

Modern Trends In Fodder Production

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Trends are always

- Based on NEEDS

Current Status Livestock n Fodder availability

- ✘ The population of livestock is approximately 163.0 millions per heads according to Economic Survey of Pakistan.
- ✘ It is increasing @ 4.2% in every year and requirement of feed also increases,
- ✘ The major problem in Pakistan ,the shortage of fodder'
- ✘ About 2% fodder production decreases in every year,
- ✘ One season is winter and other is summer .

2

- ✘ Now a days, grown fodder crop is 10.3% and total crop area is 22.6 million hectares.
- ✘ In Punjab, 82.56% area is shared.
- ✘ 2.31 million is area under fodder crops and 51.92 million tons fodder production per year;
- ✘ Average production of fodder is 22.5 t ha⁻¹.
- ✘ The average production of fodder is too low (15-30%)

3

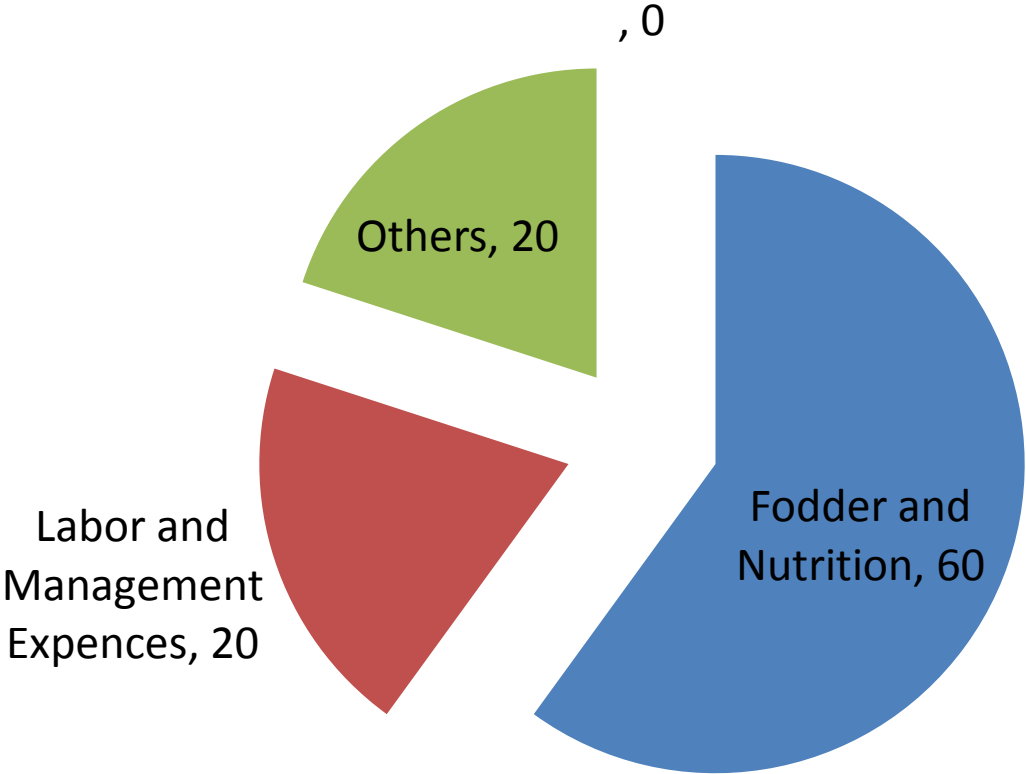
CONTRIBUTION OF DIFFERENT SOURCES TO FEED LIVESTOCK IN PAKISTAN.

