Animal Husbandry

Punjab Revenue Academy

Board of Revenue Punjab

Animal Husbandry?

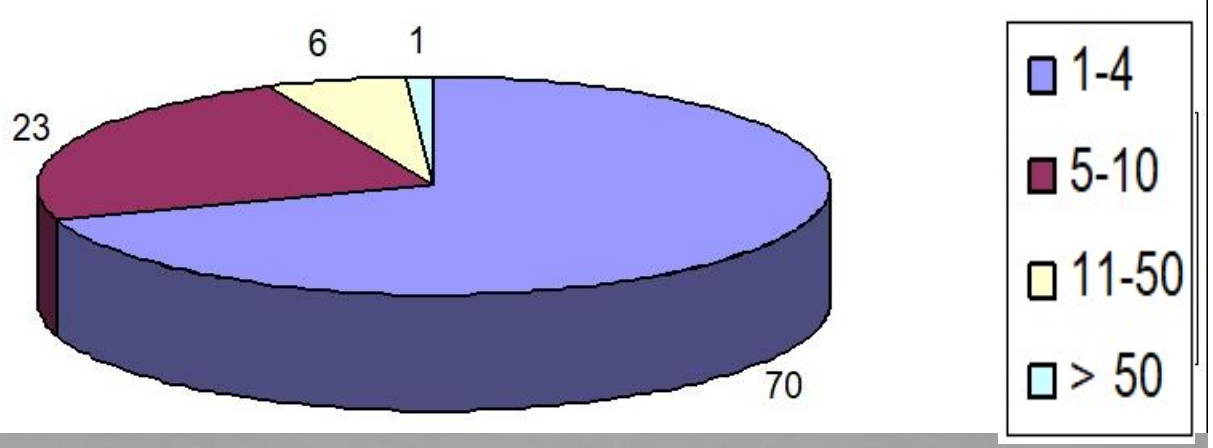
- Animal husbandry is the branch of agriculture concerned with animals that are raised for meat, fiber, milk, or other products.
- It includes day-to-day care, selective breeding, and the raising of livestock.

Animal Husbandry- Land Revenue Administration

- Traditionally, animal husbandry was part of the **subsistence farmer's way of life**, producing not only the food needed by the family but also the **fuel, fertilizer, clothing, transport & draught power**.

UNDERSTANDING THE LIVESTOCK SECTOR IN THE PUNJAB

SUBSISTENCE LEVEL FARMING



“Animal husbandry is Economic Management of Breeding, Nutrition, Rearing, Disease Prevention & Reporting, and Productivity of Livestock”.

Animal Husbandry deals with:

Breeding- genetic potential management

Nutrition- production systems management

Education- awareness, training, capacity building, disease reporting, etc.

Disease Prevention- awareness, DISEASE REPORTING, vaccination, de-worming

Productivity- Management & Markets (Rearing models- intensive, subsistence, commercial, industrial etc.; Organization of Production, Labour (Farmer, Management, etc.- Supply Chain, Markets etc.)

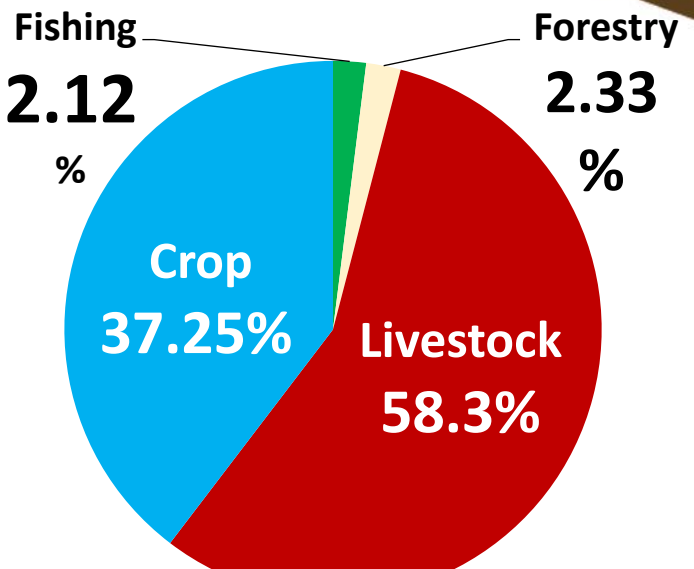
Animal Husbandry- Functions of Revenue Agency

