Simulation Exercise (SimEx) Conduction Framework

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1. Purpose and end-state

This framework takes a state from "which disease?" to a scored, debriefed simulation exercise (SimEx) in seven phases. Every exercise is driven by a pre-drafted master blueprint, and every participant is scored against it.

Who uses it: the national/state exercise planning team, the Exercise Director, facilitators (controllers), evaluators, simulators (role-players) and participating departments.

End-state. At the end of any exercise built with this framework, each participant can state:

- **Role** — the specific actions they own when the disease occurs.
- **Scope** — where their responsibility starts and stops, and what they hand over.
- **Knowledge** — the technical facts they must hold for their role (signs, sampling, biosecurity, legal provisions).
- **The larger universe** — every body involved (village to national level, line departments, labs, police, local bodies, media) and how they connect.
- **The fallback** — who to go to when the first contact does not respond, and what to do when a resource is not available.
- **The repositories** — where the SOPs, contact lists, forms, reporting portals and stockpiles sit, and how to reach them.

The seven phases

1. Disease selection and capacity self-assessment (scale of 1–5)
2. Scoring, ranking of components and state concurrence
3. Function mapping and the SimEx filter (not every function warrants a SimEx)
4. Progressive SimEx programme design — modalities, players, days
5. Exercise design — aim, objectives, scope, groupings, start point (Point A) and end point (Point B)
6. Master blueprint — the minute-by-minute script of expected actions for every participant and facilitator
7. Conduct, evaluation against the blueprint, debrief and improvement plan

The disease used for worked examples throughout is highly pathogenic avian influenza (HPAI) in backyard and commercial poultry. Swap it for any priority disease; the structure does not change.

2. Phase 1 — Disease selection and capacity self-assessment

Pick one disease per exercise programme, then have the state rate its own capacity on every component of the response, at every level, on a scale of 1–5.

2.1 Selecting the disease

Score each candidate disease 1–5 on the criteria below and pick the highest total. Record the reasoning; it becomes the first paragraph of the exercise concept note.

Criterion	Question to answer
Likelihood	How likely is an incursion or outbreak in the next 2–3 years (history, neighbouring states, migratory routes, trade)?
Impact	Livelihood, trade, food security and zoonotic (human health) consequences if it occurs
Complexity of response	How many agencies and levels must act together?
Time since last real event	Longer gap = more decayed institutional memory
Policy push	Is there a national action plan, new SOP or programme that must be operationalised?

2.2 Components of the response to be assessed

Break the disease response into components. For HPAI-type outbreaks use this list; adapt for other diseases.

Code	Component
C1	Community detection and first reporting (farmer, pashu sakhi, para-vet)
C2	Field investigation and clinical recognition
C3	Sample collection, packing, cold chain and dispatch
C4	Laboratory testing and result communication

Code	Component
C5	Outbreak declaration and legal notification
C6	Zoning, movement control and check-posts
C7	Culling, disposal and disinfection
C8	Biosecurity and personal protective equipment (PPE)
C9	Valuation and compensation
C10	Surveillance in the zones and declaration of freedom / restocking
C11	One Health coordination (human health screening of exposed persons)
C12	Risk communication, community engagement and media
C13	Logistics, stockpiles and finance release
C14	Command, control and coordination (rapid response teams, control rooms)
C15	Data management and upward reporting

2.3 The five dimensions and the 1–5 scale

Each component is rated on five dimensions: **awareness, skill, understanding, exposure, experience**. Use these anchors so that a "3" means the same thing in every district.

Score	Anchor	What it looks like
1	Absent	Not aware the task exists; never seen it done
2	Aware	Knows the task exists; cannot list its steps
3	Understands	Can describe the steps and who is involved; has not practised
4	Practised	Has done it in a drill, exercise or real event with support
5	Proficient	Has done it independently in a real event or full exercise in the last 3 years; can train others

2.4 Who fills it and how

- **Respondent levels:** village (pashu sakhi, para-vets, farmer representatives) · block (veterinary officers, livestock inspectors) · district (district animal husbandry officer, rapid response team members) · state (directorate, state disease diagnostic laboratory) · allied departments (health, revenue, police, panchayati raj / urban local bodies, forest, transport, information).
- **Method:** one form per level per district, filled in a facilitated 2-hour session rather than circulated cold, so that the anchors are applied consistently. A sample of individuals at village level (minimum 10 per district) gives a more honest picture than the block officer rating them.
- **Form layout:** rows = components C1–C15; columns = the five dimensions + a free-text column "Last time this was done for real". Template in Annex A1.

3. Phase 2 — Scoring, ranking and state concurrence

Turn the self-assessment into a ranked list of components, decide the training intent for each, and get the state to sign off on it before any exercise is designed.

3.1 Scoring

1. For each component, average the five dimension scores per level, then across levels → **mean capacity score** (1.0–5.0).
2. Note the **lowest level score** separately. A component that is 4.2 at state level but 1.8 at village level is a village problem, not a 3.0 problem.
3. Assign a **criticality weight** to each component: 3 = failure stops containment (e.g. C1 reporting, C3 sampling, C7 culling); 2 = failure delays containment; 1 = failure degrades quality.
4. Compute the **priority index**: (5 − mean capacity score) × criticality weight. Range 0–12.

3.2 Ranking and training intent

Sort components by priority index, highest first. Then set the training intent from the mean score:

Mean capacity score	Training intent	Typical modality
1.0 – 2.0	**Familiarise** — introduce the process, roles and documents	Orientation / seminar

Mean capacity score	Training intent	Typical modality
2.1 – 3.0	**Upskill** — practise a specific procedure	Drill, tabletop exercise
3.1 – 4.0	**Test** — check that procedures and coordination work under time pressure	Functional exercise
4.1 – 5.0	**Validate / evaluate** — confirm readiness of the whole system	Full-scale exercise

Priority bands: **A** (index 6 or more) must be in the programme; **B** (3 to under 6) should be included if days allow; **C** (under 3) is covered by reading material and refreshers only.

