

# **Biosecurity Requirement Checklist for Livestock & Poultry Farms in Bhutan**

## **Information Sheet**

The Biosecurity Policy of the Kingdom of Bhutan 2010 designates Bhutan Food and Drug Authority, Ministry of Health, as the National Competent Authority to coordinate all biosecurity related activities in the country. Provision under Section 9 of the Livestock Act of Bhutan 2001 requires the Technical Department (DoL) to develop procedures for Biosecurity measures in consultation with the relevant stakeholders and BFDA to implement biosecurity measures to prevent and control the spread of livestock diseases. In line, BFDA has developed the In-country Livestock Biosecurity Guidelines as a reference document for practicing good livestock biosecurity in Bhutan. The guidelines entail basic context and rationale for livestock biosecurity as well as a description of how to practice good biosecurity in Bhutan. Building on the guideline, the DoL & BFDA developed the generic biosecurity checklist for livestock farms in the country. The checklist lists the basic minimum biosecurity facility and practices to be present and followed at the farm as routine procedures.

- ❖ As reflected in the Livestock Rules and Regulations, the inspection of the farms will be done by BFDA, MoH & DoL, MoAL.
- ❖ A rating scale will be used for evaluation of the biosecurity level of the farm for each prompt. The rating scale ranges from 0-3 and the rating will be done as indicated in the checklist.
- ❖ Note for Assessor\* (in the tables below) guides the biosecurity assessor on how to rate each livestock farm on each prompt.
- ❖ For each visit, observation and recommendation to be given to the farm with a timeline.

The checklist shall be used for:

1. Assessing prevailing biosecurity level in a farm for various purposes.
2. Registration of a new farm with DoL.
3. For availing subsidy or any kind of support from DoL, MoAL and financial institutions.
4. Replacing culled stocks at times of disease outbreaks.
5. To calculate compensation for the culled stocks at times of disease outbreaks.

## **A. Inspection Information**

A01	Inspection conducted by (Name of official):	
A02	Designation:	Date of Inspection (DD/MM/YY):
A03	Reasons for Inspection (Please ✓ one):	<input type="checkbox"/> Regular <input type="checkbox"/> Follow up <input type="checkbox"/> Complaint <input type="checkbox"/> Auditing <input type="checkbox"/> In the event of disease outbreak

## B. Livestock Farms Information

B01.	Name of owner:									
B02.	Ownership:		<input type="checkbox"/> Government <input type="checkbox"/> Private <input type="checkbox"/> Corporate/SOE <input type="checkbox"/> Joint							
B03.	Location of Farms	Dzongkhag:		Dungkhag:						
		Gewog:		Village:						
		Contact No:								
B04.	Geo Coordinates (in decimal degrees)		X - Coordinates	Y - Coordinates						
B05	Type of Livestock animal reared									
B06	Type of Farm		<input type="checkbox"/> Backyard <input type="checkbox"/> Semi-commercial <input type="checkbox"/> Commercial							
B07.	Size of the farm		Numbers (total heads): <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>							
B08.	Establishment year of farm		Years: <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>							

### C. Farm Premise Facilities & Practices

ID	PROMPT	RATING	Note for Assessor
C01.	Have a biosecurity signboard at the entrance of farm <i>[cautioning visitors to follow biosecurity procedures, contains information on farm name, name of owner/manager and his contact number]</i>	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No biosecurity sign board or sign board requires maintenance. <b>Fair</b> : Temporarily arranged, not enough information, inappropriately placed. <b>Good</b> : Clearly written notice mounted on permanent frame, appropriately placed, contains all required information. <b>Excellent</b> : All weather notice mounted on a permanent frame, clearly written, appropriately placed, contains all required information.
C02.	Farm has a functional perimeter fence	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No perimeter fence or the fence requires major maintenance. <b>Fair</b> : Temporary wooden fence, green net fencing, fencing inappropriately done. <b>Good</b> : Adequately spaced barbed wire fencing with wooden pole support. <b>Excellent</b> : Chain linked fencing or adequately spaced barbed wire fencing with concrete pole or iron post support.
C03.	Have functional foot dip at the entrance gate of farm	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No foot dip or the foot dip is not functional. <b>Fair</b> : Foot dip present, no evidences of correct use & solution replacement. <b>Good</b> : Good construct, solution appropriately maintained, facility properly used. <b>Excellent</b> : Concreted foot dip, solution appropriately maintained, facility properly used, person in charge identified and trained on disinfectant solution preparation & replacement.
C04.	Have functional tyre dip at the entrance of the farm: <i>If vehicles can cross the entrance gate of perimeter fencing and enter the farm, the tyre dip is mandatory.</i>	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No tyre dip or the tyre dip is not functional. <b>Fair</b> : Tyre dip present, no evidences of correct use & solution replacement. <b>Good</b> : Good construct, solution appropriately maintained, facility properly used. <b>Excellent</b> : Concreted tyre dip, solution appropriately maintained, facility properly used, person in charge identified and trained on disinfectant solution preparation & replacement.

