**ANNEXURE-I**

**DESCRIPTION OF CHICKEN VARIETY**

**RURAL/ BACKYARD CHICKEN VARIETY**

1. **GENERAL DESCRIPTION**
2. Name of the Variety :
3. Background for such a name :
4. Name of organization :
5. Type of variety :

(Meat/Egg/Dual/Others, specify)

1. Specific purpose for which developed :
2. Unique characteristic of Variety :
3. Details of development of Variety :

(flow diagram of breeding plan with detail description)

1. Details of Parent Lines :

(Male line and Female line)

1. Any other information :
2. **PHYSICAL CHARACTERS (For both, male and female, separately)**
3. Feather characteristics

a) Morphology (Normal/Frizzle/ :

 Silky/Others, specify)

b) Distribution (Normal/Naked neck/ :

 Feathered shanks and feet/Beard/crest/Others, specify)

c) Growth rate (Fast/Slow) :

1. Colour

a) Plumage colour (White/Black/ Blue/ :

 Red/Brown/Gold/Others, specify)

b) Plumage pattern (Solid/Dull/Stripped/ :

 Patchy/Spotted/Barred/Others, specify)

c) Pattern within feather (Self-white/ :

 Self-black/Self-blue/Self-red/Self-wheaten/

 Barred/ Mottled/Others specify)

d) Skin colour (White/Yellow/Blue/ :

 Black/Others, specify)

e) Shank colour (White/Yellow/Black/ :

 Blue/Green/Others, specify)

f) Earlobe colour (White/Red/ :

 Black/White & red/Others, specify)

g) Eye colour (Grey/Black/Brown/ :

 /Others, specify)

1. Comb

a) Type (Single/Pea/Rose/Walnut/ :

 Cushion/Strawberry/Duplex/V-shaped/Double)

b) Colour (Red/Black/Others, specify) :

c) Comb colour intensity :

 (Dark/Medium/Light)

d) Size (Large/Medium/Small) :

1. Wattles (Present/Absent) :
2. Other specific visible traits :
3. **PERFORMANCE AT FARM**

**(Two evaluations are mandatory under farm)**

1. **Growth characteristics** (*based on minimum of 250 records each for male and female up to 20 weeks of age, and thereafter 250 pooled records* in each evaluation*)*
2. **Dual/ egg type rural Variety (Two evaluations are mandatory, separate table for each evaluations)**

|  |
| --- |
| Evaluation 1 |
| Trait |  Age | Male | Female | Pooled |
| Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N |
| Body Weight (g) at | Day old  |  |  |  |  |  |  |  |  |  |
| 6 weeks |  |  |  |  |  |  |  |  |  |
| 8 weeks |  |  |  |  |  |  |  |  |  |
| 20 weeks |  |  |  |  |  |  |  |  |  |
| 40 weeks |  |  |  |  |  |  |  |  |  |
| 52 weeks |  |  |  |  |  |  |  |  |  |
| 64 weeks |  |  |  |  |  |  |  |  |  |
| 72 weeks |  |  |  |  |  |  |  |  |  |
| Shank Length | 6 weeks |  |  |  |  |  |  |  |  |  |
| 8 weeks |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| Evaluation 2 |
| Trait |  Age | Male | Female | Pooled |
| Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N |
| Body Weight (g) at | Day old  |  |  |  |  |  |  |  |  |  |
| 6 weeks |  |  |  |  |  |  |  |  |  |
| 8 weeks |  |  |  |  |  |  |  |  |  |
| 20 weeks |  |  |  |  |  |  |  |  |  |
| 40 weeks |  |  |  |  |  |  |  |  |  |
| 52 weeks |  |  |  |  |  |  |  |  |  |
| 64 weeks |  |  |  |  |  |  |  |  |  |
| 72 weeks |  |  |  |  |  |  |  |  |  |
| Shank Length | 6 weeks |  |  |  |  |  |  |  |  |  |
| 8 weeks |  |  |  |  |  |  |  |  |  |

Feed utilization *(based on minimum 100 females)*

|  |  |
| --- | --- |
| Age in weeks | kg feed/kg gain |
| Mean±SE | Range | N |
| 0-6 |  |  |  |
| 0-8 |  |  |  |
| 9-16 |  |  |  |
| kg feed/dozen eggs |
| 17-40  |  |  |  |
| 41-72  |  |  |  |

