maintain physical records of customer requests and generate and issue cash memos. Customer feedback could be taken only during personal visits or telephonically. Grievances were sent through letters, and it was time-consuming for distributors to track and resolve them.

In the 2000s, much changed. Indane connections began to be released across the counter. Distribution was better and this led to improved consumer convenience. With time, IndianOil also traversed into the digital space and consumer experience enhanced further.

During 2000-01, Indane customer service cells opened in the state, divisional, and area offices, as well as at terminals and depots. IndianOil launched refill booking through its website at select distributors and commissioned interactive voice-recording facility at Indane area offices. This was totally delightful for consumers, especially when the next year a toll-free telephone facility was extended at customer service cells throughout the country.

A major technology shift happened in 2008-09 when IndianOil introduced Indsoft to plan, network, and manage the LPG customer base; a web-based customer grievance redressal system (eCFS); and an all-India toll-free number which allowed consumers to track complaints and even escalate them.

Conveniences happened swiftly. Within a year, Indane launched IVRS/SMS-based refill booking system in phases. Then, in another two years, by 2012, LPG was integrated with the government's Unique Identification Project (UIDAI), which plugged all holes in LPG distribution. Three years later, by virtue of the PaHaL scheme, consumers could link their LPG connection number with their bank account through Aadhaar to receive the LPG subsidy to their bank accounts.

By 2013-14, we could also buy 5-kg free trade LPG cylinders through select retail outlets and *kirana* stores. A year later, we could book LPG connections online, under the government's SAHAJ initiative. My granddaughter was a whizz: she simply placed a request online by filling an eKYC form, uploaded the required documents, and made a nominal payment. She received an electronic subscription voucher and soon the distributor's representative arrived at her home to install the connection.



There just was no waiting period. Later, by 2021, the Missed Call service facility was introduced, enabling consumers to book cylinders with a missed call to a number provided by IndianOil. Indane also launched a mobile app for iOS and Android users, through which customers could easily avail of a range of services, including booking a refill and changing their distributor.

Today, I discover that all LPG services can be found on the Indane website. Consumers need to simply register and book refills on a centralised number — either through SMS, Missed Call, IVRS, or WhatsApp. We can also use the portal or mobile app and make payment digitally through UPI, BQR, BBPS, Netbanking, or cards in real time. Receipts are also generated electronically and sent through SMS. We can also link documents via Digilocker and retrieve them through Aadhaar authentication.

The registration and distribution system is robust now. We can today avail Double Bottle Connection instantly at our doorsteps with a choice to choose 5 kg, 10 kg, or 14.2 kg sizes. Refill requests even during festivals or calamities and in the remotest parts of India happen within two days; or so my daughter-in-law who lives in Manipur tells me. In fact, Indane Tatkal Seva which was launched in January 2022 in Hyderabad assures refill delivery within two hours of request, at an affordable extra cost of ₹25. Earlier, in 2021, IndianOil also launched the government's refill booking portability initiative, largely an extension of the 2013 LPG connection portability project.

So now, when I receive a link via SMS for rating the delivery, I provide the feedback immediately. It feels nice to know that Indane, my lifelong companion, cares. My journey with the brand, though not without challenges, has been good. I believe that Indane does indeed deliver happiness. ●



#CustomerFirst

#LPGSafety

REACH OUT AT
1906
FOR EMERGENCY
GAS LEAK SERVICES

CHHOTU WISHES A
BIG JOYFUL HOLI.
Call your celebration with Indane
Chhotu for your loved ones.

Indane
SAFE • RELIABLE • CONVENIENT

HOW TO BOOK
INDANE GAS CYLINDER

No address proof required
to get your
Chhotu
FTL cylinder.

Indane
SAFE • RELIABLE • CONVENIENT

You are
just a Missed Call
away from
your New
LPG connection

Give a Missed Call to
8454955555
today

A new LPG cylinder
is a tap away
Book now
on WhatsApp

WhatsApp it to
758888824

Shaan se pay karo.
Digital pay karo.

0% Zero transaction charge on
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NOW BOOK & PAY
for your Indane LPG
Cylinder through **paytm!**

Show your Aadhaar Card,
get an LPG Connection *instantly!*

Get a non-subsidised LPG connection
even without an address proof.

Submit your Aadhaar card and
get a non-subsidised LPG connection
even without an address proof.

Submit your Aadhaar card and
get a non-subsidised LPG connection
even without an address proof.

CHHOTU CYLINDER
BADEY KAAM KA...
Store it as back-up,
Use it when you need it most.

Now, choose a 5 kg cylinder combo along with your 14.2 kg Indane connection
Apply for a Double Bottle Connection to avail this facility
Contact your Indane Distributor for more details

You can also place a request through <https://cx.indianoil.in> or IndianOil One Mobile app

BOOKING YOUR
GAS CYLINDER IS NOW
A TWEET AWAY.

Tweet @Indanerefill
<SPACE> #register <SPACE> <LPGID> <SPACE>
and then book refill by tweeting @Indanerefill

SHARE THE DAC
TO HELP US SERVE YOU BETTER

Your LPG refill invoice
SMS will contain a
Delivery Authentication

Thank you
please give us
your feedback

BADA CYLINDER KHALI?
Chhotu hai na, don't worry!

Now, choose a 5 kg cylinder combo along with your 14.2 kg Indane connection
Apply for a Double Bottle Connection to avail this facility
Contact your Indane Distributor for more details

You can also place a request through <https://cx.indianoil.in> or IndianOil One Mobile app

Book Refill Through
INDANE
ONE
MOBILE
APP

Be SAFE
Be ASSURED

Use Bharat BillPay enabled
Digital Channels to book your
Indane Cylinders and Be Safe.

Accepted by all Indane distributors
**BOOK AND PAY FOR YOUR
INDANE CYLINDER**

Accepted on <https://cx.indianoil.in> portal
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How to apply for the Indane Gas Dealership?

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Smart payment options,
for smart people!

Pay for Indane LPG services through quick,
convenient and multiple digital payment options.

UPI
BHARAT
BILLPAY

Avail digital payment facility even at the time of refill delivery.

EASY TO HANDLE. EASIER TO BUY.

✓ No address proof
✓ Safe: BIS - certified cylinder
✓ Reasonably priced
✓ Get a refill

#NomadicKitchen

The world's highest motorable road, built and maintained by Border Roads Organization, was once an important part of the ancient Silk Route. Running through Khardung La pass, this formidable 52-km stretch at an elevation of 19,300 feet, is today the *piece de resistance* for bikers seeking adventure trails.

And, while dangers such as stray rolling stones and landslides are common, it is lack of food and water that pose the biggest challenge. And, when coupled with low oxygen level and poor mobile phone network, the ride is fraught with risk.

NomadicKitchen hopes to change this. A mobile kitchen that is placed every day on the road to Khardung La, it is IndianOil's new initiative to offer security to those who pass by. As a group of enthusiastic bikers from Tamil Nadu would say: "We ran out of food and had no clue if there were any shops or hotels in the area. Finally, we found NomadicKitchen and had our fill... thanks to IndianOil."

