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Government of India
Ministry of Rural Development
Department of Rural Development
(Rural Livelihoods Division)

7th floor, NDCC Building - II,
Jai Singh Road, New Delhi - 1.
Dated: 4th November 2020.

To

The Chief Executive Officer/ State Mission Directors,
All States/Union Territories.

Subject: -Guidelines for promotion of backyard goat rearing by SHG women under DAY-NRLM.

Madam / Sir,

I have been directed to circulate herewith the Guidelines for promotion of backyard goat rearing by SHG women under DAY-NRLM duly approved by competent authority. You are requested to initiate goat based intervention in your state based on the attached guideline.

Enclose :-As above.

Yours sincerely,



(H. R. Meena)

Deputy Secretary to Govt. of India

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Promotion of backyard goat rearing by the SHG members

Introduction:

Goats are known as 'poor man's cow'. Goats contribute to the livelihoods of millions of rural poor. Small and marginal farmers as well as landless, particularly women, are increasingly relying on goat keeping for their socio-economic upliftment. Goat is well integrated into the farming systems of the small and marginal farmers due to low capital requirement, secure handling and ability to adapt in versatile environmental conditions. For the small and marginal farmers, including landless agricultural labourers, the goat is an ideal animal species for farming, particularly in rainfed regions where crop production is uncertain, and rearing large ruminants is difficult because of acute feed and fodder scarcity. Goat rearing has distinct economic and managerial advantages over other livestock species because of its less initial investment requirement, low input requirement, higher prolificacy, early sexual maturity and comfortable in marketing. Goats can efficiently survive on available shrubs and trees in an unfavourable environment. Goat milk and its meat are excellent food serves to both vegetarian (milk) as well as non-vegetarians (Chevon). The nutritive values have been shown below:

Constituent of goat milk¹: Goat milk is found to be more nutritive than cow milk. A comparative analysis has been shown below:

Contents	Goat Milk	Cow Milk
Calorie	76	69
Protein gm	3.3	3.3
Fat gm	4.1	3.7
Lactose (g)	3.8	4.8
Calcium milligram per 8 ounce	330	275-300
Lactalbumin (g)	0.4	0.4
Casein (g)	2.5	2.8

The fat molecules of goat milk are of lower size which makes it easily digestible. It is naturally homogenized. One of the most common allergies in children is a dairy-allergy and it has a lot to do with a particular protein in the milk called Alpha s1 Casein. The levels of Alpha s1 Casein are about 89% less in goat milk. – which is one of the main reasons why people who have dairy sensitivities may get away with and consume goats milk as an alternative. Our bodies produce enzymes to help break down our foods, especially sugar. Goat milk contains less lactose (milk sugar) than cow milk, which makes it easier on our stomachs simply because we need less of a particular type of enzyme to break down the lactose.

Constituent of Chevon (Goat meat):

Meat type	Calories	Fat	Saturated Fat	Cholesterol	Protein
Goat	143	3.03	0.93	75	27.1

The content of vitamin B12, Calcium and protein are higher in Goat meat.

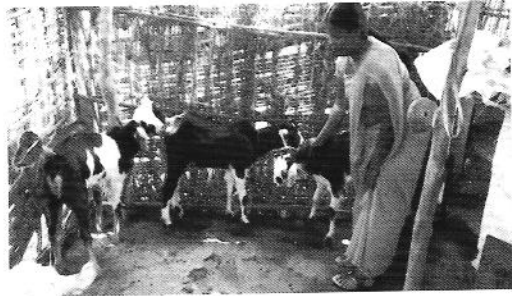
¹ <https://www.healthline.com/health/benefits-of-goat-milk#Goats-milk-vs.-cows-milk>

Region-wise distribution of goat breeds in India:

