

Sample collection Performa

Questionnaire was divided into two parts which were as follows: (a) host analysis (b) Risk factors analysis.

Part A. Information related to cattle Host and management practices

1- Signs and symptoms

- a) Symptomatic host
- b) Asymptomatic host

2-Infection history

- a) Frist time infected
- b) Several time infected

3-Ticks infestation

- a) Present
- b) Absent

Part B. Information related to associated Risk factors

1-Different characteristics of host

- a) Indigenous
- b) Exotic
- c) Age group < 2 year and > 2 years- 6 year
- d) Gender- Male, female
- e) Breed-
Holstein Frisian,
Jersey
Sahiwal

2-Management practices

- a) Feeding system
Free grazing
Stall fed
- b) Hygienic measures
Hygienic

Unhygienic

c) Farming system

Combine

Separate

d) Stall pattern

Congested

Open

3 Season of the year and dates

Winter

Summer