

MushroomWale™
The Mushrooming Expert

Mushroom farms, engineered.

Turnkey infrastructure for India's fastest-growing horticulture sector — climate-controlled production rooms, compost units, spawn labs, and EPC delivery.

B2B PROJECTS

100+

pan-India, 2018–26

ROOMS

1–50

per facility

FULL-FLEDGED

B2C

fresh mushroom brand

TRACK RECORD

8yr

turnkey EPC

INSIDE

Twenty chapters.

A complete view of our company, capabilities, process, and economics.

PART 01 The Company 03–06	PART 02 What We Build 07–13	PART 03 Process & Proof 14–17	PART 04 Economics 18–20
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01	Cover	p. 01	11	Post-Harvest Chain	p. 11
02	Contents	p. 02	12	Automation & Monitoring	p. 12
03	Letter From the Founders	p. 03	13	Mushroom Varieties	p. 13
04	The Opportunity	p. 04	14	The 12-Week Build	p. 14
05	The Landscape	p. 05	15	Quality & Compliance	p. 15
06	Why MushroomWale	p. 06	16	Training & Knowledge	p. 16
07	What We Build	p. 07	17	Project Profile	p. 17
08	Grow Room Anatomy	p. 08	18	Investment Economics	p. 18
09	Compost Operations	p. 09	19	Government Schemes	p. 19
10	Spawn Laboratory	p. 10	20	Get Started	p. 20

03

A LETTER FROM THE FOUNDERS

"Every failed mushroom farm we have ever seen in India was fixable before it started."

We spent a decade watching investors pour lakhs — sometimes crores — into mushroom ventures that never flushed. The compost was fine. The spawn was certified. What failed, repeatedly, was the room itself.

Today we deliver more commercial mushroom facilities than any other EPC in India. Many are built for other agri-infra companies, corporate vendors, and government partners — white-label or branded, our name or theirs.

In 2026 we also launched our full-fledged B2C operation — fresh and value-added mushrooms reaching consumers through modern retail and our own distribution. The same engineering that builds our partners' farms now runs our own.

Every specification in this brochure is real. Every figure is verifiable.

SIGNED

Mahendra P. Singh
Director

Chirag Deep Singh
Partner

Agrimotion Engineering Pvt Ltd
Sirsaganj, Uttar Pradesh · April 2026

04

THE OPPORTUNITY

A USD 3.9 billion market by 2033.

India's mushroom industry is doubling every six years. Supply is the constraint.

CAGR

12.7%

India market

2024-2030 forecast

SOURCE

Grand View / Astute Analytica

MARKET SIZE

USD 1.6B

India, 2025

projected USD 3.9B by 2033

SOURCE

Grand View / Astute Analytica

TONNES

0.33M

annual production

2024, ~2% of world

SOURCE

Grand View / Astute Analytica

EXPORTER

3rd

globally

after China, Malaysia

SOURCE

Grand View / Astute Analytica

WHY NOW

URBAN DEMAND

Protein-conscious consumers, HoReCa channel growing 40% YoY; fresh mushroom demand highest in metro NCR and West.

EXPORT WINDOW

India exports fresh and processed mushrooms to Bhutan, Nepal, USA; export volume up 33% year-on-year (2024-25).

POLICY TAILWIND

MIDH subsidy up to 40-50% of project cost; NABARD AIF provides 3% interest subvention on credit up to Rs 2 Cr.

05

THE INDIAN LANDSCAPE

The industry, measured.

Five states produce most of it. Five varieties dominate. Eight price tiers.

TOP PRODUCING STATES	VARIETIES BY SHARE	PRICE TIERS • Rs / KG
01 Bihar Samastipur hub	Button (A. bisporus) ~60%	Button (farm-gate) Rs 120
02 Maharashtra Pune climate units	Oyster (Pleurotus) ~20%	Button (retail) Rs 200–280
03 Odisha Ganjam oyster belt	Milky (Calocybe) ~8%	Milky mushroom Rs 140
04 Haryana Sonipat 40% share	Shiitake (Lentinula) ~6%	Oyster Rs 180–220
05 Punjab Wheat-straw depth	Paddy straw ~4%	Shiitake (retail) Rs 1,200+
06 Himachal P. Solan, Chambaghat	Medicinal (misc.) ~2%	Reishi (dried) Rs 4,000
07 Uttar Pradesh Nalanda, Varanasi		Cordyceps (dried) Rs 1.5L+

THE OPPORTUNITY IS CONCENTRATED

Five states. Five varieties. One big supply gap.

