

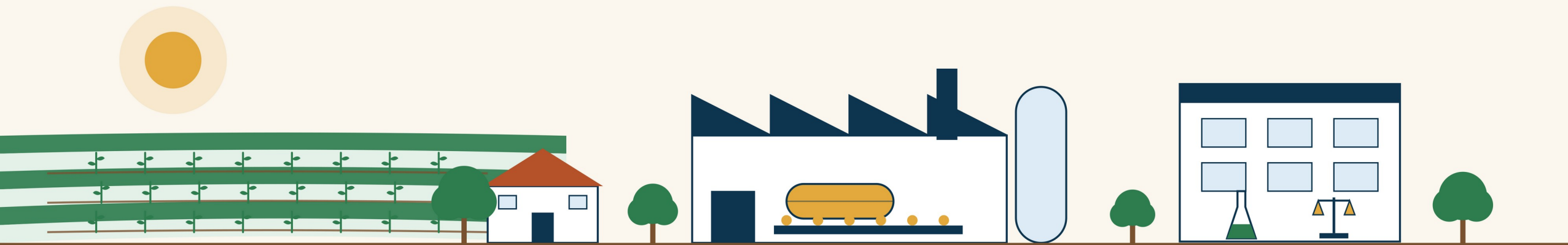


COMPANY PROFILE · SEPTEMBER 2026

Vital Agri Nutrients

Crop nutrition engineered, manufactured, registered and tested in Pakistan.

Lahore · since 2010 · www.van.com.pk

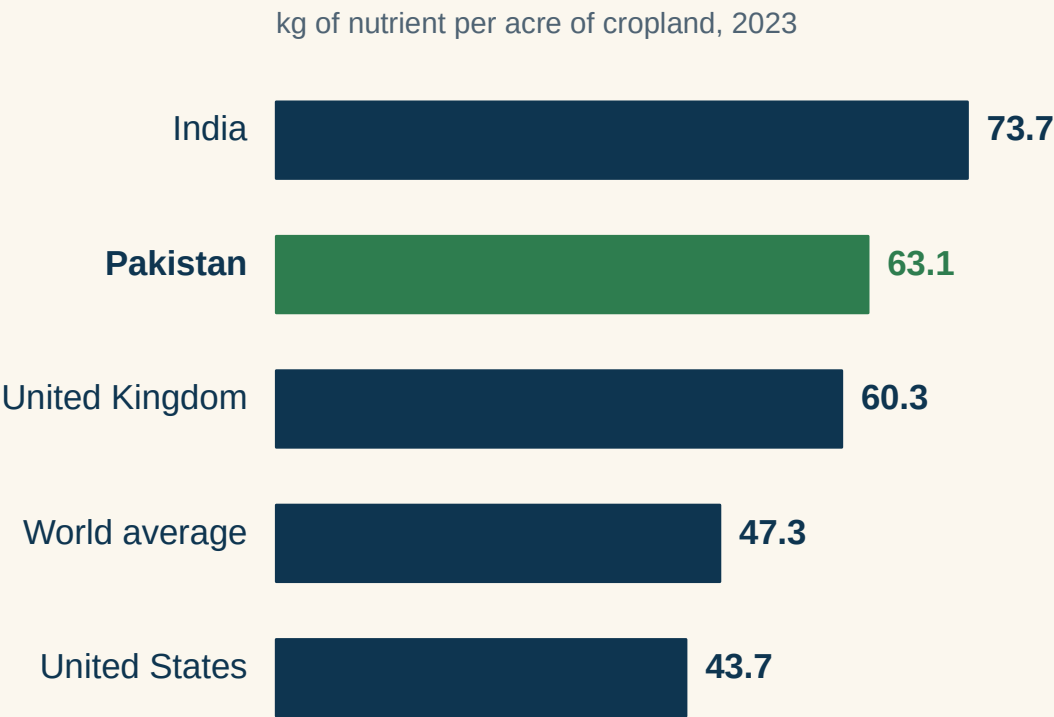


Pakistan puts more nutrient on an acre than the world average.

63 kg

of nutrient on an acre of cropland in Pakistan in 2023. The world average is 47 kg.

Pakistan is above the United States and within a few kilograms of the United Kingdom.



Source: Our World in Data / FAO (2025), fertilizer use per hectare of cropland, 2023. Published in kg per hectare: India 182, Pakistan 156, United Kingdom 149, world average 117, United States 108. Divided by 2.471 for kg per acre.

Each kilogram of nutrient now grows less crop than it did in 2000.

+68%

nutrient applied per acre of arable land, 1999-2000 to 2023-24 (38.6 to 64.9 kg an acre)

+31%

wheat yield over the same period (25.2 to 33.0 maunds an acre)

25%

of the nitrogen applied to Pakistan's cropland is taken up by the crop. The United States converts about 72%.

The other 75% of the nitrogen leaves as ammonia gas, drains below the root zone as nitrate, or is lost to denitrification. The farmer pays for that nitrogen at the depot and the crop never gets it.