3.3 Concurrence with the state

1. Present the ranked list, the training intent per component and the level-wise heat map to the state animal husbandry directorate in a half-day concurrence meeting.
2. Invite allied departments named in C11–C14 (at minimum health and revenue / disaster management).
3. The state may add, drop or re-rank components. Every change is recorded with its reason (e.g. "C9 compensation raised to A: new state notification issued last quarter").
4. Close with an **Agreed Component List** signed by the competent authority. This is the only input to Phase 3; nothing outside it enters the exercise.

4. Phase 3 — Function mapping and the SimEx filter

Not every function warrants a SimEx. Break each agreed component into the functions people actually perform, then pass each function through a five-question filter; only functions that pass go into the exercise programme.

4.1 From component to function

A **function** is a task with a clear owner, trigger and output. Write each as "*who* does *what* when *trigger*, producing *output*". Example for C1: "Pashu sakhi reports unusual poultry mortality to the block veterinary officer within 2 hours of learning of it, producing a verbal report and a written/WhatsApp message with the five mandatory fields."

4.2 The SimEx filter

#	Question	Points toward SimEx if…
F1	Does the function involve a hand-off between people, levels or agencies?	Yes
F2	Is it time-critical or does it need judgement under uncertainty?	Yes
F3	Is it rare in real life, so it cannot be learnt on the job?	Yes
F4	Can it be learnt equally well by reading, a lecture or a hands-on demonstration?	No
F5	Is the gap really caused by a missing resource, budget or policy?	No

Decision rule: include in the SimEx programme when (F1 or F2) is Yes **and** F3 is Yes **and** F4 and F5 are both No. Otherwise route the function to the alternative shown below and record it in the Function Register.

Filter result	Route to instead of SimEx
F4 = Yes (learnable in class)	Classroom training, video, job aid
F5 = Yes (resource / policy gap)	Procurement, budget request, SOP or notification revision
F1 and F2 both No (solo, routine)	Hands-on skills demonstration, supervised practice
F3 = No (done often)	On-the-job mentoring, supportive supervision

4.3 Function Register (worked HPAI example)

Function	Comp.	Intent	SimEx?	Alternative / note
Pashu sakhi reports unusual mortality to block VO	C1	Upskill	Yes	Hand-off, time-critical, rare
Block VO verifies report and alerts district	C2	Test	Yes	Judgement on "suspect" status

Function	Comp.	Intent	SimEx?	Alternative / note
Collection and triple packing of samples	C3	Upskill	Partly	Packing = hands-on demo; dispatch chain = SimEx
Lab communicates positive result up the chain	C4	Test	Yes	Multi-agency hand-off
Issue of notification declaring infected / surveillance zones	C5, C6	Test	Yes	Legal and multi-department
Donning and doffing of PPE	C8	Upskill	No	Skills station; drill on day 1
Calculation of compensation per bird	C9	Familiarise	No	Job aid + worked examples
Health department screening of culling team and farm household	C11	Test	Yes	Cross-sector hand-off
Press briefing by district administration	C12	Test	Yes	Time pressure, judgement
Procurement of disinfectant stock	C13	—	No	Resource gap: procurement action

5. Phase 4 — Progressive SimEx programme design

Group the SimEx-worthy functions into a programme that climbs from discussion-based to operations-based exercises, so that no group is tested on something it has not first been familiarised with.

5.1 The five modalities

Modality	What happens	Best for intent	Typical duration	Indicative planning lead time
Orientation	Facilitated walk-through of SOPs, roles, contacts and repositories	Familiarise	Half to 1 day	2–4 weeks

Modality	What happens	Best for intent	Typical duration	Indicative planning lead time
Drill	One function practised for real, often unannounced (e.g. call-down of the reporting chain, sample dispatch)	Upskill	1–4 hours	3–4 weeks
Tabletop exercise (TTX)	Players discuss and decide on a scenario that unfolds through injects, in a room	Upskill / test decisions	1–2 days	6–8 weeks
Functional exercise (FX)	Players act from their real posts or a simulated control room; messages, forms and calls are real, field action is simulated	Test coordination	1–2 days	3–4 months
Full-scale exercise (FSX)	Real deployment of teams, PPE, vehicles and equipment to a mock outbreak site	Validate	1–3 days	6 months or more

5.2 Programme-building rules

1. Every function enters the programme at the modality matching its training intent (Section 3.2) and moves up one step per exercise.
2. Discussion-based exercises (orientation, TTX) come before operations-based ones (drill, FX, FSX) for the same function.
3. The after-action report of each exercise is an input to the next; do not schedule the next one before the improvement plan from the last is agreed.
4. Group functions that share a hand-off into the same exercise (e.g. C1 reporting + C2 verification + C3 dispatch).
5. Cap a single exercise at 3–4 objectives.

5.3 Players required

Build a **player matrix**: rows = functions in the exercise; columns = every role. Mark each cell **P** (plays), **S** (simulated by a role-player) or blank. Any role that has a **P** must be invited; any role with an **S** needs a simulator on the control team.

Standard exercise roles:

Role	Job in the exercise
Players	Participants who act in their real-life role and are evaluated
Exercise Director	Owns the exercise; final call on pause, change or termination
Facilitators / controllers	Deliver injects, keep the play on the blueprint line, manage time
Simulators	Role-play people and agencies not present (farmer, laboratory, media, ministry)
Evaluators	Observe and record player actions against the blueprint; do not intervene
Safety officer (FX / FSX)	Stops any real-world unsafe act
Observers	Watch only; no interaction with players

Indicative ratios: 1 facilitator per 6–8 players; 1 evaluator per player sub-group; 1 simulator can cover 2–3 simulated roles in a TTX.