Using Indane Chhotu as cooking fuel, NomadicKitchen not only serves food and water but also houses aprons, NFR items, Indane caps, T-shirts, and more. Nurboo, its driver-cum-cook serves both food and warning of dangers lurking in the area. "Often, bikers unfamiliar with the conditions here, get stuck atop the hill. Helping, guiding, and serving them food is our duty. So, word has spread about us. Earlier, we we would use only one cylinder per day. Now we need two." ●





Lighting up Lives

Mission Smokeless Village to Ujjwala

In December 2015, the IndianOil piloted Mission Smokeless Village project in Vyachakuraballi in Chikkaballapur district of Karnataka achieved honour like none other when the government declared it as India's first smokeless village — meaning that none of the 274 households of the village cooked with firewood any more.

The project, launched with the idea to help women regain their health and make cooking easier, was started on the premise that cooking with firewood makes women more prone to pneumonia.

Under the mission LPG stoves and cylinders were made available for villagers, awareness programmes were conducted to emphasise the importance of going smokeless, and women were taught how to safely operate and handle stoves and cylinders. Soon it became the launchpad of a government campaign that has reached iconic status — the Pradhan Mantri Ujjwala Yojana.

In 2017, Vyachakuraballi entered the Limca Book of Records.



The 2015 World LPG Forum was a watershed moment for IndianOil in many ways. Presenting an astonishing array of data on indoor air pollution, Dr. Kirk Smith, Nobel Peace Prize recipient, and environmental health giant, opened up the minds of the audience to the dangers of the ‘*chulba* trap’ — the connection between *chulbas* (cookstoves using biomass, firewood, etc.) and the health and well-being of womenfolk. And, it was an eye-opener. A woman in a rural household, using a *chulba* to cook, takes in a breath-choking amount of pollution, equivalent to 300 to 400 cigarettes an hour!

Stunned by the revelation, it was an awakening of sorts for the audience. A debate followed on how this could be addressed. Then IndianOil Chairman B Ashok took it upon himself to drive a change that would enable rural women to cook using cleaner fuel.

LPG was the perfect substitute and the Chairman set up a task force to study and implement LPG use in rural households. An act that would eventually become momentous. Meanwhile, a team member from Karnataka who had attended the Forum came back to explain the vision of Dr. Kirk Smith—one that drove the power of imagining change and hope for rural womenfolk.

Realising the monumental effort that would be required to even kickstart such a huge task, members of the LPG group of IndianOil, Karnataka State, set up a war room. And, after a lot of brainstorming and focussed discussions, a protocol was established and a standard procedure was laid down. Resources too were allocated from the CSR budget.

Since the task could not be carried out without the support of the state government, a core team of IndianOil personnel, LPG distributors, block development officers of the local district, panchayat members, and field officers from the Area Office was formed and it is this team that actually set the process on a roll.

Extensive surveys were carried out of the studied habits of rural households, after which two approaches were adopted. The first identified Vyachakurahalli in Chikkaballapur district in Karnataka for the first level change. The second co-opted other stakeholders like stove manufacturers to work alongside in educating rural women on the extraordinary benefits that they would receive.

After over a month of intense fieldwork in that involved organising clinics to explain the changes, safety protocols, economics of change, societal improvement, and an impending social revolution, Vyachakurahalli celebrated the actual change by embracing the way to social prosperity.

Mission Smokeless Village was thus born, a journey that really began when Vyachakurahalli was proudly declared the ‘First Smokeless Village of India’: the term ‘smokeless’ coined by the Karnataka LPG Team as an apt epithet for the mission.

This was replicated in quick succession across Karnataka before other states of India too took it ahead. Vyachakurahalli was recognised by the Government of India and citations from various sources came in — Limca Book of Records, appreciation from the Government of Karnataka, and later even from Parliament.



#Ujjwala

Realising the enormous value Mission Smokeless Village had for the uplift of rural women, the Government of India announced the Pradhan Mantri Ujjwala Yojana (PMUY) in May 2016 in Ballia in Uttar Pradesh. The launch of the Blue Flame Revolution here was a logical choice, given that this region had the lowest LPG penetration in the country.

Popularly known as Ujjwala, the PMUY scheme used almost the same protocol as Mission Smokeless Village. The only difference was that budgetary support was provided through Parliament. The aim was to make LPG connections easily available to rural and BPL households — achieving a target of eight crore LPG connections by FY 2019-20.

Clubbed with the PaHaL initiative which ensures that LPG subsidy amounts reach intended beneficiaries through their Jan Dhan accounts, Ujjwala brought rural women within the fold of financial inclusion—thereby instilling a sense of dignity in them. For IndianOil, it was an extension of Mission Smokeless Village and by mid-2018, within two years of its launch, it could hand out more than 1.67 crore LPG connections under the scheme.

Ujjwala has addressed the link between energy, poverty, and household air pollution, and for that, a lot of credit goes to the warriors and women of Mission Smokeless Village. Today, with LPG penetration of over 90 per cent across various states in India, we find women whose health has improved and who now have time for the family. It is there for the world to see; a phenomenon that has even been measured.

IndianOil's core mission has always been to improve LPG penetration in the country. Initiatives like PMUY only made it more zealous in helping the government achieve its target, nine months before the deadline of March 2020. Today, IndianOil continues to take forward PMUY 2.0 as announced in FY 2021-22. ●





Prime Minister Narendra Modi interacting with Ujjwala beneficiaries in New Delhi.

#PaHaL

Guinness Book of World Records-recognised holder of the “Largest Cash Transfer Programme (households)”, Pratyaksha Hastaantarit Laabh (PaHaL) was implemented by IndianOil and other oil marketing companies of India during 2014-2015. Initially launched in 54 districts of the country and then extended in the remaining districts, the Direct Benefit Transfer for LPG (PaHaL) scheme was designed to help consumers and in turn help the Government of India in better subsidy management. PaHaL ensures direct deposit of refill subsidy into electronic bank accounts and selling LPG at market prices.

PaHaL won the coveted title on August 12, 2015, after meeting stringent parameters with respect to such cash transfer programmes in countries like USA, China, etc. The project was a marvel of execution: in a very short span of four months, 80 per cent LPG consumers had joined the scheme. IndianOil brought more than eight crore Indane customers under it.

As on November 1, 2022 oil marketing companies had actually transferred cash amounting to ₹1,452 billion in the bank accounts of 289.6 million consumers who joined the DBTL (PaHaL) scheme across India.

#GiveItUp

Since domestic LPG was heavily subsidised, translating into huge annual subsidy burden, the Government of India launched the ‘#GiveItUp’ campaign in 2015 to encourage well-to-do LPG users to voluntarily surrender their subsidy so that BPL households could be provided with LPG connections. So far, approximately 1.1 crore people have given up their LPG subsidy.

Lakshmi

Chatariya Village, Darbhanga District, Bihar

I am a daily labourer and live with my only daughter, Bitti. While I did know a little about LPG gas stoves, I felt it was a rather expensive investment; I could instead use the money to continue sending Bitti to school. Firewood was enough for us, except on rainy days when they became damp and my child had to sleep without a proper meal.

One day, as I was lighting the *chulah*, the *sarpanch* arrived with some papers and plenty of praise for Bitti’s intelligence. After a while I realised that the papers were for an LPG connection. I was shocked; I felt that my poor Bitti was now missing school and working at the *sarpanch*’s house so that I could get an LPG connection. Otherwise, why would the *sarpanch* come to deliver the papers?

Later I realised that it was a surprise from my dear Bitti. She had taken my thumbprint on blank papers and smartly applied for a gas connection under Ujjwala — with the help of the *sarpanch*. Now we have a free Indane connection and I can cook hot meals without worrying about firewood.