Sources: nutrient per acre, World Bank AG.CON.FERT.ZS (FAO), published as 95.4 and 160.3 kg/ha. Wheat yield, Pakistan Economic Survey Table 2.5 (2009-10 and 2024-25 editions), published as 2,491 and 3,264 kg/ha; 1 ha = 2.471 acres, 40 kg = 1 maund. Nitrogen uptake, Lassaletta, Billen, Grizzetti, Anglade and Garnier (2014), Environmental Research Letters 9:105011, corroborated by Shahzad et al. (2019), Nature Sustainability.

Nitrogen is 78.5% of the nutrient Pakistan applies. Potash is 0.94%.



83 t

of nitrogen for every 1 t of potash, Pakistan, 2023. India applies 11 t of nitrogen for every 1 t of potash.

Potash builds cell walls, moves sugar and controls how the plant uses water. It helps a crop stand up to lodging, heat and drought. Sulfur, magnesium, zinc and boron are not on this bar at all, because at national level they barely register.

Source: FAOSTAT, Fertilizers by Nutrient, via Our World in Data (2023). Pakistan N 3,808,775 t, P 994,885 t, K 45,735 t. India N 20,456,400 t, K 1,878,600 t. Shares and ratios derived.



What 770,160 soil samples say about Punjab.

8.22

mean pH. 96.1% of samples are above 7.5

0.61%

mean organic matter. 97.6% of samples are under 1%

97.9%

of samples are below adequate in phosphorus

87.8%

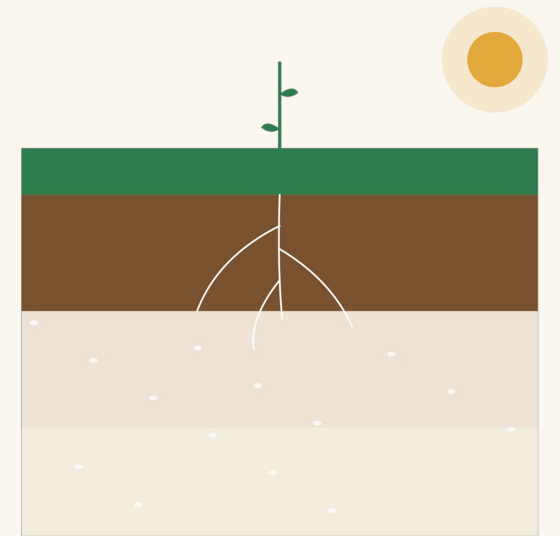
are low in potassium

59.0%

are low in zinc

51.7%

are low in boron



The data comes from the Punjab provincial soil survey, 36 districts. VAN did not collect it. VAN reads it alongside its own sampling.

0

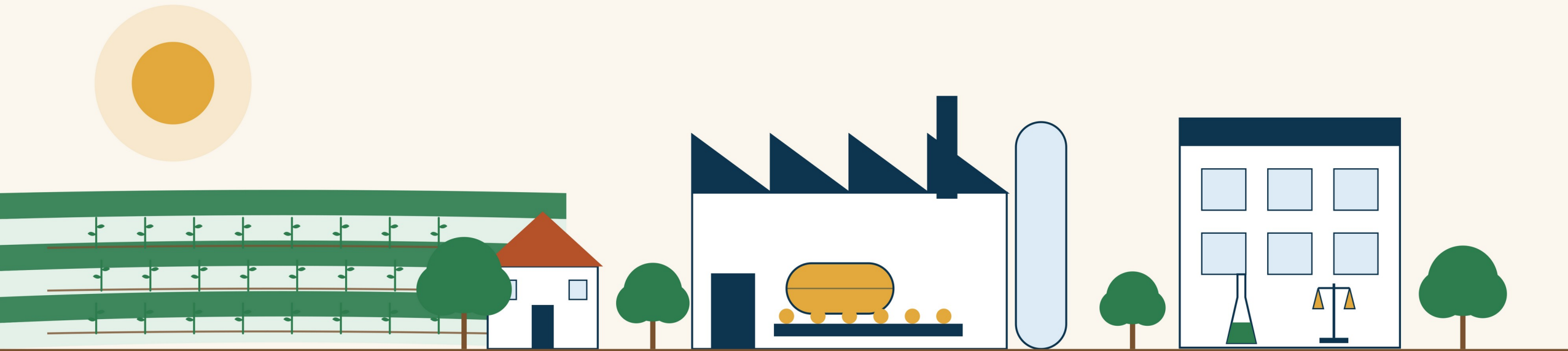
samples tested for sulfur, in all 36 districts.

Source: Punjab soil testing programme, 36 district workbooks, 770,160 samples, c. 2016 to 2018, as read on van.com.pk, Soil Atlas.