C05.	Have a wash station (tap water, scrubbing brush, detergent) at the entrance of farm	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No wash station or it is not functional. <b>Fair</b> : Limited water supply or water in containers, no soap provided. <b>Good</b> : Water tap with continuous water flow, soap & sole scrap provided. <b>Excellent</b> : Water tap with continuous water flow, detergent, scrap brush, disinfection facility for incoming equipment disinfection.
C06.	Have farm gears for workers (boots/shoes and farm clothes)	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No designated farm boots/shoes and clothes/farm gears not used. <b>Fair</b> : Boots provided and regularly used but no farm clothes. <b>Good</b> : Boots and farm clothes provided, properly used and maintained. <b>Excellent</b> : Boots & farm clothes provided, properly cleaned, maintained and used. Such farm gears maintained even for farm visitors.
C07.	Farm distance from the highway	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : Distance between farm & highway is < 50 meters. <b>Fair</b> : Distance between farm & highway is 50-75 meters. <b>Good</b> : Distance between farm & highway is 76-100 meters. <b>Excellent</b> : Distance between farm & highway is >100 meters & not too far.
<b>C. Farm Premise Facilities &amp; Practices [Biosecurity Score]</b>  <i>Total score from all relevant Prompts divided by the number of Prompts included</i>			<b>Score:</b> ----- [record the round figure up to 2 decimal points]

#### D. Farm Shed Facilities & Practices

ID	PROMPT	RATING	Note for Assessor
D01.	The shed surroundings are clean	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : Filthy, waterlogged, unmanaged garbage, rodent infested, covered with bushes. <b>Fair</b> : Free of garbage, manure heaps, puddles, and bush cover. <b>Good</b> : Surrounding clean, free of rodents, cleaning schedule maintained. <b>Excellent</b> : Concreted clean surrounding, cleaning and disinfection schedule maintained, pest control programs implemented.
D02.	Have good drainage system in place	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No drainage system or drainage system not functional. <b>Fair</b> : Drainage system not properly planned, no proper flow of water & waste. <b>Good</b> : Drains protected with iron grills, free outflow of farm effluent. <b>Excellent</b> : Well-planned drainage system with traps at inlets/outlets.

D03.	Have functional foot dip at the entrance of each shed	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No foot dip or the foot dip is not functional. <b>Fair</b> : Foot dip present, no evidences of correct use & solution replacement. <b>Good</b> : Good construct, solution nicely maintained, facility properly used. <b>Excellent</b> : Concreted foot dip, solution nicely maintained, facility properly used, person in charge identified and trained on disinfectant solution preparation & replacement
D04.	Have separate shed for isolation of sick animals	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No isolation facility or not used even if available. <b>Fair</b> : Isolation facility available, but at times it is used for other non-intended purposes viz. quarantine, to store feeds. <b>Good</b> : Separate shed, maintained clean, used appropriately (check records) <b>Excellent</b> : Separate shed, at least 100 m away from other sheds, maintained clean, used appropriately (check records).
D05.	Have a separate shed for quarantine (new arrival)	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No quarantine facility or not used even if available. <b>Fair</b> : Quarantine facility available, but at times it is used for non-intended purposes viz. isolation of sick, store feeds. Not properly maintained. <b>Good</b> : Separate shed at least 100 m away from animal sheds, maintained clean, used appropriately (check records). <b>Excellent</b> : Separate shed, at least 200 m away from other sheds, maintained clean, used appropriately (check records).
D06.	Animal shed is kept clean (free of physical/extraneous matters) and disinfected	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : Extraneous matters, excreta left on the floor, walls dirty, evidence of rat infestation. <b>Fair</b> : Floor free of extraneous matters, excreta. <b>Good</b> : Floor free of extraneous matters & excreta, cleaning schedule maintained and followed. <b>Excellent</b> : Floor free of extraneous matters & excreta, cleaning and disinfection done as per schedule, cleaning & disinfection schedule maintained and followed.
<b>D. Farm Shed Facilities &amp; Practices [Biosecurity Score]</b>			
<i>Total score from all relevant Prompts divided by the number of Prompts included</i>			<b>Score:</b> ----- <i>[record the round figure up to 2 decimal points]</i>