Rumabaala Pandit

Arambhag District, West Bengal

October 8, 2016 remains a memorable day in my life. It is the day I got my Ujjwala connection and freedom from a smoke-filled kitchen. Since I got married, I had been cooking on a traditional firewood stove and had developed bronchitis. My treatment, our son’s education, and our monthly expenses were rising and it was getting increasingly difficult to manage.

It was during this time that Ujjwala changed my life. With assistance from the authorities and women in the village, I was able to get an LPG connection under the scheme. Now I save on monthly fuel and treatment cost. I can now help my husband at our farm. Indane has made our life healthier and happier.





Salmi

Mayong Village, Assam

I was out collecting firewood to cook my husband Moidul's favourite dishes when I slipped and fell. The doctor later said I had damaged my spine and advised me against carrying any heavy load. After we returned home from hospital, Moidul went out to buy firewood. But when he came back, he had a strange smile on his face. He asked me to wear the sari I had kept aside to wear during Bihu. After I did so, he kissed my forehead and gave me a receipt for a gas connection. I have been so happy since then!

Olee Borah

Jorhat, Assam

While IndianOil's LPG distributorship helps keep my kitchen fire lit and my family's stomachs filled, it was the opportunity to implement the PMUY scheme under its aegis that helped me to also contribute to society.

I was selected for a meeting of distributors and beneficiaries at the Rashtrapati Bhawan for my efforts during the campaign during which I could present the challenges involved in providing Ujjwala LPG connections for current and ex-labourers of tea gardens in Assam.

The problem received due recognition and resolutions were passed so that the hindrances in the inclusion of the affected segments could be eased. I was truly inspired to strive further in lighting up the lives of rural women.

Ranju Devi

Haripur Village, Alauli Block, Khagaria District, Bihar

My husband, a carpenter, was the sole breadwinner of the family and money was always short. I had learnt tailoring and wanted to help him with the household expenses but I could never devote much time; cooking took up the entire day. Adding to our woes, I developed respiratory problems, caused by the prolonged exposure to smoke from the *chulah*. In June 2016, Ujjwala came to my rescue. After I received the LPG connection, there has been no looking back. I save my health and my time. I also take up small stitching jobs and ease my husband's burden.

Savita

Peepal Village, Gautampura, Madhya Pradesh

After my husband passed away, I relegated myself completely to kitchen duties as a way of contributing to the joint household; after all, I and my 15-year-old son Mahesh were dependent on the income my brothers-in-law brought in. Mahesh aspired to study and get a good job, but I felt he should drop out. Meanwhile, I was constantly coughing and the kitchen smoke was causing my vision to blur.

One fine day though, my life changed. A new gas connection arrived under Ujjwala. Mahesh had secretly petitioned for one! I was angry, but could not take my eyes off from the blue flame. Slowly, I became comfortable using the gas stove. Now I take pride in my son's gift.







Cutting Edge

With frontline innovation as a way of life, the LPG Research Centre (LERC) set up in Bengaluru in 1990, and IndianOil's sprawling R&D Centre in Faridabad, set up in 1972, have pioneered a legion of products and technologies that serve diverse consumer and industry segments in the country and overseas.

LERC holds a strategic position in technical upgradation, safety, and quality assurance of LPG equipment in the country while the Faridabad R&D centre has developed game changing solutions for efficient LPG use. Both, through cutting-edge research and development, have evolved into engines for indigenisation of safe LPG products.



LERC, Bengaluru

U V Mannur
Former Executive Director, Tamil Nadu State Office

The government of a young, independent India had realised the potential of LPG as the fuel of the future, way back in the 1950s. And, IndianOil, as the first oil marketing company, began promoting its use with missionary zeal. In 1965, it launched Indane and stepped up the tempo of ensuring LPG penetration throughout India.

Achieving this goal was not without its challenges. In the initial phase of the country's LPG journey, the industry perforce adapted technology available in the global market for indigenous use — often with not-so-good results. LPG is a hazardous fuel if not used with utmost care, which meant that the quality of LPG equipment, including hose pipes and valves, had to be up to the mark. But that was not the case, often resulting in leakage-related fire incidents in households. This aspect, especially true in the 1980s, had the potential to discourage the use of LPG at a time when people were just about warming up to it.

No one understood the need for quality control measures to prevent LPG-related incidents better than IndianOil and the other two public sector oil marketing companies, Bharat Petroleum Corporation Limited (BPCL) and Hindustan Petroleum Corporation Limited (HPCL). Driven by a common goal, they then joined hands to establish a research centre for the LPG sector.

In April 1990, the LPG Equipment Research Centre (LERC), a public sector unit without any precedent anywhere in the world, was born in Bangalore, now Bengaluru. Recognised by the Department of Scientific and Industrial Research (DSIR), the centre was later registered as a society under the Karnataka Societies Registration Act, 1960 in January 1993. Since then, LERC has been in service of the nation and its LPG sector. IndianOil with a majority stake of 50 per cent has crucial decision-making role and brings to the table its research capabilities.

LERC's primary role is development of quality LPG equipment and suitable quality control measures to enhance LPG safety for domestic, commercial, and industrial customers. It is part of our duty to share knowledge acquired through research and innovation with LPG equipment manufacturers such as those involved in the making of cylinders, valves, and pressure regulators.



Clockwise from top left: A sophisticated equipment being demonstrated during the inauguration of LERC in July 1990; IOC-ians inspect cylinders during a review meet of LERC's performance in December 1990; The Polymer Lab in LERC; and demonstration of cookstove safety features at LERC.

To achieve this objective, our staff — comprising specially trained engineers from the three oil majors — conduct regular training and development workshops and seminars for OMC officials and LPG vendors.

Our state-of-the-art laboratories, recognised by the National Accreditation Board for Laboratories (NABL) and Bureau of Indian Standards (BIS), serve as testing centres for the various LPG equipment that we develop. Our mechanical, polymer, and combustion laboratories evaluate various equipment like cylinders, valves, hoses, and regulators in accordance with IS standards. Our research, testing, and innovation services extend to our parent OMCs, who diligently implement them in their facilities.

Among our patented innovations are the LPG Suraksha Hose, which is resistant to rodents and weather; DeTect handheld leak testers which check leaks in valves and O-rings before delivery; Tamper Evident Seals with advanced security features that prevent pilfering of subsidised domestic LPG cylinders; FKM O-ring which prevents leakage of LPG to the atmosphere; FKM Spindle Gasket that minimises leakage issues; and FKM Tight Joint which improves component performance of domestic pressure regulators (DPRs).

Advanced research has also helped us to develop several new equipment — SC valve retrieval unit, automated DPR testing unit, automated SC valve testing unit, and combo detect and detect calibration unit. Our high thermal efficiency LPG stoves have an efficiency of more than 74 per cent — the highest in the world — and help users achieve around ten per cent savings in LPG consumption.

LERC also works closely with BIS to develop Indian Standards for LPG equipment. We aim to be able to impart LERC certifications for LPG equipment in the future. Today, we even provide analytical assistance to LPG equipment manufacturers across the country for evaluating their technologies. For instance, in 2015, LERC tested the efficiency of the Agnisumukh stove, an innovative product developed for industrial kitchens.

