



Present Status of Dairy Sector in Sri Lanka

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Outline

- ❑ Responsibility of DAPH in livestock food security
- ❑ Are we secured in animal products at present ?
- ❑ Dairy Sector in food security in Sri Lanka
- ❑ Issues in the dairy sector
- ❑ Conclusion

Responsibility of DAPH

Mission of the DAPH

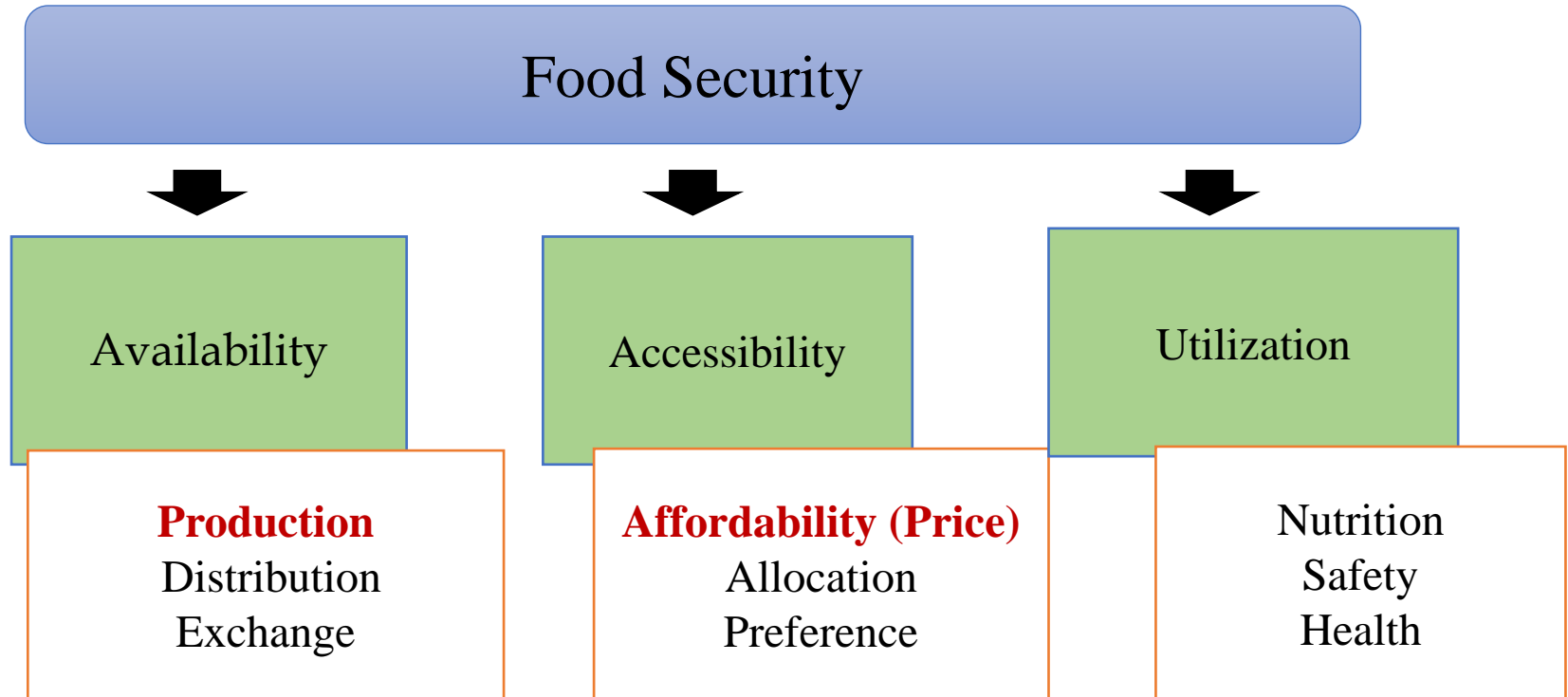
- Provide technical guidance and support to achieve sustainable development in the livestock sector by maintaining a **healthy animal population and enhanced productivity**, ensuring **food safety**, contributing to **food security**

Legal Empowerment

- DAPH is empowered with 4 acts
- 1. [Animals Act](#) (No.29 of 1958) - Farm registration, Animal identification, animal transport, etc..
- 2. [Animal Disease Act](#) (No.59 of 1992) - Prevent exotic disease entry, Disease control)
- 3. [Animal Feed Act](#) (No.15 of 1986) - Control feed quality
- 4. [Pasture Development and Pasture Land Reservation Act](#) (No.4 of 1986)- Technical recommendation for pasture land reservation
- Statutory bodies
- Veterinary Drug Control Authority (VDCA)- *quality of vet. drugs and biologicals*
- Animal Feed Advisory Committee (AFAC) - *quality of feed*

Are we secured in animal products at
present ?