1. **Broiler/Meat type rural Variety (Two evaluations are mandatory, separate table for each evaluations)**

|  |
| --- |
|  Evaluation 1 |
| Body Weight (g) at | Male | Female | Pooled |
| Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N |
| Day old  |  |  |  |  |  |  |  |  |  |
| 5 weeks |  |  |  |  |  |  |  |  |  |
| 6 weeks |  |  |  |  |  |  |  |  |  |
| 12 weeks |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| Evaluation 2 |
| Body Weight (g) at | Male | Female | Pooled |
| Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N |
| Day old  |  |  |  |  |  |  |  |  |  |
| 5 weeks |  |  |  |  |  |  |  |  |  |
| 6 weeks |  |  |  |  |  |  |  |  |  |
| 12 weeks |  |  |  |  |  |  |  |  |  |

Body measurements (cm) (*based on minimum of 100 records)*

|  |  |  |  |
| --- | --- | --- | --- |
| At | Keel length | Shank length | Breast angle |
| Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N |
| 5 weeks |  |  |  |  |  |  |  |  |  |
| 6 weeks |  |  |  |  |  |  |  |  |  |
| 12 weeks |  |  |  |  |  |  |  |  |  |

Feed utilization (*based on minimum of 50 males and 50 females)*

|  |  |
| --- | --- |
| Age in weeks | kg feed/kg gain |
| Male | Female | Pooled |
| Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N |
| 0- 5  |  |  |  |  |  |  |  |  |  |
| 0-6 |  |  |  |  |  |  |  |  |  |
| 0-12 |  |  |  |  |  |  |  |  |  |

1. **Carcass characters** (*based on minimum of 25 male birds for dual/ egg type variety and 25 male and 25 female birds for broiler variety, at 12 weeks of age*

|  |  |  |
| --- | --- | --- |
| Carcass characters | Male | Female |
| Mean | SE | N | Mean | SE | N |
| Live weight (g) at slaughter |  |  |  |  |  |  |
| Carcass weight (g) |  |  |  |  |  |  |
| Dressing % |  |  |  |  |  |  |
| Meat: bone ratio |  |  |  |  |  |  |
| **Cut up parts (%)** |  |  |  |  |  |  |
| Breast |  |  |  |  |  |  |
| Legs |  |  |  |  |  |  |
| Wings |  |  |  |  |  |  |
| Back |  |  |  |  |  |  |
| **Giblets (%)** |  |  |  |  |  |  |
| Heart |  |  |  |  |  |  |
| Liver |  |  |  |  |  |  |
| Gizzard |  |  |  |  |  |  |
| Abdominal fat |  |  |  |  |  |  |
| **Carcass quality traits**  | Flesh Colour  |  |  |  |  |  |  |
| Tenderness |  |  |  |  |  |  |
| Flavour |  |  |  |  |  |  |

1. **Mortality (%)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of bird | Period | Male | Female | Pooled |
| Dual/ egg type | Brooding period (0-6 weeks) |  |  |  |
|  Growing period (7 - 20 weeks) |  |  |  |
|  Laying period (21-72weeks) |  |  |  |
| Broilers/meat type | Brooding  | 0-5 weeks |  |  |  |
| 0-6 weeks |  |  |  |
|  Growing  | 6 - 12 weeks |  |  |  |
| 7 - 12 weeks |  |  |  |

1. **Egg Production parameters**

Dual/egg type variety *(based on minimum 100 females)*

|  |  |  |
| --- | --- | --- |
| Production traits  | Evaluation 1 | Evaluation 2 |
| Mean ± SE | Range | N | Mean ± SE | Range | N |
| Age at sexual maturity (in days) |  |  |  |  |  |  |
| Egg Production (in no.) at |
| 40 wks |  |  |  |  |  |  |
| 52 wks |  |  |  |  |  |  |
| 64 wks |  |  |  |  |  |  |
| 72 wks |  |  |  |  |  |  |
| Egg weight (g) at |
| 28 wks |  |  |  |  |  |  |
| 40 wks |  |  |  |  |  |  |
| 52 wks |  |  |  |  |  |  |
| 64 wks |  |  |  |  |  |  |
| 72 wks |  |  |  |  |  |  |

1. **Special/ Unique characteristics** (like disease resistance, stress tolerance etc., supported by proper scientific data).
2. **FIELD EVALUATION**
3. **Dual/ egg type rural variety**

(Minimum of three separate evaluations under field conditions is mandatory. A minimum of 25 farmers with 15-20 birds/farmers is required in each evaluation. Three evaluations should be from different generations and at different places. Minimum of 75-100 farmers with total sample size of 1000- 1500 birds needs to be evaluated in three evaluations).

