

# Backyard Poultry Biosecurity: Existing Knowledge, Attitude and Practices in Chattogram, Bangladesh

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## Take home message

- Though the backyard poultry farmers' knowledge, attitude and practices (KAP) regarding biosecurity are limited, but they have a moderate level of knowledge about disease and transmission.
- The prophylactic use of antibiotic (30.6%) is high, which can promote antimicrobial resistance.
- While government guidelines about disposal of dead poultry is detailed in the "Animal Disease Act, 2005" in Bangladesh, there is low awareness of them and a high proportion of the farmers (78.7%) discard the dead chickens in the bush/pond/jungle/roadside.
- Almost 68.7% of the farmers had at least primary level of education which is suitable for reading training materials.
- ✓ Cost-effective biosecurity practices of the farmers can be improved through proper training and awareness.

## Background & Objectives



In **Bangladesh**, backyard poultry production is an important source of household food and subsistence income especially for **women**. Despite this significant contribution, knowledge regarding diseases and biosecurity practices among backyard poultry keepers are very limited.

This **study** was undertaken to explore the existing KAP of backyard poultry farmers regarding

- Biosecurity practices
- Infectious diseases
- Vaccination and treatment

**in order to support development of training materials and awareness raising regarding policy guidelines**

## Methods

### Sampling

- Seven upazilas (sub-districts) were selected based on the wider geographical coverage of Chattogram district.
- One village was selected from each upazila using multistage random sampling.
- A total number of **150** households were proportionally allocated for the selected villages.

### Data collection



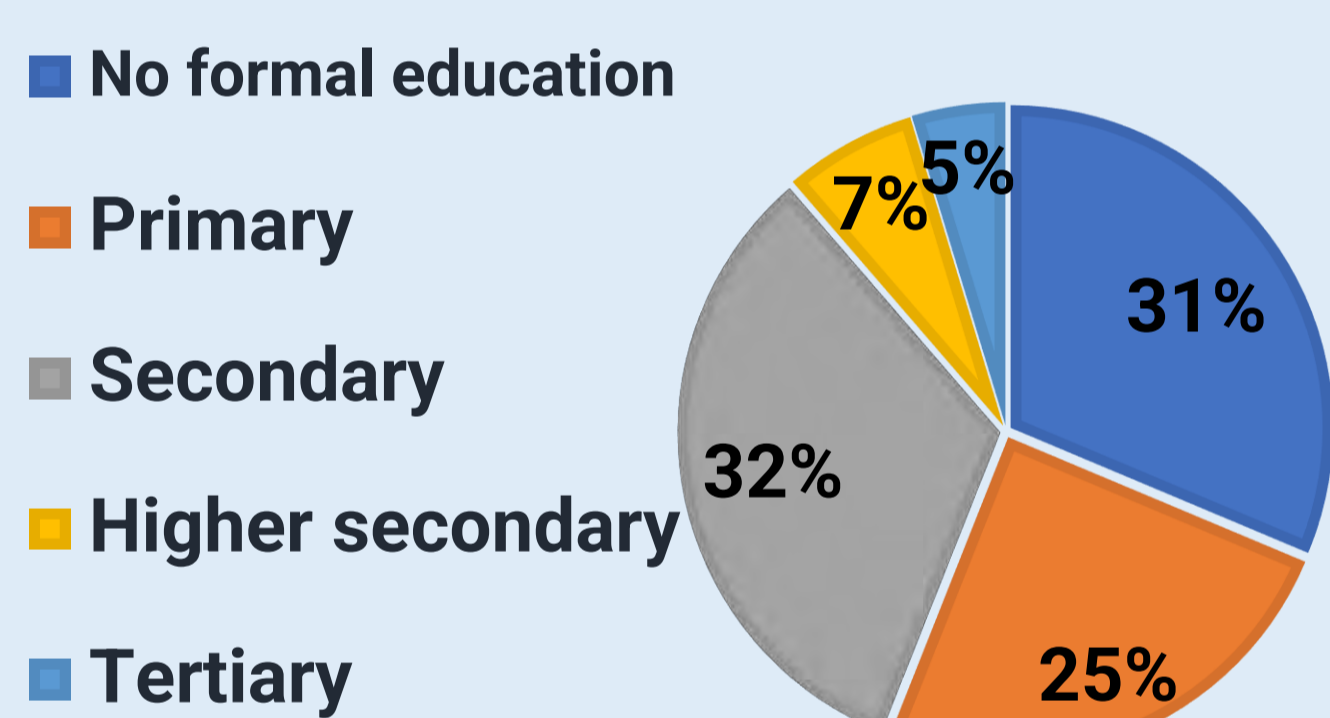
- ❖ Structured questionnaire
  - Piloted
  - Administered through interview and observation

