

SUSTAINABILITY STORIES

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WHAT IS YOUR JOB AND HOW DOES IT SUPPORT SUSTAINABILITY?

I hold the position of Director (Technical) in IFFCO, responsible for activities related to plant operations and maintenance. It is difficult to summarize my job, as it involves doing substantial work in so many areas at this level, including: on safety, the environment, climate change impacts, energy efficiency, emissions reduction, water conservation, digitalization, etc. A major priority now is making our plants more sustainable.

I have 40 years of association with the fertilizer industry. Initially, the challenge was to increase fertilizer availability for more farmers by increasing production. Keeping us updated with Best Available Techniques (BAT), we are now achieving not only increased production but also with the least consumption of natural resources.

WHY DID YOU DECIDE TO WORK IN THE FERTILIZER INDUSTRY?

Since my childhood, I have had a passion for defying the odds to deliver and reach my goals. I graduated as a Mechanical Engineer from IIT Roorkee and joined IFFCO in the maintenance department. As a key component of the maintenance program, inspection jobs included the tasks of checking the condition of equipment, failure analysis, residual life assessment and timely replacements and upgrades. Over the years, I developed expertise in maintenance and troubleshooting, project engineering, operation, energy conservation, installation and commissioning.

WHAT IS THE MOST IMPORTANT LESSON YOU'VE LEARNED IN YOUR CAREER TO DATE?

Excellence is an uphill road; one must put in efforts to keep going and nurture this vision among your colleagues. In an ever-changing world of technology, we need to constantly adapt to new research and scientific studies, simultaneously keeping in view the safety of our people and environment. Failures are also an important part of learning, but it prepares you to manage future challenges.

CAN YOU TELL US ABOUT IFFCO'S SUSTAINABILITY JOURNEY AND PLANS?

We recently invested \$270 million in implementing energy saving schemes at all our five ammonia-urea manufacturing units as part of the Energy Saving Project. Previously, during 2005-06, we also upgraded the plant's equipment and controls systems to reduce energy consumption and carbon emissions.

In our 05 ammonia-urea manufacturing sites our overall energy consumption had reduced from 7.73 GCal/MT urea to 5.981 GCal/MT urea in the first phase (2005-06) and



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to 5.33 GCal/MT urea in the second phase (2018-19). Our water consumption had reduced from 14.05 M³/MT of urea to 5.15 M³/MT of urea, since commissioning the respective plants. We have earned a total of 159,850 Energy Saving Certificates out of 286,000 earned by all fertilizer plants combined in India. ESCs earned by IFFCO units in the country have resulted in reduced CO₂ emissions of 0.45 million MT per year.

In line with other ISO standards, we have also promoted the adoption of the ISO 50001 standard that aims to improve the organization's energy performance resulting in reducing effect of climate change, a key part of our corporate strategy. All our facilities are also IFA Protect and Sustain certified and are active participants of an IFA Benchmarking study. In addition, our offices and townships carry the Green Residential Society Rating System of Indian Green Building Council for use of solar energy and other energy conservation efforts.

IFFCO is investing a lot in new products designed to help Indian farmers improve their productivity and profitability, and therefore become more competitive globally. In tune with the concept of 'Seeing is believing,' we provide production assistance through on-farm demonstrations, farm credit and discount on products, on-site resources to aid production such as equipment rentals and free advisory services to improve agricultural productivity and benefit farmers.

We are working together with the government of India to achieve Prime Minister Narendra Modi's ambition to double the income of farmers. We aim to provide goods and services that will help farmers grow more food, economize on their input costs, improve their incomes and protect the environment as well.

HOW DO YOU THINK FERTILIZERS AND PLANT NUTRIENT MANAGEMENT CAN HELP TRANSFORM FOOD SYSTEMS FOR THE BETTER?

We are now witnessing a transformation in

India's agricultural landscape. Recently, there had been genuine concerns over fertilizer use efficiency, in general, and Nitrogen Use Efficiency (NUE) in particular. Improving NUE has emerged as a vital component of food security and environmental sustainability. Farmers are now more concerned about their farming practices and trying to learn new techniques to grow more and earn more.

In this shift from the philosophy of 'green revolution-led' productivity to 'green methods-led' sustainability, the emergence of water-soluble fertilizer, specialty fertilizer and biostimulant products promises to reduce fertilizer use and improve water and nutrient use efficiency. We believe these new segments have the potential to reduce fertilizer consumption by 25-30 percent overall.

IFFCO's business model coincides with the 4R Nutrient Stewardship framework, which helps farmers be sustainable and profitable. To implement it properly, efforts are equally required to ensure fertilizer products are available to meet local requirements. In addition, decision support systems, agronomic, dealer and sales point training are also required.

WHAT DOES SUSTAINABILITY MEAN TO YOU?

Sustainability means to do business without negatively influencing the environment, community or society. The natural human tendency is to have the future look much like the recent past. Just revisiting our assumptions about the world we live in, and taking a casual approach will leave many of us highly vulnerable.

It is essential that a clear-eyed perspective on how to manage the changing landscape will help us prepare to succeed. There is an imperative need to adjust to the new realities while developing new, sustainable and profitable business models.