Field Evaluation: Dual/egg type variety

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Particulars | Evaluation1 | Evaluation2 | Evaluation3 | Pooled |
| Place of evaluation  |  |  |  |  |
| No. of Birds evaluated  |  |  |  |  |
| No. of farmers  |  |  |  |  |
| Traits | Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N |
| A. Body weight (g) at  |
| 12 weeks | Male  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |  |  |
| Body weight (g) of Females at |
| 20 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 52 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 64 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 72 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| Adult body wt. (g) of males, if available (specify age in weeks) |  |  |  |  |  |  |  |  |  |  |  |  |
| B. Age at Sexual maturity (days)  |  |  |  |  |  |  |  |  |  |  |  |  |
| C. Egg Production (in no.) at |
| 40 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 52 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 64 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 72 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| D. Egg Weight (g) at |
| 28 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 52 wks\* |  |  |  |  |  |  |  |  |  |  |  |  |
| 64 wks\* |  |  |  |  |  |  |  |  |  |  |  |  |
| 72wks\* |  |  |  |  |  |  |  |  |  |  |  |  |
| E. Mortality (%) |
| 0-6 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 7-20 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 21-72 wks  |  |  |  |  |  |  |  |  |  |  |  |  |

\*Optional

1. **Broiler/Meat type variety**

(Minimum of three separate evaluations under field conditions is mandatory. A minimum of 10 farmers with 100-150 birds/farmer is required in each evaluation. Three evaluations should be from different generations and at different places. Minimum of 30 farmers with total sample size of 3000-4500 birds needs to be evaluated in three evaluations).

Field Evaluation:Broiler/Meat type variety

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Particulars | Evaluation 1 | Evaluation 2 | Evaluation 3 | Pooled  |
| Place of evaluation  |  |  |  |  |
| No. of Birds evaluated  |  |  |  |  |
| No. of farmers  |  |  |  |  |
| Traits | Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N |
| Body weight (g) (pooled) at |
| 6 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| Mortality % |
| 0-6 wks |  |  |  |  |  |  |  |  |  |  |  |  |
| 7-12 wks |  |  |  |  |  |  |  |  |  |  |  |  |

1. **PACKAGE OF PRACTICES (Please describe)**

1. Nursery rearing

Housing :

Brooding :

Feeding :

Health Care :

2. Free Range

Housing:

Health Care:

1. **ECONOMICS**

Detailed economic analysis :

(Please provide details of Input, Output and Profit)

**COMMERCIAL CHICKEN VARIETY FOR INTENSIVE FARMING**

* 1. **GENERAL DESCRIPTION**
1. Name of the Variety :
2. Background for such a name :
3. Name of organization :
4. Type of variety :

(Meat/Egg/Dual/Others)

1. Specific purpose for which developed :
2. Unique characteristic of Variety :
3. Details of development of Variety :

(flow diagram of breeding plan with detail description)

1. Details of Parent Lines :

(Male Line and Female Line)

1. Any other information :
	1. **PHYSICAL CHARACTERS (For both, male and female, separately)**
2. Feather characteristics

a) Morphology (Normal/Frizzle/ :

 Silky/Others, specify)

b) Distribution (Normal/Naked neck/ :

 Feathered shanks and feet/Beard/Crest/Others (specify)

c. Growth rate (Fast/Slow) :

1. Colour

a) Plumage colour (White/Black/Blue/ :

 Red/Brown/Gold/Others, specify)

b) Plumage pattern (Solid/Dull/Stripped/ :

 Patchy/Spotted/Barred/Others, specify)

c) Pattern within feather (Self-white/ :

 Self-black/Self-blue/Self-red/Self-wheaten/

 Barred/Mottled/Others, specify)

d) Skin colour (White/Yellow/Blue/ :

 Black/Others, specify)

e) Shank colour (White/Yellow/Black/ :

 Blue/Green/Others, specify)

f) Earlobe colour (White/Red/ :

 Black/White & Red/Others, specify)

g) Eye colour (Grey/Black/Brown/ :

 Others, specify)

1. Comb

a) Type (Single/Pea/Rose/Walnut/ :

Cushion/Strawberry/Duplex/V-shaped/double)

b) Colour (Red/Black/Others, specify) :

c) Comb colour intensity :

 (Dark,/Medium/Might)

d) Size (Large/Medium/Small) :

1. Wattles (present/absent) :
2. Other specific visible traits :
	1. **PERFORMANCE AT FARM**

**(Two evaluations are mandatory under farm)**

1. **Growth characteristics** (*based on minimum of 250 records for male and 500 records for female up to 20 weeks of age, and thereafter 500 pooled records* in each evaluation*)*