### Data analysis

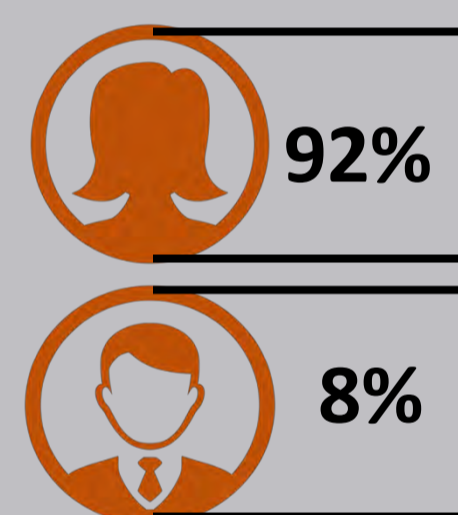
- Quantitative and thematic analysis

## Results

### Education level



### Gender of the farmers



### Definition/concept of biosecurity

Never heard:	82.7%
Could not define:	10%
Cleaning or Hygiene:	1.3%
Security of life:	1.3%
Some arrangements to prevent virus:	0.7%
To prevent poultry disease:	0.7%
Care, cleaning & giving good food:	0.7%
Other responses:	2.6%

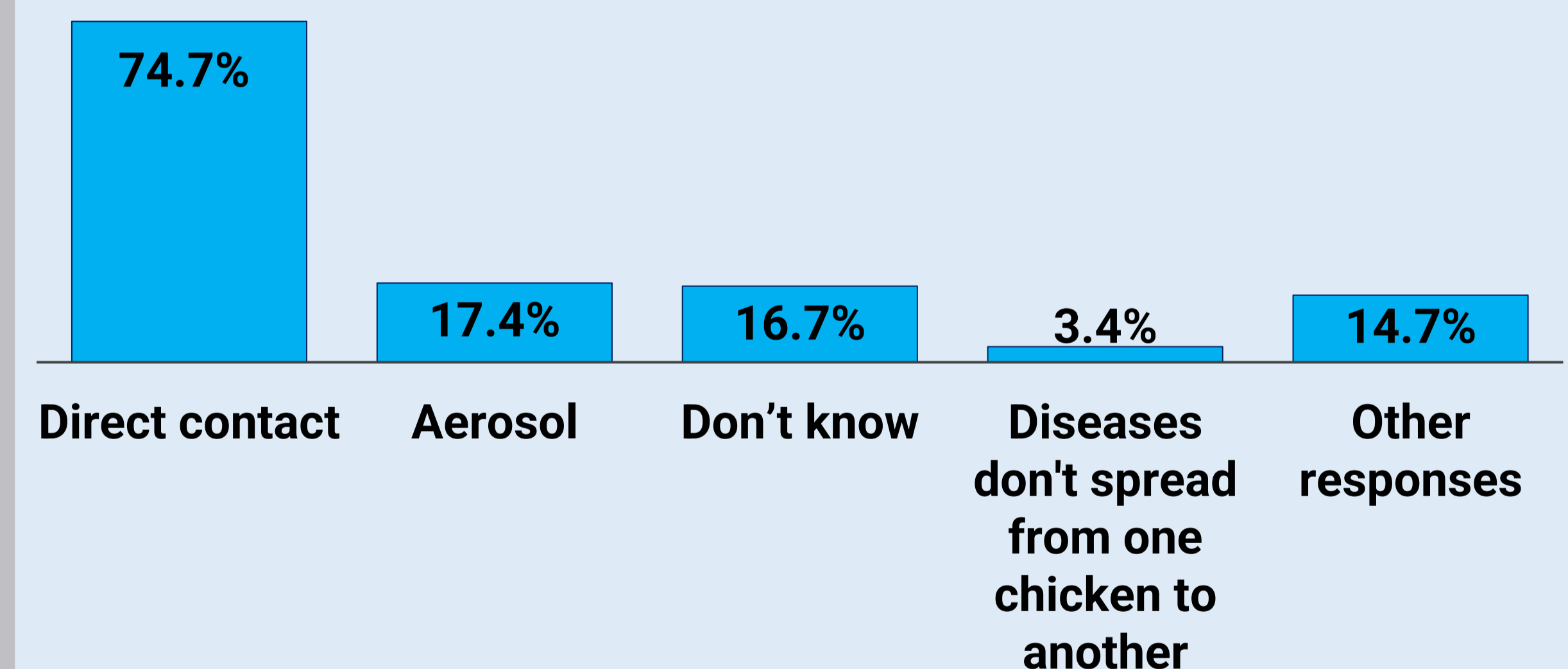
### Purpose of vaccination

Others	9.3%
Make chickens grow faster	1.3%
Keep chickens healthy	2.7%
Don't know	5.3%
Cure disease	7.3%
Reduce disease	16.7%
Prevent disease	37.3%