WHAT VAN IS · SINCE 2010

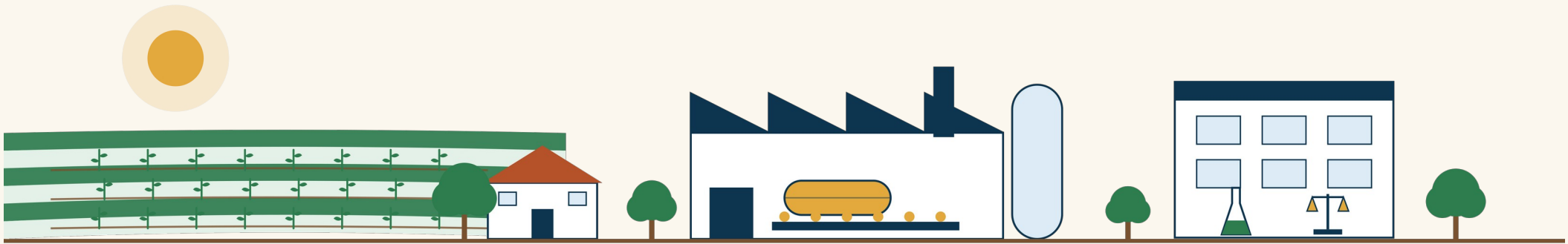
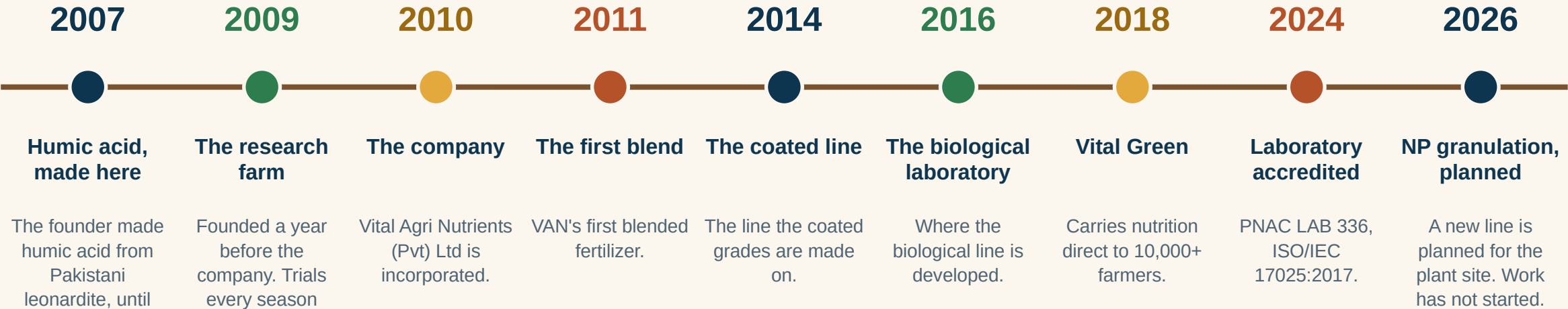
VAN started with a research farm in 2009, a year before the company.

Trials have run on that ground every season since. VAN formulates, manufactures, registers and tests what it sells on 1 plant site in Lahore. Most of what leaves the plant carries a partner's name.



HOW IT WAS BUILT

How VAN was built, 2007 to 2026.



23 registered brands, made on 1 plant site in Lahore.

23

registered brands, made in Pakistan. All 23 are open to own-brand manufacturing, Vital Urea included.

22

PSQCA licences, against 8 Pakistan Standards

28

crop programmes published, stage by stage

LAB 336

PNAC accredited, ISO/IEC 17025:2017

14

national and multinational partners, since 2010

8

production lines under 1 roof, beside the laboratory

144684

Pakistan Patent, sulfur coated urea

100+

partner brands with VAN as the registered maker

10,000+

farmers reached direct through Vital Green

8 production lines under 1 roof.

1 Compound granulation

Every granule carries the full declared analysis, so nothing separates between the bag and the field.

3 Sulfur coating

Commercial scale. The line behind VAN's sulfur coated urea.

5 Organics and humates

Compost and organic-carbon carriers. Humate as crystal, powder, pellet and liquid.

7 Micronutrient coating

Boron and iron coated onto the granule, so the micronutrient lands wherever the granule lands.

2 Bulk blending

Single-nutrient and specialty granules blended to a target ratio. Compatibility is checked before the batch.

4 Liquids

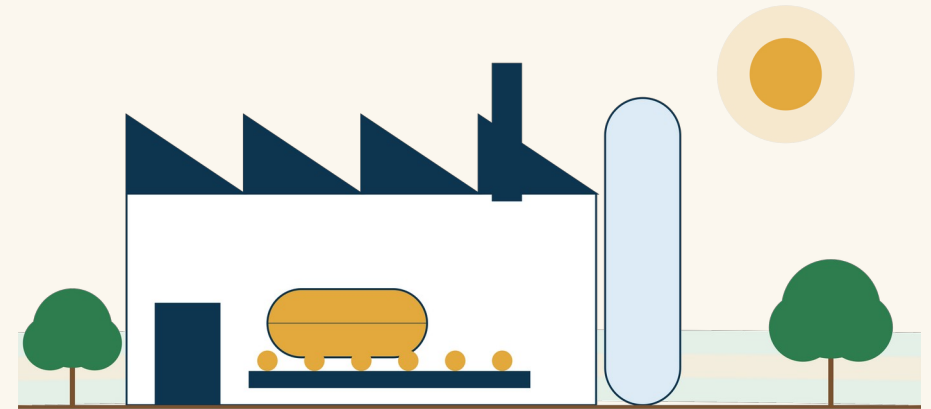
The VL liquid range, from foliar concentrates to fertigation grades.