**Commercial layer variety (Two evaluations are mandatory, separate table for each evaluation)**

|  |
| --- |
| Evaluation 1 |
| Body Weight (g) at | Male | Female | Pooled |
| Mean ± SE | Range | N | Mean ± SE | Range | N | Mean ± SE | Range | N |
| Day old  |  |  |  |  |  |  |  |  |  |
| 16 weeks |  |  |  |  |  |  |  |  |  |
| 20 weeks |  |  |  |  |  |  |  |  |  |
| 40 weeks |  |  |  |  |  |  |  |  |  |
| 52 weeks |  |  |  |  |  |  |  |  |  |
| 64 weeks |  |  |  |  |  |  |  |  |  |
| 72 weeks |  |  |  |  |  |  |  |  |  |

|  |
| --- |
| Evaluation 2 |
| Body Weight (g) at | Male | Female | Pooled |
| Mean ± SE | Range | N | Mean ± SE | Range | N | Mean ± SE | Range | N |
| Day old  |  |  |  |  |  |  |  |  |  |
| 16 weeks |  |  |  |  |  |  |  |  |  |
| 20 weeks |  |  |  |  |  |  |  |  |  |
| 40 weeks |  |  |  |  |  |  |  |  |  |
| 52 weeks |  |  |  |  |  |  |  |  |  |
| 64 weeks |  |  |  |  |  |  |  |  |  |
| 72 weeks |  |  |  |  |  |  |  |  |  |

Production parameters (Two evaluations with a minimum sample size of 300 birds per generation)

|  |  |  |  |
| --- | --- | --- | --- |
|  Production traits  | Evaluation 1 | Evaluation 2 | Pooled |
| Mean ± SE | Range | N | Mean ± SE | Range | N | Mean ± SE | Range | N |
| A. Age at Sexual Maturity ( in days) |  |  |  |  |  |  |  |  |  |
| B. Egg Production (in no.) at  |
| 28 wks |  |  |  |  |  |  |  |  |  |
| 40 wks |  |  |  |  |  |  |  |  |  |
| 52 wks |  |  |  |  |  |  |  |  |  |
| 64 wks |  |  |  |  |  |  |  |  |  |
| 72 wks |  |  |  |  |  |  |  |  |  |
| C. Egg Weight (g) at |
| 28 wks |  |  |  |  |  |  |  |  |  |
| 40 wks |  |  |  |  |  |  |  |  |  |
| 52 wks |  |  |  |  |  |  |  |  |  |
| 64 wks |  |  |  |  |  |  |  |  |  |
| 72 wks |  |  |  |  |  |  |  |  |  |

**Broiler/ Meat type commercial Variety (Two evaluations are mandatory, separate table for each evaluation)**

|  |
| --- |
| Evaluation …….. |
| Body Weight (g) at | Male | Female | Pooled |
| Mean ± SE | Range | N | Mean ± SE | Range | N | Mean ± SE | Range | N |
| Day old  |  |  |  |  |  |  |  |  |  |
| 5 weeks |  |  |  |  |  |  |  |  |  |
| 6 weeks |  |  |  |  |  |  |  |  |  |

Body measurements (cm) for broiler variety (*based on minimum of 100 records)*

|  |  |  |  |
| --- | --- | --- | --- |
| At | Keel length | Shank length | Breast angle |
| Mean ± SE | Range | N | Mean ± SE | Range | N | Mean ± SE | Range | N |
| 5 weeks |  |  |  |  |  |  |  |  |  |
| 6 weeks |  |  |  |  |  |  |  |  |  |

1. **Carcass characters** (*only for broiler variety, 25 male and 25 female birds -at 6 weeks of age)*

|  |  |  |
| --- | --- | --- |
| Carcass characters | Male | Female |
| Mean | SE | N | Mean | SE | N |
| Live weight (g) at slaughter |  |  |  |  |  |  |
| Carcass weight (g) |  |  |  |  |  |  |
| Dressing % |  |  |  |  |  |  |
| Meat: bone ratio |  |  |  |  |  |  |
| **Cut up parts (%)** |  |  |  |  |  |  |
| Breast |  |  |  |  |  |  |
| Legs |  |  |  |  |  |  |
| Wings |  |  |  |  |  |  |
| Back |  |  |  |  |  |  |
| **Giblets (%)** |  |  |  |  |  |  |
| Heart |  |  |  |  |  |  |
| Liver |  |  |  |  |  |  |
| Gizzard |  |  |  |  |  |  |
| Abdominal fat |  |  |  |  |  |  |
| **Carcass quality traits**  |  |  |  |  |  |  |
| Flesh Colour |  |  |  |  |  |  |
| Tenderness |  |  |  |  |  |  |
| Flavour |  |  |  |  |  |  |