- **North Temperate Region:** This includes Jammu & Kashmir, hilly region of Uttarakhand and Uttar Pradesh. The breeds available are *Chegu*, *Changthangi* and *Gaddi*. *Changthangi* is known for the finest quality of wool famous by the name of Pashmina.
- **North-west and semi-arid region:** It comprises of Rajasthan, Haryana, Punjab, plains of Uttar Pradesh, Madhya Pradesh and Chhattisgarh. The breeds available in this region are *Sirohi*, *Jhakrana*, *Beetal*, *Barbari*, *Jamunapari*, *Surti*, *Zalawadi*, *Marwari*, and *Kutchi*.
- **Southern Peninsular region:** States include Andhra Pradesh, Karnataka, Tamil Nadu, Kerala, Maharashtra and other central parts of India. Goat breeds of this region are *Osmanabadi*, *Sangamneri*, *Malabari*, *Kannaiadu* and *Sikkim* etc.
- **Eastern and North Eastern region:** This area comprises of Bihar, Jharkhand, West Bengal, Sikkim and north eastern States. The breeds prevalent here are *Black Bengal*, *Assam hills*, and *Gunjam* etc.

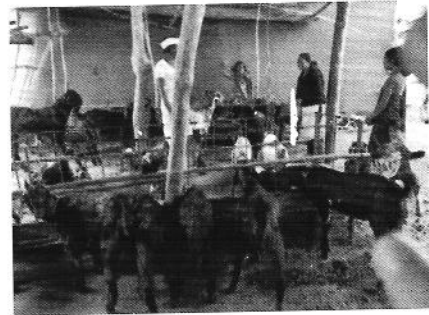
Different Goat rearing systems:

1. **Semi-intensive production:** This system is practiced to some degree in most of the situations, but the nature and extent of integration depend on the type of crops grown and their suitability to goats. The advantages of this system increase fertility of land via the return of dung and urine, control of waste herbage



growth, reduced fertilizer usage, easier crop management and better yield.

2. **Extensive production:** This involves the low carrying capacity in situations where land is marginal and is plentiful. It is characterized by low rainfall and various browse plants. The system is used by nomadic people, usually in shallow rainfall areas or during winter months, when crop residues are available.
3. **Intensive production:** The goats are fed in confinement with limited access to land. It involves high labour and cash inputs. Cultivated grasses and agro-industrial by-products are fed in situ. This system also has the advantage of allowing control over the animals.
4. **Tethering:** This is common in the sub-humid and humid zones, where probably because of intensive cropping, it is a convenient means of rearing goats from the



standpoint of control, minimum labour input and utilization of feed in situ. It is thus a sedentary system. A variation of this method is combining tethering with grazing up to 5 goats at a time, led by ropes held by women.

Key challenges in household goat rearing:

All the above practices are prevalent in different parts of the country. The following are the key challenges before promotion of goat rearing based livelihoods at household level for SHG women in rural India:

Kid mortality: This is one of the major concern. High mortality of kids reduces the rate of increase in herd size, low expansion leading to low income. The mortality rates for small, medium and large categories of goat keeping were 32.8, 32.1 and 15.8% in kids (reference 6)

Quality kid availability: In rural areas people opt for locally available kids compromising with the quality due to lack of knowledge on quality parameters, availability of good quality, locally adopted breeds and healthy kids.

Quality of Buck: The penetration of Artificial Insemination in goat in rural areas is limited, thus farmers depend on the breeding buck. Knowledge about quality parameters of a good quality buck, its availability and free ranging practices reduce the control of the rearers over breed improvement.

Supplementary feed: For proper growth and quality of meat, feed supplement even in free ranging system is equally important. Goat rearers lack knowledge on requirement of feed supplement, even if they know, the availability is another challenge.

Health Management: Lack of knowledge and awareness on goat health and its management practices come on the way to demand or access to facilities like vaccination, de-worming, castration, de-budding. Besides, vet care facilities both prophylactic and curative, access to vet-clinic, vet-practitioner are other challenges.

Instant health care: There is severe shortage of qualified vet-practitioner, vet-medicine and extension services in rural areas.