5.4 Number of days

Total programme days = sum of exercise days + one debrief half-day per exercise + design and blueprint workshops (about 3 days for a TTX, 5–8 days for an FX or FSX).

Sample HPAI programme for one district (about 12 exercise days spread over 6–8 months):

Step	Modality	Functions covered	Players	Days
1	Orientation	C1–C15 overview, repositories, contact tree	All levels + allied departments	1
2	Drill	C1, C2: unannounced call-down from pashu sakhi to district	Village, block, district	0.5
3	Drill	C3, C4: sample packing and dispatch to lab	Block, district, lab	0.5
4	TTX	C1–C7, C11, C12: suspicion to zone notification	District RRT, block VOs, health, revenue, police	2

Step	Modality	Functions covered	Players	Days
5	FX	C5–C9, C13–C15: control-room operations	District control room, state directorate	2
6	FSX	C6–C8, C10, C11: field deployment at a mock farm	RRTs, police, health, local body	2
—	Debriefs + design workshops	—	Planning team	about 4

6. Phase 5 — Exercise design

Each exercise has one aim, 3–4 objectives, a written scope, a fixed start point (Point A), a fixed end point (Point B) and checkpoints in between. Everything that follows — blueprint, injects, evaluation — must sit inside this design.

6.1 Aim and objectives

- **Aim:** one sentence stating what the exercise achieves. Example (Step 4 TTX): *"To test the district's ability to move from first report of unusual poultry mortality to a notified infected and surveillance zone, in line with the state HPAI action plan."*
- **Objectives:** 3–4, each specific, observable and time-bound. Each objective must have its own evaluation criteria and indicators (Section 11).

#	Objective (example)
O1	Report a suspected HPAI event from village to state level through the correct chain, with all mandatory fields, within the timelines set in the blueprint
O2	Collect, pack and dispatch samples to the designated laboratory with correct documentation and chain of custody
O3	Convene the district rapid response team and issue the zone notification within the planned time after a positive result
O4	Coordinate with health, revenue, police and the local body on their first actions after notification

6.2 Scope

Write the scope as an in / out list. Anything not listed as *in* is out; facilitators steer players back if they drift outside it.

Dimension	In scope (example)	Out of scope (example)
Geography	One block, one epicentre village, the 1 km and 10 km zones	Neighbouring districts (simulated by inject only)
Levels	Village, block, district, state directorate	National level (simulated)
Agencies	Animal husbandry, health, revenue, police, panchayat	Forest, transport (simulated)
Components	C1–C7, C11, C12	C9 compensation, C10 restocking
Simulated time	Day 0 (first report) to Day 3 (zone notified, culling teams briefed)	Culling operations themselves
Real vs simulated	Real: phone calls inside the room, forms, decisions	Simulated: lab results, media, farmer

6.3 Group or sub-groups

- **Single group** when there are fewer than about 15 players and the exercise follows one chain of events.
- **Sub-groups** when players come from distinct levels or functions that act in parallel (e.g. village/block group, district RRT group, allied departments group). Each sub-group gets its own facilitator and evaluator.
- Sub-groups talk to each other only through the channels they would use in real life (simulated phone, message slips, a shared message board). This is how the blueprint tests hand-offs.

6.4 Point A, checkpoints and Point B

- **Point A (start):** the opening situation, written as a short narrative plus the first inject. It can be a **single start** (everyone hears the same opening) or **staggered starts** (each sub-group enters at its own point, e.g. the lab group starts when the sample arrives).
- **Checkpoints:** 3–6 milestones between A and B where the facilitator confirms every sub-group has arrived before play moves on. Example: CP1 report reaches block VO; CP2 report reaches district; CP3 samples dispatched; CP4 positive result received; CP5 RRT convened; CP6 zones notified.

- **Point B (end):** the pre-defined end state of the scenario. The exercise ends when events reach Point B, even if some participants are still mid-way. Participants who have not reached B must still complete every decision and every report owed by their role up to the point they reached.

6.5 Assumptions and artificialities

List everything the scenario takes for granted (e.g. "all phones work", "the lab is open on a Sunday", "the farmer is cooperative") and every artificiality of the format (e.g. "one exercise hour = one real day between 10:00 and 11:00"). Read them out at the start so players do not argue with the scenario.

7. Phase 6 — The master blueprint

The master blueprint is the single script of the exercise: every event, every expected action of every participant, every facilitator move, and the exact standard each action will be scored against. It is written before the exercise and is never shown to players.

7.1 The four layers of the blueprint

1. **Master Scenario Events List (MSEL)** — the ordered list of injects from Point A to Point B, with simulated time and real clock time.
2. **Expected Action Sheets** — for each inject, what each affected participant should do, to whom they report, by when, with what information.
3. **Facilitator cards** — for each inject, how it is delivered, what to say if players get stuck, how to pull back a player who drifts, and when to release the next inject.
4. **Evaluator checklist** — the same expected actions turned into tick-boxes with timings and mandatory items, one checklist per sub-group.

Layers 2–4 are generated from the same rows, so what the facilitator drives, what the player should do and what the evaluator scores can never disagree.

7.2 Inject record (one per event in the MSEL)

Field	Content
Inject ID	I-01, I-02 … (contingency injects: C-01 …)
Real time / simulated time	e.g. 10:20 / Day 0, 08:30
From (simulator role) → To (player)	e.g. Farmer (simulator) → Pashu sakhi

Field	Content
Mode	Phone call, message slip, document, video clip, in-person role-play
Content	Exact words or document to be handed over
Linked objective(s)	O1–O4
Expected actions triggered	EA IDs (see 7.3)
Checkpoint	Which checkpoint this inject leads to, if any

7.3 Expected Action record (one per participant per inject)

This is the core of the blueprint. Every time a participant comes into the picture — including when an instruction comes **back** to them from a higher level — they get a fresh record.

