

PROJECT GREEN FLAME

333 units. One serviceable cluster.

Pabna operating cluster

A controlled 18-month investment to test sustained use, repair costs and slurry sales.

BDT 10m City CSR cap

BDT 15m total mobilised

18 months



Project concept visual; not documentary evidence.

Phase I points to a better operating model

01

Households showed interest

The implementer reports strong uptake across Sirajganj and Bogra.

02

Clusters made fieldwork easier

Concentrated sites improved mobilisation, installation, monitoring and after-sales support.

03

Slurry management mattered

Households valued help turning digester output into a usable farm input.

15

Commercial-rate sales reported

Fifteen additional units were reportedly sold after the supported Sirajganj installations.

PHASE II MUST VERIFY

Current functionality

Repair cost

Household savings

Paid slurry transactions

Reconcile the asset register before using installation totals as evidence of impact.

WHY NOW

Bangladesh already has the policy and delivery base

20%

CSR expenditure category

Environment and climate mitigation and adaptation. This is an allocation rule, not automatic project approval.

15%

of total manure

Bangladesh NDC 3.0 target for biogas treatment by 2035.

68,000+

plants financed nationally

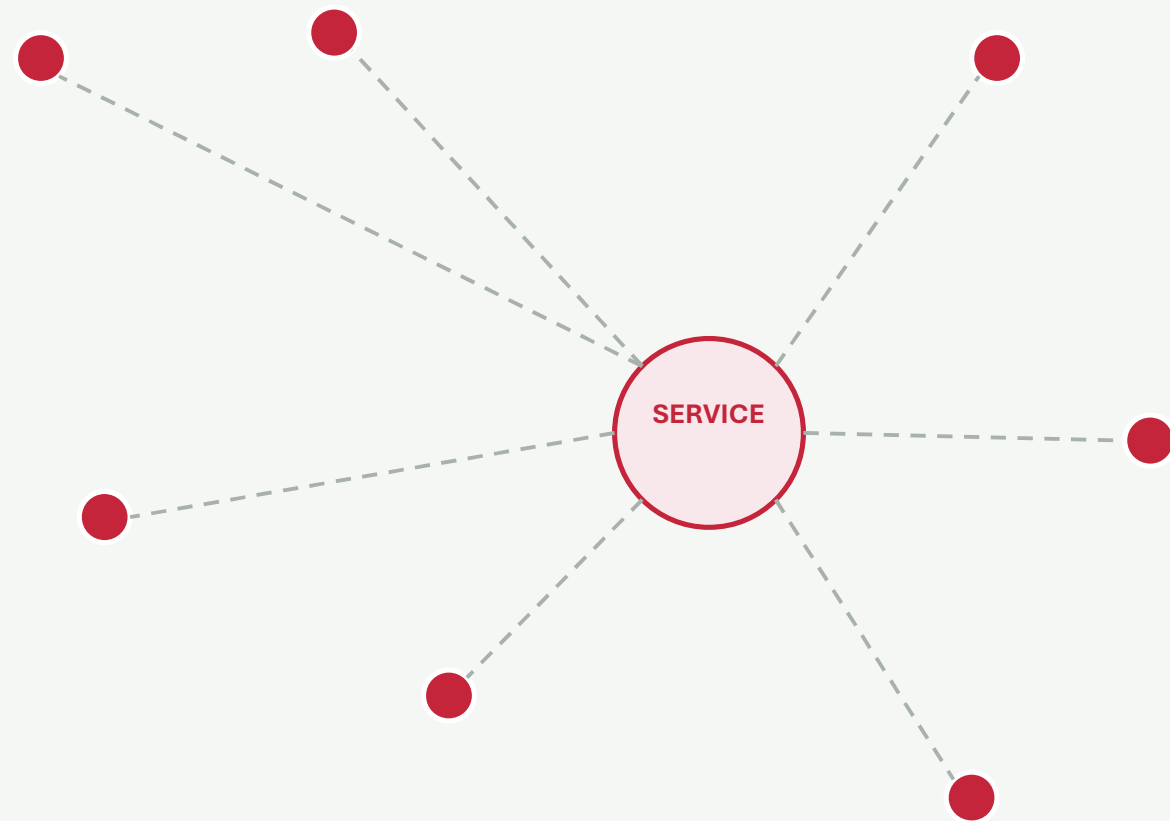
IDCOL-reported total by December 2023. Current functionality is not published.