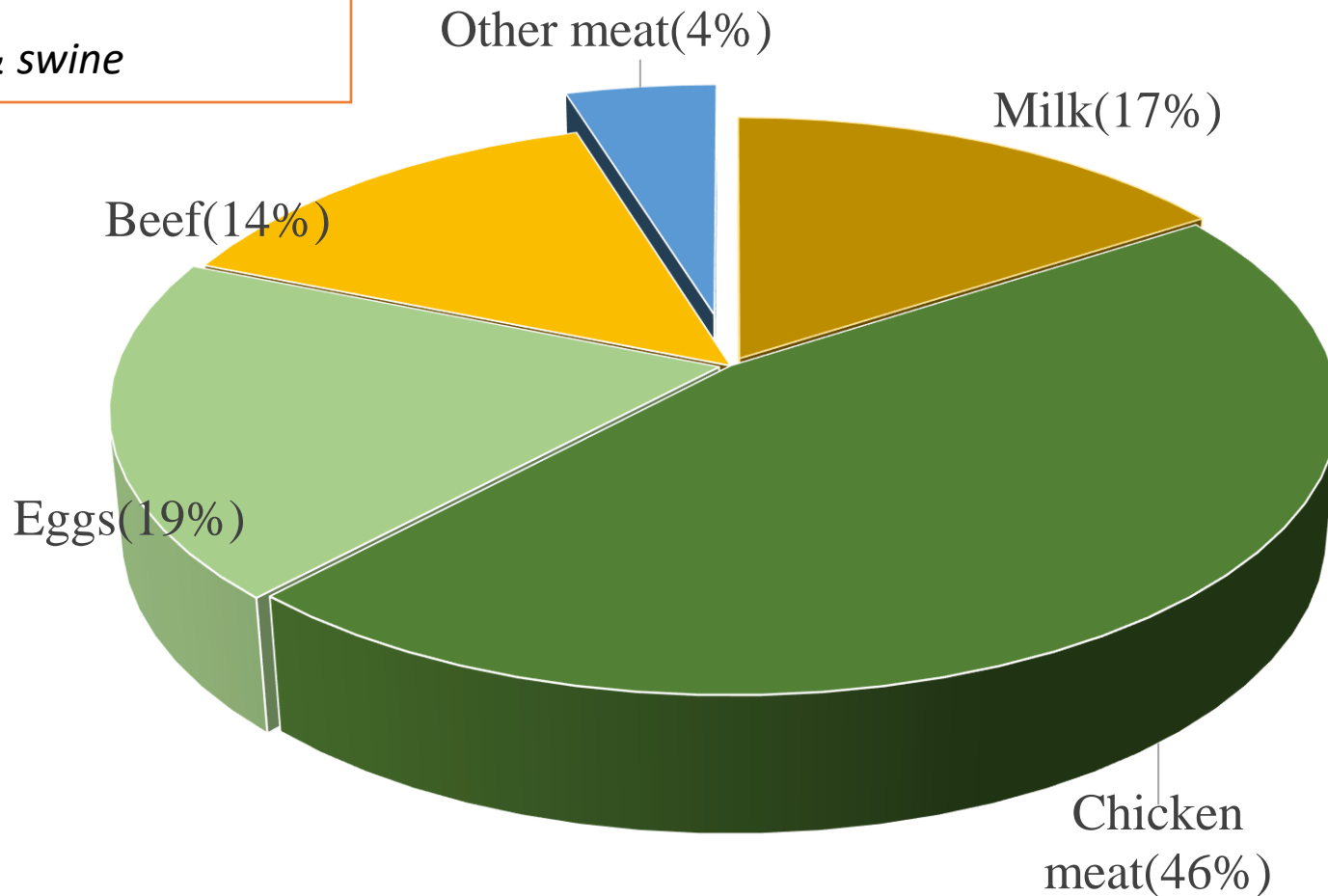
What is Food Security



Livestock Production (LKR 382 Billion)

