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FEASIBILITY REPORT OF 500 RABBITS

Preamble

Rabbit is a small herbivorous animal and could be the food of the future. Touted for years by food activists including Michael Pollan, these fluffy herbivores eat grasses instead of energy-intensive soy or fish meal, grow quickly and thrive in clean, disease-free conditions. Plus, while their reproductive process is efficiently managed, the raising demand for rabbits meat may be met quickly.

Rabbit farming has grown from raising a few rabbits for family consumption to large commercial operations with hundreds of rabbits. Investment in a rabbitry, including breeding stock, can be quite modest.

Expansion is much simpler than other livestock alternatives because a large range of existing facilities can be modified for rabbits and land requirements are negligible. According to the 2002 Census of Agriculture (NASS), there were more than 4,300 farms selling almost 890,000 rabbits in the USA. In Pennsylvania, 298 farms sold more than 112,000 rabbits, making it the top producer nationally.

Experience of UA Peshawar

A study was undertaken to document the status of rabbit farming system in Khyber Pakhtunkhwa (KP). The Province was divided into seven regions, from which data were captured using a structured questionnaire. The survey revealed that proper details about indigenous rabbit breeds were not found in the province. Six rabbit varieties were identified on the basis of body coat and eye color. The varieties available in different regions of KP were Black & White (36.84 %), White (20.84 %), White Bay (20. %), Black (12.28 %), Gray (5.7 %) and Bay (4.28%). Average live weights for different varieties were Black & White (1.68 kg), White (1.47 kg), White Bay (1.76 kg), Black (1.70 kg), Gray (1.59 kg) and Bay (1.50 kg). Mean litter sizes found for different varieties were Black & White (5.69±0.25), White (5.32±0.33), White Bay (5.45±0.34), Black (5.37±0.44), Gray (5.20±0.61) and Bay (5.13±0.60). People rearing rabbits in Kacha & covered houses of Southern region (39.66±1.33), Central region (22.00±1.00) and Northern region (23.50±0.50).

Pre weaning, post weaning and adult percent survival rate were found in Southern region (94.36±0.46, 83.66±0.63 and 85.86±0.67), Central region (84.35±0.74, 57.40±0.89 and 64.95±1.00) and Northern region (84.90±0.82, 59.65±0.99 and 69.70±0.84) respectively. People rearing rabbits for meat purpose were found in Southern region (36.66 %), Central region (24 %) and Northern region (24 %). Rabbits kept for family assistance were found in Southern region (28 %), Central region (19 %) and Northern region (17 %) respectively. Rabbits were accepted for meat purposes in southern regions (42.66 %), central region (33 %) and northern regions (33 %). Traditional (24.57 %) and religious (2.28 %) myths about rabbit meat were also found in some community of the province. The study concluded that scope of rabbit as meat animal exists in the province and improvement in rabbit management could efficiently improve its production and utilization.

The University of Agriculture Peshawar has established an experimental rabbits unit and several studies are underway to demonstrate appropriate breeding, health and feeding management of this animal and utilize it as an alternate source of meat production and self employment for the youth. A PARC-ALP project has been launched at the Faculty costing Rs.4.80 million with main focus on meat production ability of rabbit under various production and management systems.

Based upon the data generated so far, a feasibility of the production system has been prepared and we recommend it as an entrepreneur for the youth of the province.

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Expected impact

1. A source of self employment for the youth with higher monetary returns
2. A source of alternate source of meat for the local population and export
3. A candidate for a new chain of restaurants with cheaper source of meat
4. A tool for food security of the nation

Personnel:

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Experimental rabbits at UA Peshawar



Feeding pattern



Cage system



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Cost and return estimates (Pak Rupees)

Equipment Cost:

1. Rabbit cages = 50,000 (Kacha)
2. Feeder = 10,000
3. Drinker = 10,000

Total Fixed Cost = 70,000

Running Cost:

1. Concentrates = 39 (bags) x 1200 (Rs) = 46,800
2. Fodder = 2750 x 10 = 27,500
3. Labour = 6,000
4. Misc. = 3,000

Total Cost = 83,300

Return on cost:

1. Total Cost (Variable+ 10% of fixed Cost) $83,300+7000 = 90,300$
2. Mortality = 5% Remaining Animal s= 475
3. Cost per Rabbit = $83,300/475 = 190/\text{Rabbit}$
4. Rabbit = 2.5 kg; Meat = 1.8 kg/ Rabbit
5. Total Meat = $475 \times 1.8 = 855 \text{ kg}$
6. Cost per kg of Rabbit = 105/ kg
7. Sale Price = Rs 250 /kg
8. Profit per kg meat = 145

Presumptions

1. Duration per batch production 90 days
2. Fattening 55 days
3. Gestation days 30 days
4. Number of batches per year 6
5. Prolificacy 5 per head
6. Pre-weaning survival 60%

Summary of profitability

1. Total Profit per batch of 500 rabbits= 1, 23,975
2. Profit per month = 41,325
3. **Profit per year = 4, 95,900**