- ✓Inventory Reporting
- ✓Disease Reporting

Inventory Reporting

The Agriculture Basket

- ✓ Rural Poverty -89% landless
- ✓ Rural-urban migration
- ✓ Health
- ✓ Population control
- ✓ Gender empowerment
- ✓ Stunted growth issue
- ✓ Exports (tanneries)
- ✓ Bio-control



Total Landed Farmers: 5,249,800

Acre	Total Farmers (000)	% of Total	Owners (000)	% of Total	Owners cum Tenants (000)	% of Total	Tenants (000)	% of Total
1.2	1237	43%	1152	23.5%	15.7	0.29%	69.6	1.32%
2.4	965	18%	846	16%	41	0.7%	78	1.5%
5	1144	22%	944	18%	93	1.7%	106	2%
7.5	792	15%	620	12%	88	1.6%	83	1.5%
12.5	619	11%	444	8%	98	1.8%	76	1.44%
Total	4747	90%	4006	76%	335	6.3%	412	7.86

63%

Owners cum Tenants

7%

Tenants

8.6%

Absentee?

68.6%

Composition

- **Landholding fragmentation 42% in 1990- crossed 67% (95% now)**
- Households in the Punjab **18.33 M**/ 110 M Pop.
- Rural Households in the Punjab @ 63.29%: **11.6** M
- **9.8 M** estimated Livestock Farmers in the Punjab
- Livestock Farmer actually captured on 9211 System: **9.8 M**
- Composite Families Captured **3.2 M**
- Largest women engagement in any sector of economy (rural woman spends 59% of her daily time in livestock related activities in Punjab)
- **46%** labour force
- **93%** never focused for any development
- **11%** share in National GDP & **58.9%** in Agri Sector GDP (Economic Survey 2017-18)
- Job creation, Rural Urban Migration, Millions of consumers & down stream industries

Access to Credit & Vertical Market Linkages

89% livestock Farmers are Landless

Share In Agri Credit's Consumption

7%

Livestock

share in Agri sector GDP

58.3%

- **Access to Credit**
  - **Collateral ?**
  - Unique Identifier

73% Potential Banking Market does not have access to Banking Products in Pakistan