Sub sectors of livestock

- Poultry
- Dairy
- Goat & swine

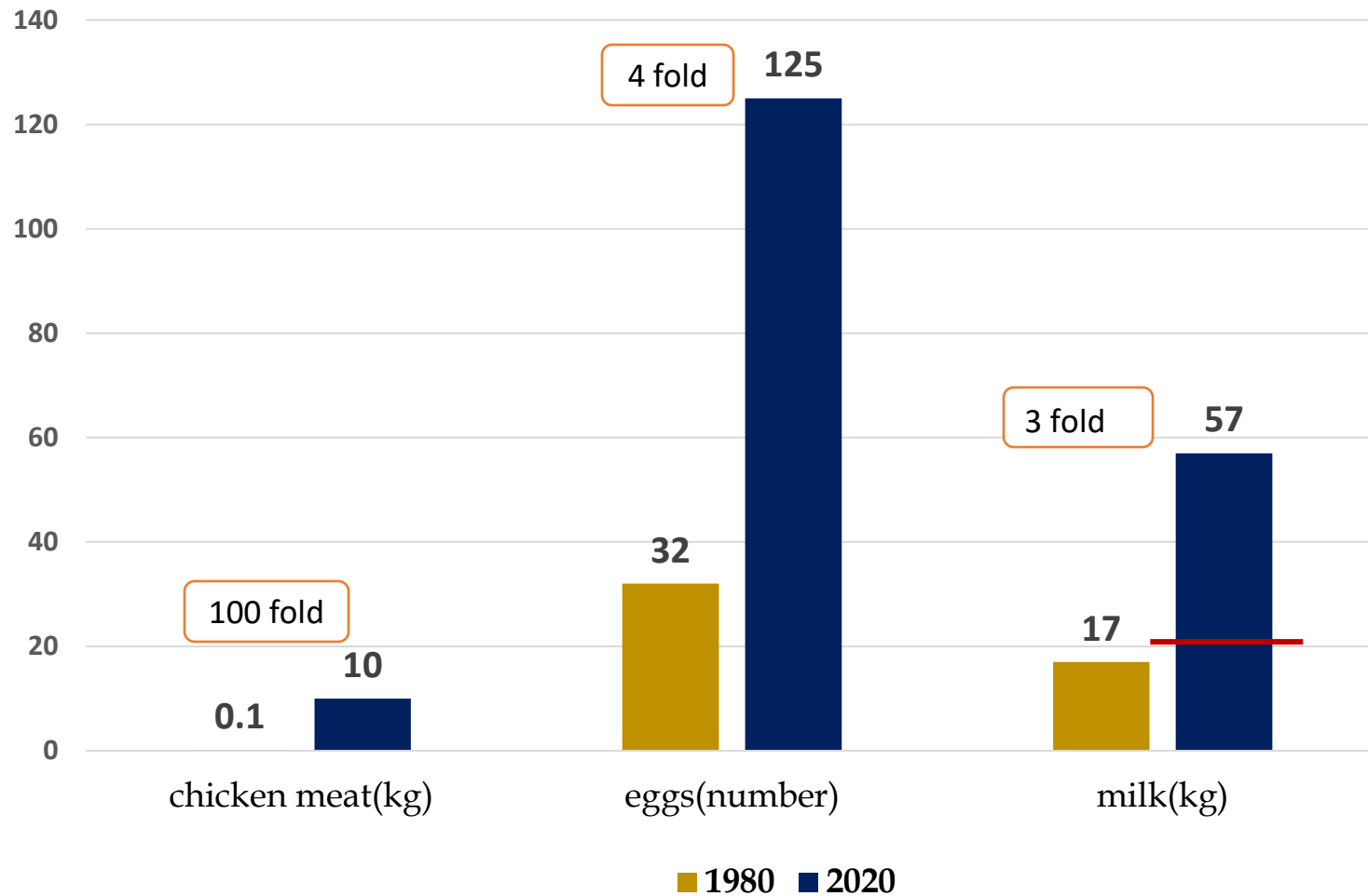


Livestock production in Sri Lanka 2020

Type	Production	Imports	Unit price (Rs)	Per cap availability
Chicken meat (000 Mt)	216.16	No	565.60/kg	9.79 kg/y
	100%			
Eggs (millions)	2435.96	No	17.52/egg	110.71(number)
Milk (Mil.litres)	414	748.8	80 /litre at FO	52.81 kg/y
	38 %			