Field	What to write
EA ID	EA-01.1 (inject 01, action 1)
Participant (role)	e.g. Pashu sakhi
Specific actions	Numbered, observable actions in the order expected
Report to (primary)	Named role(s) who must be informed
Inform also (secondary)	Roles to be copied
Fallback contact	Who to go to if the primary does not respond within the set time
Ideal timeline	Target time and maximum acceptable time from the trigger
Mandatory information	The fields that must appear in the report (see 7.4)
Immediate advice to others	What the participant must tell the farmer / community / team on the spot
Must NOT do	Actions that are wrong or harmful (e.g. moving dead birds, opening carcasses)
Repository / reference	SOP section, form number, contact list, portal

Field	What to write
Next appearance	The inject at which this participant re-enters the play
Scoring weight	Critical / important / desirable

7.4 Minimum reporting dataset

Fix the mandatory content of each type of communication in the blueprint so it can be scored item by item. For a first report of unusual mortality:

Field	Example
Species	Backyard desi chicken
Age	Adult, about 6 months
Number	40 at risk, 18 dead in 2 days, 6 sick
Location	Village, gram panchayat, block, landmark / GPS
Owner	Name and phone number
Onset	Date and time first deaths were noticed
Signs seen	Sudden death, swollen head, bluish comb, drop in eggs
Other birds nearby	Neighbouring flocks, wild / migratory birds, water body
Reporter	Own name, role, phone number

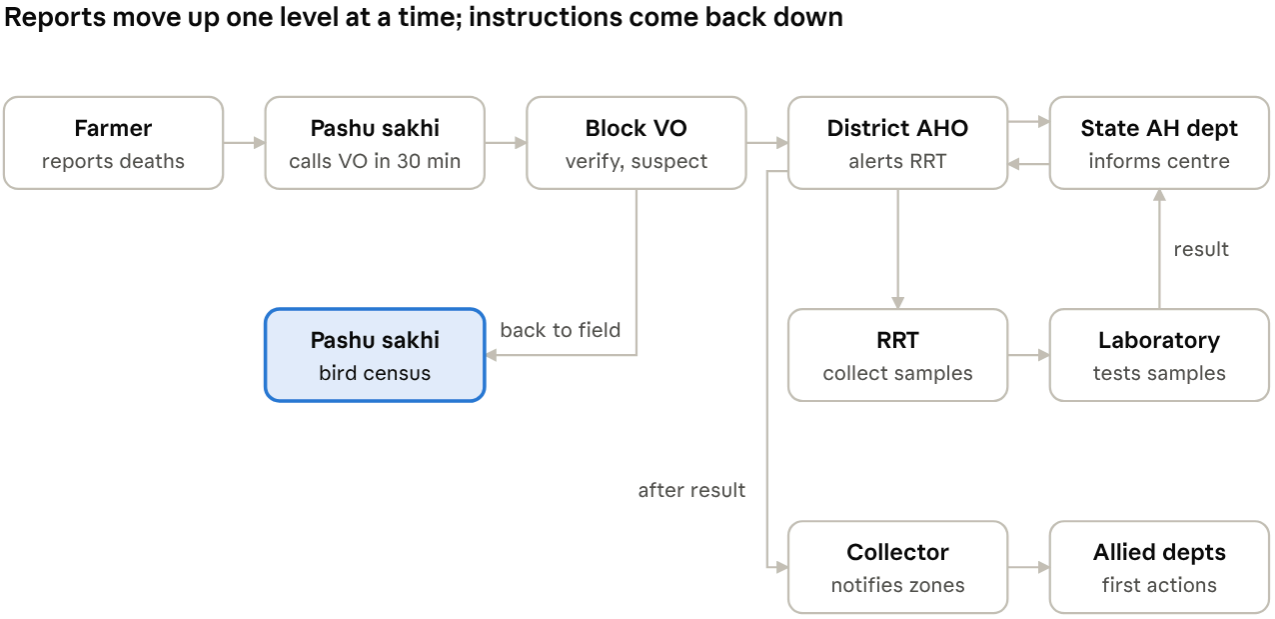
7.5 Inject types

- **Main injects** — the planned sequence from A to B.
- **Expected-response injects** — simulator replies when players do the right thing (e.g. the block VO answers the pashu sakhi's call).
- **Contingency injects** — used only by the facilitator if players stall or drift (e.g. "the farmer calls again: 10 more birds have died").
- **Fallback-test injects** — deliberately block the primary channel (e.g. "the block VO's phone is switched off") to test whether players use the fallback.
- **Complicating injects** — raise difficulty for experienced groups (e.g. a media reporter arrives; a farmer refuses entry). Use sparingly and only where linked to an objective.

8. Worked blueprint — mass poultry mortality (HPAI) TTX

This is the Step 4 tabletop exercise from the sample programme, scripted from the farmer's first phone call (Point A) to notified zones and briefed teams (Point B). Target times, contacts and zone sizes are illustrative; replace them with the state's current HPAI action plan and SOP before use.

Exercise frame: 3 hours 15 minutes of play (10:00–13:15), simulating Day 0 to Day 3. Three sub-groups: **G1** village/block (pashu sakhi, livestock inspector, block VO), **G2** district (district animal husbandry officer, RRT, district lab focal point), **G3** allied (district collector's office, health, police, panchayat). State directorate, laboratory, farmer and media are played by simulators.



HPAI reporting chain · 10 roles, one return loop

The pashu sakhi appears twice: once to raise the alarm and again when the block VO sends tasks back to the village; the blueprint scores both appearances.