COST CONTEXT

BDT 115/litre diesel raises transport and service costs. **+74.8%** across two approved SABIC urea purchases signals import exposure, but digestate is not a direct urea substitute.

Operations determine whether a biodigester keeps working

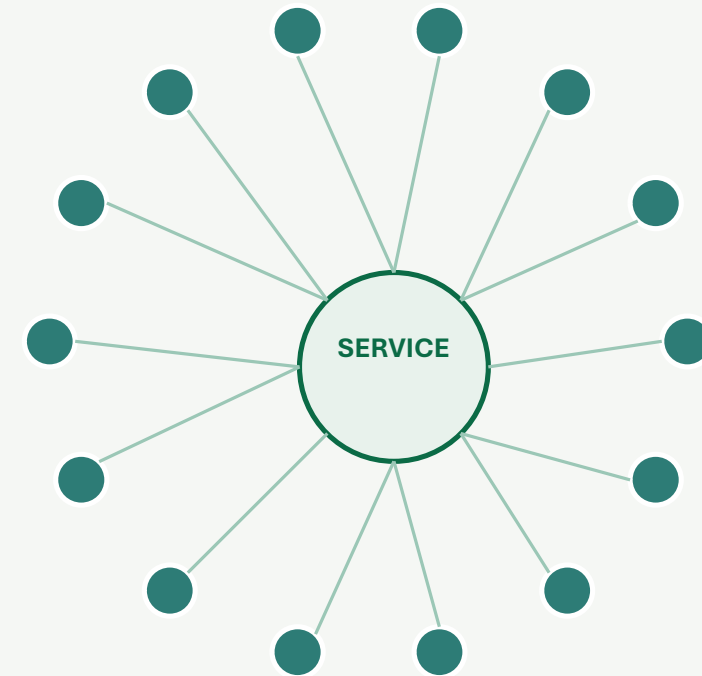
SCATTERED DELIVERY



Long routes

Higher downtime | weaker monitoring | costly slurry collection

DENSE OPERATING CLUSTER



Repeatable routes

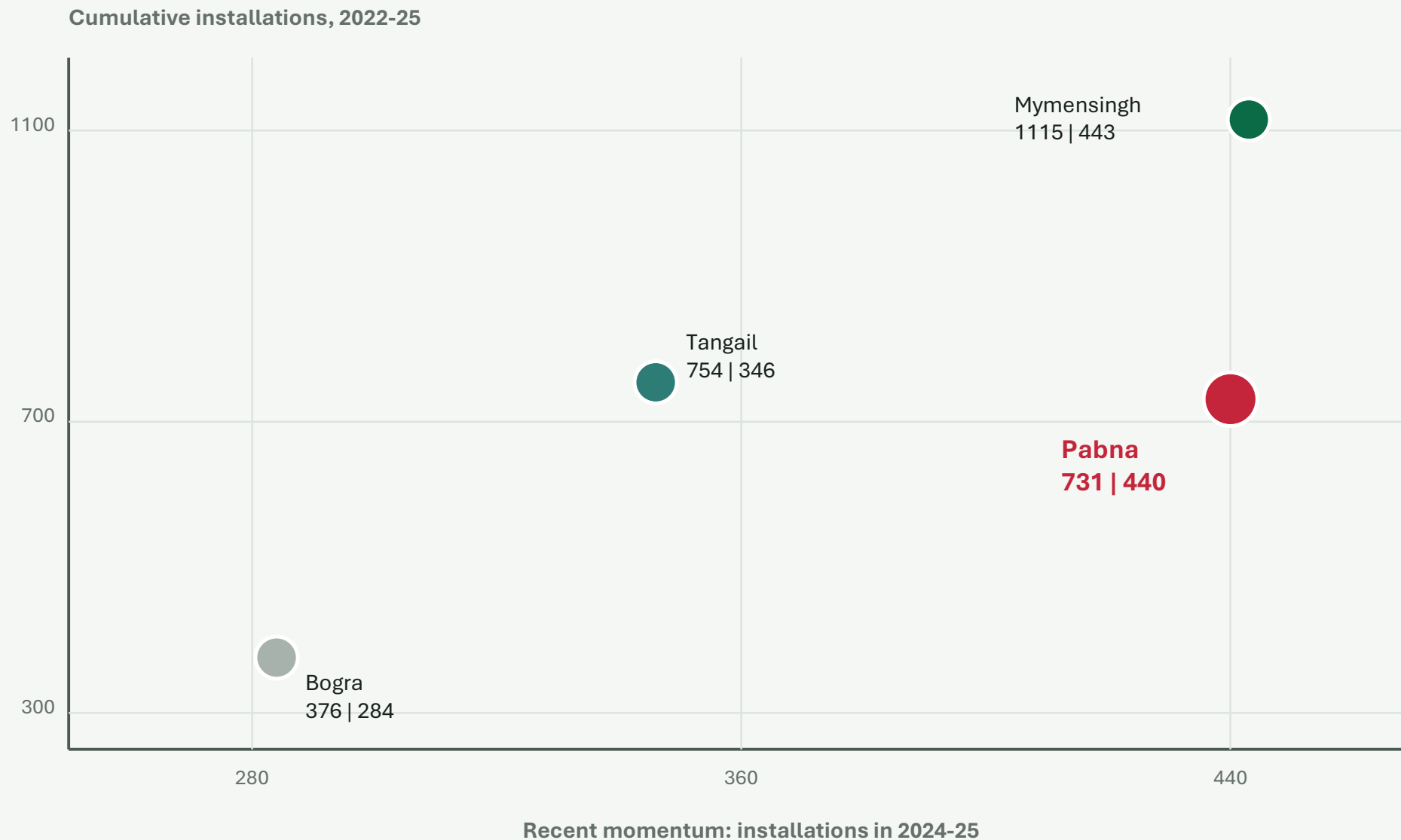
Faster repairs | consistent follow-up | testable collection economics

54% ABANDONED IN A 2,559-HOUSEHOLD NEPAL SAMPLE

A warning about failure mechanisms, not a Bangladesh failure-rate estimate.

Pabna has installation momentum; readiness needs field verification

731 IS CUMULATIVE INSTALLATIONS, NOT ACTIVE ASSETS



SITE GATES

- 01 GPS concentration**
333 eligible homes within a serviceable radius
- 02 Functionality**
Legacy assets physically checked, not assumed active
- 03 Feedstock and water**
Daily operating inputs verified household by household
- 04 Service capacity**
PO response time, parts and technician route cost
- 05 Digestate demand**
Tested product, buyer route and paid transaction

BUDGET

The BDT 10m ceiling can be built from contracted rates

333-UNIT ILLUSTRATION USING PHASE I CONTRACTED RATES

LINE ITEM	CALCULATION	AMOUNT	
Biodigester subsidy	333 x 24,500	BDT 8,158,500	
Sales + distribution	333 x 3,800	BDT 1,265,400	
Management + logistics	333 x 1,698	BDT 565,434	
Ceiling reserve	Balancing amount	BDT 10,666	

CITY BANK CEILING

BDT 10,000,000

+ BDT 4.995m HOUSEHOLD CO-FINANCING = BDT 14.995m TOTAL

Component-level Phase II price build-up has not been supplied.