USD 320 million

Per Capita Availability of Livestock Products (1980-2020)



Livestock production in 2020-2021

- Production change 2020 ...2021
 - ☐ Milk production growth - +4.4 %
 - ☐ Egg production growth - +4.5%
 - ☐ Chicken meat production growth - +9.5 %
- Livestock sector showed improvement in 2021 compared to 2020
- *Source: Central Bank of Sri Lanka, 2021*

Impact on production (2022)



Livestock Production Drop-2022

Item	Milk (ML)	Chicken meat (000 Mt)	Eggs (million)
2021 production	440	236	2934
2022 forecast(earlier)	480	240	3017
2022 adjusted forecast	385	211	1963
2022 drop	95.00	29.00	1054.00

2022 drop (%)	19.8	12.1	34.9
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Large farm (>50%)

Small farm (15%)

Decrease imported milk

Availability drop

Source: Department of Animal Production and Health

Impact on prices (2022)



Year	Chicken Meat(Rs/kg)	Eggs(Rs/egg)	Fresh milk(Rs/l)
1985	42.77	1.5	3.48
1990	70.51	2.42	6.17
1995	93.72	2.57	10.8
2000	132.96	4.10	16.64
2005	202.93	6.68	27.12
2010	327.91	13.9	44.0
2015	388.26	14.72	54.0
2020	531.49	21.48	74.0
2021	637.11	24.91	105.00
2022	1350.00	50.00	150.00

5 year av. 41 %

5 year av. 46 %

5 year av. 56 %

High impact

Affordability drop

112 %

101 %

42 %

Source: Department of Animal Production and Health

Poultry Sector

Poultry sector has shown a phenomenal growth over past few decades

It is developed as an industry with

- ✓ High technology (eg. closed houses, battery cages ,etc..)
- ✓ Large scale breeder farms (GP farms, parent farms)
- ✓ By back small scale farming with less marketing risk
- ✓ High integration of Day Old Chicks (DOC), Animal feed, Veterinary drugs and Extension markets to enhance the efficiency
- ✓ Large scale processing establishments
- ✓ Large scale feed manufactures
- ✓ International quality standards (ISO 9000,HACCP,ISO 22000,etc..)
- **Highly import dependant (Layer parent DOC, feed raw materials, drugs and equipment)**
- **Value addition is around 40-50%**

Poultry sector transformation as an industry

Before 1980



Backyard

2020



Commercial industry with high tech.

Dairy Sector in Sri Lanka

Dairy Sector in Sri Lanka

- Traditional practice that survived thousands of years
- Plays an important role in rural economy in reducing poverty
- Exist around 250,000 dairy farms
- Around 75 % are small holders (< 10 animals)

