

THE CURRICULUM

for the course of

Home Based Livestock Farming

(Comprising of 200 Hours)



**SOLVE AGRI & DAIRY INSTITUTE (SADI),
LAHORE - Pakistan**



Training Objectives:

The course is designed to impart knowledge and skills about the basic home based livestock farming to help trainees transform traditional rural livestock farming on modern and profitable lines. The course aims to enhance profitability of the existing and new small and medium scale livestock farming at household level.

The course covers the important aspects of livestock farming including large ruminants (cattle and buffaloes), small ruminants (sheep and goat), domestic poultry and feedlot fattening at village level.

Key Highlights:

Entry Qualification: Primary / middle

Course Duration: 2 Months

200 Hours

4 Hours per Day, 6 Day per Week or
5 Hours per Day, 5 Days per week

40 % theory and 60 % practical including field / farm visit, exercises,
demonstration and hands on practices

Language: Punjabi and Urdu

Course Outcome:

Upon successful completion of the course; trainees are expected to possess following skill- set:

- ☐ Identification of breeds and selection of suitable animals
- ☐ Fulfillment of basic housing requirements for animals
- ☐ Day to day H/H level farm management practices
- ☐ Plan and execute feeding management including fodder preservation through hay and silage
- ☐ Breeding management including heat observation and reporting to AIT
- ☐ Disease prevention and primary treatment / 1st Aid
- ☐ Identification of sick animals and reporting to veterinarian
- ☐ Record keeping



- ☐ Hygienic milking and milk handling & storage
- ☐ Understanding on dairy business, marketing and sale of milk
- ☐ Fattening on calves / feedlot fattening practices at village level
- ☐ Sheep and Goat farming focusing sale of sacrificial animals on Eid ul Azha
- ☐ Feeding, breeding and housing management of rural poultry
- ☐ Care and handling of new born
- ☐ Health precautions for animal handler and milker
- ☐ Awareness on zoonotic / tick born diseases

Upon successful completion of this course; trainees are expected to know:

- ☐ Livestock breeds characteristics
- ☐ Basic body parts of the animals and their functions
- ☐ Housing requirements and ways to fulfill them
- ☐ Nutritional value of available feedstuff
- ☐ Balanced feeding and concept of mixed rations
- ☐ Fodder planning for whole year
- ☐ Fodder production process and harvesting
- ☐ Fodder preservation through hay and silage
- ☐ Observation of heat and reporting to AI technician
- ☐ Basic animal diseases and their signs
- ☐ Handling procedures for sick animals and reporting to veterinarians
- ☐ Milk quality parameters and handling SoPs
- ☐ Basic of farm profitability and loss
- ☐ Different income generating activities related Livestock
- ☐ Animal welfare needs

Scheme of Studies

General Housing etc. (1st & 2nd Week)

Sr #	Details of Topics	Hours for Theory	Hours for Practical	Total Hours
1	Introduction to livestock farming, its role in rural and household economy	1	-	1
2	Objectives of Home Based Livestock Farming	1	-	1
3	Dairy farm entrepreneurship and small income generating activities like Ghee / Butter or Khoya	2	2	4
4	Introduction & identification of livestock breeds (cattle, buffalo, sheep, goat, poultry)	1	3	4
5	Introduction to body parts of animals & Introduction to Different systems of animal body and functions	2	3	5
6	Animal Handling and Restraining Method	1	3	4
7	Housing requirements and general farm management principles	2	3	5
8	Concept of animal welfare with provision of 5 freedoms	1	1	2
9	Identification of animals and basic methods of record keeping	1	3	4
10	Small holder Dairy Farm with milk sale business	1	1	2
11	Milk hygiene, its handling	2	3	5
12	Characteristics of model sheds/housing for cattle, buffalo, sheep and goat	2	4	6
13	Feedlot fattening at H/H level	2	5	7

Total: 50 Hours

Feed and Feeding (3rd & 4th Week)

14	Importance of balanced feed / ration, Nutritional needs of animals and options to fulfill them	2	4	6
15	Introduction to fodder, its importance, types and varieties	2	4	6
16	Fodder availability, Seasonal fodder availability in Pakistan & Storage Methods. Fodder Preservation Methods	2	4	6
17	Silage making, crop selection, harvesting, chopping, ensiling, storage and feeding	2	6	8
18	Hay making, crops selection, hay making process and	2	6	8
19	Use of wheat straw, its limitations and wheat straw enrichment program. Preparation of TMR & Urea Molases Block	2	4	6
20	Importance of free access to water, its economics and benefits	2	2	4
21	Balanced ration, its concept, choices, different formulas and preparation methods and limitations	2	6	8

Total : 50 Hours

Breeding, Care of Pregnant and Calf Rearing (5th Week)

22	Importance of Breeding, Common breeding practices, disadvantages and challenges	1	-	1
23	Modern breeding through artificial insemination, concept, advantages and economics	2	1	3
24	Heat detection methods and Best time for insemination	2	2	4
25	Selection of sire/semen, AI protocols and check-list for farmers	2	2	4
26	Care of pregnant animals up to calving	2	2	4



27	Calving process and immediate care of dam and newborn	1	2	3
28	Principles & methods of calf rearing and weaning & Post-weaning rearing of young animals	1	2	3
29	Care and management of heifers	1	2	3