Vertical Market Linkages

State Bank of Pakistan 2010

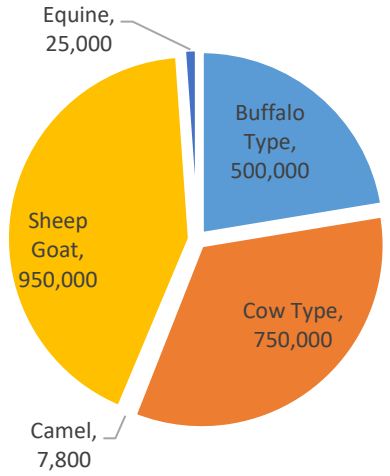
9212-Village Data Bank

Account

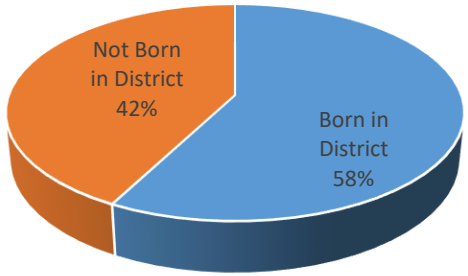
9212 - Animal Census

District: Select | Tehsil: Select | Mauza: Select | Year: Select | S

Animal Population

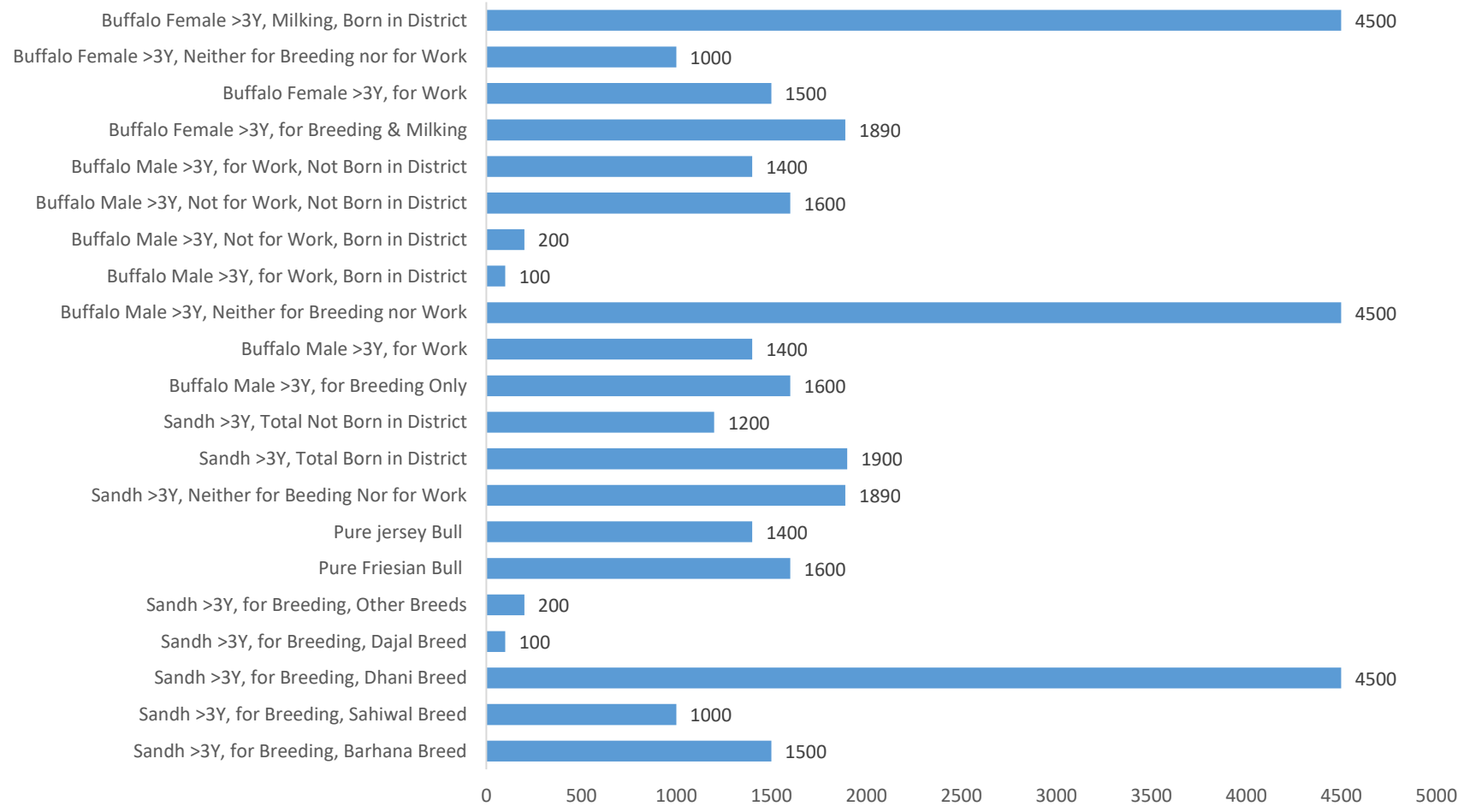


Birth District Wise Animals



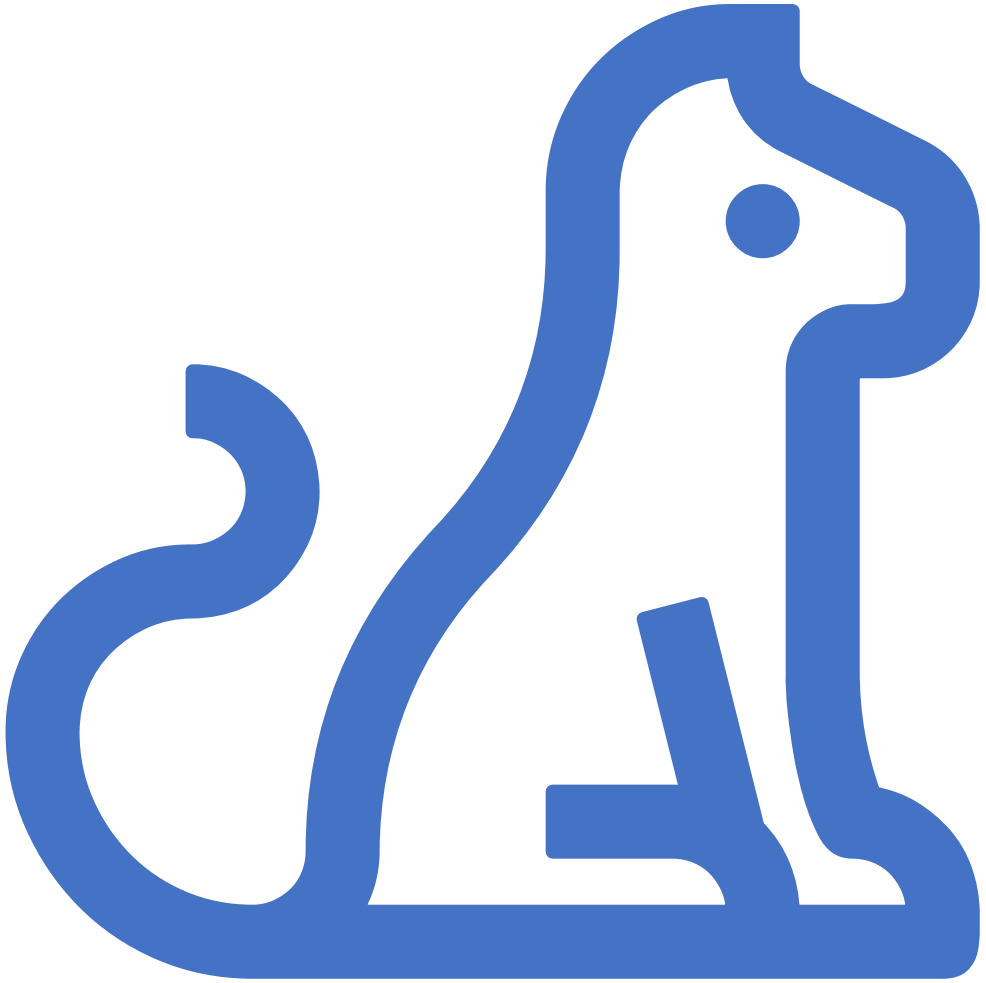
Category Wise Animal Population

Select Animal Category