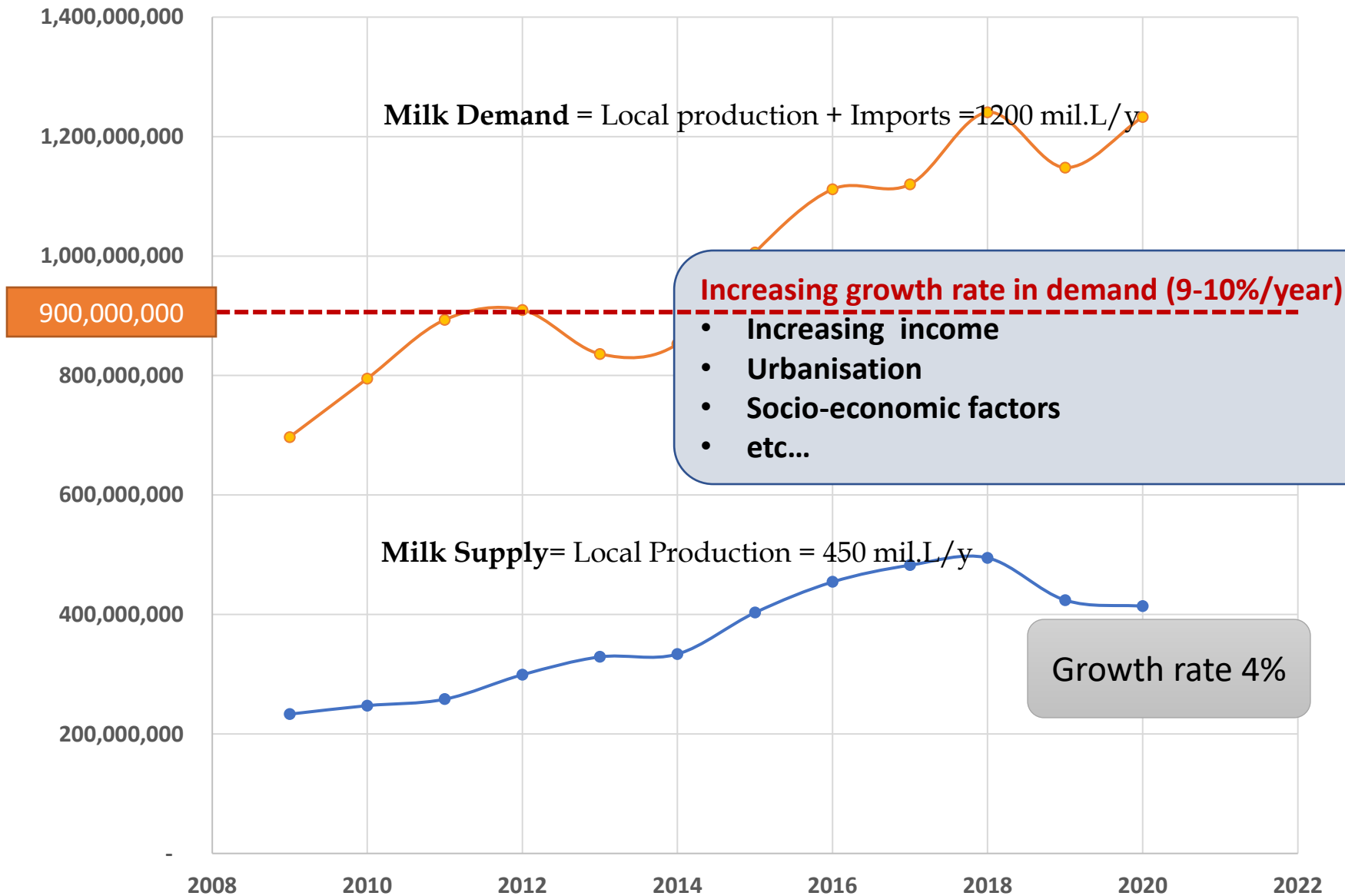
- Heavily depend on government subsidies
- Services are mainly (90%) provided by the government sector
- Huge investment on dairy development by the SL government
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Return on Investment ?

Dairy Sector in Sri Lanka

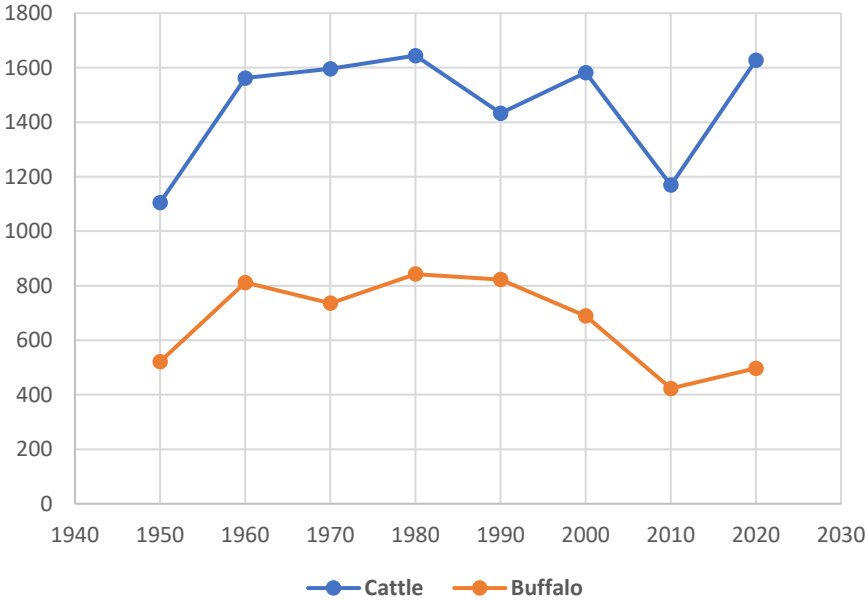
- Highly depend on family labour
- Mainly a secondary income generating source (>85%)
- Milk is a 'cash crop' for small scale dairy farmers; converting their family labour into a value added market commodity
- Year round income for farmers
- Formal milk collation 65 % (by main milk collecting agencies)
- Milk is mainly consumed as value added products
 - Demand - 1200 mil L/Year
 - Supply - 450 mil L/Year
 - Gap - 750 mil L/Year
 - Annual milk import bill (2021) - LKR 62 billion