6 Biological laboratory

Phosphorus-solubilizing bacteria on locally isolated strains.

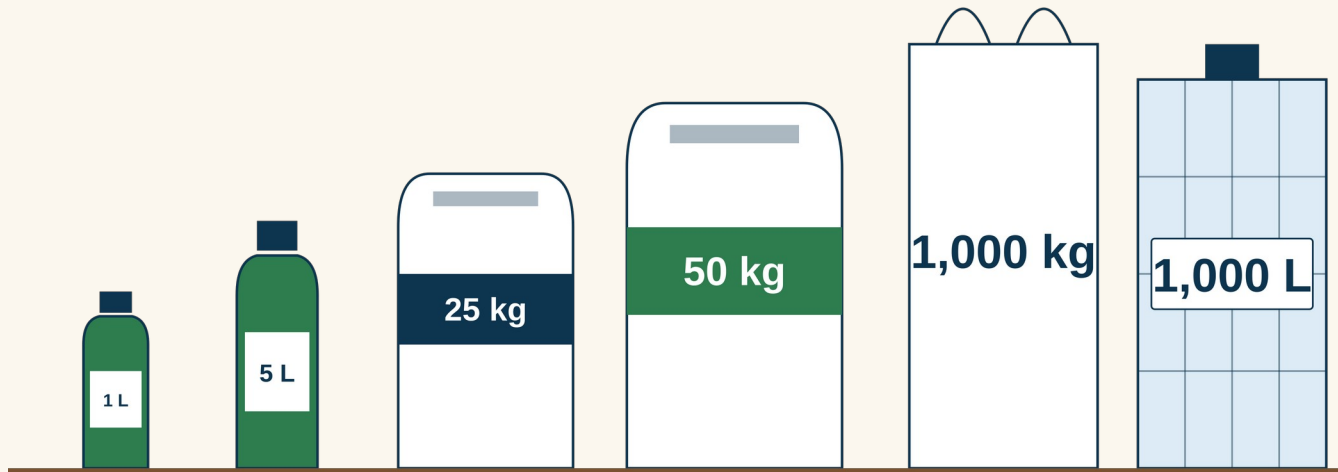
8 Filling and storage

Packs from 1 litre to bulk, with finished-goods storage on site.



The analytical laboratory is on the same site as the 8 lines. Every batch from every line is tested there before it ships.

VAN makes 7 physical forms, in packs from a 1 L bottle to a 1,000 kg bulk bag.



Physical forms

Granular, powder, crystalline soluble, liquid, pellet, water-dispersible granule and coated prill. The same composition can be made in more than 1 form.

Pack range

From a 1 L bottle to a 1,000 kg bulk bag and a 1,000 L IBC. Estate and contract-farming packs run on the same line as the retail unit.

1 t

is where a batch starts

7

physical forms, from powder to coated prill

1,000 L

the largest liquid pack, an IBC

None

no minimum on the order itself

THE RANGE

23 registered brands in 7 families.

1

Nitrogen

Vital Urea · SCU, N 32% · S 13%

4

Phosphorus

V. Ammonium Phosphate · 10-44-0
Green Phosphate · 6-32-0, humic coated
Fusion Phosphate · TSP, P₂O₅ 46%
V-Germinator Pro · liquid P 27%

5

Potash

Vital Potash · N 11 · K₂O 44, boron coated
Fusion Potash · 2-0-50 + S, B, Mg
SOP · K₂O 50% · S 17.5%
VL-Potash Liquid · K 30%
V-Potash Plus · 10-0-40 + Mg, B, Fe

2

NPK blends

Crop Force · 15-15-15 · 12-12-18
VL-NPK · liquid 8-8-6

4

Micronutrients

VL-Micromix · Zn, Fe, Mn, Cu
VL-Boron · B 5%
V-Zinc 10% · zinc sulfate
V-Transform · zinc 21% granular

3

Secondary nutrients

Cala-Mag V · N 10 · Ca 6 · Mg 4 · B 1
V-Mag Essential · Mg 8.5% · B 1%
Green Sulfur · sulfur 70% WDG

4

Soil health and biologicals

V-Compost · organic matter 25%
Humi Grow · potassium humate pellets
Humi Grow Plus · humic acid 10% liquid
Tornado · amino, fulvic, humic, seaweed

Open to your brand

All 23 brands are open to own-brand manufacturing, Vital Urea included. Each brand's analysis, licence number and Pakistan Standard is on van.com.pk.

The soil takes fertilizer back in 3 ways. VAN makes a product against each.

Nitrogen · loss 1 of 3

Urea is lost as ammonia gas and as nitrate.

Above pH 8, surface urea is lost as ammonia before the crop can use it. What dissolves moves down with the irrigation water.

Phosphate · loss 2 of 3

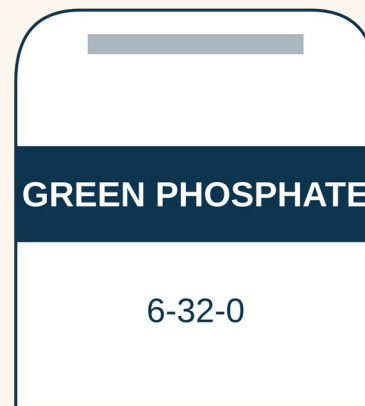
Free calcium binds phosphate.