### To prevent disease

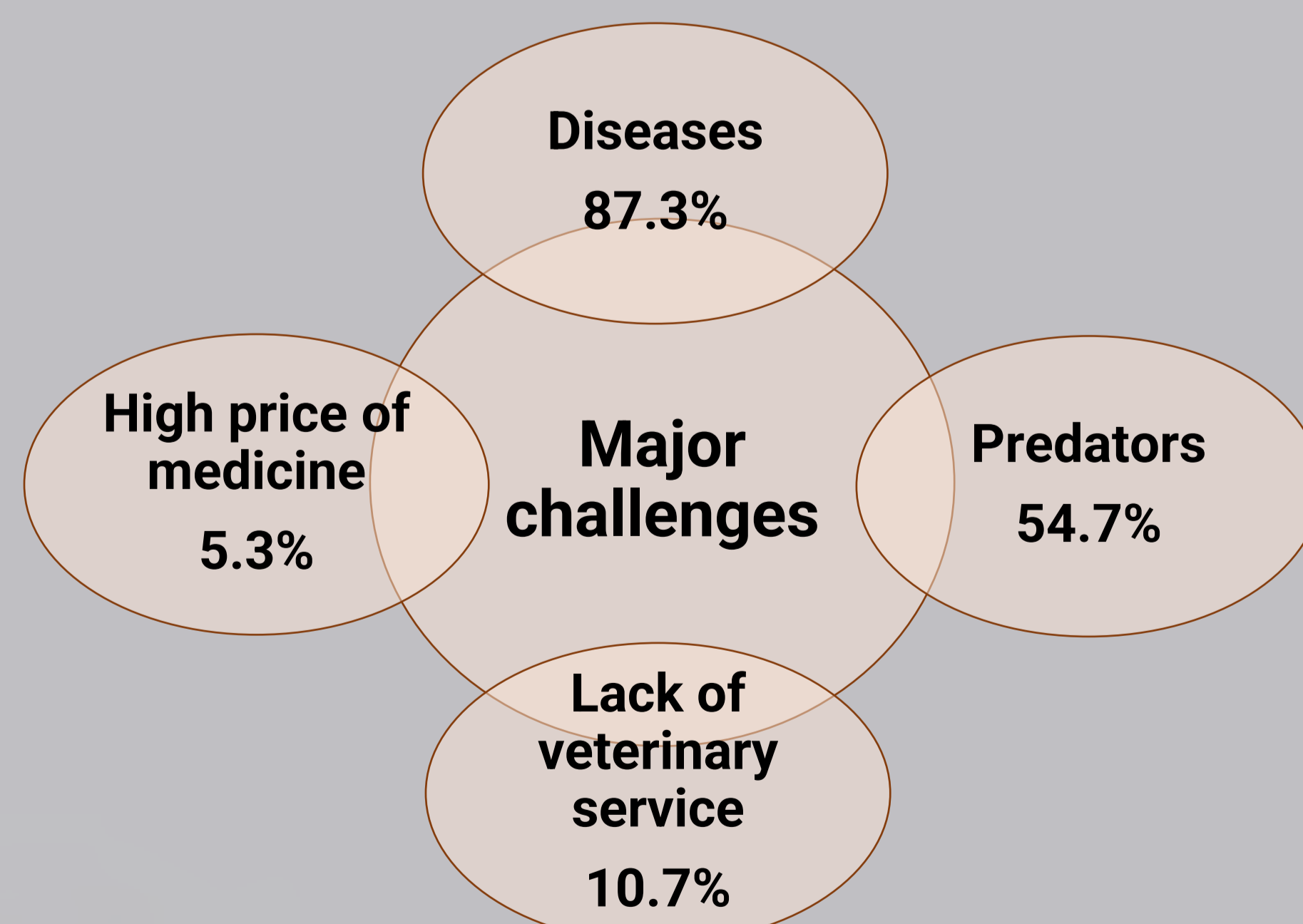
- 40.7% do nothing
- 30.7% use antibiotics
- 7.3% vaccinate
- 10.7% deworm
- 14.7% maintain hygiene

### Mode of disease transmission



### Disposal of dead poultry

Throw in bush/pond/roadside/jungle:	78.7%
Bury:	14%
Burn:	2.7%
Dustbin:	2%
Give to Buddhist:	1.3%
Poultry never dies (always slaughter):	0.7%
Feed to stray animals:	0.7%



### Causes of disease

- Do not know : 52%
- Germs (virus, bacteria) : 24%
- Weather change : 20%
- Others : 16.7%

- Have received training → 10%
- Would like to have further training → 26%

## Results dissemination with the Stakeholders



Quotation from one of the stakeholders- "The term **training** seems highly technical to our rural poultry farmers and so they don't feel encouraged to attend the training programmes. Instead of using this term, we should use the local term "**Uthan boithak**" (Backyard get together) which is much friendlier to them."+