Most Indian producers are small and seasonal — climate-controlled year-round facilities like ours remain rare.

06

WHY MUSHROOMWALE

Six reasons we exist.

Every differentiator
is infrastructure,
not a promise.

01

India's largest B2B EPC

We build more commercial mushroom facilities than any EPC in India — white-label or branded, for partners and their clients.

02

Engineering before agronomy

We design to heat load, air changes, panel U-values, tunnel geometry — not to hope. Every spec is a calculation.

03

Bankable documentation

DPRs, DSCR tables, IRR projections — our documents are PNB-ready, CA-graded, NABARD-approved.

04

Single turnkey contract

Civil, HVAC, PUF panels, racks, automation, training — all under one PO, one GC, one accountability.

05

B2C brand now operating

2026: full-fledged direct-to-consumer — our own brand, retail presence, supply chain, and fresh-mushroom distribution.

06

Scheme literacy + support

MIDH, NABARD AIF, APEDA, MUDRA — mapped to fit. 2-year post-handover support available on customer demand.

07

CAPABILITIES

What we build.

Six infrastructure tracks, assembled into one turnkey facility.

01

GROW ROOMS

PUF-insulated climate-controlled rooms with Daikin HVAC, MS racks, automated mist irrigation.

SCOPE

1–50 rooms • 18×60 ft

02

COMPOST UNITS

Phase-I & Phase-II tunnels, pasteurisation chambers, turning and filling equipment.

SCOPE

1,500–3,000 bags

03

SPAWN LAB

Class-100 laminar flow, autoclave, incubators; PS/G1/G2 grain spawn production.

SCOPE

250–800 kg/week

04

POST-HARVEST

Cold room, blast chill, grading, tray/punnet packing, cold-truck logistics interface.

SCOPE

2–4°C • 95% RH

05

AUTOMATION

Naayom climate controllers, IoT sensors, remote dashboards, alarm escalation.

SCOPE

T • RH • CO₂ • VPD

06

CIVIL & MEP

Foundations, drainage, electrical, plumbing, water treatment — single GC scope.

SCOPE

Turnkey accountability

ONE CONTRACT • ONE ACCOUNTABILITY • ONE HANDOVER

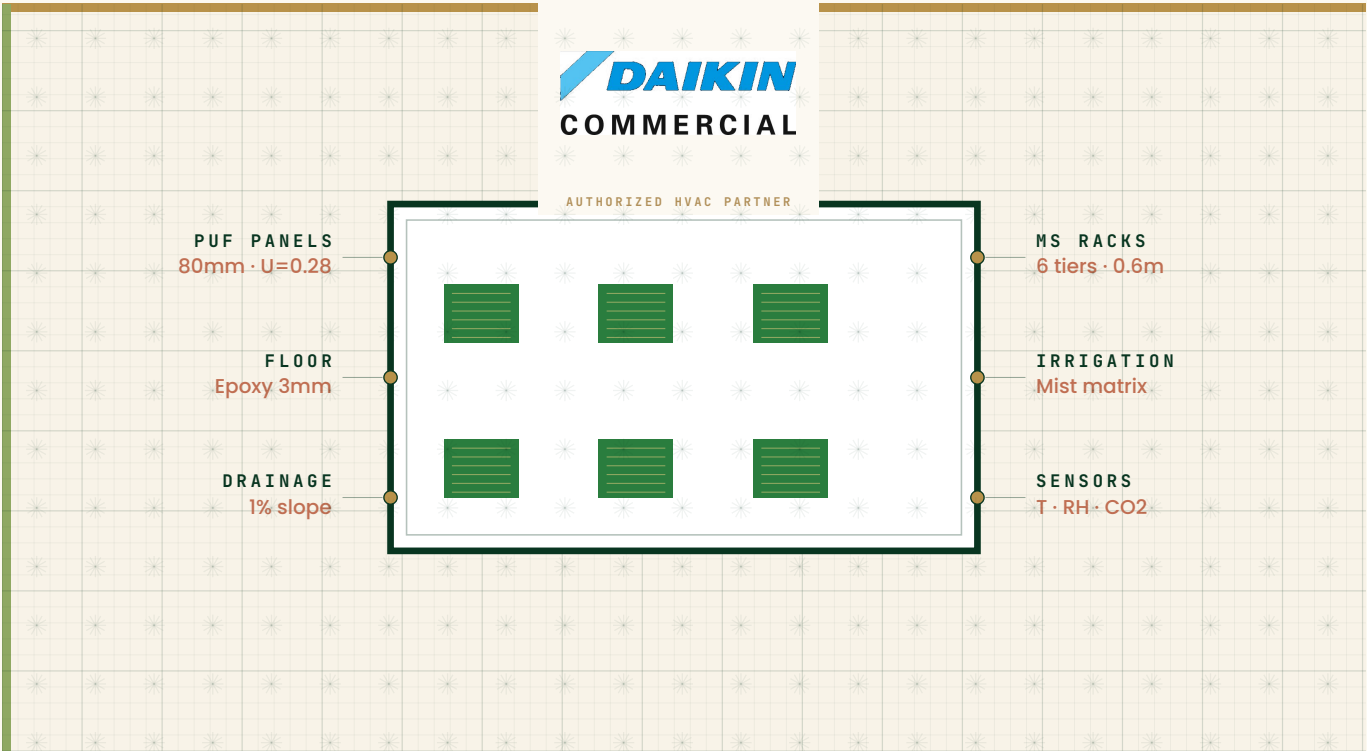
EPC delivery means a single PO covers design, procurement, and commissioning.