8.1 Master Scenario Events List

Inject	Real / simulated time	From → To	Content (summary)	Expected actions	Checkpoint
I-01	10:00 / D0 07:30	Farmer → Pashu sakhi	"18 of my 40 hens died since yesterday evening, 6 more are sitting with swollen heads."	EA-01.1	—

Inject	Real / simulated time	From → To	Content (summary)	Expected actions	Checkpoint
I-02	10:15 / D0 09:00	Block VO receives call (response inject)	VO picks up only if pashu sakhi calls the right number	EA-02.1	CP1 report at block
C-01	(if stuck)	Farmer → Pashu sakhi	Second call: "5 more dead, my neighbour's birds are sick too."	Re-triggers EA-01.1	—
F-01	(variant)	Simulator	Block VO's phone switched off for 30 minutes	Tests fallback in EA-01.1	—
I-03	10:35 / D0 11:30	Field visit card → Block VO	Findings: sudden deaths, cyanotic combs, haemorrhages on shanks, nearby pond with migratory ducks	EA-02.2	—
I-04	10:50 / D0 12:00	Block VO → District AHO	Suspicion report arrives (if sent)	EA-03.1	CP2 report at district
I-05	11:10 / D0 14:00	District → RRT	RRT reaches farm; sampling kit on hand	EA-04.1	CP3 samples dispatched
I-06	11:30 / D0 15:00	Block VO → Pashu sakhi	Instruction back to the field (if given)	EA-02.3, EA-01.2	—
I-07	11:45 / D1 10:00	Farmer 2 → Pashu sakhi	7 deaths in a second household 300 m away	EA-01.3	—
I-08	12:00 / D2 18:00	Laboratory → State directorate	Samples positive for H5N1	EA-05.1	CP4 result at district
I-09	12:20 / D2 19:00	State → District	Instruction to implement the action plan	EA-03.2, EA-06.1, EA-07.1, EA-08.1, EA-09.1	CP5 RRT convened
I-10	12:50 / D3 08:00	Journalist → District AHO	"Is it true people are dying of bird flu in the village?"	EA-03.3	—
I-11	13:10 / D3 10:00	Facilitator	Zones notified; culling teams briefed; pashu sakhi assigned to door-to-door bird census	Final reports from all roles	CP6 = Point B

8.2 Expected Action record — EA-01.1, pashu sakhi (first report)

Field	Expected
Trigger	I-01: farmer's call reporting unusual deaths

Field	Expected
Specific actions	1. Note all minimum-dataset fields while on the call. 2. Give the farmer the immediate advice below. 3. Call the block VO. 4. Follow up with a written / WhatsApp message carrying the same fields. 5. Enter the event in the pashu sakhi register. 6. If visiting, stay outside the shed and do not touch birds without PPE.
Report to (primary)	Block veterinary officer
Inform also	Livestock inspector of the area; gram panchayat head (only that a veterinary team is coming — no diagnosis)
Fallback	If block VO does not answer in 30 minutes: livestock inspector → nearest veterinary dispensary in-charge → district animal husbandry office helpline
Ideal timeline	Verbal report within 30 minutes of the farmer's call (maximum 2 hours); written message within 2 hours (maximum 4 hours)
Mandatory information	Species, age, number (at risk / dead / sick), location, owner name and phone, onset, signs seen, other flocks or wild birds nearby, reporter's own details
Immediate advice to farmer	Keep surviving birds confined; do not sell, slaughter, eat, gift or move birds or eggs; cover carcasses and keep them away from dogs and crows, do not throw them in water or the open; keep visitors and children out; wash hands with soap after any contact
Must NOT do	Handle carcasses bare-handed; carry carcasses to the dispensary; name the disease to the community or post on social media; advise treatment
Repository	Pashu sakhi job-aid card; block contact list; reporting register
Next appearance	I-06 (instruction back from block VO)
Weight	Critical

8.3 Expected Action summary — all other participants

EA	Role	Key expected actions	Report to	Ideal / max time from trigger	Must include
EA-02.1	Block VO	Acknowledge, record, call farmer back, start for village with PPE and sampling kit	District AHO (preliminary alert)	30 min / 1 h	Minimum dataset as received
EA-02.2	Block VO	Clinical exam outside-in, declare "suspect", impose informal standstill at farm and neighbours, request RRT and kits	District AHO in writing; copy livestock inspector	1 h / 2 h after visit	Dataset + signs + epidemiological link (pond, ducks) + action taken
EA-02.3	Block VO	Instruct pashu sakhi on village tasks (below)	—	Same day	Clear task list with deadline
EA-01.2	Pashu sakhi	List every poultry-keeping household, count birds, report any new deaths daily, repeat advice house to house, note bird movement in last 7 days	Block VO daily by 17:00	Within 24 h	Household, species, number, deaths, movement
EA-01.3	Pashu sakhi	Report second household as a new event, not as "more of the same"	Block VO immediately	30 min / 2 h	Full dataset for the new location
EA-03.1	District AHO	Alert RRT, inform state directorate, inform district collector and chief medical officer, arrange sample dispatch	State directorate (format as per SOP)	1 h / 3 h	Dataset, suspect status, steps taken, resources needed

EA	Role	Key expected actions	Report to	Ideal / max time from trigger	Must include
EA-04.1	RRT	Collect samples with full PPE, triple-pack, fill submission form, maintain cold chain, dispatch to designated lab, record chain of custody	District AHO; lab focal point	Same day	Sample ID, species, sample type, number, date, collector, chain-of-custody form
EA-05.1	State directorate (simulated)	Communicate result to district and national authority	—	Within hours	—
EA-03.2	District AHO	Convene RRT and district coordination meeting, propose infected and surveillance zones on map, request notification, deploy teams	District collector	2 h / 6 h after result	Map, zone list of villages, team list, stock position
EA-06.1	District collector's office	Issue order notifying zones, ban on movement / sale, check-posts, constitute teams	All departments; public notice	Same night / next morning	Zone boundaries, restrictions, effective date, responsible officers
EA-07.1	Health department	Screen and line-list exposed persons (farm household, pashu sakhi, team), arrange prophylaxis and fever surveillance as per health SOP	Chief medical officer; district surveillance unit	24 h	Names, exposure type, date, symptoms
EA-08.1	Police	Set up check-posts on zone roads, support teams, prevent bird movement	District collector	12 h	Check-post locations and staffing
EA-09.1	Gram panchayat	Announce restrictions, identify disposal pit site, support census	Block development officer; block VO	24 h	Site, announcements made

