



Future of Dairy Cattle in Pakistan

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GDP CONTRIBUTION	9.4 %
AGRICULTURE VALUE ADDED	37.5 %
EXPORT VALUE (Rs)	53.0 Bill
DEPENDENT POPULATION	35 Mill.
SECURITY AGAINST CROP FAILURE	
RURAL SOCIAL SECURITY	

ANIMAL PRODUCTION SYSTEM

CATTLE AND BUFFALOES

RURAL SUBSISTENCE SMALL HOLDINGS

RURAL MARKET ORIENTED SMALL HOLDINGS

RURAL COMMERCIAL FARMING

PERI-URBAN COMMERCIAL DAIRYING

SHEEP AND GOATS

NOMADIC

TRANSHUMANT

SEDENTARY / HOUSEHOLD

POULTRY

TRADITIONAL RURAL POULTRY

COMMERCIAL POULTRY

Constraints - Livestock Sector

- Lack of sustainable and consistent Policy
- Inadequate Research Establishments, Facilities and Technology Transfer
- Conventional Breeding and Management Practices
- Scattered Livestock Population with small holdings
- Lack of Mechanization and Insufficient Commercialization
- Poor Response of Farmers
- Malnutrition and Higher Incidence of Diseases

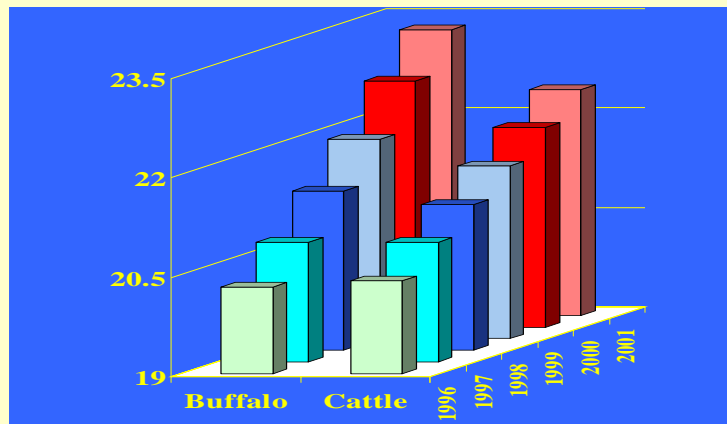
Importance of Cattle

- Mainly kept for draft purpose
- Supplement buffalo lactation cycle
- Rich source of quality beef and milk
- Require less inputs – High FCR
- More adaptable to local environment conditions as compared to buffalo

Present Position of Cattle Farming in Pakistan

- | | |
|-------------------------|--------------------|
| ➤ Cattle population | > 20 million heads |
| ➤ Breed classification | > 70% nondescript |
| ➤ Nutritional level | > 30% deficient |
| ➤ Milk production level | < 1000 lit./lact. |
| ➤ Dairy potential | > 3,000 lit./lact. |