1. **Feed Utilization:**

a. For layer *(based on minimum 100 females)*

|  |  |
| --- | --- |
| Age in weeks | kg feed/kg gain |
| Mean ± SE | Range | N |
| 0-8 |  |  |  |
| 9-16 |  |  |  |
| kg feed/dozen eggs |
| 17-40  |  |  |  |
| 41-72  |  |  |  |
| 17-72 |  |  |  |

b. For broiler (*based on minimum of 50 males and 50 females)*

|  |  |
| --- | --- |
| Age in weeks | kg feed/kg gain |
| Male | Female | Pooled |
| Mean ± SE | Range | N | Mean ± SE | Range | N | Mean ± SE | Range | N |
| 0- 5  |  |  |  |  |  |  |  |  |  |
| 0-6 |  |  |  |  |  |  |  |  |  |

1. **Mortality (%):**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of bird | Period | Male | Female | Pooled |
| Layers/ egg type | Brooding period (0-6 weeks) |  |  |  |
|  Growing period (7 - 20 weeks) |  |  |  |
|  Laying period (21-72weeks) |  |  |  |
| Broilers/ meat type | 0 -5 weeks |  |  |  |
| 0-6 weeks |  |  |  |

* 1. **FIELD EVALUATION**

**Commercial Layer variety**

(Minimum of two separate evaluations under field conditions is mandatory. A minimum of 5 farmers with 500-1000 birds/farmer is required in each evaluation. Two evaluations should be from different generations and at different places. Minimum of 10 farmers with total sample size of 5000-10000 birds needs to be evaluated in two evaluations.

Field evaluation: Commercial Layer variety (only females)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Evaluation 1 | Evaluation 2 | Pooled |
| Place of evaluation |  |  |  |
| No. of Birds evaluated |  |  |  |
| No. of farmers |  |  |  |
| Production traits | Mean ± SE | Range | N | Mean ± SE | Range | N | Mean ± SE | Range | N |
| A.Body Weight (g) at |
| 16 wks |  |  |  |  |  |  |  |  |  |
| 40 wks |  |  |  |  |  |  |  |  |  |
| 72 wks |  |  |  |  |  |  |  |  |  |
| B. Age at Sexual Maturity (in days) |  |  |  |  |  |  |  |  |  |
| C. Egg Production (in no.) at  |
| 28 wks |  |  |  |  |  |  |  |  |  |
| 40 wks |  |  |  |  |  |  |  |  |  |
| 52 wks |  |  |  |  |  |  |  |  |  |
| 64 wks |  |  |  |  |  |  |  |  |  |
| 72 wks |  |  |  |  |  |  |  |  |  |
| D. Egg Weight (g) at |
| 28 wks |  |  |  |  |  |  |  |  |  |
| 40 wks |  |  |  |  |  |  |  |  |  |
| E. Mortality, % |  |  |  |  |  |  |  |  |  |
| 0-6 wks |  |  |  |  |  |  |  |  |  |
| 7-20 wks |  |  |  |  |  |  |  |  |  |
| 21-72 wks |  |  |  |  |  |  |  |  |  |

**Broiler/ Meat type commercial variety**

(Minimum of two separate evaluations under field conditions is mandatory. A minimum of 10 farmers with 200-300 birds/farmer is required in each evaluation. Two evaluations should be from different generations and at different places. Minimum of 20 farmers with total sample size of 4000-6000 birds needs to be evaluated in two evaluations.

Field evaluation: Broiler/Meat type commercial variety

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | Evaluation1 | Evaluation 2 | Pooled |
| Place of evaluation  |  |  |  |
| No. of Birds evaluated  |  |  |  |
| No. of farmers  |  |  |  |
| Traits | Mean±SE | Range | N | Mean±SE | Range | N | Mean±SE | Range | N |
| Body weight (g) (pooled) at  |
| 5 weeks |  |  |  |  |  |  |  |  |  |
| 6 weeks |  |  |  |  |  |  |  |  |  |
| FCR |  |  |  |  |  |  |  |  |  |
| Mortality % |  |  |  |  |  |  |  |  |  |
| 0-6 weeks |  |  |  |  |  |  |  |  |  |

* 1. **PACKAGE OF PRACTICE (Please describe)**

1. Nursery rearing

Housing :

Brooding :

Feeding :

Health Care :

2. Growing:

Housing :

Feeding :

Management :

Health Care :

* 1. **ECONOMICS**

Detailed economic analysis

(Please provide details of Input, Output and Profit)