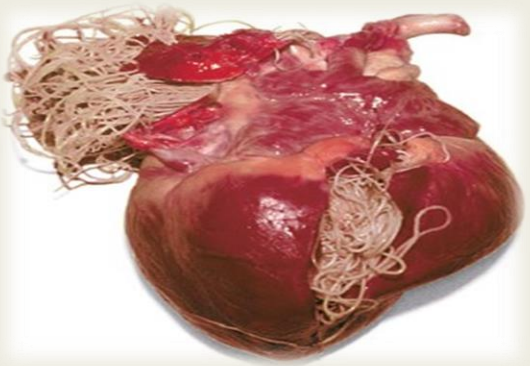


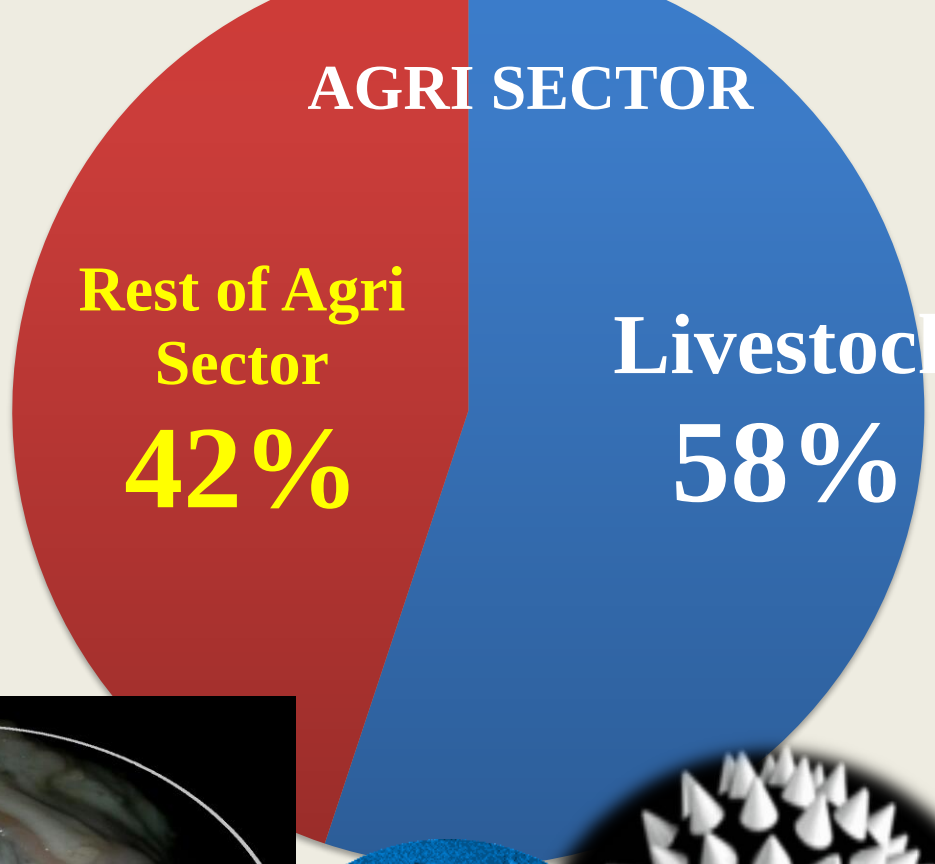
Disease Reporting

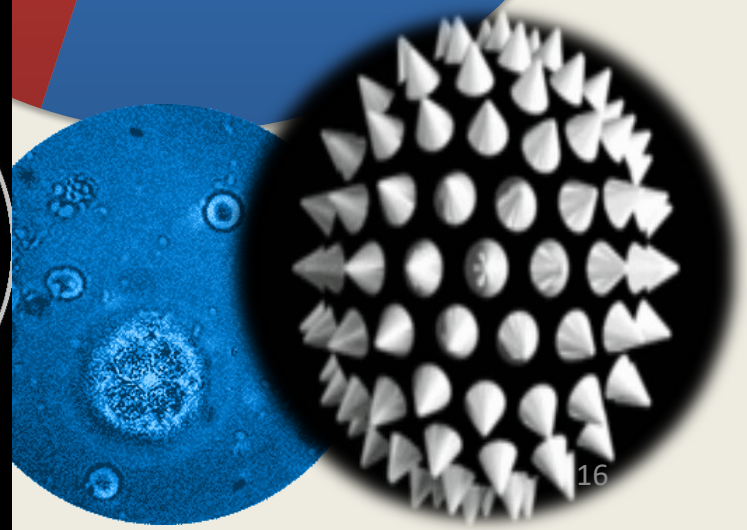
Animal Diseases



FMD- *Rs. 8 b*
Brucellosis- 15-50 % ↓
HS- *Rs. 2.17 b*
HYPODERMOSIS- *Rs. millions*
PPR-*20.5 b*
MASTITIS- *Rs. billions*
TB- ***zoonotic*** *Rs. billions*
BQ-*10 b*
Worms-*Rs. billions*
Castration-*Rs Billions*







Zoonotic Diseases Reporting

Environmental Health
One Health
Human Health
Animal Health

Awareness & Education

خبردار **فوگ فیور** (سردی کا بخار) **جان لیوا ہے**

ذرا سی غفلت جانور کی زندگی خطرے میں ڈال سکتی ہے

اپنے جانوروں کی حفاظت کیلئے رات کا کھڑا پانی **ہرگز نہ** پلائیں بلکہ اُنکو تازہ اور صاف پانی دیں

- سردی سے بچانے کا مناسب انتظام کریں
- سبز چارے کے ساتھ خشک چارا ملا کر کھلائیں
- نمی والی برسیم اور سرسوں کو دھوپ میں خشک کر کے استعمال کریں
- حاملہ اور دودھ دینے والے جانوروں کیلئے خصوصی احتیاط اپنائیں
- دودھ دوہنے کے بعد جانور کو لازمی پانی پلائیں