CONTRACTED HOUSEHOLD PACKAGE

BDT 29,000 Digester, stove, accessories, transport + installation

+ BDT 6,000 One-ton slurry collection tank

BDT 35,000 total City 24,500 | Household 10,500

PHASE II PRICE PROPOSAL

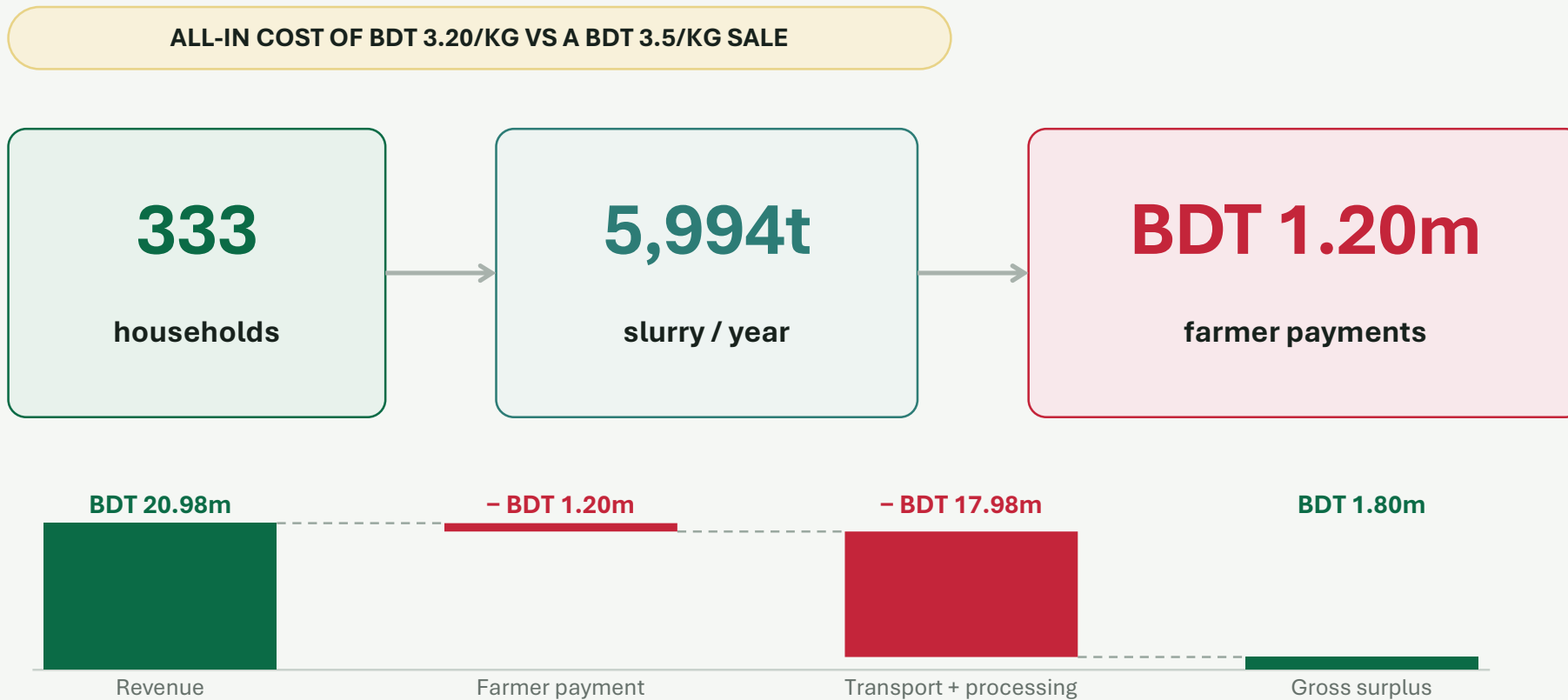
BDT 39,500

City subsidy remains BDT 24,500

Household contribution rises to BDT 15,000

+42.9% HOUSEHOLD CO-PAY

The model leaves BDT 1.80m before admin and overheads



Illustrative processing route; not delivery evidence.

