

**1. Title : Supplying good quality concentrate feed to the farmer to Improve the animal productivity and socio-economic status**

**2. Category:** Animal Husbandry.

**3. Challenge:**

**Thirumathi. Mala Arunan**, w/o. Thiru. Arunan, Kananthankudi Keelaiyur, Orathanadu, Thanjavur District, Tamil Nadu started a cattle farm with 2 crossbred cows and presently she is maintaining 4 crossbred cows and 6 heifers. Total milk production is 35 litres per day and this milk is supplied to the cooperative society and local people. Animals are fed with green fodder, paddy straw and concentrate mixture. Concentrate feed is fed at the rate of 5-6 kg/day per animal. Availability of green fodder and good quality concentrate feed are the major challenges for the sustainable milk production.

**Thirumathi. Mala Arunan** has started poultry farm with 100 birds (country chicken). After attending training programme conducted by Instructional Livestock Farm Complex, Veterinary College and Research Institute, Orathanadu, Thanjavur District, Tamil Nadu the number of birds were increased. Availability of good quality concentrate feed separately for egg production and meat production is the major challenge. Breaking of egg shell during handling and transportation is another major problem.

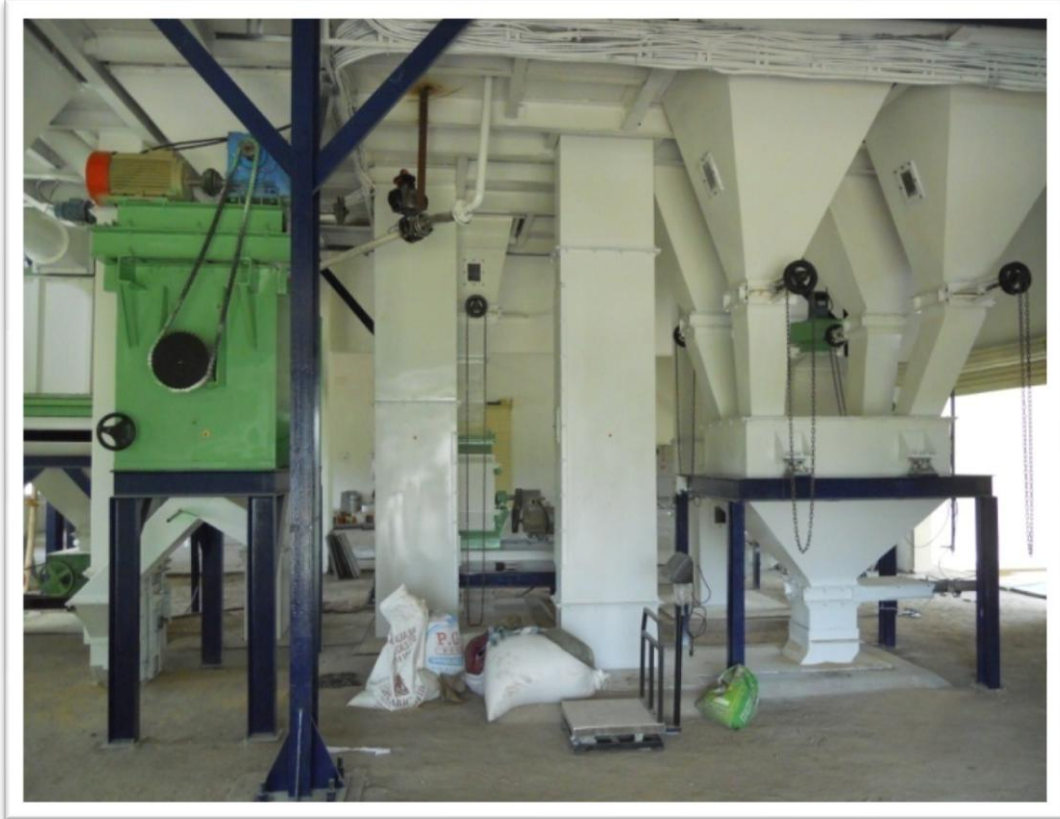
**4. Initiative (Activity taken up under RKVY) :**

Under the RKVY programme, a **Regional feed processing and demonstration unit** has been established at a cost of Rs. 184 lakhs at the Department of Animal Nutrition, Veterinary College and Research Institute, Tamil Nadu Veterinary and Animal Sciences University, Orathanadu, Thanjavur District, Tamil Nadu. This unit comprises of concentrate feed preparation unit and complete feed preparation unit. This feed processing unit has the facility to produce mash, pellet and crumbled feed for livestock and poultry. Through this programme good quality livestock and poultry feed are prepared using locally available feed ingredients (maize, soybean meal, gingelly oil cake, coconut oil cake, rice bran) and

supplied to the farmers of Cauvery delta region for sustainable livestock production. In addition training is provided to the farmers and entrepreneurs regarding feed preparation and feeding management of livestock and poultry.