یاد رکھیں! جانوروں کو شیڈول کے مطابق **حفاظتی ٹیکہ جات** لگوانا ہرگز نہ بھولیں

SPL # 16786

محکمہ لائیوسٹاک اینڈ ڈیری ڈویلپمنٹ حکومت پنجاب

شکایات و مزید رہنمائی کیلئے محکمہ کی ہیلپ لائن
0800-78685-86 پر رابطہ کریں

دھوکا باز... بچنے نہ پائے

چند بے ضمیر افراد

ہمارا نام لیکر سوکھے دودھ اور Whey پاؤڈر سے سفید رنگ کا پانی

دودھ بنا کر آپکے بچوں کو پلا رہے ہیں جو موذی امراض کے پھیلاؤ

کیساتھ ساتھ ہماری بدنامی کا باعث بھی بن رہا ہے

کردیں اِن کو...
نو دو گیارہ

انکی نشاندہی آپکے بچوں کی صحت و زندگی کی ضمانت ہے

SPL # 364

ایسے افراد کی شکایت کیلئے ٹال فری نمبر: **08000-9211**

محکمہ لائیوسٹاک اینڈ ڈیری ڈویلپمنٹ حکومت پنجاب

Growth Indicators- Real Time Livestock Census Punjab 2018

CURRENT LIVESTCK POPULATION (IN MILIONS)

Species	Pakistan Economic Survey 2017-18	Pakistan Agri Census 2010	Punjab As per Economic Survey 2017-18	Punjab Agri Census 2010	% share of Pb as per ES	Punjab Real time door to door Livestock Census 2018
Cattle	46.1	24.11	22.58	13.20	**49**	14.945
Buffalo	38.8	23.46	25.22	16.01	65	14.122
Sheep	30.5	15.02	7.32	4.94	24	6.056
Goat	74.1	45.73	27.41	17.39	37	14.564
G.Total	**189.5**	**108.32**	**82.53**	**51.54**		**49.687**
Back yard Poultry	87.16	-	41.83		48	13.754
Commercial Poultry	1057.65	-	772.08		73	-