Calcareous soil binds phosphate with free calcium and takes most of it back before the root reaches it.

Potash · loss 3 of 3

Too little potash goes on.

Pakistan applies 83 kg of nitrogen for every 1 kg of potash, so the crop draws potash from the soil's own reserve.



THE FLAGSHIP

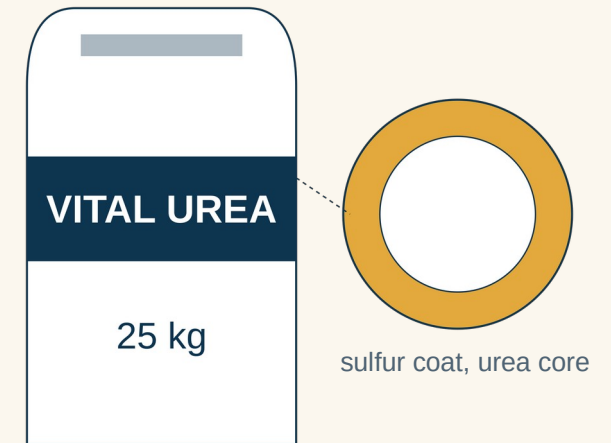
Vital Urea: sulfur coated urea, patented and made in Pakistan.

144684

Pakistan Patent, held by VAN. Registered since 2019.

25 kg

bag. N 32% · S 13%, so at least 8.0 kg of nitrogen and 3.25 kg of sulfur in every bag.



2012

VAN began coated work and has tested many combinations since.

Broadcast

drill or side-dress it. Never fertigate.

All 23

VAN brands are open to own-brand manufacturing, Vital Urea included.

Khaliqabad, 2023, with Rafhan Maize Products: 1 bag of 25 kg against a 50 kg bag of plain urea, across 5 grower sites, and the growth was comparable. It was an observational field programme, not a replicated trial, and no yield was measured. Rafhan is the only client VAN names, with its agreement.

VAN designs each grade for the soil where it will be used.

770,160

soil records across Punjab

18,000

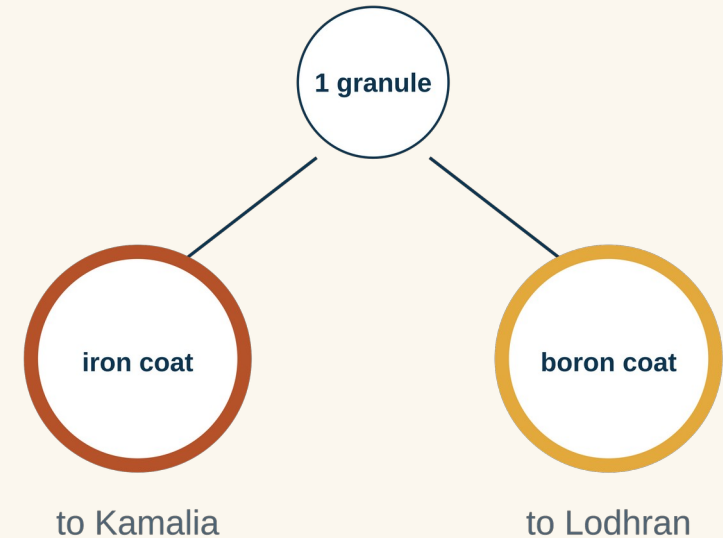
across Sindh

600

in Gilgit-Baltistan

These records sit behind VAN's formulation decisions. They come from the provincial soil survey work and from VAN's own sampling. VAN did not collect the survey data and does not claim it.

The phosphate granule sent to Kamalia carries an iron coat. The same granule going to Lodhran carries boron. It is 1 base material on 1 coating line, and the micronutrient is chosen for the soil where the bag will be opened.



QUALITY

Every batch is tested before it ships.

LAB 336

PNAC accredited, ISO/IEC 17025:2017, since 2024

8 of 21

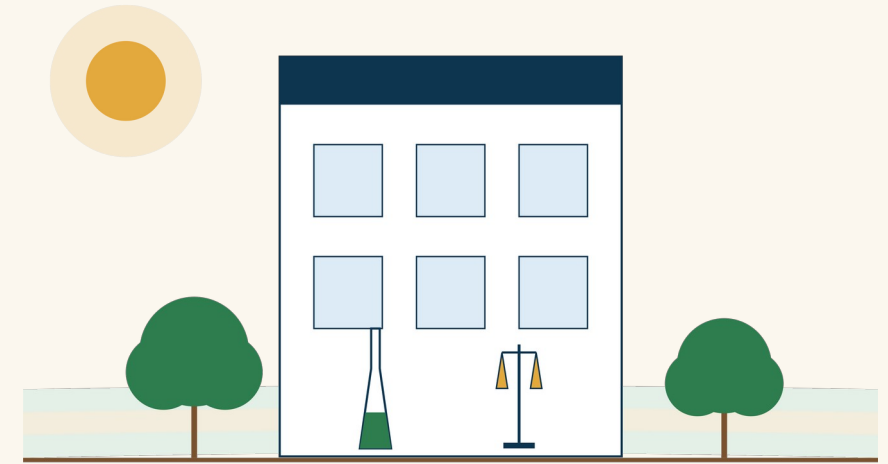
tests accredited. All 21 are priced publicly.