Sources	Contribution (%)
Fodder and crop residues	51
Forage/grazing	38
Cereal by-products	06
Post harvest grazing	03
Oilcakes, meals, animal protein	02

Basis of of dairy farming in Pakistan

- Ambition
- Landless
- Prestige
- Financial security
- Subsistence land holders
- Business

MONTHLY CASH FLOW FOR A LIVESTOCK FARM



ISSUES/Needs of the Livestock farmers

- Investment and cash flow required is increasing while revenue from milk is on decline
- Permanent quality Fodder is not available throughout the year due to seasonal fluctuations
- Winter fodders have higher CP but less energy while Summer fodders have less CP but more energy

2

- No concept of Food Security for animals therefore farmer has to pay more for lower quality fodder during period of short supply thus making his business non feasible
- Research on fodder production is unsatisfactory therefore dependence on imported fodder seed is increasing
- Machinery for fodder preservation is costly as locally made machinery is not available

Way forward

- The only hope for the livestock farmer is to be in business is to ensure availability of quality fodder throughout the year at his door step as FODDER is the only source of cheap nutrition which may help ensure his dairy business SUSTAINABLE and ECONONMICALLY VIABLE

What is Good Fodder?

(PALATABLE, NUTRITIOUS, DIGESTIBLE & PRESERVABLE)

1. Fodder according to the animal's liking, that it consumes happily.
2. There should be a reasonable amount of dry matter in the fodder.
3. There must be an appropriate amount of raw proteins to meet the requirements of the body.
4. There should be enough digestible energy in the fodder so that the animals' digestive system remains healthy.
5. The fodder should be completely digestible.
6. It must have the quality to be preserved so that the farmer knows how much of the nutritional requirements of his animals are being fulfilled

What is Good Fodder?

- Dairy farmers should choose the best type of fodder for better growth of their animals.
- The growth and production of animals depends on the fodder they eat.
- Only the best fodder can guarantee their growth and maximum production.

Modern Trends In Fodder Production

- Selection of fodder with higher yield/acre
- Selection of varieties with higher nutritional value
- Preference of multi cuts and perennial fodders
- Preference of fodders which can be preserved easily ensuring food security for livestock

2

- Fast Growing fodder Production Techniques
- Intercropping with friendly fodder crops increasing nutritional value of the harvested material
- Farm Mechanization helping to speed up fodder harvesting and preservations

Strategy of fodder planning /Type of SOIL

- Corn on best land available
- Alfalfa -do-
- Sada Bahar Marginal land
- Rhodes Grass Marginal & sub marginal land
- Miscellaneous Sub Marginal land
- Atriplex Saline land with saline water