**FEED PROCESSING UNIT**



**FEED PROCESSING EQUIPMENTS**



**FEED PROCESSING EQUIPMENTS - GRINDER**



**FEED PROCESSING EQUIPMENTS – MIXER**



**GRINDING OF FEED INGREDIENTS**



**PACKING OF COMPOUNDED FEED**



**SEALING OF BAGS**



**PACKED CONCENTRATE FEED**



**PREPARATION OF MINERAL MIXTURE**



**MINERAL MIXTURE PACKETS**



**COMPLETE FEED BLOCK UNIT - PULVERIZER**



**FEED BLOCK MAKING UNIT**

**5. Key result/ insight/ interesting fact:**

Separate feed for egg laying birds and growing birds are purchased from the feed processing unit, VCRI, Orathanadu and fed to the birds. The birds attained more body weight (1.2 kg in 4 months) and fetched better price (Rs. 250/bird). Egg laying capacity of the birds is improved and egg weight is also improved. In addition egg shell breakage is also reduced.

The total milk yield from 4 crossbred cows has increased from 28 litres to 35 litres per day due to the feeding of concentrate mixture purchased from the feed processing unit, VCRI, Orathanadu.





**FEED PURCHASED FROM FEED PROCESSING UNIT, DEPT. OF ANIMAL NUTRITION, VCRI, ORATHANADU**



**OLD SHED WHERE POULTRY REARING IS STARTED**



**NEW SHED ESTABLISHED FOR REARING BIRDS**



**FEEDING OF GROWER CHICKEN**



**FEEDING OF GROWER CHICKEN**



**LAYER BIRDS MAINTAINED BY THE FARMER**



**COWS MAINTAINED BY THE FARMER**



**SUCCESS STORY DOCUMENTATION**

## 6. Impact:

### 1. Economics of milk production:

**Economics of rearing 4 cows for 2 months (Feed purchased from private feed mill):**

Feed cost (5 kg/animal/day x 4 cows) Rs. 1180/70 kg bag) (17 bags x Rs. 1180)	Rs. 20,060
Income through sale of milk (28 litres x Rs.23.00 x 60 days)	Rs. 38,640
<b>Net profit</b>	<b>Rs. 18,580</b>

**Economics of rearing 4 cows for 2 months (Feed purchased from feed processing unit, VCRI, Orathanadu):**

Feed cost (5 kg/animal/day x 4 cows) Rs. 1190/50 kg bag) (24 bags x Rs. 1190)	Rs. 28,560
Income through sale of milk (35 litres x Rs.23.00 x 60 days)	Rs. 48,300
<b>Net profit</b>	<b>Rs. 19,740</b>

### 2. Economics of egg production:

**Economics of rearing 100 chicks (Feed purchased from private feed mill):**

Cost of chicks @Rs.40/chick x 100)	Rs. 4,000
Feed cost for 10 bags of 50kg @ Rs. 1350/50kg bag)	Rs. 13,500
Medicine cost	Rs. 300
Total expenditure	Rs. 17,800
Total income (90 x Rs.250)	Rs. 22,500
<b>Net profit</b>	<b>Rs. 4,700</b>

**Economics of rearing 100 chicks (Feed purchased from feed processing unit, VCRI, Orathanadu):**

Cost of chicks @Rs.40/chick)	Rs. 4,000
Feed cost for 10 Nos of 50kg bag @ Rs. 1200/50kg bag)	Rs. 12,000
Medicine cost	Rs. 300
Total expenditure	Rs. 16,300
Total income (90 x Rs.250)	Rs. 22,500
<b>Net profit</b>	<b>Rs. 6,200</b>

## **7. Lessons learned:**

- ❖ Mortality in poultry can be reduced by controlling disease and periodical vaccination.
- ❖ Separate feed should be fed for grower and for layer for attaining good growth and egg production.
- ❖ Feeding of shell grit is highly essential for layers to improve the egg size and shell thickness.
- ❖ In lactating cows feeding of concentrate is essential in addition to green fodder and straw to improve milk production and reproductive efficiency.

## **8. Contact information:**

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