08

ANATOMY OF A GROW ROOM

The room is the yield.

A typical 18 × 60 ft MushroomWale production room – from floor to HVAC.



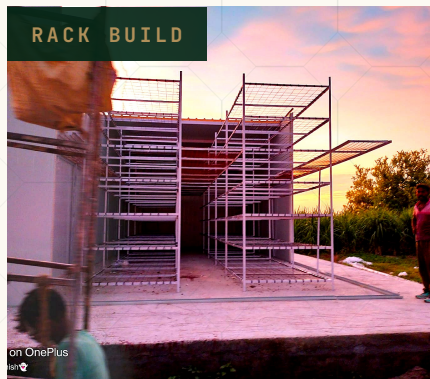
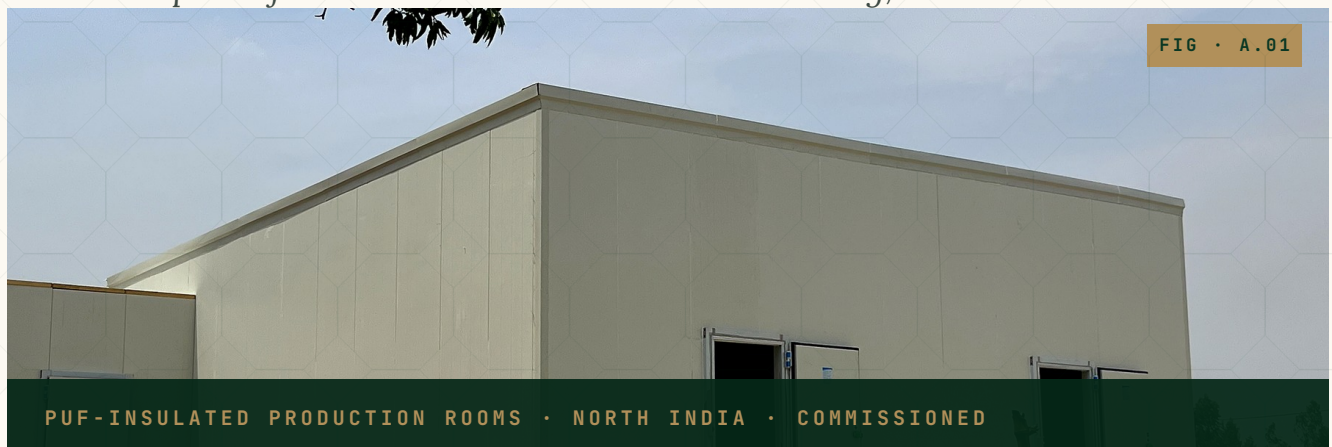
ROOM SPECIFICATIONS					
DIMENSIONS	AREA	TEMP	HUMIDITY	CO2	YIELD
18 × 60 ft	1,080 sq ft	14–18 °C	85–95 % RH	600–1,200 ppm	2.5–3.0 T/cycle

08 • A

PRODUCTION ROOMS • AS BUILT

Rooms we've built.

Real PUF-panel facilities. Real Daikin HVAC. Running, across India.



MS racks, pre-commissioning



Full cycle — 6-tier matrix



PUF access, exhaust stacks

ENGINEERED WITH

Daikin HVAC.

Every production room is climate-controlled by Daikin Commercial VRV systems. Audit-grade reliability.

DAIKIN
COMMERCIAL

AUTHORIZED HVAC PARTNER

09

COMPOST OPERATIONS

Phase I. Phase II. Sellable output.

A 3,000-bag compost unit feeds six grow rooms – and produces marketable surplus.