EA	Role	Key expected actions	Report to	Ideal / max time from trigger	Must include
EA-03.3	District AHO / PRO	Refer journalist to the designated spokesperson; give only cleared facts; no speculation on human cases	District collector's office	Immediate	Holding line, single spokesperson

Every row above is written in full EA-01.1 format in the actual blueprint file (Annex A3).

9. Facilitator and controller playbook

Facilitators own the flow: they make sure events run in the planned sequence, no participant gets stuck, no one drifts off the expected line, and every sub-group reaches each checkpoint before play moves on.

9.1 The control set-up

- **Control cell:** Exercise Director, lead facilitator, simulators and a message logger sit together (or on one call line). Every inject leaves from here and every player message to a simulated role comes back here.
- **One facilitator per sub-group**, holding that group's facilitator cards and a copy of the MSEL.
- **Message log:** every inject and every player message is logged with real time, simulated time, from, to and content. The evaluator scores from this log plus direct observation.
- **Checkpoint huddle:** at each checkpoint, facilitators confirm status to the lead facilitator in under 5 minutes (sub-group reached / behind / drifted).

9.2 The loop for every inject

1. Deliver the inject exactly as scripted (words, document, mode).
2. Watch for the expected actions on the Expected Action record.
3. If actions happen on time → release the next inject at its scheduled time.
4. If actions are missing or late → apply the prompt ladder (9.3).
5. If players move outside scope → apply the drift rules (9.4).
6. Log what happened, including every prompt given, so the evaluator can mark actions as "unprompted" or "prompted".

9.3 Prompt ladder (when a participant is stuck)

Climb one step at a time. Wait about 3 minutes of exercise play between steps.

Step	Facilitator move	Example
1	Pause and wait	Silence; let the group think
2	Open question	"What is your next step?"
3	Point to the repository	"What does your job-aid card say about reporting?"
4	Contingency inject	Farmer calls again with more deaths (C-01)
5	Direct steer	"For the exercise, assume you have now called the block VO. What will you tell him?"

Steps 3–5 are recorded; the related action is scored as **prompted**. Step 5 is recorded as **facilitated** and scored as a miss for the timeline indicator but the content is still scored.

9.4 Drift rules (when a participant leaves the expected line)

- **Out-of-scope topic** (e.g. compensation rates in a TTX that excludes C9): acknowledge, write it on the visible "parking lot" sheet, restate the scope, return to the current inject.
- **Fighting the scenario** ("this would never happen here"): point to the assumptions read out at the start; the scenario is fixed.
- **Jumping ahead** (e.g. starting to cull before a result): ask "What is the trigger for that action in your SOP?" and hold them at the current step.
- **Acting for another role** (e.g. the block VO issuing a zone order): ask "Whose authority is that?" and make them route it to the correct role.
- **Wrong channel** (e.g. calling the state directly, skipping the district): the simulator answers as the real person would ("Has the district been informed?"). Do not correct it; the evaluator records it.

9.5 Checkpoint gates and Point B

- Play does not move past a checkpoint until every sub-group has reached it **or** the lead facilitator applies a **time jump**: the lagging group gets a catch-up card stating what has happened meanwhile, and the evaluator records the gap.
- The overall exercise continues until events reach Point B.
- A participant who is still mid-way at Point B must complete every decision and every report owed by their role on a **completion sheet** before the hot wash. They play the role completely, even if the scenario has moved on.

9.6 Facilitator do's and don'ts

- Do read the full blueprint and rehearse every inject in the dry run.
- Do keep to the clock; one slow sub-group should not hold the whole room for more than 10 minutes.
- Do not teach or correct during play; learning happens in the debrief.
- Do not show the blueprint or the expected actions to players.
- Do not let evaluators or observers speak to players.
- Use the code words **"EXERCISE PAUSE"** to stop play and **"REAL WORLD"** before any message about a genuine emergency. Every exercise message starts and ends with **"EXERCISE, EXERCISE, EXERCISE"** in an FX or FSX.

10. Evaluation framework

Evaluation runs on three levels, all fixed before the exercise: each participant's actions against the blueprint, each objective against its criteria and indicators, and the conduct of the exercise itself.

10.1 Participant scoring against the blueprint

The evaluator scores every Expected Action record on five elements.

Element	How it is scored
Action taken	2 = done unprompted · 1 = done after prompt (ladder step 3–4) · 0 = not done or facilitated (step 5)
Right recipients	Required recipients informed ÷ required recipients; list who was missed and who was wrongly informed
Timeliness	2 = within ideal time · 1 = within maximum time · 0 = late or not done
Content	Mandatory fields included ÷ mandatory fields; list the missing fields
Must-not-do	Count of violations; any violation on a critical action is flagged

Weight each action by its blueprint weight (critical ×3, important ×2, desirable ×1) to get the participant's or sub-group's total.