GROSS SURPLUS

BDT 1.80m

before admin and other overheads

THE THIN MARGIN STILL ABSORBS

- Collection
- Admin + salaries
- Laboratory + registration
- Packaging
- Transport
- Working capital
- Unsold stock

Partner roles must be contracted before deployment

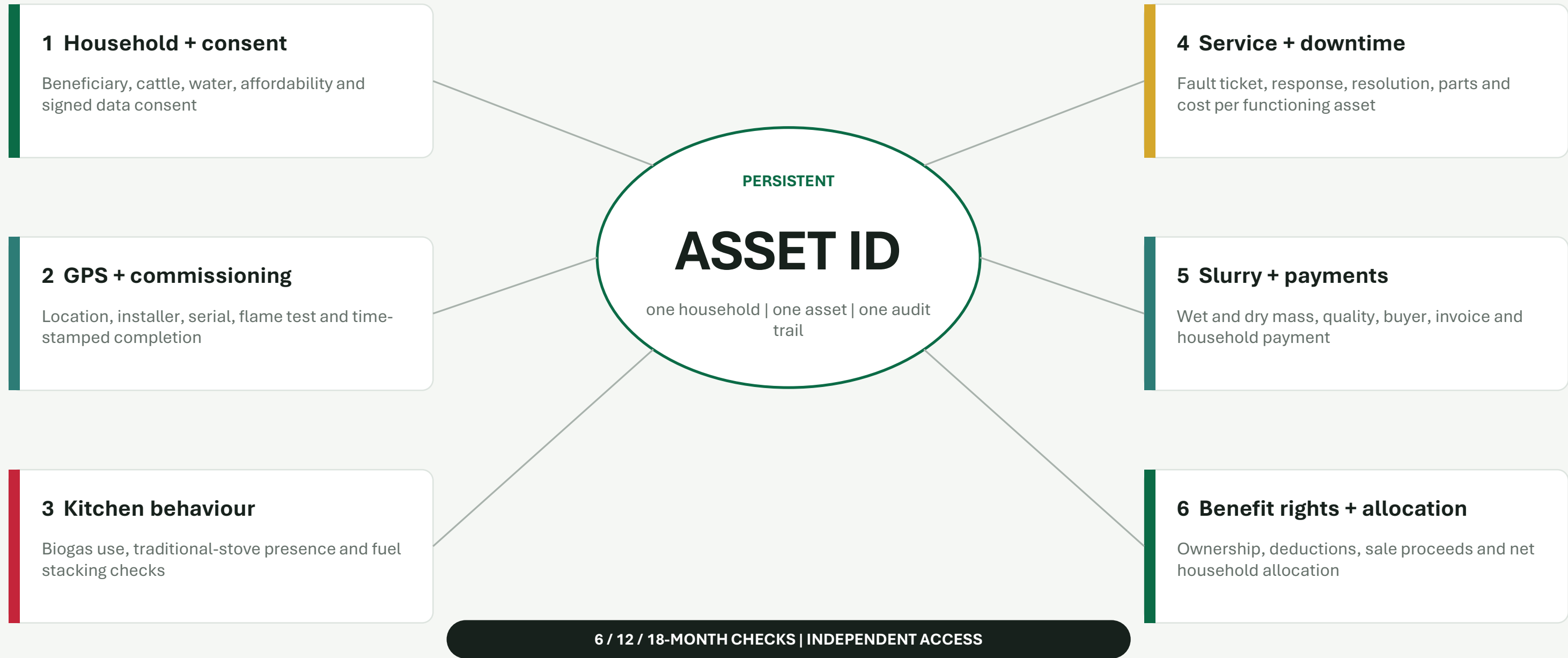
INSTITUTION	ACCOUNTABLE LANE	STATUS
City Bank	CSR capital, decision gates, oversight and reporting	DECISION MAKER
IDCOL	Validate dataset, confirm platform route and eligible PO	COMPLETE
Ekshathe	Household mobilisation, installation coordination and service	PROPOSED
ATEC / provider	Technology, warranty, training and performance data	TO CONTRACT
Cultivera	Digestate off-take pilot under price and conflict controls	PROPOSED

Public ATEC evidence: separate 16,000-unit programme and access to PRAN's 4,000+ listed farmers. It does not establish participation in this project or deployment in Pabna.