UNIT CAPACITY	
3,000	
BAGS PER CYCLE	
Wet compost / cycle	54 tonnes
Cycles per year	8
Grow rooms supported	6 × 1,080 sq ft
Surplus / cycle	12 tonnes
Footprint	2,400 sq ft

SURPLUS REVENUE	
Rs 8–12	
PER KG • SURPLUS COMPOST	
Surplus compost / year	96 tonnes
Avg realisation	Rs 10/kg
Surplus revenue / year	Rs 9.6 Lakh
Buyer segments	Oyster, nursery
Margin on surplus	~55%

09 · A

COMPOST UNIT · AS BUILT

Yards. Tunnels. Turners.

Phase-I yards. Phase-II tunnels. Aerated floors. Turners.



HDPE aeration manifold beneath each bay, zoned for Phase-I.



Loader-fed turner — 54-tonne cycle per shift.

BUILD SPECIFICATIONS

Engineered capacity — per standard compost unit.

PER CYCLE

54 T

wet compost

BAGS

3,000

per cycle

CYCLES / YR

8×

year-round

SURPLUS / YR

96 T

marketable

10

SPAWN LABORATORY

Sterile genetics, grown in-house.

A Class-100 laminar-flow lab producing mother culture through commercial spawn.

SPAWN PROCESS

Mother culture to commercial grain spawn

01

MOTHER CULTURE

Agar slant • 5–7 days

02

MASTER SPAWN

PDA broth • 7–10 days

03

PS GRAIN

Pure substrate • 14 days

04

G1 • COMMERCIAL

Bulk grain • 14–18 days

05

G2 • DELIVERY

Cold-stored at 4°C

LABORATORY SPECS

Class-100 sterile production

AIR CLASS

ISO 14644 Class 5 (100)

LAMINAR FLOW

HEPA H14, 0.45 m/s

AUTOClave

120°C • 20 psi • 60 min

INCUBATOR RANGE

22–26°C, 60–85% RH

OUTPUT

250–800 kg/week PS grain

GRADES

PS • G1 • G2 • compost

CONTAMINATION

< 2% batch rejection

SHELF LIFE

30 days @ 4°C

FOOTPRINT

400–800 sq ft

SPAWN COST • BUILT-IN SAVINGS

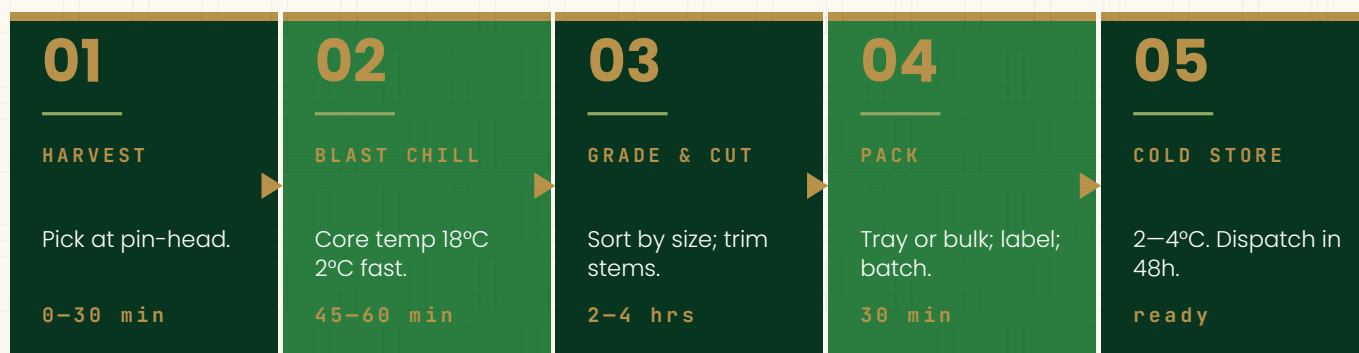
In-house spawn reduces input cost by ~40% and removes supply lead-time entirely.

11

POST-HARVEST CHAIN

Flush to shelf, cold and clean.

Blast chill, grading, packing, cold-storage – the chain that doubles shelf life.