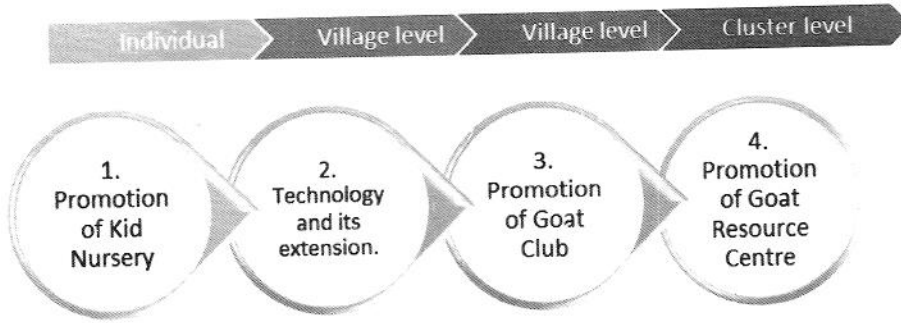
General management: Access to quality goat shed, awareness and maintenance of hygiene are other challenges leading to low productivity, loss of assets and income.

Marketing: Goat marketing in most of the rural areas is a great concern. Price of goat is still not fixed on the basis of live weight, bargaining with the traders many a times costs heavily to the rearers.

Strategy under DAY-NRLM for Goat Intervention:

The broader strategy consists of the following intervention:

1. Promotion of kid-nursery entrepreneur
2. Promotion of improved rearing practices through entrepreneurs.
3. Promotion of village level Producer Group (Goat Club / Pashu Pathshala)
4. Promotion of Producers Enterprise (Goat Resource Centre) at a larger geography



Promotion of Kid nursery entrepreneur:

Selection of kid-nursery entrepreneur: Preferably *Pashu Sakhi* or any individual related to SHG willing to take up the activity and having received any formal livestock training may be promoted to initiate kid nursery.

Training and capacity building: The training and capacity building for the kid nursery can be done through:

- National Resource Persons (NRPs) / State Resource Person (SRPs)
- In convergence with Department of Animal Husbandry
- Hand holding can be done by CRPs who may be trained by the Master CRPs/PRPs/ entrepreneurs of some pioneer States like Jharkhand, Maharashtra where they have been practicing it for quite some times.
- Two ICAR institutes (a) Central Goat Research Institute (CGRI), Mathura (UP) and (b) National Research Center on Meat, Hyderabad (Telangana) can also be roped in for training, capacity building and bring in new technologies.
- **Incubation supports:** The incubation support after technical training is extremely important to promote the kid-nursery entrepreneurs. This can be provided by the entrepreneurs or *Pashu sakhis* from pioneer States like Jharkhand, Maharashtra, Rajasthan and Maharashtra who are experienced in kid nursery.
- **Economics:** The economics of rearing 10 kids in nursery popularly referred as “*Memna nursery*” is as follows:

Particulars	Kids - (2 to 3 months' old)		
	Unit cost	No of units	Cost
A. Fixed cost			
A1. Cost of kids	3500	10	35000
A2. Transport	100	10	1000
A3. Feeding manger, Water turf	250	2	500
A4. Housing (Thatched roof with ventilation)	1000	1	1000
Total A			37500
B. Recurring cost			
B1. Feeding cost of kids @ 0.3 kg per day at 24 Rs/Kg - concentrate for 120 days in a year	24	360	8640

Particulars	Kids - (2 to 3 months' old)		
	Unit cost	No of units	Cost
B4. Health care cost	100	10	1000
B5. Grazing charges@Rs 100 per month per kids or fodder cost	100	10	1000
B6. Minerals and supplements	50	10	500
B7. Insurance	200	10	2000
B9. Consumables /Repair & maintenance	500	1	500
Total B			13,640
C. Investment required			51140
D. Receipts			
D1. Sale of 4 Month old goats	7,500	10	75,000
D3. Sale of manure	20	600	12000
Gross Receipts			87000
Net profit in 4 Months			35860
Monthly income			8965

Source: Maharashtra SRLM

- **Funding sources:** The source of funding for the setting up of kid nursery can be (a) own contribution, (b) CIF loan (c) Bank linkages and (d) Convergence through Animal husbandry scheme of Sub-mission on goat and sheep development/entrepreneurship (e) The construction of shed for kid- nursery can very well be done in convergence with MGNREGA.

Technology and its extension:

Improved goat rearing practices include improved Goat-shed, Feed and feeding management, Breed and breeding management, care for new-born kids, castration of male kid, preventive health care and access to vet-healthcare facilities. The details on improved rearing practices has been presented in **Annexure-II**.