LERC's role is especially critical in a country where LPG subscription is increasing each day. It is our endeavour to become a world-class institution, a centre of excellence developing quality system and equipment for the LPG industry. After all, it is our mission to be a prestigious asset for stakeholders and the nation. ●



A dazzling icon of research excellence, IndianOil's sprawling 65-acre world-class R&D facility in Faridabad is among the finest in Asia. It is India's foremost commercial research institution which today has forayed into sunrise research areas like nanotechnology, bioenergy, and new energy resources. For this, a new R&D campus equal in size to the present one has also been acquired.

In the late 1990s, IndianOil's R&D centre for the first time in the world developed a new technology that could process heavy petroleum fractions, including residues, to high yield of LPG. Christened INDMAX or Indian Maximization Process, it achieved the milestone by using IMX-50, a novel catalyst formulation.

Today, the centre's crucial focus area, nanotechnology, has also proved to be a boon for IndianOil's LPG division. ●



The INDMAX unit at IndianOil's Guwahati refinery.



The INDMAX unit at IndianOil's Paradip refinery.



With about 12 million customers waiting for LPG connections in the Nineties, enhanced LPG yield was the need of the hour. INDMAX was expected to come to the rescue because, besides being a major producer of propylene and butylene in refineries, it would also make LPG directly from residues. By 1999, the INDMAX patent was accepted in the USA. The same year, IndianOil would also go on to announce approval for the commissioning of the first unit by 2001.

Today, IndianOil has three commissioned INDMAX units at the Guwahati, Paradip and Bongaigaon refineries. And, by licensing the INDMAX technology to global customers, the company has now also achieved the status of refining technology exporter in a very competitive field.



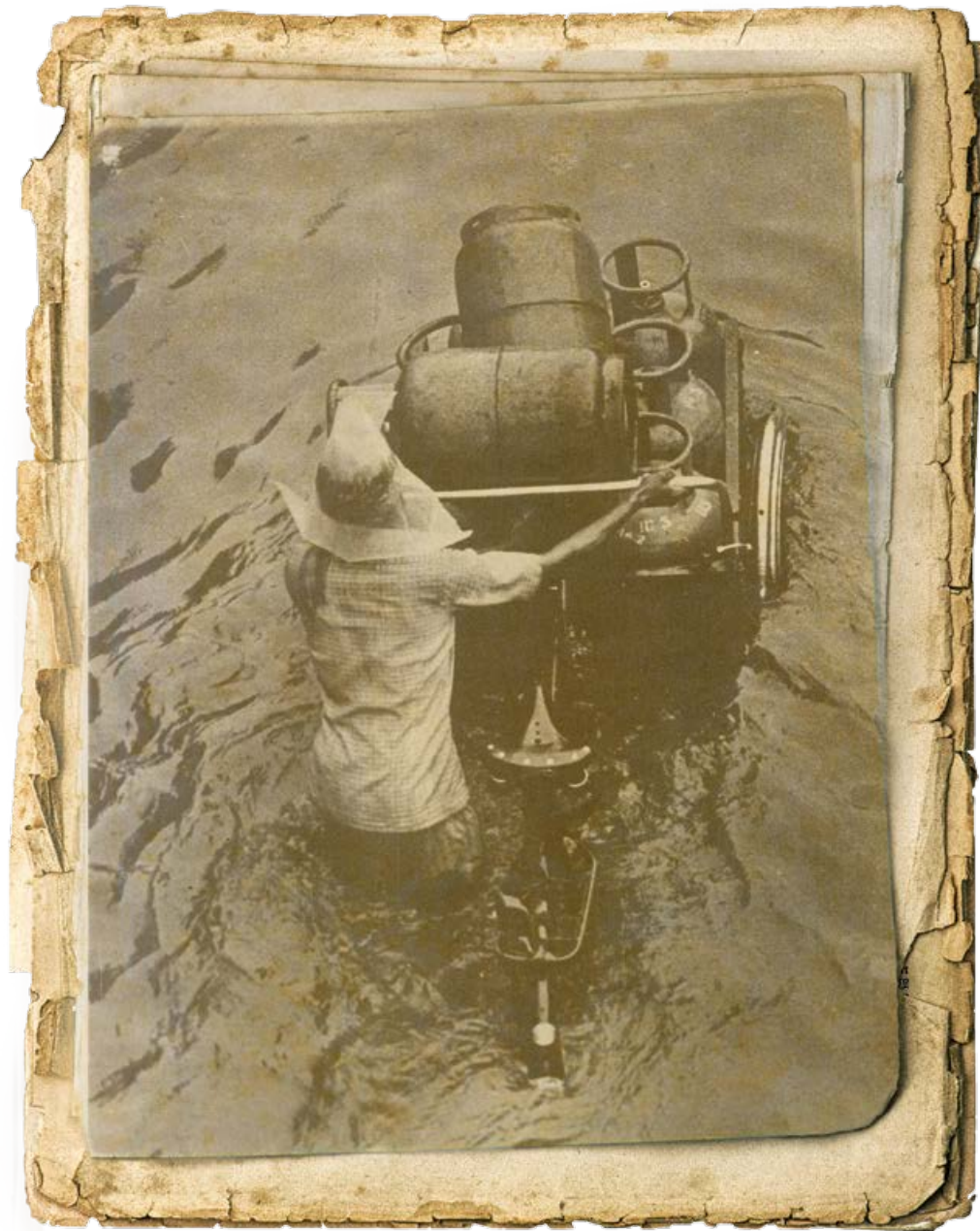


Warriors Extraordinaire

In its journey of nearly six decades, Brand Indane has stood by the nation through its many storms. Its warriors, in the spirit of 'keep the home fires burning' and 'India comes first', have swiftly and selflessly served communities across the country through emergency situations and annual hardship months.

Despite disruption in the demand and supply dynamics, channel partners, delivery personnel, truck crew, contract workers, bottling plant employees, and scores of other stakeholders always up their game and keep the nation on the go.

On April 30, 2020, for example, braving the corona virus pandemic and a stringent lockdown, LPG warriors kept fuel supply lines going and delivered a record 33.11 lakh Indane cylinders on a single day!!



In April 1984, Madras (now Chennai), experienced heavy downpour, with a record rainfall of 29 cm on a single day, the heaviest in 75 years. While normal life and transport were crippled due to heavy water logging, Indane supplies to customers remained unaffected.

Rajendra Kumar Arora
Former Executive Director (Cryogenics)

August 2018 is a period Kerala will remember for a long time. It was when the southern state was ravaged by unprecedented rains. With 35 dams overflowing, people across Kerala found themselves surrounded by knee-to-chest deep water in their own homes. Old-timers were then reminded of the 1984 floods in Chennai — the capital of the neighbouring state of Tamil Nadu — when the city had come to a complete standstill after a downpour citizens had not experienced in 75 years!!

Then, as during the 1984 floods in Chennai, it was IndianOil's LPG warriors who stepped up to brave storm and rain to ensure uninterrupted supply of Indane. Mithun Shaji Chittoorappan of Chittoorappan Indane Service in Kochi recalls how undauntingly he and his team continued distribution in 2018 — trudging up to the IndianOil depot to meet the ground team and collect Chhotu cylinders. They then ensured that the Chhotus were delivered to as many petrol pumps and relief camps they could reach in and around Kochi.