**COLD CHAIN SPECS**

Harvest to blast	≤ 30 minutes
Blast chill range	-1 to 2°C core
Cold room temp	2–4°C
Cold room RH	90–95%
Shelf life achieved	10–14 days
Farm-to-retail shrinkage	< 5%

COMMERCIAL IMPACT

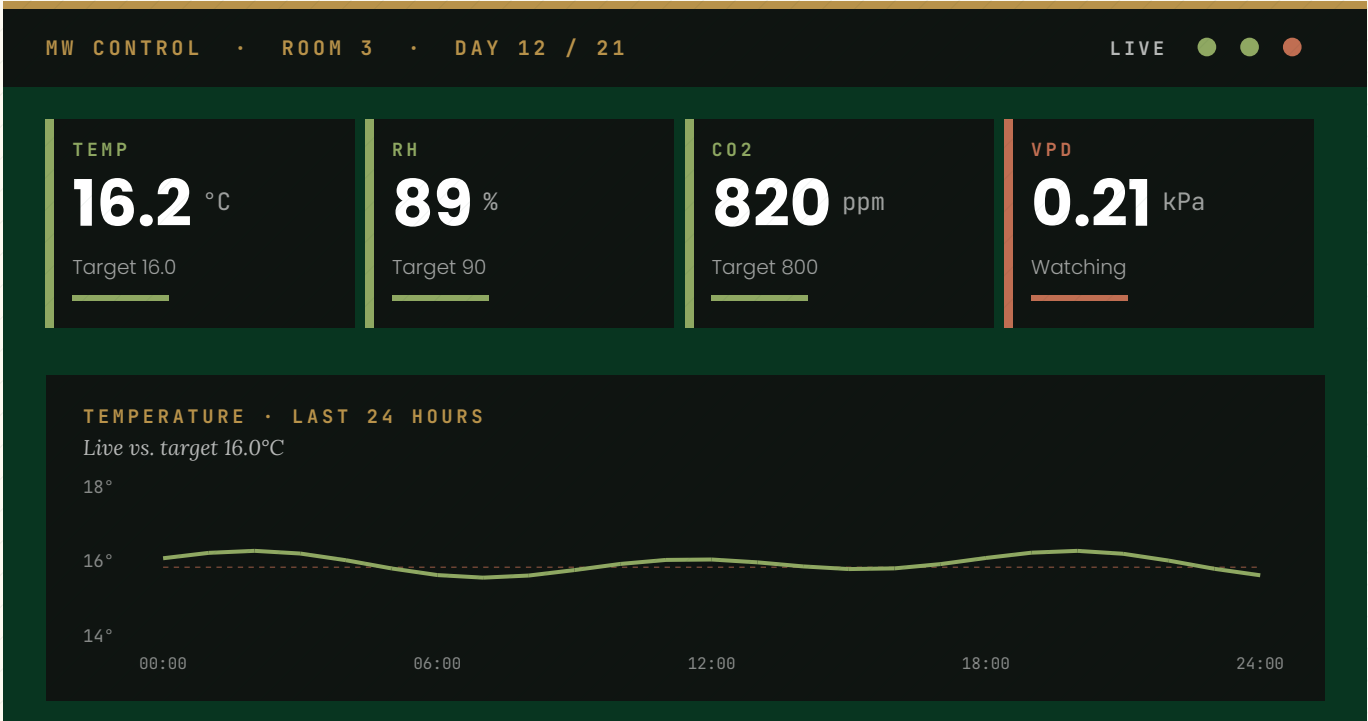
Price premium vs. non-chilled	+18–22% over market
Reach expansion from facility	500 km+ vs. local only
Wastage reduction	30–40%

12

AUTOMATION & MONITORING

Every room, every minute.

Naayom controllers and IoT sensors log every climate variable and escalate drifts.



WHAT YOU GET				
Climate	Alerts	History	Access	Backup
set-and-forget	SMS + email	12-month roll	browser + app	SD + cloud

13

MUSHROOM VARIETIES

Five species. One facility.

A MushroomWale room can be retuned for any of these — climate and substrate, not bricks.

BUTTON <i>Agaricus bisporus</i> Variety #01	OYSTER <i>Pleurotus spp.</i> Variety #02	MILKY <i>Calocybe indica</i> Variety #03	SHIITAKE <i>Lentinula edodes</i> Variety #04	MEDICINAL <i>Reishi, Cordyceps</i> Variety #05
				
India's bestseller. Cooler climate, composted substrate. Temperature 14–18°C Humidity 85–95% Cycle 40–50 days Biol. efficiency 60–80% Farm-gate (avg.) Rs 120/kg	Fastest cycle, simplest substrate. Entry variety. Temperature 20–25°C Humidity 80–90% Cycle 25–30 days Biol. efficiency 75–100% Farm-gate Rs 180–220/kg	Tropical native, warmer climate. Popular in South India. Temperature 30–35°C Humidity 80–90% Cycle 40–50 days Biol. efficiency 50–70% Farm-gate Rs 140/kg	Premium. Hardwood substrate. High margin. Temperature 16–22°C Humidity 80–90% Cycle 90–150 days Biol. efficiency 40–60% Retail Rs 1,200–1,500/kg	Functional / nutraceutical. High value, small volume. Temperature 18–24°C Humidity 85–95% Cycle 60–180 days Biol. efficiency 20–40% Dried price Rs 4k–3.5L/kg