THE JOURNEY OF 65 YEARS



Started our journey of trends from
here



HIT & TRIALS



Atriplex Grazing



Indigenous storage



Moving forward



How to value add wheat straw



CUT & CARRY



CUT & CARRY PROCESSING

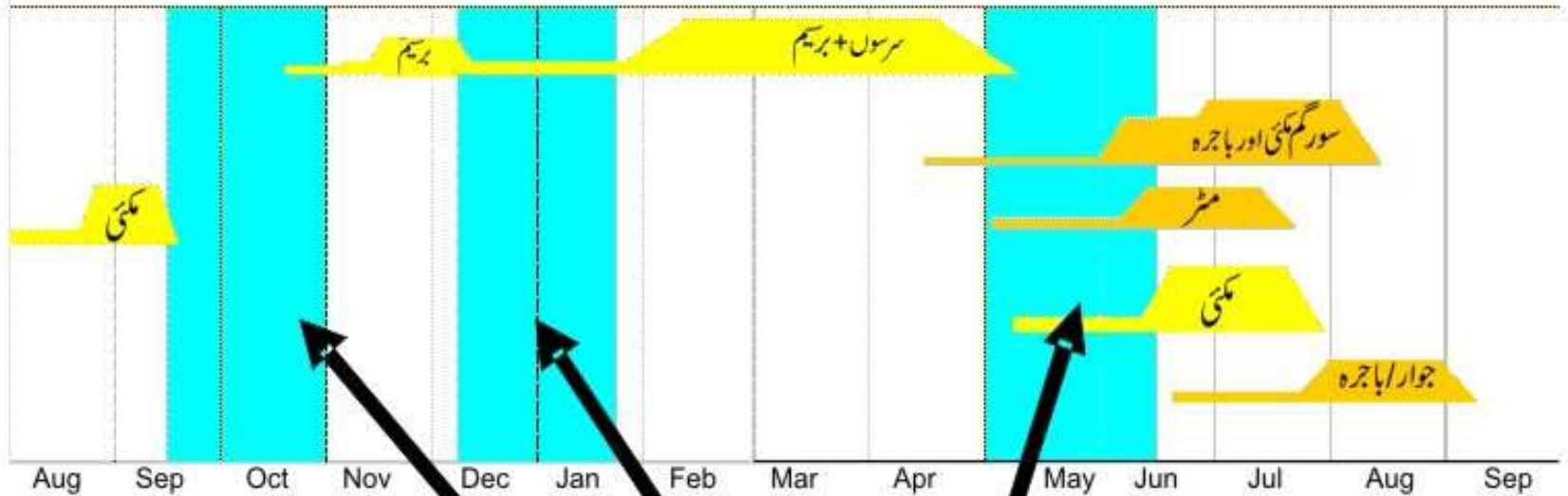


GREEN FODDER IS BEST



پنجاب میں سبز چارہ جات کی پیداوار

پنجاب میں روایتی طریقوں سے چارہ جات کی پیداوار



سبز چارہ جات کی کمی کے ماہ



Mature low quality fodder



Speed Breaker



Trends towards fodder selection

<i>Name of the fodder</i>	<i>Average per acre yield(Ton/Acre)</i>	<i>Target per acre yield(Ton/Acre)</i>
Maize	21	28
Sorghum hybrid	50	70
Mott grass 4 cut	50	75
Berseem 4 cut	36	48
Oats 2 cut	24	30
Lucerne 9 cut	30	60
Millet	18	28

Important Factors that Increase per Acre Production of fodder

- 1. Seeds which produce high yield
- 2. Timely cultivation according to schedule
- 3. Timely use of balanced fertilizers and water
- 4. Timely use of insecticides
- 5. Timely harvesting and preservation

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Trends are always **NEED BASED**



EFFECT OF INTERCROPPING ON PRODUCTION OF FODDERS

Sowing Ratio Alfalfa :Rhodes	Means					
	Plant Population (Number of Plant / 2m row)		Plant height (cm)		Number of leaves per plant	
	1 st cut	2 nd cut	1 st cut	2 nd cut	1 st cut	2 nd cut
100 : 0	128.68b	238.9a	29.03d	32.34d	67.27a	30.55ab
0 : 100	161.15a	176.95b	85.08a	87.25a	25.62c	20.80b
50 : 50	139.33b	166.15b	52.88c	57.75b	34.92bc	36.45a
75 : 25	173.53a	188.25b	44.01c	47.68b	46.8b	25.62ab
25 : 75	129.8b	193.58a	69.05b	77.36a	30.55c	36.85a

Fodder Crops Yield at Farmer Field VS Research Station

S.No	Crop	Farmer field (t/ha)	Research Station (t/ha)	Yield Gap (t/ha)
1	Berseem	45	90	45
2	Lucerne	40	90	50
3	Oats	35	70	35
4	Maize	35	60	25
5	Jowar	40	60	20
6	Bajra	35	45	15
7	Sadabahar	45	65	20
8	Sudangrass	30	50	20
9	Guara	20	40	20
10	Cowpea	15	25	10
Average		34	60	26



Berseem in Mott Grass

Moving from Thresher to harvester



HAY & SILAGE

- Crops suitable for hay & silage
- All thin stem crops for hay
- All thick stem crops for silage
- All thick and thin stems crops having same mode of maturing are also good for silage

Harvested Rhodes Grass



Rhodes grass baler







بنکر کی تعمیر



• ساڑھے بارہ ایکڑ زمین کے لئے

• 40 سے 50 جانوروں کے لئے چھ مہینے کا سائیلج

سائلیج کے فروغ کے لئے بورڈ کا منصوبہ

سائلیج کے فروغ کے لئے بورڈ نے ایک شاندار منصوبہ تشکیل دیا ہے جس کے دو حصے ہیں



Grasses For Pasture



A wide-angle photograph of a lush green field of rye grass. The grass is tall and dense, filling most of the frame. In the background, a line of trees and a wooden fence are visible under a clear sky. To the right, a portion of a cornfield is visible. The text "RYE GRASS" is overlaid in the center of the image.

RYE GRASS

HYDROPONIC FODDER PRODUCTION



Sprouting



Active growth



Ready to serve



2



Being served



FERTIGATION WITH SOLAR



Sky is my Limit

