Ph. D. Project: "Production system analysis of Harina breed of cattle in its breeding tract".

1. Study area:  
2. District:  
3. Tehsil:  
4. Cluster/ village:

**VILLAGE PROFILE:**

I. **Socio-economic aspects:**

1. Geographical area:  
2. No. of households:  
3. Main occupation:  
4. Population distribution pattern: Dispersed type/ concentrate type/ mixed  
5. Availability of common grazing lands: Yes/ no  
   (If yes then specify the area and other characteristics)

**II. Cattle population:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle population figure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Hariana</strong></td>
</tr>
<tr>
<td>Livestock census (2003 &amp; 2007)*</td>
<td></td>
</tr>
<tr>
<td>Survey during 2007-08T**</td>
<td></td>
</tr>
</tbody>
</table>

2. Numbers of household having Hariana type cattle: -------

* Cattle population figure collected from the village record maintained at *Patwari* office
** Cattle population figure collected through surveying of selected villages
ANNEXURE-II

SOCIO-ECONOMIC VARIABLES OF RESPONDENT

District: ________________________ Tehsil: ________________________ Village: ________________________

1. **Name of respondent:**

2. **Caste:**

3. **Family type:** Joint/Nuclear

4. **Family size:**

<table>
<thead>
<tr>
<th>Adults</th>
<th>Children</th>
<th>Total</th>
</tr>
</thead>
</table>

5. **Size of landholding:**

   Total: ____________ acres

   Cultivable: ____________ acres

6. **Family occupation**

   (i) **Main:**

   (ii) **Subsidiary:**

7. **Details of livestock:**

<table>
<thead>
<tr>
<th>Cattle</th>
<th>Buffalo</th>
<th>Camel</th>
<th>Equine</th>
<th>Total</th>
</tr>
</thead>
</table>

8. **Herd strength:**

   (i) **Cow in milk:**

   (ii) **Dry cow:**

   (iii) **Heifer:**

   (iv) **Young stock:**

   (v) **Breeding bull:**

   (vi) **Bullock:**

   (vii) **Total:**
CATTLE MANAGEMENT PRACTICES

(A) Breeding practices:

1. Method of service: Natural/ AI/Both
2. System of mating: Controlled/ uncontrolled
3. Castration of male calves: Yes/ no
4. If yes then method of castration: Open traditional/ Burdizzo
5. Age of castration: 1 - 2 years/ > 2 years
6. Information on production traits of Hariana cows:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>AFC (months)</th>
<th>ALL (days)</th>
<th>SP (days)</th>
<th>DP (days)</th>
<th>CI (Months)</th>
</tr>
</thead>
</table>

(B) Housing practices:

1. Housing Type: Close/ loose
2. Structure: Stable or fixed/ seasonally movable
3. Location: Inside/ near dwelling or separate from dwelling
4. Manger: Kutchha/ pucca
5. Roof: Thatched/ wooden/pucca
6. Cattle kept under shed: Most of the time except grazing/at night only
7. Any special protection measures during:
   (i) Summer season
   (ii) Rainy season
   (Hi) Winter season

(C) Milking practices:

1. Gender of milker: Man/Woman/Both
2. Method of milking: Knuckling/ full hand/ stripping/combination of two
3. Hygiene measures during milking: Satisfactory/ unsatisfactory Milk let stimulus: Calf
4. Weaning: yes/no
5. Milk disposable pattern:
   Home consumption only/ home consumption + sale ghee /home consumption + sale milk
(D) **Health care practices:**

1. Vaccination: Practiced/ not practiced

2. Deworming practices in cattle:

3. Deworming practices in other animals: Yes/ No

4. Treatment of sick animals: 
   - Source of health care
     - Self medication with local materials
     - Consult to local knowledgeable person
     - Consult to veterinary staff

5. Common ailments/ diseases in cattle: systemic/ infectious diseases

6. Segregation of diseased animals: Yes/ No

7. Tick spray: Yes/ No
1. **Feeding system:**

<table>
<thead>
<tr>
<th>Feeding system</th>
<th>Rainy</th>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grazing</td>
<td></td>
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<tr>
<td>Stall feeding</td>
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<tr>
<td>Grazing+ stall feeding</td>
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</tbody>
</table>

2. **Source of grazing land:** Own fallow land/ common land/ both

3. **Type of feeds and fodder**

<table>
<thead>
<tr>
<th>Feed category</th>
<th>Rainy</th>
<th>Winter</th>
<th>Summer</th>
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<tbody>
<tr>
<td>Dry fodder</td>
<td></td>
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<tr>
<td>Green fodder</td>
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<tr>
<td>Concentrate</td>
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4. **Watering of animals**

4.1 **Source of drinking water**

4.2 **Frequency of watering**

(F) **Common constraints of cattle production system:**

1. .................................................................

2. .................................................................

3. .................................................................

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INDIVIDUAL PERFORMANCE RECORD SHEET

1. Name of farmer: 
2. Village: 
3. Tehsil: 
4. District: 
5. Breed of cattle: 
6. Animal identification mark: 
7. Date of calving: 
8. Lactation order: 
9. Date of 1st service after calving: 
10. Date of conception: 
11. No. of services/conception (NS/AI): 
12. Date of drying: 
13. Schedule of monthly test day milk recording

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Date of milk recording</th>
<th>Milk yield (Kg)</th>
<th>Remarks</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Morning milking</td>
<td>Evening milking</td>
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<td>1.</td>
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14. Total lactation yield:  
15. Lactation length:  
16. Calving interval (service period + gestation length):  
17. Dry period (calving interval-lactation length):