ALL FIVE • SAME PLATFORM

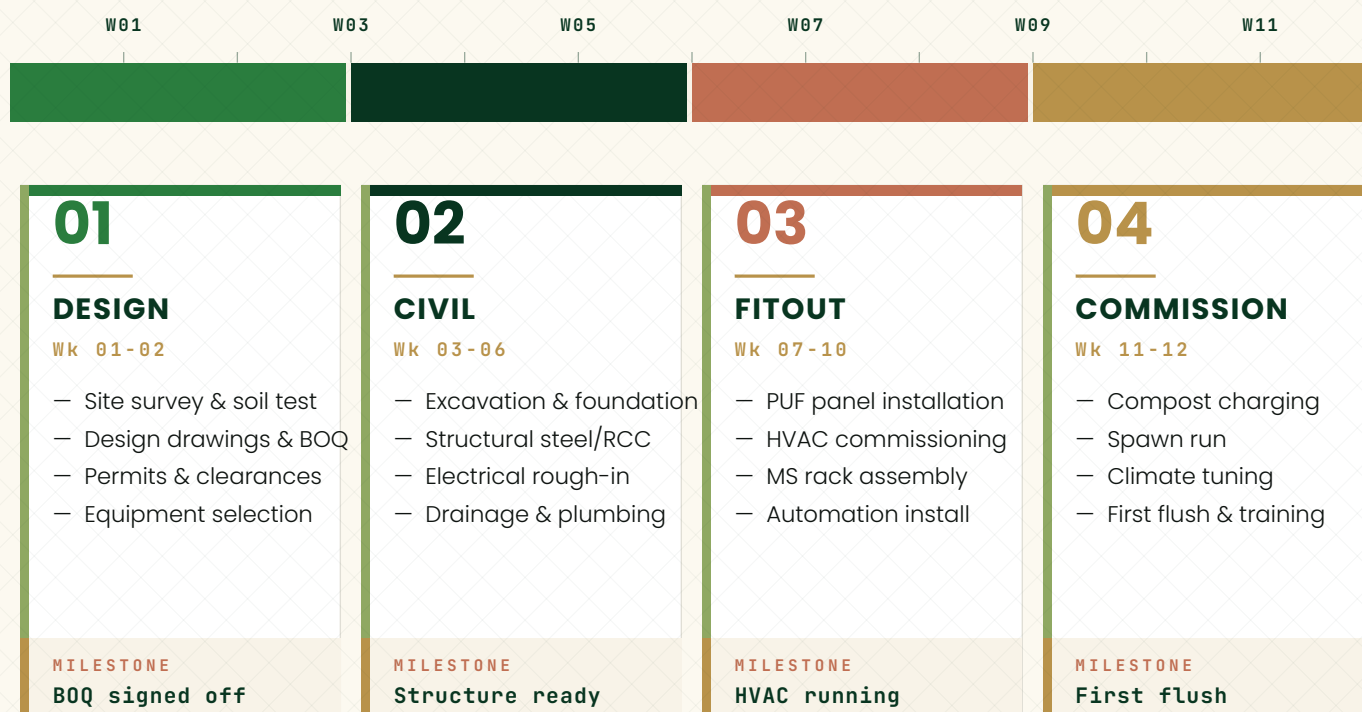
One MushroomWale facility can run two or more species concurrently with modular substrate lines.

14

THE 12-WEEK BUILD

Bare land to first flush.

Twelve weeks, four phases, one commissioning ceremony.



SCHEDULE DISCIPLINE

92% of our projects commissioned on or before promised date. Late penalty if we miss.

15

QUALITY & COMPLIANCE

Built to audit-ready.

We build to Indian standards, document to bank standards, operate to FSSAI standards.

01

CONSTRUCTION

IS 456 RCC · IS 800 Steel · NBC 2016 load & fire compliance.

- Structural design peer-review
- Third-party load testing
- As-built drawings archived

02

FOOD SAFETY

FSSAI license · GHP/GMP guidelines · Schedule-4 (mushroom).

- Potable water source
- Drainage separation
- Pest control SOP

03

EXPORT READINESS

APEDA registered substrate chain · phytosanitary compliance.