## E. Herd Health Practices

ID	PROMPT	RATING	Note for Assessor
E01.	Vaccination as per schedule (refer record for one year at least)	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No vaccination done, no vaccination records maintained. <b>Fair</b> : Vaccination done as deemed necessary by DoL, no records maintained. <b>Good</b> : Good working knowledge on vaccination schedule, vaccination records maintained and schedule followed. <b>Excellent</b> : Excellent working knowledge on vaccination schedule, vaccination records maintained and schedule followed.
E02.	Deworming at regular interval (refer record for one year at least)	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No deworming done, no records maintained. <b>Fair</b> : Deworming done as deemed necessary by DoL, no records maintained. <b>Good</b> : Good working knowledge on deworming, records maintained. <b>Excellent</b> : Excellent working knowledge on deworming, deworming records maintained, regular deworming done.
E03.	Check the animals/birds for any signs of disease at least twice a day (refer record for validation)	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No evidence of checking animal health whatsoever. <b>Fair</b> : Checks the health of animals once a day, no records maintained. <b>Good</b> : Checks twice a day, reports to DoL officials when required, records maintained. <b>Excellent</b> : Good working knowledge on signs of ill health, checks twice a day, reports to DoL officials if required, records maintained.
E04.	Isolate and treat sick animals/birds (refer treatment record)	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No isolation facility, no treatment records maintained. <b>Fair</b> : Treatment records available but not properly maintained. <b>Good</b> : Good treatment records maintained. <b>Excellent</b> : Good treatment records maintained, evidences of observing withdrawal periods to decide marketing livestock products for human consumption.
E05.	Report any sick or deaths of animal/bird to nearest animal health center or BFDA office within 24 hours.	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : Do not know whom to report. <b>Fair</b> : Knows at least one agency to report to. <b>Good</b> : Knows whom to report to, have contact numbers of responsible officials for reporting, reports within 24 hours. <b>Excellent</b> : Knows whom to report to, have contact numbers of responsible

			officials for reporting, aware of toll-free numbers of DoL and BFDA for reporting, reports immediately.
E06.	Type of feeding practices followed	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : Feeds kitchen wastes, not aware of risk posed by kitchen wastes. <b>Fair</b> : Aware of risk posed by kitchen wastes, no evidence of not feeding. <b>Good</b> : Aware of risk posed by kitchen wastes, do not feed/feed after boiling/proper cooking. <b>Excellent</b> : Aware of risk posed by kitchen wastes, do not feed kitchen Wastes, and feeds only concentrate feeds.
E07.	Source of water supply to the farm	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No proper source of water supply to the farm. <b>Fair</b> : Open water source but the owner takes good care of the source to protect from contamination. <b>Good</b> : Clean water sourced through pipeline. <b>Excellent</b> : Clean water supplied by relevant authority.
E08.	Disposal of dead animal carcass (visit the site and see)	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No proper disposal methods followed. <b>Fair</b> : Dispose by burial. <b>Good</b> : Deep burial in secured place and fenced. <b>Excellent</b> : Dispose in biological pit constructed for the purpose/incineration.
E09.	Restrict visitors or brief essential visitors on the biosecurity measures of the farm (refer visitor record)	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : Do not restrict visitors. <b>Fair</b> : Allow visitors who the owner thinks will not pose biosecurity risk. <b>Good</b> : Restricts unnecessary visitors, appropriate biosecurity procedures followed for essential visitors. <b>Excellent</b> : Restricts unnecessary visitors, brief essential visitors, follow biosecurity procedures for essential visitors, avoid direct contact with animals.
<b>E. Herd Health Practices [Biosecurity Score]</b>			
Total score from all relevant Prompts divided by the number of Prompts included			<b>Score:</b> ----- [record the round figure up to 2 decimal points]

