

Debunking Pesticide Myths: CropLife India Calls for Evidence-Based Debate on Crop Protection

New Delhi, 16th March 2026: CropLife India today released a *Myth-versus-Fact explainer* on pesticides, noting that the growing public debate around food residues, environmental risks and product safety has led to several misconceptions about crop protection in India. The industry body stated that while concerns about misuse deserve attention, misinformation can overshadow the realities farmers face in protecting crops from pests and diseases.

Agriculture supports the livelihoods of more than **93 million households and about 150 million farmers**, employs roughly **46% of India's workforce** and contributes around **16–18% of the country's GDP**. According to Government of India estimates, **pests and diseases destroy 10–35% of crops in India every year**, with even higher losses during severe outbreaks.

Despite these challenges, **India remains among the lowest users of pesticides per hectare globally**. Farmers in India typically apply **0.3–0.6 kg of pesticides per hectare**, compared with **2–4 kg in many European countries**, around **13 kg in China** and more than **10 kg in parts of East Asia**.

CropLife India, which represents **leading research-driven crop science companies**, said that public discussion around crop protection must reflect these realities while also recognising the importance of **responsible use, farmer awareness and strong regulatory oversight**.

“The objective of this explainer is to encourage a more balanced and evidence-based conversation around pesticides,” said **Mr. Durgesh Chandra, Secretary General, CropLife India**. “Crop protection products play a critical role in safeguarding crops from pests and diseases and helping farmers secure yields. At the same time, the industry strongly supports responsible use, stewardship and adherence to India's rigorous regulatory framework.”

The organisation noted that **misconceptions—such as pesticides being widely overused or unregulated—often overlook India's comparatively low usage levels and the country's structured system for product evaluation and approval**. The myth-versus-fact explainer seeks to clarify key issues related to **pesticide safety, residue management, environmental impact and regulatory controls**, drawing on scientific evidence and official data.

CropLife India emphasised that **farmer training, improved stewardship practices and continued regulatory vigilance** are essential to ensure safe and effective crop protection. The association reiterated its commitment to **supporting farmers, promoting best practices, and contributing to sustainable agriculture in India**.

Myth-versus-Fact explainer

Myth: “Pesticides cause cancer.”

Reality: Pesticides used in India undergo government safety checks before approval. The Central Insecticides Board and Registration Committee (CIB&RC) evaluates health risks, environmental impact and food residues. Regulators have found no evidence of increased cancer risk for consumers when pesticides are used according to approved label instructions and regulated safety limits. Farmers and applicators must follow label instructions, use protective equipment and receive proper training to significantly reduce exposure risks.

Myth: “Pesticides never die.”

Reality: Many modern pesticides are designed to break down relatively quickly in soil and water. Their behaviour depends on the product, soil conditions and weather. Labels specify the correct dosage and waiting periods before harvest.

Myth: “All pesticides are pure poison.”

Reality: Toxicity varies widely between products. Each pesticide is tested separately and placed into safety categories. Labels clearly explain safe dosage, handling instructions and waiting periods.

Myth: “Organic farming means chemical-free.”

Reality: Organic farming also uses certain approved pesticides, including natural products such as neem extracts and pyrethrum. Both natural and synthetic pesticides must meet safety standards before approval.

Myth: “Pesticides kill beneficial insects”

Reality: Farmers increasingly use Integrated Pest Management (IPM), which combines biological controls, monitoring and targeted pesticide use. When applied correctly and at recommended timings, many crop protection products are designed to minimise impact on pollinators and beneficial insects.

Myth: “Food residues mean danger.”

Reality: India’s food regulator sets Maximum Residue Limits (MRLs) for pesticides in food. Government monitoring between 2022 and 2025 tested more than 86,000 food samples, and about 97% complied with these limits. Washing, peeling and cooking can further reduce residues.

Myth: “Groundwater is doomed.”

Reality: Environmental impact depends largely on how pesticides are used. Many products bind strongly to soil, limiting movement into groundwater. Problems usually arise from overuse or incorrect application.

Myth: “Pesticide-free farming.”

Reality: Without crop protection tools, pest outbreaks can cause 30–50% yield losses, affecting farmer incomes and food availability, in-turn impact India’s food security.

Myth: “Farmers are poisoned by pesticides.”

Reality: Safe use practices are essential. Protective equipment, proper training and adherence to label instructions help significantly reduce exposure risks for farmers and applicators.

Myth: “The industry hides the truth.”

Reality: Registration of pesticides requires companies to submit detailed studies on health effects, environmental impact and food residues. Regulators review this information before approving products for use.



THE TRUTH ABOUT PESTICIDES

MYTH "Pesticides = Cancer?"	REALITY Rigorous safety testing by regulators No link to cancer at safe, regulated use
MYTH "Pesticides Never Die?"	REALITY Break down quickly in soil & water • Short half-lives • Safe pre-harvest intervals
MYTH "All Pesticides = Pure Poison?"	REALITY toxicity varies – many safer than household chemicals • Regulated & classified for safe use
MYTH "Organic = Chemical Free?"	REALITY Organic uses natural/bio pesticides too All are safety tested before approval
MYTH "Kills Natural Enemies?"	REALITY IPM & Responsible Use ✓ Protects Pollinators & Beneficial Insects
MYTH "Food Residues = Danger?"	REALITY 95%+ produce within MRLs (Safe Limits) Washing & Cooking reduce further
MYTH "Groundwater Doomed?"	REALITY Low movement to groundwater Strict monitoring & responsible use
MYTH "Pesticide Free Farming?"	REALITY Leads to 30–50% yield loss Essential for Food Security
MYTH "Farmer Poison?"	REALITY PPE + FREE Training = ZERO Risk Safety First!
MYTH "Industry Hides the Truth?"	REALITY Transparent Testing & Monitoring Working with Regulators & Farmers

Safe • Responsible • Science-Backed

About CropLife India

CropLife India is committed to advancing sustainable agriculture and it is an association of leading R&D driven member companies in crop protection. We jointly represent ~ 70% of the market and are responsible for 95% of the molecules introduced in the country. Our member companies have annual

global R & D spend of 6 billion USD and are firmly committed to engaging with the farming community to enable Safe, Secure Food Supply.

OUR MEMBERS



OUR ASSOCIATE MEMBERS