LARGEST ON-FARM SERVICES' DELIVERY MODEL

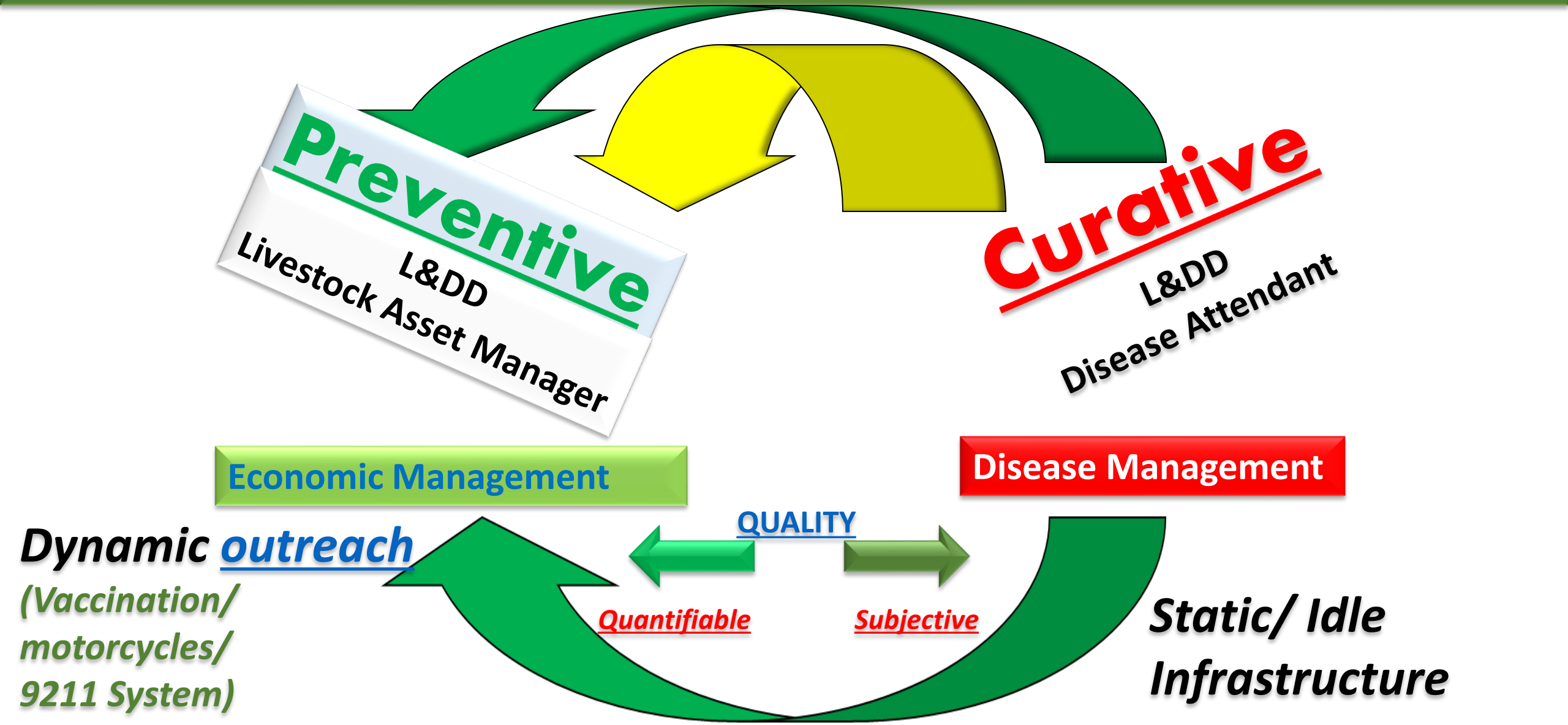
- ✓ **9335** Medical-Kit Mounted M/Cycles;
- ✓ **353** Mobile Veterinary Dispensaries,
- ✓ **44** Mobile Veterinary Laboratories,
- ✓ **9** state of the art mobile training schools,
- ✓ **11151** well trained field staff (Vets.)
- ✓ delivering **434** well documented services pertaining to:

  Prevention, *Extension*, *Breeding*, *Diagnostics*, *Surveillance*, & *Treatment*

AT DOORSTEPS OF:

- ✓ **millions of livestock farmers**;
- ✓ their 73 million livestock,
- ✓ across all of **25,892 villages** of the Punjab
- ✓ with complete service history profiling &
- ✓ 360 degree viewable and retrievable electronic log– largest ICT based System