Gap statement format — every miss is written as "expected vs done", so the participant sees exactly what to change:

EA	Element	Expected	Done	Gap
EA-01.1	Recipients	Block VO, livestock inspector, gram panchayat head	Block VO, district office, village WhatsApp group	Missed: livestock inspector, gram panchayat head · Wrongly informed: village WhatsApp group
EA-01.1	Content	Species, age, number, location, owner, onset, signs, nearby birds, reporter	Age, number, location, owner, signs	Missing: species, onset, nearby birds, reporter details
EA-01.1	Timeliness	Verbal ⩽ 30 min	55 min	Within maximum, beyond ideal
EA-01.1	Advice to farmer	6 advice points	3 (confine, don't sell, wash hands)	Missing: carcass handling, visitors, no movement of eggs

10.2 Objective achievement — criteria and indicators

Each objective has measurable indicators. Rating: **Achieved** = 80% or more of indicators met and no critical action missed · **Partially achieved** = 50–79%, or one critical action missed · **Not achieved** = under 50%.

Objective	Criteria	Indicators (target)
O1 Reporting chain	Report reaches each level through the correct chain, complete and on time	Village → block within 2 h · block → district within 2 h of visit · district → state within 3 h · 100% of mandatory fields at every level · fallback used within 30 min when primary unreachable
O2 Sampling and dispatch	Samples are correct, safe and traceable	Correct PPE used · triple packing correct · submission form 100% complete · chain-of-custody form signed at each hand-over · dispatched same day

Objective	Criteria	Indicators (target)
O3 RRT and zone notification	RRT convened and zone order issued on time	RRT meeting within 2 h of result · zone map with village list produced · order drafted with all required elements · order issued within planned time
O4 Multi-agency coordination	Each allied department acts on its first tasks	Health line-list started within 24 h · check-posts named and staffed · panchayat announcement made · single spokesperson designated

10.3 Evaluation of the conduct of the exercise

Criterion	Indicator
Delivery to plan	Share of injects delivered within 5 min of scheduled time
Flow	All sub-groups reached every checkpoint; number of time jumps used
Facilitation load	Number of step-5 steers (high count = design too hard or briefing too weak)
Scope discipline	Number of parking-lot items and drift interventions
Realism and relevance	Participant rating 1–5 on realism, relevance to their job, and clarity of their role
Evaluation coverage	Share of Expected Action records actually observed and scored
Safety (FX / FSX)	Real-world safety incidents (target: zero)
Logistics	Materials, venue, communications worked without disruption

10.4 Evaluator rules

- One evaluator per sub-group, briefed on the blueprint and the scoring sheet in the dry run.
- Evaluators observe and record only; they never prompt, correct or answer players.

- Record facts with timestamps ("10:47 — pashu sakhi calls district office, not block VO"), not opinions.
- Hand in scored sheets to the lead evaluator within 1 hour of Point B, before the hot wash.

11. Conduct timeline and day-of run sheet

A tabletop exercise needs about 90 days from concept to final report; double the lead time for an FX and plan 6 months or more for an FSX. T = exercise day.

11.1 Planning-to-closure timeline (TTX)

When	Task	Output	Owner
T-90	Appoint Exercise Director and planning team; confirm agreed components	Concept note	State directorate
T-75	Initial planning meeting	Aim, objectives, scope, dates, venue, player matrix	Planning team
T-60	Draft scenario narrative and MSEL	Draft MSEL	Scenario lead + subject experts
T-45	Mid-planning meeting; draft Expected Action records and evaluation framework	Draft blueprint, evaluation sheets	Planning team
T-30	Send invitations by role (not by name); confirm logistics	Nomination list	Exercise coordinator
T-21	Final planning meeting; freeze the blueprint	Frozen blueprint; printed cards	Exercise Director
T-14	Send participants a pre-read (SOPs, contact lists — never the scenario)	Pre-read pack	Exercise coordinator
T-7	Train facilitators, simulators and evaluators	Trained control team	Lead facilitator, lead evaluator
T-2	Full dry run with the control team	Corrected injects and timings	Lead facilitator

When	Task	Output	Owner
T-1	Venue set-up; communications and materials check	Room ready	Logistics lead
T0	Conduct, completion sheets, hot wash	Scored sheets, hot-wash notes	Exercise Director
T+1	Control-team debrief	Conduct evaluation	Lead evaluator
T+3	Individual / sub-group gap reports sent	Gap reports	Lead evaluator
T+14	Draft after-action report	Draft AAR	Lead evaluator
T+21	AAR review meeting with state and departments	Agreed findings	Exercise Director
T+30	Final AAR and signed improvement plan	Final AAR, improvement plan	State directorate

11.2 Day-of run sheet (TTX)

Time	Activity	Lead
08:30	Control cell assembles; phones, message log, injects checked	Lead facilitator
09:00	Registration; seating by sub-group; role badges	Exercise coordinator
09:15	Opening: aim and objectives	Exercise Director
09:30	Players' briefing: rules, scope, assumptions, artificialities, code words, how to send messages	Lead facilitator
10:00	**Point A** — first inject	Control cell
10:00–13:10	Play through the MSEL; checkpoint huddles at CP1–CP6	Facilitators
13:10	**Point B** — "End of exercise" announced	Exercise Director
13:15	Completion sheets for participants who had not finished their role	Facilitators
13:30	Lunch; evaluators consolidate scores	Lead evaluator

Time	Activity	Lead
14:15	Hot wash (see Section 12)	Lead facilitator + lead evaluator
15:30	Participant feedback forms	Exercise coordinator
15:45	Close	Exercise Director
16:00–17:00	Control-team debrief	Exercise Director

12. Debrief, after-action report and improvement plan

The exercise is only finished when every participant has been told what they missed against the blueprint and the state has signed an improvement plan with owners and dates.