Population Trends

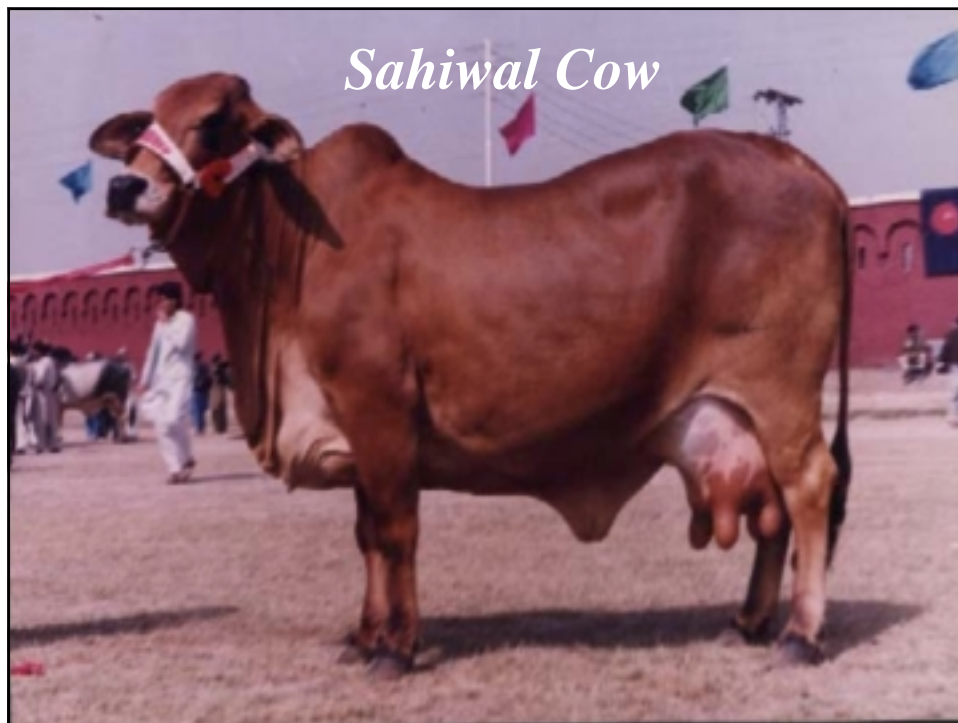


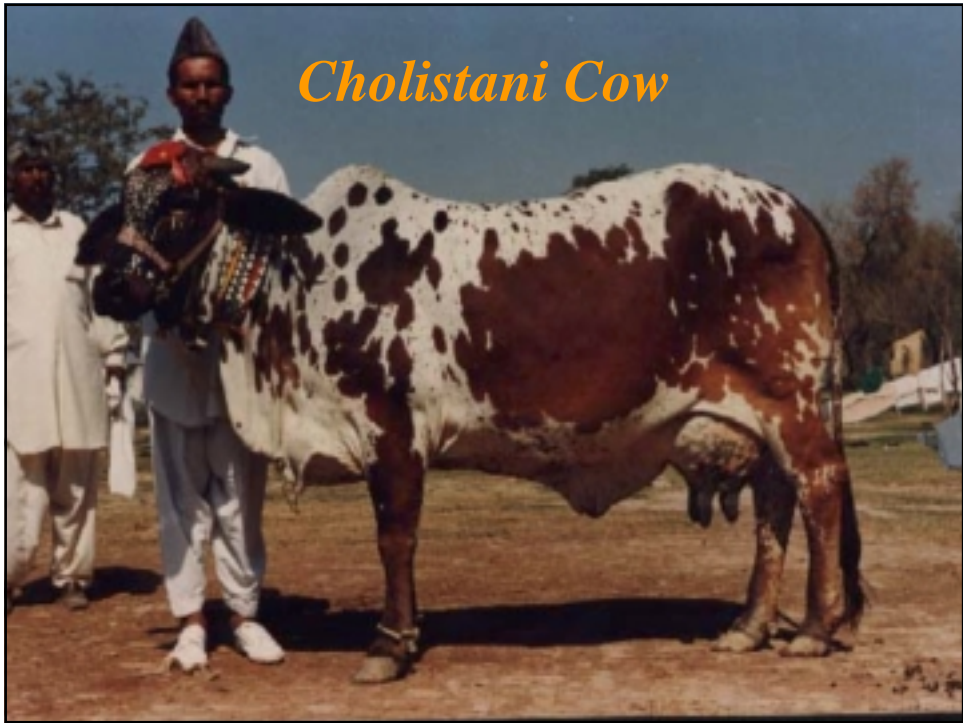
Characteristics of Dairying in Pakistan

- Scattered population
- Small herd size
- Buffalo dominance
- Malnutrition
- Inadequate disease control and AI coverage
- Poor sanitary conditions
- Unprocessed raw milk

Dairy Breeds

- **Sahiwal**
- **Red Sindhi**
- **Cholistani**





Dual Purpose

- **Tharparkar or Thari Breed**

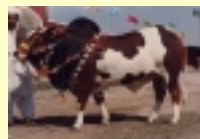


Comparative Production Performance of Indigenous Cattle

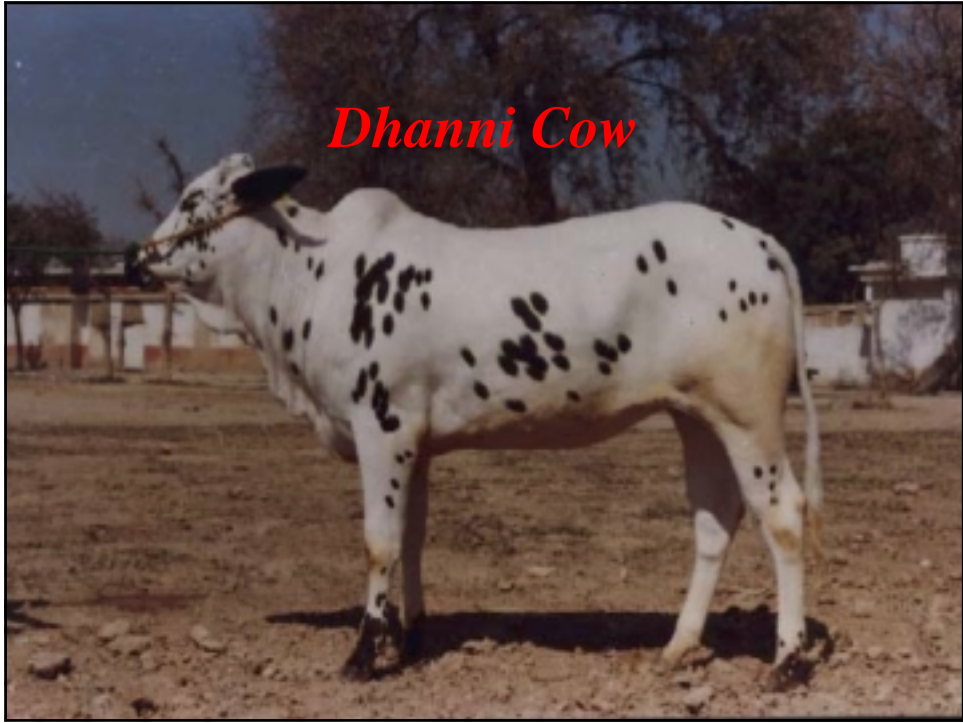
Breed	Adult Live Weight (kg)		305-d Milk Yield (Lit.)	Days in Milk	Days Dry	Days Open
	M	F				
Red Sindhi	552	318	1800	251	191	442
Sahiwal	660	376	2200	291	180	471
Cholistani	660	376	1800	290	290	470
Tharparkar	504	285	1200	237	315	552