2

independent analysts on every sample

3

working days for most tests, from confirmed booking



- Written methods, calibrated instruments and reference standards run alongside every batch, so the result does not depend on who ran the test or on which day.
- A batch outside its specification is rejected.
- The certificate of analysis for any batch is free on request. Send the batch number off the bag.
- Quality management follows ISO 9001. Certification is in progress with System Certification Centre (SCC), expected during 2027.

22 PSQCA licences, each published with its number.

22

PSQCA licences held across 20 of the 23 brands

8

Pakistan Standards the licences are held against

100+

partner brands registered with VAN named as the manufacturer

Every number published

Each licence is listed by brand, with its licence number and its standard, on van.com.pk.

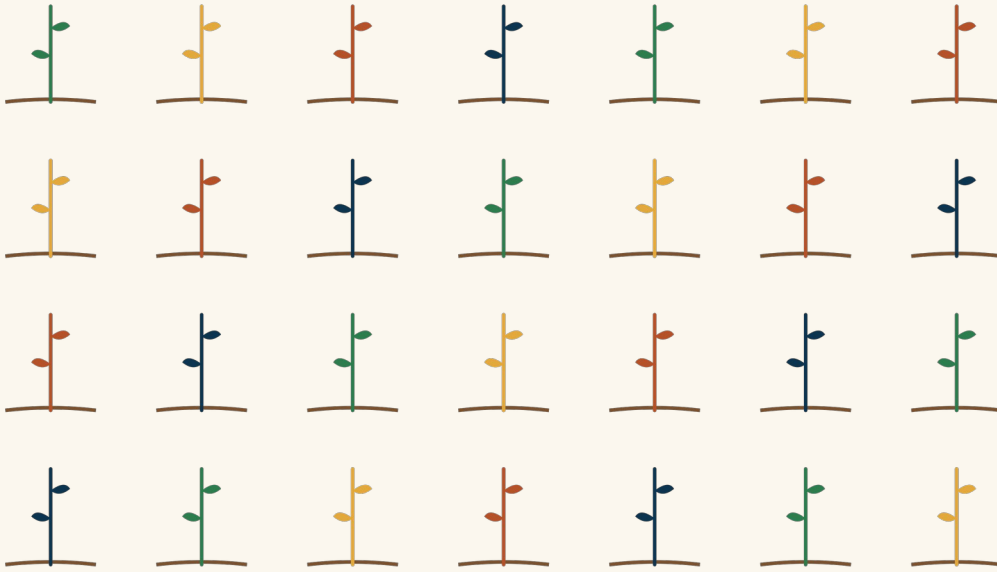
Registration run by VAN

For a partner brand, VAN files the registration under that brand, with VAN named as the manufacturer. VAN has done this more than 100 times.

Label claims checked before print

VAN checks what a label says before it is printed, and will not print a claim that a trial does not support.

28 crop programmes, free, per acre and stage by stage.



Wheat · Maize · Basmati rice · Hybrid rice · Cotton · Sugarcane, February planting · Ratoon sugarcane · Canola · Sesame · Soybean · Sunflower · Chickpea · Lentil · Mungbean and mash · Potato · Tomato · Chili · Garlic · Watermelon · Turmeric · Onion · Banana, year 1 · Banana, year 2 · Citrus · Date palm · Mango · Strawberry · Guava

Vitalytics · VAN's tools

A nutrition creator on the crop pages, and a live calculator on 12 crops: set the acres and the plan scales, adjusted for a soil report or the district.

Soil Atlas

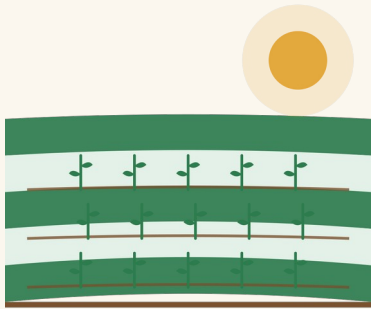
The 770,160-sample Punjab record, district by district, read against what each crop removes.

Yield and Discipline Simulator · beta

Nutrition decides about 1/4 of the yield. Sowing, seed, water, weeds and pests decide the rest. The simulator scores them on wheat and potato; 26 crops follow.

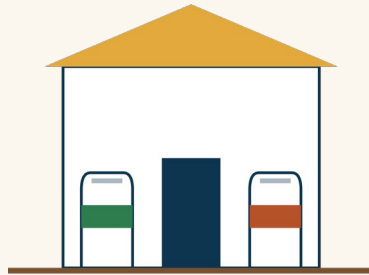
17 years of trial data from VAN's research farm sit behind every programme.

VAN works for growers, dealers and brand owners, and publishes its evidence.