For extension services two models may be thought of, (a) through Pashu Sakhi in villages where Pashu Sakhi is already active and has not become kid nursery entrepreneur, (b) through Kid nursery entrepreneurs tied up with the rearers who have purchased kids from her. Following are the topics for extension services:

<ul style="list-style-type: none"> ○ Awareness and cattle census ○ Provide input in good practices of goat rearing, keep healthy goat and buck and remove unhealthy one. ○ Promoting green fodder ○ Promoting mineral salts (animal licking) ○ Goat yard with all facilities ○ Promote right Feed and fodder practices ○ Method of feeding pure water(Using Water Tub) ○ Timely Weight check up to get the weight 	<ul style="list-style-type: none"> ○ Protect from worms in the body ○ Timely Cutting of Hooves of cattle ○ Use right way of Milking ○ Deworming of goat – twice in a year(before rainy and after rainy season) ○ Shaving leg side hair ○ Timely Vaccination of goat. ○ Insurance Service ○ Breeding Buck service ○ Provide Goat Concentrate feed ○ Preserve and protect them from weather
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gain or loss	○ Protect from cold
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Promotion of Goat Club:

At village level, all the goat rearers will be organized into an informal group (Producers Group or a Pashu Pathshala) to be named as Goat Club. A goat club comprises of minimum of 8-10 goat rearers with minimum of 50 goats. The members of goat club should mandatorily be SHG members. These individual goat clubs conglomerate into village level goat club. The goat clubs are an informal group for training, cross-learning, sharing of experiences triggered by pashu sakhi. These goat clubs would be meeting once in a month with Bakri Palak Pathshala which would be organised by Pashu Sakhi. During the meeting and pathshala the information related to deworming, vaccination, management, new interventions, veterinary camp etc. would be discussed and reports will be collected on progress.

All the financial transaction in the village will be done through SHGs and VO only. The goat club secretary and president will be involved in VO meeting to report the goat club and pashu sakhi performance.

Promotion of Goat Resource Centre (GRC):

In a later stage, when goat clubs are well established, an aggregation of goat club around a formal FPO (Goat Resource Centre or GRC) may be thought of at cluster or group of adjoining clusters level. The following will be the activities of a GRC:

- Training of small ruminant farmers
- Supply of small ruminants' rearing Input (Feed, medicine, vaccine etc.)
- High end vet-care services
- Collective marketing

The details of promotion, institution building, capacity building, financial sustainability etc of GRC will be circulated in separate guidelines.

Income potential at the household level:

With a herd size of 10 goats (9+1) and in a cycle of 24 months, it has been found that the household can earn good amount from goat rearing. The detailed calculation is annexed as

Annexure-I.

Convergence opportunities:

There is ample scope for convergence with the Department of Animal Husbandry for the animal vaccination, vet-medicine, subsidies for kids, animal feeds and support of vet-doctors. Under the Individual Beneficiary Scheme (IBS) of MGNREGA, goat shed, and under common livelihood assets of MGNREGA, the building for GRC can be constructed. Besides, local KVK may be roped in for the training of goat rearers, kid nursery entrepreneurs and Pashu Sakhi. RSETI may be utilized for training of Pashu Mitra (entrepreneurs) / kid-nursery entrepreneurs through recently approved training courses.

Role of SHG:

Financial transaction will be done through SHGs and VO in village to get CIF. Even the loan required by SHG members for small ruminant based intervention would be channel zed through VO through SHG.

Role of VO livelihood sub-committee:

The goat club secretary and president will be invited in VO meeting to report on the goat club and performance of Pashu Sakhi / kid-nursery entrepreneurs. In case of promotion of GRC at a later stage, VO may take lead to take membership fees of GRC to be deposited to GRC.

Insurance of Goat:

SRLM will facilitate goat insurance scheme of general insurance companies / cattle insurance companies with the goat rearers. Pashu Sakhi / kid-nursery entrepreneurs would help the goat rearers in paper works like filling up of insurance form for the goat rearers. The GRC / Goat Club / VO / CLF whatever the case may be, will do the physical verification like health status of goat. It would calculate the Premium, then after getting the premium for insurance Pashu Sakhi will do tagging of animal.