- Traceability chain
- HACCP framework
- Batch records

04

HVAC & ENERGY

ASHRAE 62.1 ventilation · BEE 5-star equipment preferred.

- Air-changes per hour doc
- Insulation U-value tested
- Energy baseline logged

05

WATER & WASTE

CPCB discharge norms · closed-loop drainage for compost.

- STP sizing
- Compost leachate capture
- Solid-waste handling

06

SAFETY & LABOR

Factories Act 1948 · BOCW · PPE & hygiene protocols.

- First-aid + fire drill
- PPE audits quarterly
- Training logs kept

BANK-READY HANDOVER DOSSIER

Every handover: as-built drawings · HVAC commissioning · spec matrix · warranties.

16

TRAINING & KNOWLEDGE TRANSFER

A trained team is the yield.

Every handover includes a full curriculum — classroom, SOPs, and support available on customer demand.

01

PRE-HANDOVER

6-day classroom + hands-on program before commissioning.

Cold-chain discipline
Day 1–2

Climate control logic
Day 2–3

Spawning & casing
Day 3–4

Pest & disease ID
Day 4–5

Harvest & grading
Day 5

Record-keeping
Day 6

Conducted on-site at your facility during fit-out.

02

SOPS & MANUALS

Printed binder + digital copy covering every operational detail.

Room operations
120-page binder

Compost charging
Step-by-step

Spawn lab protocols
Class-100 rules

Emergency procedures
HVAC, power, pest

Quality checkpoints
11-point audit

Language options
Hindi / English

SOPs delivered bilingually; videos available online.

03

POST-HANDOVER CARE

Two years of technical support available on customer demand.

On-call response
within 4 hours

Site visits
2 in year 1

Climate audits
quarterly

Yield benchmarking
monthly report

Pest & disease callouts
as needed

Post-2yr AMC option
at choice

Activated on your request. AMC terms on demand.

OUR COMMITMENT

A trained team is the single biggest predictor of first-year yield. We take this seriously.

17

REPRESENTATIVE PROJECT PROFILE

A 6-room facility, anatomy & economics.

A representative MushroomWale deployment – actual client names withheld by policy.

PROJECT TYPE	SCALE	REGION	BUILD TIME	STATUS
6 rooms	1,080 sq ft × 6	North India	14 weeks	Operating, yr 1

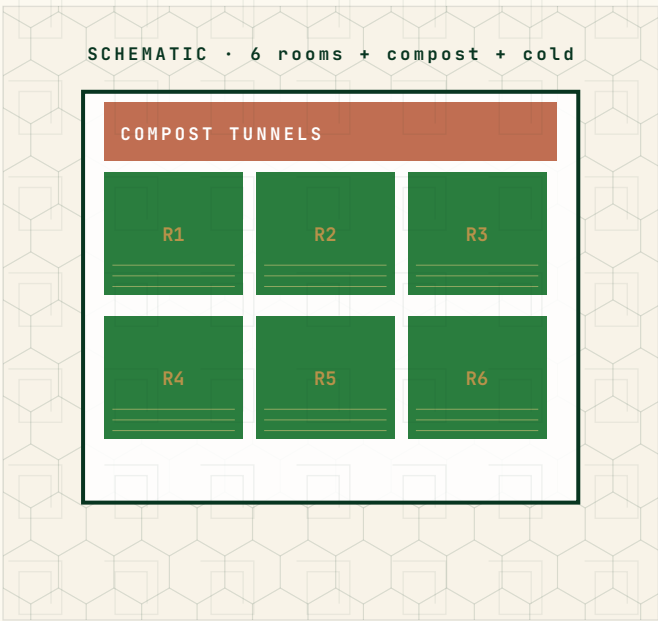


FIG. 01 · Typical 6-room facility footprint

THE CHALLENGE

Client: medium-scale agri entrepreneur, 2 acres of family land, no prior mushroom experience. Needed a bank-ready project and a facility that could be operated by a team of 12.

THE SOLUTION

Full DPR delivered (DSCR 1.64, IRR 18.4% project, 23.7% equity). Six climate-controlled rooms with 56 TR Daikin HVAC, two compost tunnels on-site, spawn lab, post-harvest cold chain, Naayom automation, and operator training.

THE OUTCOME

First flush at week 14 (on schedule). Operating at 95% capacity within 4 months. Currently tracking 4y 7m payback at indicative pricing.

TOTAL Rs 685L CapEx	BANK LOAN Rs 500L term finance	ROOMS 6 climate ctrl	HVAC 56 TR Daikin	TO FLUSH 14wk on schedule
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18

INVESTMENT ECONOMICS

A bankable business.