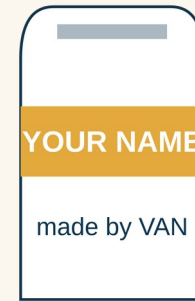
If you grow

Sugar mills, corporate farms and growers. 28 programmes, per acre, stage by stage, and estate packs.



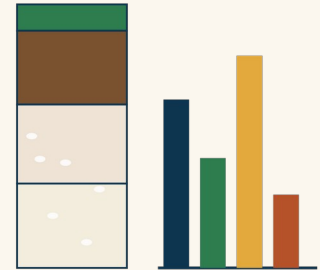
If you sell

Dealers and distributors. 23 brands, every batch tested before it ships, and a bag a farmer can verify by its number.



If you want it made under your name

National and multinational companies. Formulated, made, registered and tested here, and sold under your brand.



If you want the evidence

770,160 soil samples and 17 seasons on 1 research farm. Every figure carries its source.

VAN is open to a supply agreement, toll manufacture, licence or joint venture.

The portfolio, without the names.

VAN does not publish its partners' names. These figures describe the portfolio without them. A partner under NDA can be given specifics in a meeting.

100+

partner brands registered with
VAN named as the manufacturer

14

companies hold them between
them

2010

the year the longest-running
partnership started

8

products held by the largest single
partner. The next largest holds 7.

25

unbranded formulations in the
library, 11 ready to license

2 to 17

months from brief to market, the
fastest and the slowest so far

7 to 12

months for most briefs

Who already works this way: multinational crop-protection companies, national agri-input companies, sugar mills and corporate farms, and importers replacing a bought-in product.

2 ways to have a product made under your name.

Which one you take depends on whether the product you need already exists at VAN.

Developed to your brief

7 to 12 months

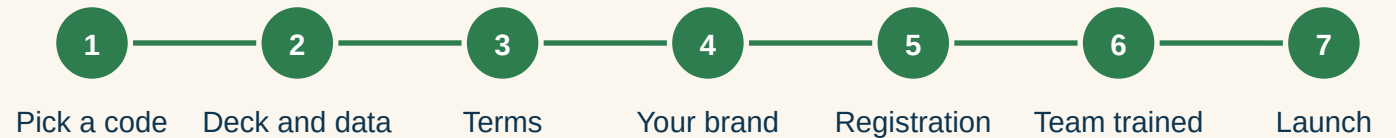
You bring a problem VAN has not solved yet: the market, the crop, the price point and the constraint. VAN brings the chemistry, the plant, the trial and the registration.



Ready to carry your name

About 3 months

You take a formulation VAN has already developed, trialled and validated. It sits in the library under a neutral code.



What VAN does not do: sell it for you, hand over the formulation, or put a claim on your label that a trial does not support.

What VAN offers a grower at estate scale.

The plan

28

published crop programmes

Sugarcane, February planting and ratoon, are 2 of the 28 published programmes: per acre, stage by stage, with the product, the method and the bag count. Ratoon sugarcane has a live calculator that scales to your acres.

The pack

1,000 kg

the largest bag, on the same line

Estate and contract-farming packs run on the same line as the retail unit, up to a 1,000 kg bulk bag. A batch starts at 1 t, and there is no minimum on the order itself.

The test

21

tests at VAN Lab, 8 accredited

Send 500 g of any fertilizer you have bought, from anywhere, to VAN Lab. 21 tests, all priced publicly, 8 accredited, most results in 3 working days. Incoming-goods checks on anything you stock.

Every VAN batch is tested before it ships. Send the batch number off the bag and the certificate for that batch comes back, with no charge and no sample to post.

VAN recovers potash from crop-residue ash, in place of imported potash.

10 t

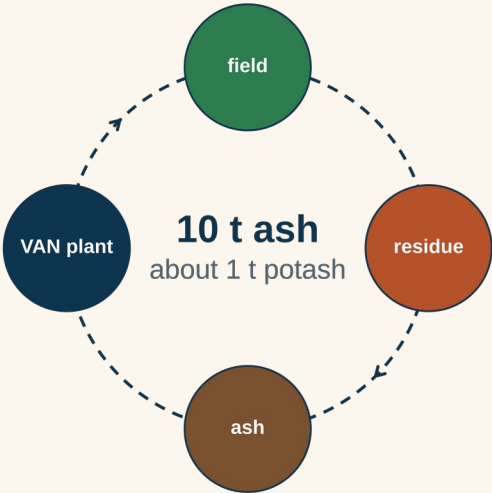
of bio-fuel plant fly ash gives about 1 t of potash

3,000 t

of ash processed so far, through VAN's own plant

About 20%

of VAN's potash intake now comes from this route



2027

a larger recovery line is planned

Silicon

is recovered from the same ash. The route is in its final R&D stage and is in no product yet.

V-Compost

is made from plant residue only, screened before it goes in. It adds organic matter to soil under 1% organic matter.

The minerals that left the field with the residue go back onto the land.

What VAN is developing now.

● Potash recovered in Pakistan

The fly ash route on the previous slide, taken to a larger line.