Annual Milk Production Trends (Million Lts)

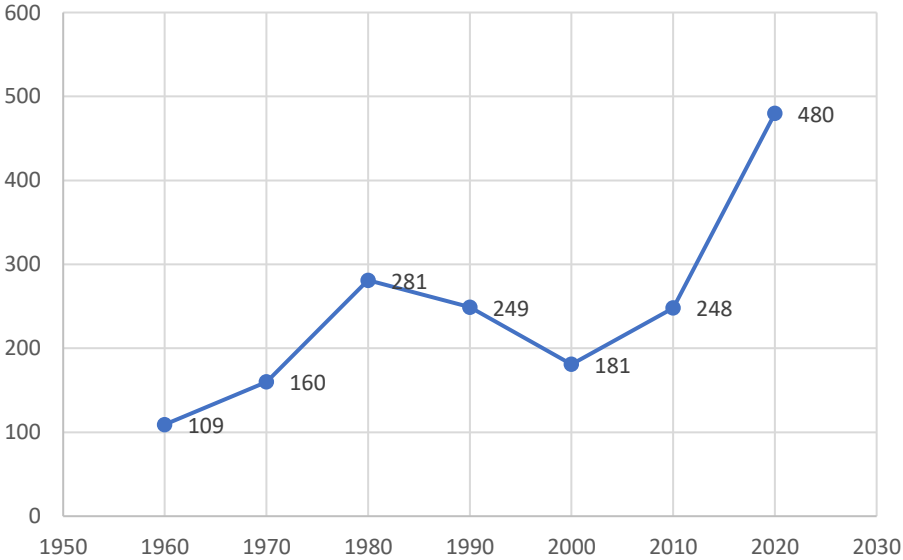


Dairy Sector Trends

Cattle and Buffalo Population Change (000) 1950-2020



Milk Production Change (mil.L) 1960-2020



Dairy farming systems in Sri Lanka



25%



63%

Intensive farming –

- ✓ Zero grazing (Cut & Fed)
- ✓ Concentrate + forage feeding
- ✓ Common in hill country, mid country wet zone
- ✓ Farm size < 5 - 1500

Semi- Intensive farming –

- ✓ Day time free grazing,
- ✓ night time shed at the farmers' backyard

Extensive farming –

- ✓ Traditional system
- ✓ Freely moving in the day and in paddocks at night
- ✓ Common- dry zone
- ✓ Farm size < 50-3000

12%



Dairy Sector in Sri Lanka

- Two demarcated style of operations
- *1. Subsistence level farms (provides only the bare necessities of life)*
- Mainly small & medium scale system