This incident is just one of the many that bring forth IndianOil's spirit of reliability and resilience in the face of adversity over the decades. Be it the annual floods in Assam and Bihar, snowfall in the Himalayan districts, landslides in Manipur, massive floods in the Diamond City of Surat in 2006, or even the deluge of the 2004 Tsunami and the 2020 Cyclone Amphan — all of which left behind devastating losses — IndianOil continuously strives to keep the blue flame burning. Distributors step up their logistics, and delivery personnel carry cylinders on foot, up hills and mountains, or through rushing waters, to reach the affected households. Many a time, they are ferried by boats across swollen rivers, plied by vans and bicycles across knee-deep water, carried on shoulders across eroded roads or, strapped to the head, up hilly trails.

D Bandhopadhyay, a colleague, remembers the risky journey the Andaman & Nicobar IndianOil LPG team made to the Port Blair bottling plant to inspect damages post the 2004 Tsunami and ensure restoration of supplies.

The disastrous Bhuj earthquake of 2001 is another case in point. We restored services to the quake-affected areas almost immediately; we also assisted in relief services, even as we mourned the loss of near and dear ones.

IndianOil marches on even in war, always working on a warfooting. Indane services in Kargil and the northern borders continued non-stop even as tanks fired missiles and enemy planes dropped bombs. Not to mention the challenges of supplying to both the defence services and civilians in the Northeast, a region that often finds itself in political and environmental turmoil. In fact, to ensure uninterrupted services here, an exclusive logistical survey called Pre-Monsoon Topping is conducted every year, as a matter of routine.

During the corona virus pandemic, while frontline fighters engaged in pitched battle with the virus, unsung heroes like Indane warriors continued with their job of maintaining constant flow of essential goods and services for communities across the nation. They kept the flame of cooking gas 'on' in kitchens, thereby ensuring smooth movement of the nation's wheels.

Putting the country before business is an intrinsic part of IndianOil's DNA and so we reached out to millions of Indane customers through the media and public announcements, assuring them that there was no shortage of supplies. On an average, 25 lakh cylinders of Indane were delivered every day during lockdown to the doorsteps of customers.

At the same time, we employed digital tools to keep track of the well-being of teams working at various locations. At operating locations, all touchpoints, workspaces, and machinery were sanitised twice or thrice every day.



Indane supplies being coordinated by distributors after the 2001 earthquake in Bhuj, Gujarat.



An Indane delivery van drives through a flooded city street in Assam.



Personnel carry Indane on their shoulders from an assembly point for delivery after landslide in the hills of Manipur.



A delivery associate with an Indane refill wades through a flooded village in Assam.



A delivery associate carries an Indane refill across a makeshift track over an eroded road in Munnar, Kerala.



Indane cylinders being ferried through the swollen backwaters during the 2018 Kerala floods.

Indane tank truck drivers, who usually remain behind the scene and on the road, strong-wheeled the distribution of the blue flame of kitchens. At bottling plants, even while trucks carrying empty cylinders were sanitised and fumigated at the entry, drivers queued within designated markings near supply distribution areas to avoid clustering.

The ultimate thought was how to safely and effectively keep the supply chain running. So, hourly public announcements on preventive measures against corona virus were routine at the security gates of operational sites. So were flex posters at plants and distribution of information leaflets among drivers. Operating sites hosted the stay and food of contract workers and migrant labour, while locals in the areas surrounding the plants were advised on safety and hygiene. We also made sure that those who were in the frontline such as packed and bulk LPG truck drivers, LPG delivery personnel, and guards patrolling pipeline routes, were covered under a medical insurance policy.

IndianOil is the Energy of India. It is an epithet IOC-ians carry proudly, endeavouring to live up to its glory and the motto of PehleIndianPhirOil. ●



Indane delivery personnel walks through a muddy road in Karbi Anglong, Assam.



A delivery personnel pedals through the flooded streets of Kolkata in the aftermath of the 2020 Cyclone Amphan with an Indane refill.



Massive destruction followed the Tsunami on December 26, 2004. Besides uprooting of trees along the seashore, including Wandoor Beach (in picture), jetties across the Andaman & Nicobar Islands were washed away, preventing IndianOil from taking ashore vessels carrying LPG cylinders. A low-cost jugaad solution was then devised by tying Indane with ropes and throwing them into the ocean. These were then conveniently pulled ashore by small boats, used, and returned the same way.



I was about to leave for Wandoor with my family, when the Tsunami struck. We felt tremors and electric poles started swaying.

I even saw a couple of motorcycles crash as riders lost their balance. Grabbing my child's arm, I started walking down the stairs. The ground was shaking furiously and my elbows kept banging against the wall.

Once the tremors stopped, I contacted the Deputy Director (Shipping) so that I could visit the bottling plant. He told me categorically that it was not possible to cross the waters. He himself was then measuring the wave patterns that were coming in every 20 minutes.

I managed to get a pair of binoculars and went to Megapode Hotel, which had the best view of the plant. I saw that not only was the jetty damaged, stretches over the pipeline had also cracked.

We had to restart operations on a war footing; we thus strengthened an alternative route for the movement of trucks, organised statutory inspection of the plant and the jetty, and resumed regular supplies.

D Bandopadhyay

Former Plant Manager, Port Blair Bottling Plant



Indane refills being ferried on a boat across a flooded wetland in Assam.



Facing page (clockwise from top left):
Indane personnel climbing up a snow-covered mountain in Himachal Pradesh for delivery during the corona virus pandemic; cylinders being sprayed with disinfectants before delivery during the pandemic in Assam; sanitisation at an LPG bottling plant during the pandemic; Indane refills being ferried to villagers in Sundarban, West Bengal; a delivery associate in Darjeeling makes an arduous climb during the pandemic to reach families living in the hills.



Indane delivery vehicles ready for distribution in Perumbalam Panchayat near Vembanad Lake during the corona virus pandemic lockdown. Since normal jangar boat services remained suspended at the time, channel partner Kairali Indane Services, Ernakulam booked its own jangar to ensure uninterrupted supply of cylinders.