● Biologicals for nitrogen and phosphorus

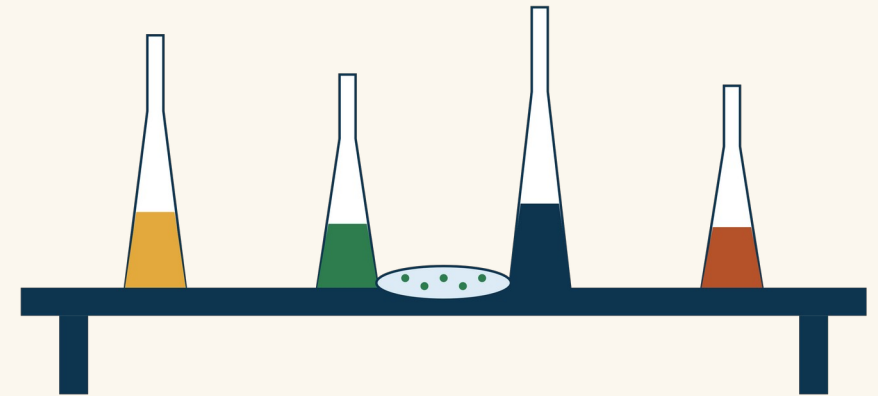
Phosphorus-solubilizing bacteria and a seed treatment in field trials, and a liquid inoculant in development. All on locally isolated strains.

● Mycorrhizal inoculant

In development. It extends the root system that has to reach the phosphorus the bacteria free up.

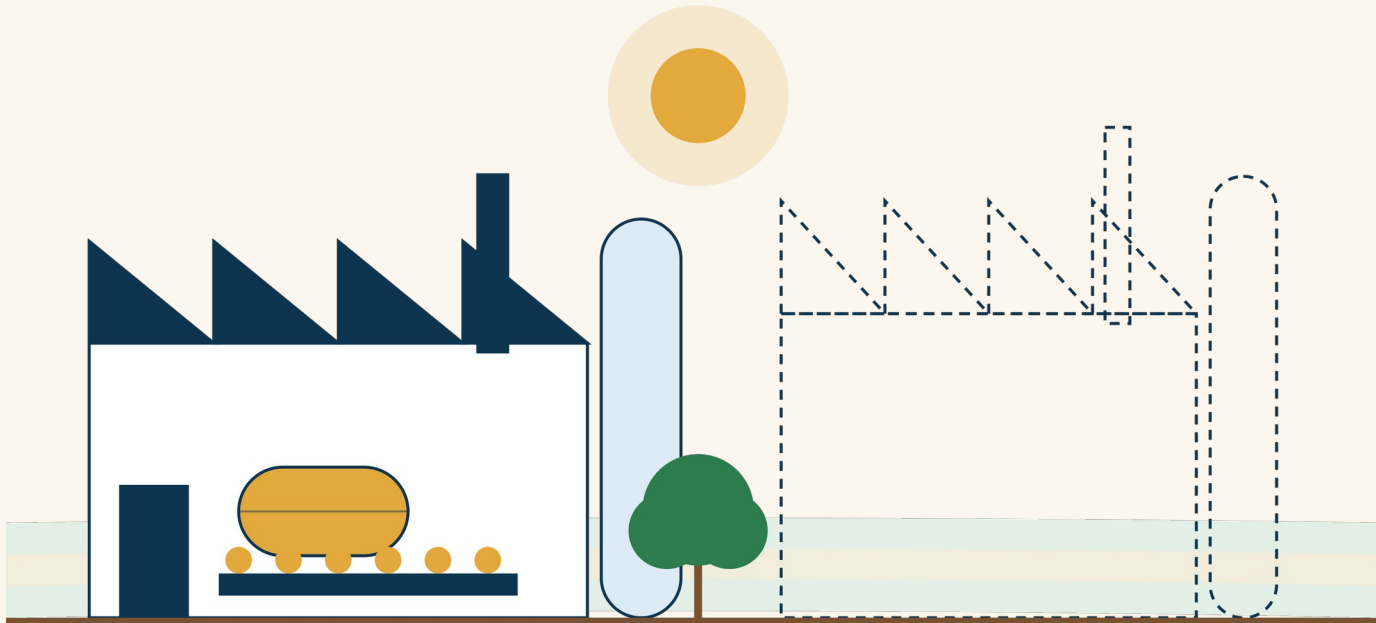
● New coated and phosphate-efficiency products

In development.



The formulation library today: 25 formulations. 11 available to license, 8 validated, 3 in field trials, 3 in development.

An NP granulation line is planned for the plant site.



Planned

Work on the line has not started, and no date has been set.

The line would make granulated nitrogen and phosphorus grades here in place of imports. The grades exist already: the VAN NP Range carries 6-32, 5-40 and 8-38, made against calcium fixation, and the 8-38 with sulfur and the 5-40 dual-release phosphate are validated in the library.

Phosphate is 20.5% of the nutrient Pakistan applies, and 97.9% of Punjab's soil samples are below adequate in it.

TALK TO VAN

Write to the address for what you need.

If you grow

kisan@van.com.pk

A crop plan, product rates, a dealer near you.

If you want it made under your name

partner@van.com.pk

Own-brand manufacturing and partnerships.

Everything else

info@van.com.pk

Supply, distribution, the laboratory, a plant visit.

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