

LEAD-SAFE



Lead detection

Bangladesh's mass childhood lead poisoning is detectable, costly, and demonstrably fixable



✓ PROVEN PRECEDENT

Turmeric lead cut 47%→0% (Stanford); XRF trusted by US CPSC

▲ WHY IT MATTERS

35.5M children poisoned · ~3.6% of GDP lost

THE SITUATION IN BANGLADESH

In Bangladesh an estimated 35.5 million children carry blood lead levels at or above $5 \mu\text{g/dL}$, the threshold for action, making the country the fourth most-affected in the world by number of children poisoned ¹. The damage is not abstract: lead exposure costs an estimated 20 million IQ points lost each year, valued at roughly USD 10.9 billion, on the order of 3.6% of GDP ¹. The poison hides in everyday life, flowing from more than 1,100 informal used-lead-acid-battery recycling sites, lead-adulterated turmeric and spices, contaminated cookware and paint ¹. Paint alone shows how porous enforcement is: despite a national 90 ppm limit set in 2018, a 2026 study found 42% of sampled paints exceeded it and 26.2% topped 1,000 ppm, with only 21.6% properly labeled ³, and the gaps cluster among smaller and informal producers where regulation reaches least ³.

OUR PITCH

LeadSafe does not sell tests; it sells trust — deploying local testing agents armed with handheld XRF analyzers, the same field technology the US Consumer Product Safety Commission relies on to screen consumer goods to within roughly 0.5% accuracy, to verify products and award a 'Lead-Safe' certification mark traders and brands can display ⁴. The wedge is proven: the Stanford-led turmeric intervention combined rapid lead detection with food-safety enforcement and education and drove adulterated market samples from 47% in 2019 to 0% in 2021, cutting tested blood lead levels a median 30% within 16 months ². That same playbook generalizes, because Pure Earth's screening across 25 low- and middle-income countries found lead in cookware, foodware, cosmetics, spices and toys — a broad and certifiable market beyond any single product ⁵. By making 'tested clean' a visible, sellable asset, LeadSafe aligns commercial incentive with the public-health goal rather than fighting it, closing the enforcement gap that leaves informal producers untouched ³. It is not a silver bullet — certification works only where buyers reward it — but in a market already stung by turmeric and paint scandals, demonstrated safety is becoming something worth paying for ¹.

Built so the operator never fails

HelperChain doesn't hand out a loan and walk away. Every operator gets the **full rail** — inputs, training, finance, supervision and a **guaranteed buy-back** of what they produce. We carry the risk so an ordinary person can succeed.



Equipped & trained

We provide the tools, inputs and hands-on training to start — turning **sample** into a working operation. No prior capital or expertise required.



Funded, not indebted

Pay-as-you-go, **riba-free** finance turns a poor person into a *funded* operator — with **no debt if a cycle fails**. The network carries the downside, not the operator.



Supervised & supported

Ongoing follow-up and quality assurance — the single factor peer-reviewed evidence shows decides whether ventures survive (**p<0.001**). The operator is never left alone.



Guaranteed buy-back

HelperChain **commits to purchase the output at a fair, pre-agreed price**, so there is always a market — the operator just produces; **we guarantee the offtake**. This is what removes the fear of failure.



Surplus recycles

A thin margin is recycled to fund the next operator — so help compounds and the network grows stronger with every person it lifts.

The promise: we give the operator everything needed to succeed — and we buy back the output at a fair, pre-agreed price. Inputs in, output bought back, risk carried by the network — so they never fail alone.

SOURCES (5)

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