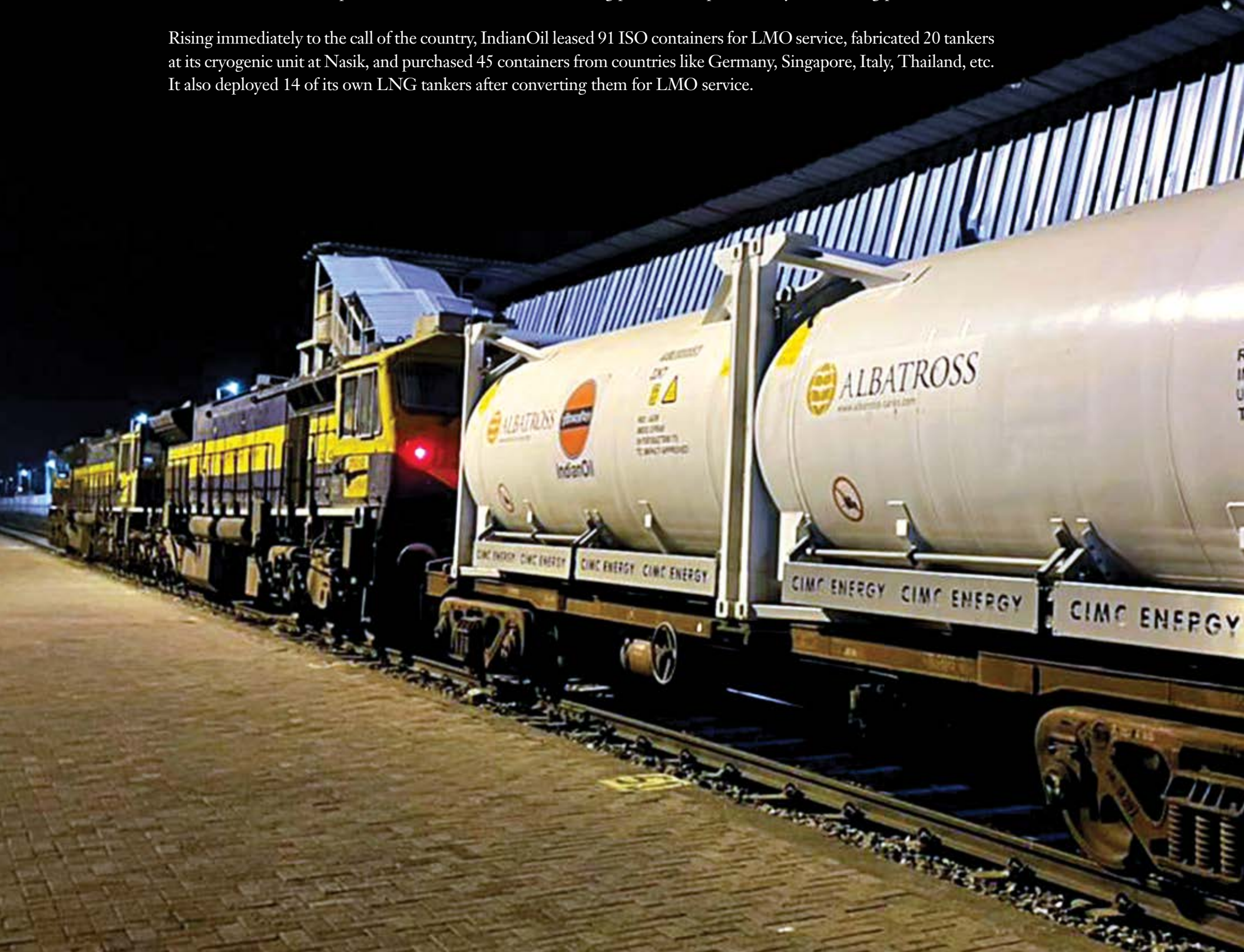
Aythala in Pathanamthitta district is no different from any other Kerala hamlet. Dotted with mansions of non-resident Indians, a handful of shops surrounded by lush green fields, and narrow deserted roads, one would not have heard about the village were it not for an infamous incident in late February-early March 2020 — when an Italy-retained family disregarding home quarantine instructions from authorities roamed around freely and infected 11 villagers within the week.

It was disastrous. Aythala stopped functioning; the village market closed and services went into shutdown. For almost a week, even delivery of Indane remained suspended and home fires of 1,500 households dimmed.

Finally, on March 17, 2020, Abin Kaithavana of Immanuel Indane Services, Perunad took out his vehicle and drove down to the village with refills and essential food items. As the IndianOil channel partner would later say, “LPG distribution is a social responsibility and commitment. I was only doing my duty.”

2021 was a year unlike any other. With the second wave of corona virus pandemic spreading globally, India did not remain untouched. As cases started increasing, the country faced acute shortage of medical grade oxygen, a crucial element in treating corona virus-infected patients. In the face of a massive surge in demand, IndianOil — which boasted strong end-to-end logistics capabilities — was assigned the task of Liquid Medical Oxygen (LMO) supply to various states of India. The activity included importing LMO, leasing and manufacturing ISO containers and road tankers, inland transportation of LMO from manufacturing plants to hospitals and cylinder-filling plants.

Rising immediately to the call of the country, IndianOil leased 91 ISO containers for LMO service, fabricated 20 tankers at its cryogenic unit at Nasik, and purchased 45 containers from countries like Germany, Singapore, Italy, Thailand, etc. It also deployed 14 of its own LNG tankers after converting them for LMO service.



While all such movements for containers and tankers were under way, the company procured LOX (liquid oxygen) through Indian Missions worldwide. To ensure seamless supply to medical facilities, IndianOil also procured 250 LOX cylinders with inbuilt vaporisers.

The operation was successfully led by the LPG team at headquarters. A 24x7 central control room was set up for monitoring and coordinating the operation with central and state government authorities and around 8,200 MT of LMO was transported successfully across the country.

IndianOil's involvement was not solely restricted to domestic supplies but also extended to international shores like Indonesia and Vietnam. ●

Facing page: IndianOil ISO tankers ready for transport by rail.

This page: (Clockwise from top left) IndianOil liquid medical oxygen containers at the Pune Air Force Station; ISO containers with LMO set sail for Indonesia from Visakhapatnam; the first IndianOil tanker being airlifted from Vadodara.



Distribution of LPG in several remote areas of Northeast India is a challenge, especially during the rainy season, when landslides and floods are common. But, over the decades, IndianOil has risen to every occasion and used every possible means of transport to reach Indane to households and communities.

Now, to enhance its reach, three new plants have been planned. To be set up in Mizoram, Meghalaya, and Arunachal Pradesh, the plants are expected to increase IndianOil's LPG bottling capacity by nearly 53 per cent — to eight crore cylinders annually by 2030. The company's Northeast division, Assam Oil Division, currently has an annual capacity to bottle 5.23 crore LPG cylinders at its nine plants.



Located at Gangaganj, Panki, the Kanpur LPG bottling plant premises is an experience of biodiversity in all its glory.



Indane Stories of Indians



We were running 24/7 pharmacies as C Lal & Sons when we were approached by senior officers of IndianOil to discuss the LPG business. My father, Ramesh Gupta, was a man of vision and foresaw a bright future for LPG. So, we started our association as LPG sub-distributor with Pyarelal & Sons.

The initial years were tough since we had to educate people on the merits of LPG over conventional cooking methods like wood and coal. But my father worked hard to spread the message of safe and clean LPG cooking and soon we could convince people about its advantages. IndianOil gave us unflinching support and we were finally commissioned as full-time distributor in 1980.

The year 2020 was challenging, with many businesses closing down and labour migrating to their villages. But we operated our distributorship with full force and our customers received their cylinders on time. In 2021, when IndianOil introduced Composite Cylinders, we again got down to the task of promoting their sale by organising camps and educating delivery personnel and showroom staff. We also received the 'All India Highest Seller Trophy' for the same.

Naveen Gupta
C. Lal & Sons (Gas), Delhi



My mother switched from piped gas that was being supplied then to an Indane connection not very long after its launch. Ours was in fact the first Indane in the neighbourhood. I was quite young, but old enough to be aware that in the first few weeks our house would be crammed with visitors at any time of the day. Neighbours and relatives would ask my mother a thousand questions, and she would answer them all with a lot of pride. How was it different? She now had time to try out bouffant like Sharmila Tagore! Did it really save cooking time? Of course. Was it a ticking time bomb like the rumours said? In reply, my mother's laugh would peal through the house. Did she wake up in the middle of the night to check if it was fine? Again, she would laugh. What would happen if it got over in the middle of cooking? Of course, my mother did keep a kerosene stove handy; she was a smart homemaker. But I can't recall any hiccups. She would call for a refill and it would arrive within the hour. I just know that she was as pleased as punch with Indane.