## F. Feed and Farm Equipment

ID	PROMPT	RATING	Note for Assessor
F01.	Feed and feed storage	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No feed store room, feed bags uncared for, and not protected from rats, birds and other stray animals, no feed records maintained. <b>Fair</b> : No feed store room, feed stored in the house of the owner, protected from rats, birds and other stray animals, no proper feed records maintained. <b>Good</b> : Temporary or semi-permanent feed store, nicely stacked, protected from rain water, rats, birds and other animals, feed records maintained. <b>Excellent</b> : Permanent feed store room, well ventilated, feed nicely stacked over wooden pallets maintaining sufficient gaps from walls, protected from rain water, rats, birds and other animals. Feed records maintained, follow first-in-first-out stock rotation and maintains all the records related to feeds.
F02.	Farm equipment use and maintenance. (Check the farm equipment)	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : Farm equipment not cleaned after use, some equipment borrowed from other farms, borrowed equipment not cleaned and disinfected before bringing into the farm. <b>Fair</b> : Owns some farm equipment, borrow some from other sources or share with others but clean and disinfect before bringing into the farm. <b>Good</b> : Owns required farm equipment, do not borrow from or share with other farms, equipment are cleaned after every use. <b>Excellent</b> : Owns required farm equipment, do not borrow from or share with other farms, equipment are cleaned and disinfected after every use. Equipment and machineries are stored in a separate room after use.
<b>F. Feed and Farm Equipment [Biosecurity Score]</b>  Total score from all relevant Prompts divided by the number of Prompts included			<b>Score:</b> ----- [record the round figure up to 2 decimal points]



## G. Other Essential Record Keepings

ID	PROMPT	RATING	Note for Assessor
G01.	Morbidity and mortality record maintained	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No morbidity and mortality records maintained. <b>Fair</b> : Morbidity and mortality records are maintained but information recorded are not adequate. <b>Good</b> : Morbidity and mortality records are maintained with adequate and up to date information. <b>Excellent:</b> Morbidity and mortality records are maintained with accurate and up to date information along with their suspected or confirmed causes.
G02.	Animal stock record maintained	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No animal stock records maintained. <b>Fair</b> : Some form of animal stock records maintained but information recorded are not adequate and updated. <b>Good</b> : Animal are identified, stock records are maintained with adequate and up to date information. <b>Excellent:</b> Animal are identified, stock records are maintained with real-time accurate and up to date information.
G03.	Visitor's record maintained with <i>[Name of person, company affiliation, date of visit, phone number, reason for visit, date and description of recent visits to other farms, if applicable]</i>	<b>(Please tick (✓) one)</b> <input type="checkbox"/> 0 – Poor <input type="checkbox"/> 1 - Fair <input type="checkbox"/> 2 – Good <input type="checkbox"/> 3 - Excellent	<b>Poor</b> : No visitor record maintained. <b>Fair</b> : Some sort of visitor record maintained but information recorded are not adequate. <b>Good</b> : Visitor record maintained with adequate information. <b>Excellent:</b> Visitor record maintained with adequate information and evidence of strict implementation by the farm.
<b>G. Other Essential Record Keepings [Biosecurity Score]</b>  Total score from all relevant Prompts divided by the number of Prompts included			<b>Score:</b> ----- [record the round figure up to 2 decimal points]

<b>Overall biosecurity score = <i>Sum of subtotals of C, D, E, F and G divided by 5</i></b>	<b><i>Score Guide</i></b>	
	<b><u>Score range</u></b>	<b><u>Category</u></b>
	0.00 - 0.49	Poor
	0.50 – 1.49	Fair
	1.50 – 2.49	Good
	2.50 – 3.0	Excellent

*Note: For a farm to qualify for stock replacement or for registration as a new farm or for availing any subsidy support from DoL, MoAL, it should have a Biosecurity level of **Good or more in All the Relevant Prompts (C01 through to G03).***

**H. Observation/Recommendation:**

Signature Inspection Team	Signature Farm Owner
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