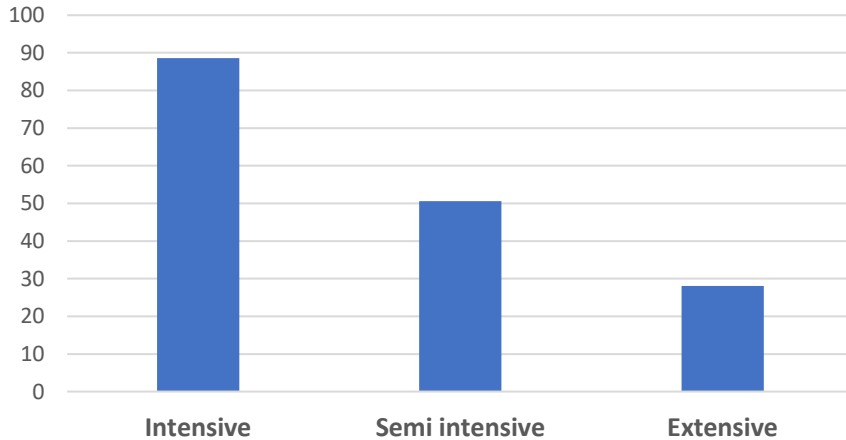
Dairy Sector in Sri Lanka

- *Large & Mega commercial farms*
- Until 2018 – Government owned large farms (DAPH (1991), NLDB, Mahaweli,etc..)
- 2018 – Private owned large farms (immerging)
- Commercial
- High tech involved
- Value chain approach (commercial fodder, silage, milk value addition, organic fertilizer, etc..)

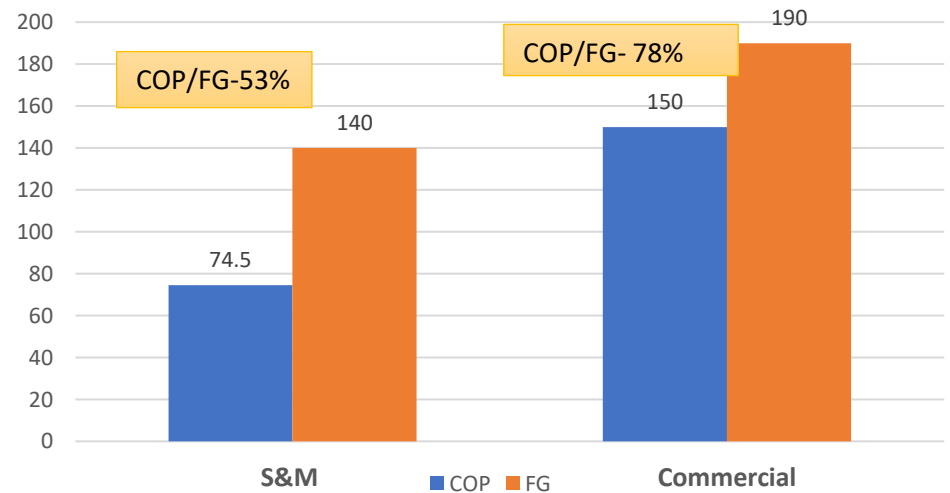


Farm Economics

Production cost of different farming systems
(LKR/L)



COP (LKR) of milk in S&M farms and commercial farms



Feed resource development

- Introducing new varieties



-
- DM requirement – 4.4 million MT
- Deficit in DM – 1 million MT/year
- Land extent requirement – 25,000 ha
- Deficit in land extent -15,000 ha
- *Assumption : I (100%) & SI(50%) with improved varieties*



Issues in the Dairy Sector

Issues

Small & Medium scale system

- ❑ Efficiency ? Long calving interval, Low productivity, Low profitability, lack of entrepreneurship,
- ❑ Youth attraction ? Social recognition ?, Formal skill development ?
- ❑ Technical interventions ? Business model approach ?
- ❑ Year round animal feed resource base ? Extent ? ,varieties ?
- ❑ Training & extension ? E-extension ?
- ❑ Milk quality ?

Issues

- Import dependency ? Local production of veterinary vaccines, drugs, feed additives
- Private Public Partnerships ? (extension service and service providing mechanism ?)
- Incentives ? (Quality & Quantity incentives)