Draught Type

- **Bhagnari**
- **Dajal**
- **Dhanni**
- **Kankrej**
- **Lohani**
- **Rojhan**



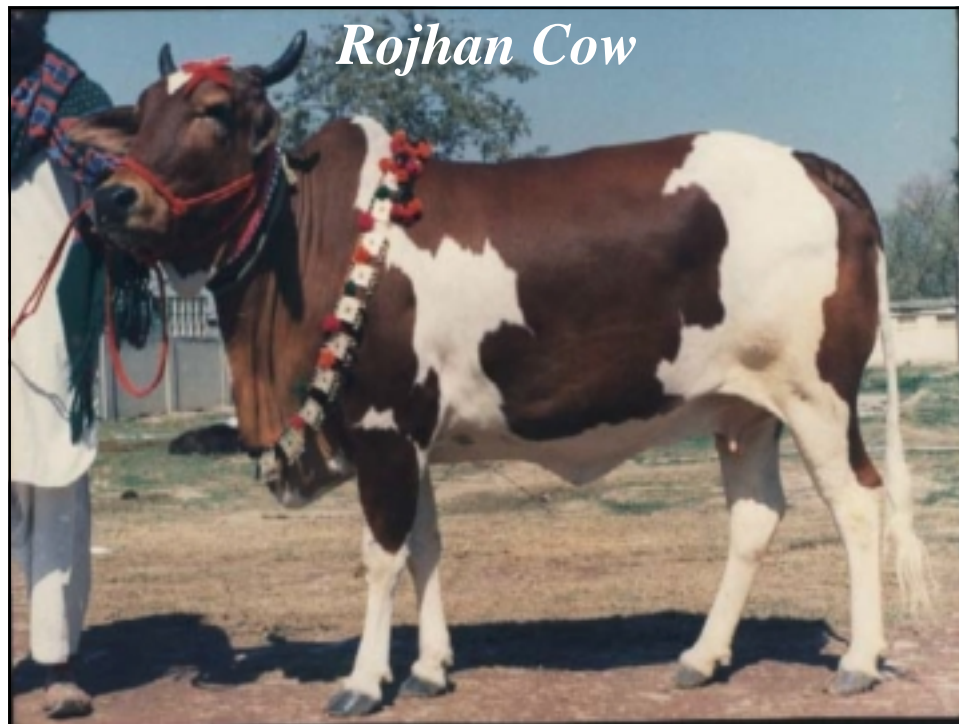




Dhanni Cow



Lohani Cow



Cattle as Dairy Animals - Issues

- **Low productivity**
- **Malnutrition**
- **Indiscriminate breeding**
- **Crossbreeding**

Present Sources of Cattle Breeding

- Farms in public sector
- Military dairy farms
- Semen production units
- Herds of immigrant/exotic dairy cattle
- Private farms

Future of Dairy Cattle

Scenario-I

- Extinction of purebred native dairy breeds
- Replacement with buffalo/graded cattle

Scenario-II

- Conservation, utilization and improvement in native dairy breeds

Proposed Strategy for Conservation and Utilization of Dairy Breeds

- Production environments assessment, Record keeping, and Selection of elite cows.
- *In-vitro* production of progeny tested germplasm, its use and preservation in Gene Banks.
- Open Nucleus Breeding Scheme (ONBS) in the public sector cattle farms.
- Alternate and inexpensive feed resources.
- Improved milk collection, value addition and marketing.
- Cooperative Dairy Farming and credit facilities.
- Integrated National Coordinated Programmes on cattle breeding, nutrition and health.

Priorities of Livestock Sector

- Genetic improvement of animals
- Improvement of feed resources & technologies
- Feeding strategies and indigenous feed stuffs in range, peri-urban dairying, market oriented small-holders livestock production systems with special emphasis on mineral supplementation and improved forage conservation and utilization for milk and meat production
- Epidemiology, diagnosis and control of emerging and re-emerging infections of animals

Growth Requirements – Livestock Sector

- Development of Sustainable Advanced/Hi-Tech Research Programs on:
 - Genetic Improvement of Livestock
 - Animal Nutrition
 - Epidemiology and Disease Management
- Proper Dissemination of Research Findings to the end users
- Public/Private Sector Joint Ventures for Production and Commercialization of Dairy/Meat Products