12.1 Hot wash (same day, 60–75 minutes)

1. **Walk the timeline (15 min):** lead facilitator replays the MSEL on screen — what was expected at each checkpoint and when each sub-group reached it.
2. **Player self-reflection (15 min):** each sub-group answers three questions: what went well, what was difficult, what they would do differently.
3. **Blueprint reveal (25 min):** lead evaluator shows, inject by inject, expected vs done for each sub-group, using the gap-statement format ("You should have informed A, B, C, D, E; you informed A, B, C, G, H"; "The message should contain age, species, number, location, owner; species was missing").
4. **Objective verdicts (10 min):** provisional rating of each objective.
5. **Parking lot (5 min):** out-of-scope issues raised during play are handed to the Exercise Director for follow-up.

Tone: blame-free; the gaps belong to the system as much as to the person.

12.2 Individual and sub-group gap reports (T+3)

One page per participant role, containing: their Expected Action records, the score on each element, the list of gaps in expected-vs-done form, and the specific repository (SOP section, job aid, contact list) to revise.

12.3 After-action report (AAR) structure

1. Exercise overview: aim, objectives, scope, modality, date, participants by role and level
2. Summary verdict per objective (achieved / partially / not achieved)
3. Strengths observed
4. Gaps, grouped by component (C1–C15) and by level, each with its root cause: knowledge, skill, SOP, resource, coordination or authority
5. Conduct evaluation (Section 10.3)
6. Recommendations
7. Improvement plan (12.4)
8. Annexes: MSEL, scored sheets summary, participant feedback

12.4 Improvement plan

Gap	Root cause	Corrective action	Type	Owner	Due	Verified in
Pashu sakhis did not include species and onset in reports	Job aid lacks a fixed reporting format	Print 9-field reporting card; train at monthly meeting	Training + job aid	Block VOs	Within 60 days	Step 2 drill (repeat)
No fallback contact used when block VO unreachable	No written escalation list	Issue village-level escalation contact list	SOP	District AHO	Within 30 days	Next drill
Zone order took longer than planned	Draft order template not available	Keep pre-approved draft notification on file	SOP	District collector's office	Within 30 days	Step 5 FX

The improvement plan is the bridge to the next exercise in the programme: every corrective action names the exercise in which it will be re-tested.

13. Annex — ready-to-use templates and checklists

Copy these into the exercise file. Fill-in cells are left blank.

A1. Capacity self-assessment form (one per level per district)

Component	Awareness (1–5)	Skill (1–5)	Understanding (1–5)	Exposure (1–5)	Experience (1–5)	Last time done for real
C1 Community detection and reporting						
C2 Field investigation						
C3 Sampling and dispatch						
… C15 Data management						

A2. Exercise design summary (one page)

Item	Entry
Exercise name and modality	
Disease	
Aim	
Objectives (3–4)	
Scope — in	
Scope — out	
Sub-groups and members	
Point A	
Checkpoints	
Point B	
Assumptions and artificialities	
Date, venue, duration	

A3. Expected Action record (blank)

Field	Entry
EA ID / inject	
Participant role	
Specific actions (numbered)	
Report to (primary)	
Inform also	
Fallback contact	
Ideal time / maximum time	
Mandatory information	
Immediate advice to others	
Must NOT do	
Repository / reference	
Next appearance	
Weight (critical / important / desirable)	

A4. Facilitator card (one per inject per sub-group)

Field	Entry
Inject ID, real time, simulated time	
How to deliver (exact words / document)	
Expected actions to watch for (EA IDs)	
Prompt ladder wording for this inject (steps 2–5)	
Contingency inject to use if stuck	
Likely drift and how to redirect	
Release condition for next inject	
Checkpoint to confirm	

A5. Evaluator checklist (one row per Expected Action)

EA	Done (2/1/0)	Time done	Timeliness (2/1/0)	Recipients informed	Missed / wrong recipients	Fields included	Missing fields	Must-not-do violations	Notes
EA-01.1									

A6. Players' briefing script (read at 09:30)

1. Welcome; this is a no-fault exercise — we are testing the system, not individuals.
2. Aim and objectives.
3. Scope: what is in, what is out; out-of-scope points go to the parking lot.
4. Assumptions and artificialities, including the time scale.
5. Act as you would in real life, in your real role. Use your real SOPs and contact lists.
6. Talk to other levels and agencies only through the channels shown (message slips / phone to control).
7. Code words: "EXERCISE PAUSE", "REAL WORLD".
8. Evaluators will not answer questions. Ask your facilitator.
9. If the exercise ends before you finish your role, you will complete it on a completion sheet.

A7. Participant feedback form

Question	Rating 1–5 / comment
The scenario was realistic	
The exercise was relevant to my job	
I am clear about my role, scope and whom to report to	
I know my fallback contact	
I know where the SOPs, forms and contact lists are	
The facilitation kept the exercise on track	
One thing I will do differently	

A8. Universe of bodies and repositories register

Build this per district before the exercise; it is handed to every participant at the end as their reference card.

Body / role	Level	What they do in this disease	Primary contact	Fallback contact	Repository they hold
Pashu sakhi	Village	Detect and report; community advice; census			Job-aid card, register
Block veterinary officer	Block	Verify, declare suspect, report			SOP, sampling kit
District animal husbandry office / RRT	District	Investigate, sample, recommend zones, deploy teams			Action plan, stock register
Designated laboratory	State / national	Test and report			Submission form
District collector's office	District	Notify zones, order restrictions			Draft notification
Health department	District	Screen exposed persons			Health SOP
Police	District	Check-posts, enforcement			—
Gram panchayat / local body	Village	Announcements, disposal site			—

A9. Materials checklist

- [ ] Printed blueprint (control team only)
- [ ] Facilitator cards per sub-group
- [ ] Evaluator checklists per sub-group
- [ ] Inject documents, message slips, maps of the scenario area
- [ ] Role badges and sub-group table signs
- [ ] Message log sheet and wall clock showing simulated time
- [ ] Parking-lot chart
- [ ] Completion sheets and feedback forms
- [ ] SOPs, contact lists and forms players would use in real life
- [ ] Projector and timeline slide for the hot wash