Total: 25 Hours

Sheep and Goat Farming (6th Week)

30	Sheep and Goat Breeds in Pakistan and characteristics	2	-	2
31	Sheep and Goat farming practices / Raising / fattening sheep and goat	1	3	4
32	Sheep and Goat farming / fattening for Eid ul Azha	2	3	5
33	Feeding practices for Sheep and Goat farming	2	4	6
34	Main diseases of Sheep and Goat with preventive and primary curative measures (Indigestion, tympany, FMD, PPR, Anthrax, Enterotoxemia, Gid, Warble flies)	2	6	8

Total: 25 Hours

Animal Health, Preventive and Primary Curative Measures (7th Week)

35	Introduction to animal health	1	-	1
36	Health characteristics, measuring TPR, identifying sick animals	1	2	3
37	Handling sick animals, basic first aid and reporting to	1	2	3
38	Major diseases, their signs and symptoms	2	-	2
39	Preventive and primary curative measures for FMD, HS, BQ, Diarrhea, Milk Fever, Tympany, Indigestion, Uteri prolapse	2	3	5
40	Mastitis, its causes, economic losses and methods to prevent	1	2	3
41	Vaccination, importance, Sops, schedules and cost benefit	2	2	4
42	Parasites and their impact on animal health and production/ Deworming schedule, Deworming Techniques	1	2	3
43	Cleaning and Sanitation Measures at farm and Household farming	-	1	1

Total: 25 Hours

Rural Poultry Farming (8th Week)

44	Rural Poultry production and its importance	1	-	1
45	Rural poultry breeds selection and farming SoPs	1	3	4
46	Feeding of rural poultry for their egg laying & meat	2	3	5
47	Common poultry disease, preventive (vaccination) and curative / preventive measures like Rani khet, gamboro, CRD etc.	2	3	5
48	Preparation of Poultry boxes, sheds	1	3	4
49	Use of Incubators as small income generating activity	2	2	4
50	Health of Animal Handlers & zoonotic diseases	1	-	1
51	Village level income generating activities (refresher of entrepreneurial activities)	1	-	1

Total: 25 Hours

List of Tools and Equipment

(For a class of 20 students)

Sr. No	Tool / Equipment	Quantity
1	Thermometers	5
2	Syringes	10
3	Vaccinators / Vaccine Syringes	4
4	Drenching Guns / Deworming Syringe	1
5	Needles (16, 18 gauge)	10
6	Semen Straws (Empty)	10
7	Ear Tag machines	01
8	Ear tags -plastic	20
9	Plastic sheet for silage*	As per need
10	Animals*	As per need
11	Feed ingredients samples*	As per need
12	Milk and milk utensil*	As per need
13	Demonstration Farm*	01
14	Water trough (local made)*	01
15	Chairs	22
16	Table	01
17	White-board with stand	01
18	White and Colored Charts	As per need
19	Permanent and Erasable markers	02+02
20	Water Cooler	01
23	Glass for water	04

* Tools should be arranged for as and when required during the course in respective lessons. (Not mandatory to physically remain present throughout course).

Post Training Benefits

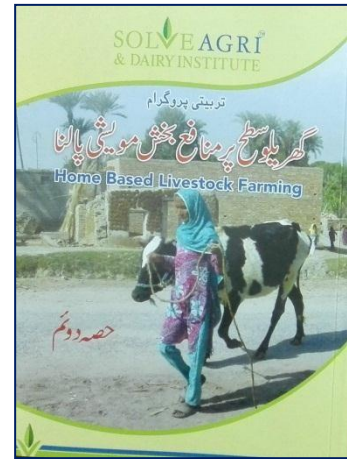
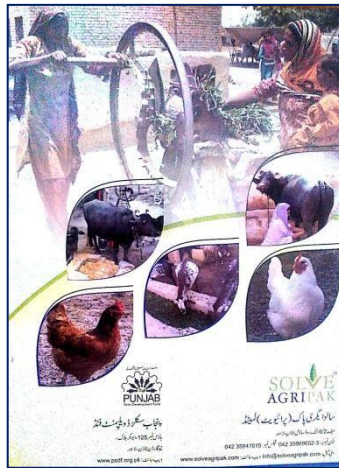
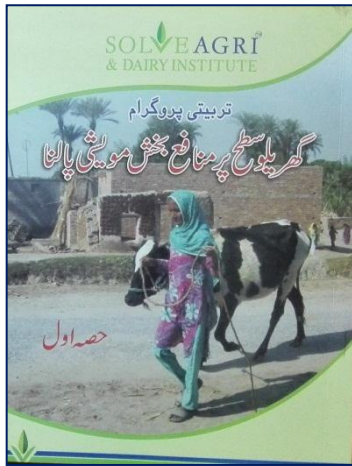
After successful completion of this training program, trainees are able to improve their own existing farm, start for a new livestock farm and/or provide services / guidance to other neighboring farms.

Trainers Qualification

Doctor of Veterinary Medicine (DVM) with minimum 3-6 months of experience along with mandatory participation in Training of Trainers (TOT) for proven inter-personal communication and presentation skills.

Recommended Books / Manuals

Manuals / modules (Home Based Livestock Farming Part 1 and 2), prepared by Solve Agri & Dairy Institute of Solve Agri Pak (Private) Limited, Lahore with collaboration of Punjab Skill Development Funds (PSDF).



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