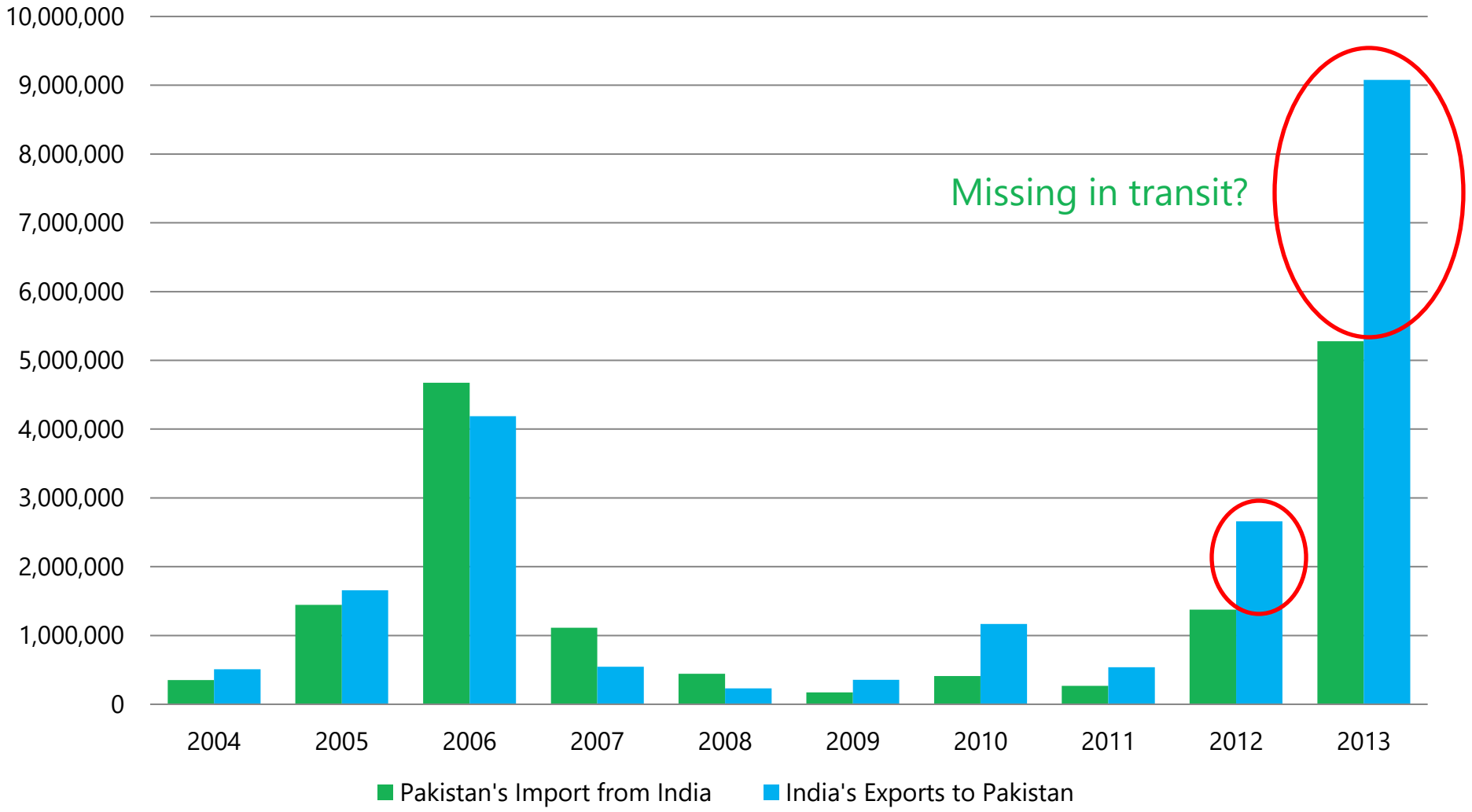
PARADIGM SHIFT



FOOD SECURITY

VISION

1st Livestock & Dairy Development Policy of Punjab, 1st of any provinces of Pakistan approved on 8th Jan 2016



Source:
UN Comtrade | International Trade Statistics Database

Milk Production, Productivity & Per Capita Availability

Pakistan (Economic Surveys 2005, 2010, 2015)

	Dairy Population Cattle + Buffalo (Millions) Economic Surveys	Dairy in Lactation (Millions)		Milk Production (Billions Lit.)	Human Population (Millions)	Lit/ Yr available for humans @ 63% of total Produced	Per day availability to Humans (Lit) @ 63% of produced by subtracting 37% for calf on the analogy of Pb Liv. Census 2018	Productivity Average/ Dairy animal/day (Lit)
2005	56.8	25.3	14	38.37	156	155	0.424	6 (1516/ Yr)
2010	67.3	30	16.5	44.82	177	159	0.437	5.9 (1494/ Yr)
2015	76.8	30	16.5	50.88	191	167	0.459	6.8 (1696/ Yr)
		Punjab @ 44.5% Pb Liv. Cen. 2018 analogy	For Punjab taken as 55% for Buffalo & Cattle -of national herd- averaged out	28	10.5	168	0.460	

Variable calculated as per production Figures in Economic surveys

Punjab (Livestock Census, 2006, Agri. Census 2010, Livestock real time/ door to door Census 2018)

2006 (Liv. Cen)	29	12.9	17.73	87.5	128	0.349	5.5 (1375/ Yr)
2010 (Agri. Cen.)	28.9	12.86	17.68	93.6	119	0.326	5.5 (1375/ Yr)
2015 Livestock Cen. (9211) Actual	**29**	12.9 (44.5% of herd)	17.73	110	101	0.278	5.5 (1375/ Yr)

weighted average after rounding up for both buffalo & cattle @ 5.5 Lit/ animal as per Pb. Liv. Cen. 2018