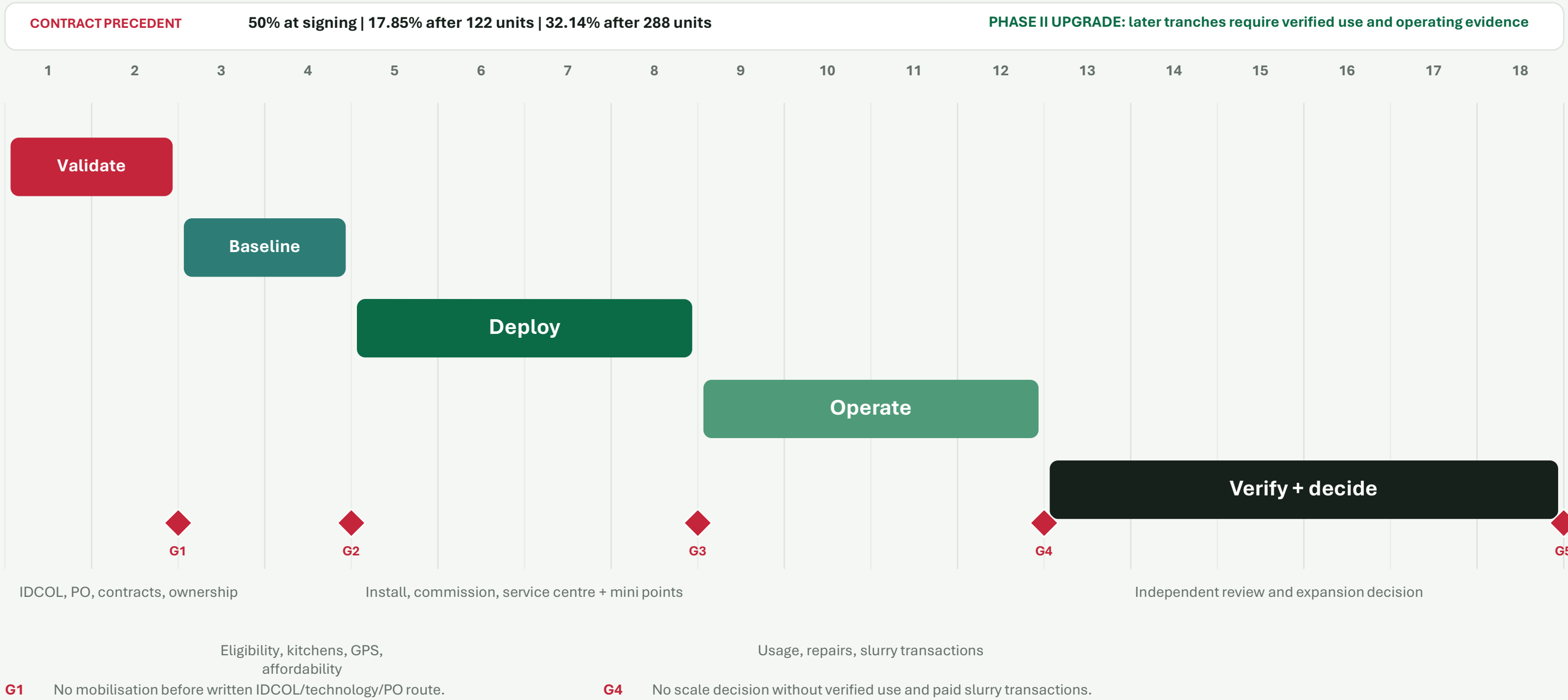
Five controls define ownership, money and evidence



Each installation needs one traceable operating record



Release capital only after each evidence gate



Approve validation before field deployment

APPROVAL CEILING

BDT 10m

released through evidence gates

Four pre-deployment conditions

- 1 IDCOL dataset and PO route confirmed
- 2 333 eligible households pass cluster screen
- 3 Ownership, data and off-take terms signed
- 4 Independent budget and value-chain review completed

WHAT CITY RECEIVES AT MONTH 18

- | | | |
|----|---------------------------|--|
| 01 | Functionality | 6- and 12-month use, downtime and repair cost |
| 02 | Household value | Fuel displacement, time, affordability and safety |
| 03 | Slurry margin | Mass balance, product tests and paid transactions |
| 04 | Evidence integrity | Consent, asset register, payments and audit trail |
| 05 | Expansion decision | Verified cost per functioning asset and replication gate |

DECISION METRIC: COST PER VERIFIED FUNCTIONING ASSET