Kuntala Das
Indane consumer, Kolkata



Today, Indane supply has come a long way since it was launched in 1971. Shillong was then the capital of Assam, consumers were not too many, and supply of cylinders, despite the narrow winding road from Guwahati to the town, was regular and seamless. I was young then, but remember our neighbour had an early Indane connection. We would visit their house often, only to watch the lady of the house effortlessly make tea and *pakor*as for us on those two burners. Gradually, use of LPG became popular and our household too switched from coal and kerosene to Indane. Before my very eyes, even my mother transformed from a harassed homemaker to a smiling one.

At the Longmei Gas Agency, I now realise the complex logistics that involves the home delivery of LPG, which we all take for granted. Much of the supply now alternates between Guwahati and Silchar. And while supply from Guwahati is relatively smooth, that from Silchar is often impeded by landslides and poor road condition. Maintaining a steady supply is sometimes challenging, especially during festivals, but we keep up well.

Sajal Sengupta
PR and Logistics Staff, Longmei Gas Agency, Shillong



Surjit Fuel Depot was started by my father in 1967. Back in the day, as my father would tell me, they had to not just look for customers but also provide installment facility for installation of Indane, since many customers could not afford it. For instance, if the installation cost was ₹200, then customers would pay us that amount in ten monthly installments of ₹20 each.

There were other challenges as well, like land allotment for godowns. But this eased up after IndianOil officials liaised with the concerned ministry and owners of land, helping the agency overcome all barriers. Today, the situation is quite different. We supply LPG cylinders in some of the most high-profile areas of the nation. The areas we serve, including CBI Colony and IB Colony, have more than 15,000 bureaucrats.

This has been possible due to our long-term association with IndianOil. Of late, processes have also been streamlined, making it easier to operate. Every month the company's Deputy General Manager of the area has a *samvaad* (conversation) with every distributor, during which we are given updates and instructions for operation. IndianOil has been a good partner.

Hatinder Singh
Surjit Fuel Depot, Delhi



Indane has been a part of my life since 1982. Over the last 40 years, IndianOil has ensured that Indane adapts and is accepted in the market. We have served roughly about 35,000 consumers over the past 40 years. At all times, the officer assigned to us, always helped us out. In fact, whenever there would be an issue above the purview of the local officer, state officers would become available for communication and resolution.

We have had to manage several challenges, but customer supply was never disrupted. Indane is an essential product and so the process is meticulously planned and implemented. Our experience with IndianOil has been excellent; it has enabled us to serve a large number of people and we would not want it any other way.

Kiran Sharma
Mathura Gas Service, Mathura



IndianOil has been a part of my life since 1982. In the initial years, LPG was a prized commodity and people relied more on coal and kerosene. But now times have changed. Since LPG is pollution-free, and thanks to free home delivery, it is now a part of each and every household.

LPG is an extremely sensitive product; hence challenges will always exist. But any complaint made by an Indane consumer is quickly addressed, something that no other company in India offers for any product. IndianOil has always assisted us, making our experience a wonderful one. I am proud to be its channel partner.

Chandra Prakash
Kwic Gas Service, Delhi



JJ Gas Service has been serving as Indane channel partner since 1975. Over the years, we have faced quite a few challenges, some of them quite unique. Ours is a hybrid business; we do not just deal with one or two entities, but have to coordinate at all levels of the LPG trade.

Customer delight is our sole motto and this is what motivates us. LPG is highly inflammable, and hence, a hazardous product. Strict adherence to safety mechanisms is a must and this is made possible by IndianOil's safety guidelines. We conduct regular training of our store staff, delivery agents, and mechanics. Apart from this, training is also given by IndianOil to ensure that there is no violation of any safety protocol.

Gurveir Ahluwalia
JJ Gas Service, New Delhi



I remember our Indane connection coming home in the year 1989. We had then shifted from Golaghat, a small town, to Guwahati, then the fast-expanding capital of Assam. My mother who until then was used to cooking on a firewood *chulah*, was rather apprehensive when she began to use LPG.

The first thing that put her off was the foul-smelling mercaptan odorant that is used in cylinders as a safety measure. Soon, the convenience aspect overrode her misapprehensions and she took to Indane as a duck takes to water. Also, having attended a safety meet, she understood that it was the foul smell that would keep her and the family safe. Later, of course, I would often find her sniffing around the stove to check if the gas was leaking!

Piya Sharma
Indane consumer, Guwahati



In 2003 I joined the distributorship that was earlier handled by my parents. In Kerala, where our agency is based, even as recent as twenty years ago, it was normal for people to use firewood stoves for cooking. But since our commissioning, we have been able to extend Indane subscriptions to many households, especially in the backward areas. In fact, 10,000 to 12,000 of our customers were getting LPG connections for the first time.

One milestone for our distributorship was the success of Chhotu, IndianOil's 5-kg cylinder. We were one of the top three national-level distributors and the top Kerala distributor for these mini cylinders, with a monthly demand for 2,000-3,000. We owe our success to its demand among fishermen and migrant labourers in the area, who found Chhotu a better alternative to the kerosene stoves they used. Besides, the paperwork involved for acquiring a 5-kg cylinder was hassle-free for migrant workers; they no longer had to resort to illegal means like the black market to acquire cooking gas.



I joined IndianOil in 1983 and worked until 2019. During my time I have seen Indane evolving from an elite household cooking fuel to a common household fuel. Throughout my time in LPG marketing, I faced numerous challenges. However, we could overcome these obstacles by taking a comprehensive approach to resource utilisation, teamwork, and strategic planning.

One incident that will remain etched in memory forever is the Karnal bottling plant incident. In 1988, after we started bottling operations we found cracks in the rail of the filling carousel. We decided to take corrective action right away, forming two teams to work on repairs round the clock. The task was challenging because it had to be completed within 48 hours to avoid supply shortage. But we achieved our goal. The entire filling carousel was disassembled and the damaged rail was repaired before being levelled.

Yadvendra Shrivastava
Former Chief General Manager (LPG) UPSOI, Noida



Our distributorship had very humble beginnings, with only one customer in 1988. Initially, we found it challenging to encourage the use of LPG among the people. In fact, even after two years of distributorship, we could hardly reach the milestone of 1,000 customers.

This is when we decided to initiate an installment scheme to attract new subscribers. Under this system, every subscriber had to maintain a deposit of ₹100 with us and pay ₹200 monthly for the cylinder. The scheme was a success, especially among middle and lower middle class households, enabling us to increase our customer base to 12,000 subscribers within a year.

Today, it has become a norm for us to conduct safety awareness campaigns at the village and *panchayat* levels every two-three months. Apart from this, we ensure regular delivery of refills. Even the pandemic lockdown could not hold us back; we continued services with the support of the authorities. We take pride in being distributors of this Indian Superbrand.

Shrenik
Shrenik Indane Enterprises, Chikkaballapur District, Karnataka

Mithun Shaji Chittoorappan
Chittoorappan Indane Services, Kochi



I've been running Kulaswami Indane since July 2002. There were many challenges initially, as the agency was in a rural area and people thought IndianOil was a private company. After much effort, I finally started succeeding in gaining customers. From three loads in the beginning, my business grew to 14 loads within a year. I would create pamphlets and visit villages, explaining how IndianOil was a government organisation and trustworthy. I started off with a staff of about eight to ten, which has now grown to about 35.