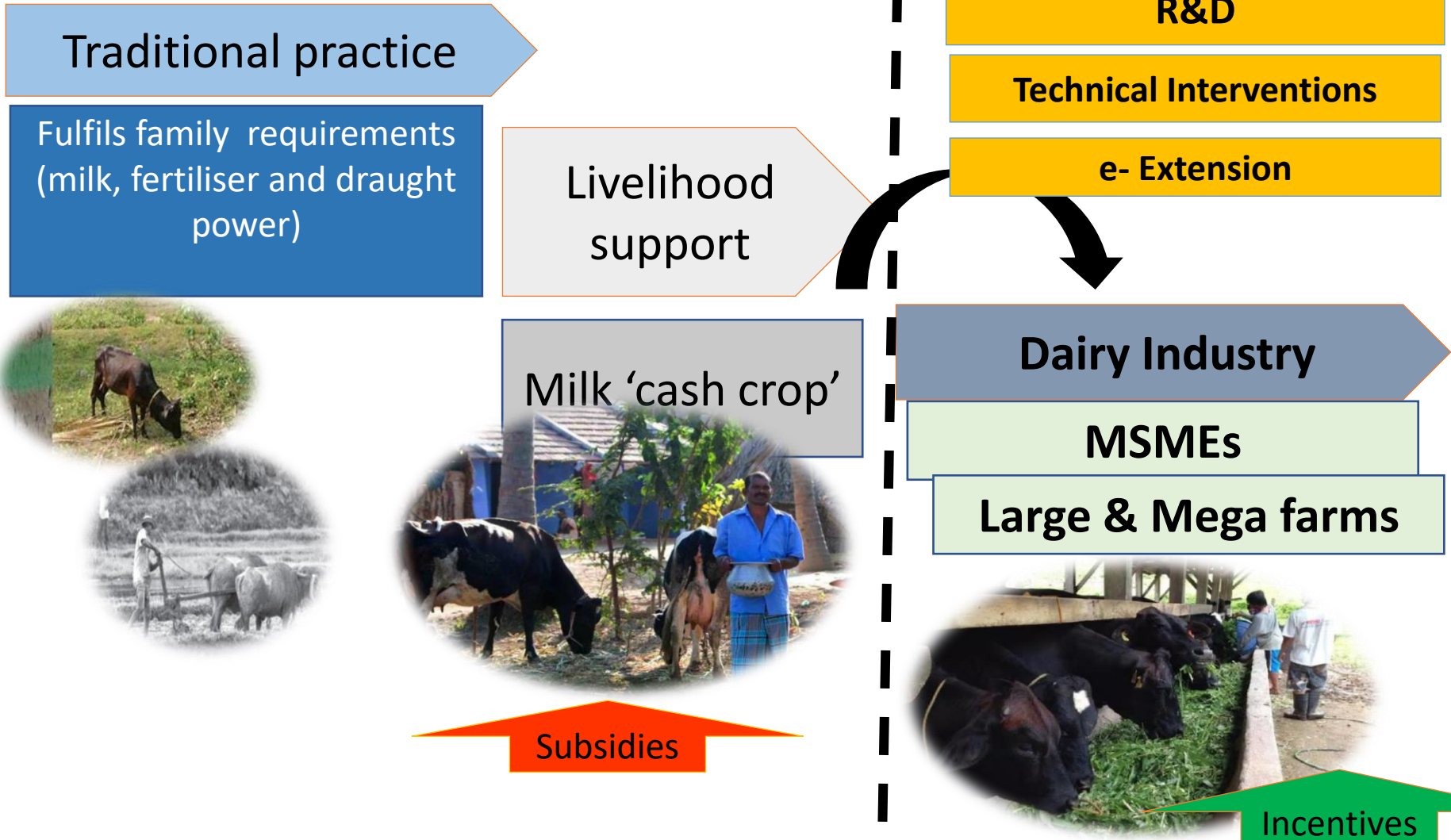
Large scale commercial

- Marginal Profit ?
- High investment ?

Common

Inter organizational collaboration ?(DoA, MoH, MoL, MoE,MoWL, etc..)

Dairy Sector



Conclusion

Conclusion

- Food security has decreased due to economic crisis
- Dairy sector is less affected compared to the poultry sector
- Milk demand and supply gap increases year by year
- Need accelerated growth rate
- Subsistence level (MS&M) farms needs entrepreneurship approach
- Large & mega farms needs high productivity (genetic potential with > 30 l/day animals) to maintain required profit margins
- Special attention needs to develop fodder resource base
- **Policy initiative with new interventions are required**

Policy Priorities

- Entrepreneurship (Transformation M & SMEs)
- Large scale commercial dairies
- Buyback system
- Good mix of MSMEs & L&Mg (10;90 ----- **25;75**)
- **Fodder resource development (Extent & Quality)**
- **Commercial fodder sector**
- **Incentives (Quantity/quality/.....)**
- **Milk quality & fresh milk promotion**
- **PPP**
- **R&D**
- **Technical intervention**
- **e-Extension**
- **Data**
- **Strong inter-institutional coordination**



Never let a good
crisis go to waste.

Winston Churchill

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