Indicative economics for a 6-room facility with compost unit and spawn lab.

TOTAL PROJECT

Rs 685L

 CapEx
indicative

IRR PROJECT

18.4%

 over 10 years
indicative

DSCR

1.64

 average
indicative

PAYBACK

4y 7m

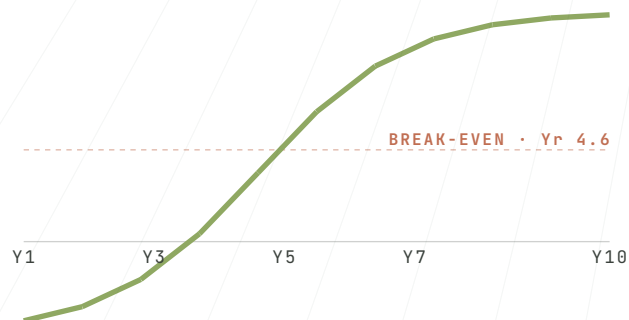
 to net zero
indicative

PROJECT COST BREAKDOWN

Land & civil works	Rs 180 L	26%
PUF panels & rooms	Rs 145 L	21%
HVAC systems	Rs 95 L	14%
MS racks & irrigation	Rs 55 L	8%
Compost unit	Rs 70 L	10%
Spawn lab	Rs 42 L	6%
Post-harvest & cold	Rs 48 L	7%
Automation (Naayom)	Rs 18 L	3%
Working capital	Rs 32 L	5%
TOTAL PROJECT	Rs 685 L	

CASH FLOW & FUNDING

CASH FLOW CURVE



FUNDING SOURCES

Promoter contribution	Rs 185 L	27%
PNB term loan	Rs 500 L	73%

MIDH subsidy headroom up to Rs 200 L (applied separately)

19

GOVERNMENT SCHEMES • 2025-26

Five schemes. Stackable.

Current GoI and agency schemes applicable to commercial mushroom units. Real rates, real caps.

01 MIDH Integrated Horticulture GoI central scheme	02 NHB National Hort. Board MIDH-aligned subsidy	03 NABARD AIF · Mushroom eligible 3% interest subvention	04 APEDA Export support For processed units	05 MUDRA Micro enterprise PM MUDRA Yojana
Max project Rs 20 Lakh Plains subsidy 40% NE / Hills 50% Pattern Credit-linked GoI : State 60 : 40 Hill ratio 90 : 10	Max assistance Rs 10 Lakh Subsidy rate 40% of cost Eligibility Individual / JV Add-on 50% on compost Application NHB portal Linked to MIDH framework	Credit ceiling Rs 2 Crore Interest subv. 3% p.a. Tenure 13 years Moratorium 2 years Guarantee CGTMSE Effect Rate minus 3%	Processing Up to 50% Packaging Up to 50% Certification Up to 50% Training Rs 50k/prog Eligibility Reg. exporter For FPO / SHG / Ind.	Shishu Up to Rs 50k Kishor Rs 50k—5 L Tarun Rs 5—10 L Shishu coll. None Processing 2—4 weeks Best for Small starts
SOURCE MIDH 2025 guidelines	SOURCE National Horticulture	SOURCE NABARD · MoA	SOURCE APEDA · MoC	SOURCE PM MUDRA Yojana

STACK THE SCHEMES

Promoter outlay can drop below 20% when schemes are aligned.

Example: Rs 100L · AIF Rs 60L (3% subv.) · MIDH Rs 20L · Promoter Rs 20L.

Women / SC / ST: additional 10% subsidy under NHB.

Build your mushroom business.

Four steps from here to first flush.

01**SEND SPECS**

Rooms,
capacity,
location,
budget range.

02**GET QUOTE**

DPR-ready
BOQ within 5
working days.

03**SITE VISIT**

We visit,
survey, finalise
design.

04**BUILD + CARE**

12-week
turnkey + 2-yr
care.

MushroomWale™
The Mushrooming Expert

CONTACT

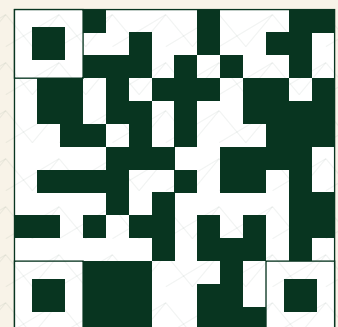
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START NOW**SCAN FOR QUOTE**

Engineered, built, delivered.

Agrimotion Engineering Pvt Ltd

April 2026 · Business Brochure