Kulaswami Indane also has a customer base of about 25,000 domestic users and up to 2,000 19-kg cylinders for non-domestic users. Initially, when we started, the area I provided service to was predominantly a forested, hilly region. But we would try and cater to every customer, no matter how far they were located and how difficult it was to reach them. Slowly, we went on building up our customer base. At times, customers used to request us to allow them to pay in installments. Today, the payment system is digital and smooth.

Deepali Jadhav
Kulaswami Indane, Ghodegaon, Pune



Our gas agency is the first in the Solapur region. Initially, people were apprehensive about Indane, since most considered IndianOil to be a private company and there were other competitor companies as

well. It was an exhaustive exercise to convince customers to subscribe to Indane. We would go door to door, village to village, to get people together in the presence of the *sarpanch* to spread awareness about Indane. Our challenge was twofold — first, to convince potential customers that IndianOil is a government company, and second, in case they had an LPG connection from a competitor company, to persuade them to switch to Indane. Of course, word-of-mouth publicity and goodwill helped a lot.

We started off with one customer, and gradually started gaining about five to ten customers per day. Today, within the service-area radius of about 15 km, we boast of around 22,000 domestic customers, 2,000 industrial customers, and 10,000 to 11,000 monthly refill sales.

Megha Nimbalkar
Naik-Nimbalkar Enterprises, Barshi, Solapur



The area my agency serves is a rural and semi-urban one. When I started out as the first Indane agency on the Western Railway Track, from Churchgate to Boisar, in the Mumbai metropolitan region, two

competitors of IndianOil were already present in the area. To make things worse, many people considered IndianOil a private company. There was lack of trust. My father who was a social worker and held in high regard helped me connect with would-be customers.

Today, I have close to 16,000 domestic customers and sell around 1,500 19-kg cylinders monthly. We don't directly deal with customers for Chhotu, but route it through PoS. I have seven transport vehicles and a staff of about 17. It is not always easy to manage, especially if a staff member does not turn up for work. We cannot engage daily wage labourers since safety is a primary concern. But we still manage to serve customers well, strictly following all safety guidelines.

Manoj Bajpayee
Chandrane Indane, Boisar



I joined the transportation business through my firm, Chadrapali Bulk Carriers. I then went on to establish six more transportation firms. My association with IndianOil started in 1999, and today I am associated

with it through all of these firms. While most of my work is associated with the Allahabad bottling plant, I have worked across entire North India. I started with one truck, and today I own 25 of them.

What I like about IndianOil is the ease of business. It is one company which has always emphasised on automation. Today, they possess a fully automated system. Be it making use of the internet, introducing Fleet Card, or facilitating automated payments — IndianOil has been doing it right since the beginning. Safety guidelines are strict and we follow them strictly. I've worked with other LPG companies as well; but the kind of freedom and work satisfaction that I get at IndianOil is incomparable.

Pushpendra Singh
TBS Enterprises, Allahabad



I took over as proprietor of our gas agency, after my mother passed away in 2016. Previously, many tasks had to be completed manually. As a result, work would be tedious. But now that we have sophisticated software and upgrades, it is much easier to keep track of all records. Good supply has also aided us greatly. As IndianOil has brought in many bottling plants over the years, transportation to our agency is also easier.

When we first opened our doors in 1975, we were the first agency in Alleppey district. Everyone relied on coconut shells, husks, etc. for fuel. Outside kitchens were common as smoke, soot and fumes were unavoidable while cooking. However, with urbanisation, outdoor kitchens became obsolete and cooking gas became a requirement. Indane was a blessing as it brought modern cooking to Indian homes. It has been a big boon for working women and the younger generation in particular.

The introduction of 'Ujjwala' has come as a blessing for the underprivileged. I think it is wonderful that Indane had given balance to their lives, and made them stress-free and smoke-free. It is said of Mary Queen of Scots that if you took a peek inside her heart, you would see 'France' written on it. In a similar vein, I've known IndianOil for a long time and have the company written in my heart.

Renuka Thomas Abraham
Krishane Gas Agency, Alleppey



My mother, Kusumam N. Kutty, was one of Kerala's first distributors of LPG. In the initial years, we had to face a lot of challenges when it came to certain tasks — be it delivering loads from the plant or making sure we had everything we wanted. Our experience with Indian Oil, however, has always been very positive. In fact, my mother always speaks highly of the officers who came in during the early years and helped train her and get the business started.

Now, we have about 17,000 customers. Processes are more streamlined, especially since the introduction of centralised software. Cylinder booking, for example, is always updated in the system. Day-to-day difficulties that existed even 10-15 years ago have greatly reduced. In terms of safety, we have experienced and well-trained delivery boys who are cooperative and always willing to do delivery and pre-delivery checks. The journey has had its ups and downs but, overall, it has been extremely stable.

Seema Narayanan Kutty
City Gas Agencies, Kochi



I joined IndianOil in 1986 and, except for one year, spent my entire career in the LPG sector. Indane runs through my veins. I began working at a young age and LPG was massive at that time. From operations to maintenance, sales, and engineering — I have worked at all the divisions and each has been a treasure trove of knowledge.

Many incidents happen at the IndianOil workplace, which when we sit and ponder on, seem like fables. There is one such I can recall vividly even now. One morning, I was told that I would be posted at Port Blair and we would establish a plant there. The place then was no less than a dense jungle. Nobody believed that we could establish a plant; but we did. At the production site, I realised that achieving one's objectives without full team support was difficult. So, I made it my mission to make every workday fun.

Tapash Gupta
Former Chief General Manager, Eastern Region, IndianOil



The support that we have been receiving from IndianOil, ever since my father started the agency in 1971, has been encouraging. It is like a guiding force, a collaboration in which we both are together building the brand.

PaHaL scheme was a unique experience, which I believe it was, for all channel partners. The exercise was overwhelming in proportion and will remain etched in memory forever. It was also a wonderful experience fulfilling needs of our customers, especially during times of crises, such as the COVID-19 pandemic.

Dr. Shakeel Peter
Partner in Kavita Enterprises, Bengaluru



Back in the Nineties, things were pretty challenging. Backlogs with new connections were regular. Refills were not very prompt. And, customers were not too happy. But now, LPG connections are much in demand and requests for new connections are a daily feature.

During the 50th birth anniversary of Mata Amritanandamayi, we could supply 1,000 cylinders to the Amritanandamayi Ashram kitchen to cater to the huge crowd of devotees. This was done within three days. The LPG field officer and I stood on ground zero to ensure that LPG supply service was up to the mark. This is the kind of support IndianOil provides to its channel partners and customers.

A T Venugopal
Super Gas, Kochi



We were in the automobile servicing business before we started an LPG agency for Indo-Burma Petroleum (IBP). It was tough to get customers and people in remote areas did not even understand the concept of a gas agency. We went door to door convincing people to get a gas connection from us. In 2005, after, about three years of such struggle, IBP was taken over by IndianOil. With this, everything became easier. IndianOil had a good reputation and we could even convince consumers of other LPG companies to switch to Indane.

Today we have 13,000 customers with monthly average refill sales for 8,000 domestic consumers and 300 commercial customers. Trimurti is a top-seller in the Satara region, always aiming for same-day delivery or at least within 24 hours. The agency makes regular deliveries even during natural calamities. Indane is our bread and butter; its our life. We are what we are because of Indane.

Pallavi Kadam and Virendra Kadam
Trimurti Gas Agency, Satara Road, Satara





