

# ROLE OF LIVESTOCK IN DOUBLING FARM INCOME BY 2022-23

August 2019



# PRIME MINISTER'S DREAM



*“It is my dream to see farmers **double their income** by 2022 when the country completes 75 years of independence”*

# DREAM DETAILS

- Period for doubling farmers' income : 2015-16 to 2022-23
- Past incidents of doubling farmer incomes : In the past 30 years, farmers' income at 'nominal prices' almost doubled in five years – twice - once during 1987-88 to 1992-93 and then during 2004-05 to 2009-10
- However - as per a Niti Aayog paper & documents on Agri ministry website - government's intention is to double farmer income in 'real terms'
- Annual growth rate required during the period to double real incomes : 10.4%

Source: Niti Aayog paper, Ministry of agriculture website

# PAST TRENDS

- Past trends of growth rates in farmer incomes

**Table 2.2: Growth rate in farm income in India, per cent per year**

Period	Agriculture value added at constant prices	Farm income of all farmers		Farm income per cultivator		CPIAL base 2004-05	Implicit price index for agriculture
		Market prices	Real terms	Market prices	Real prices		
1993-94 to 2004-05	2.52	8.45	3.30	7.04	1.96	4.91	5.65
2004-05 to 2011-12	4.19	15.03	5.52	17.14	7.46	9.02	9.80
2011-12 to 2015-16	1.60	9.02	-1.36	11.01	0.44	10.52	6.88
1993-94 to 2015-16	2.87	10.61	3.13	10.89	3.40	7.21	7.35

- The period 2004-05 to 2011-12 witnessed growth rate of 7.46% in farm income per cultivator in real terms – a great step towards achieving goal of doubling farm incomes
- Factors contributing to the growth during the period – impressive growth in output, number of farmers declined and prices received by farmers increased at a much higher rate than the increase in prices paid by rural consumers

# THE 4 “I”S FOR DOUBLING FARM INCOMES

## IMPROVE PRODUCTIVITY

LAND & LABOUR

AGRI-INPUTS

MITIGATE RISK

## INCREASE VALUE

LIVESTOCK

HIGH VALUE CROPS  
& DIVERSIFICATION

IMPROVED TERMS OF  
TRADE & EXPORTS

## INFRASTRUCTURE ENHANCEMENT

FOOD PROCESSING

IRRIGATION

AG-TECH

## INCOME FROM OTHER SOURCES

GOVT. / PVT. SERVICE

WAGE LABOUR

OTHER ENTERPRISE

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# LIVESTOCK – 26% OF AGRI GVA AND GROWING

## LIVESTOCK GROWING AT A FASTER PACE COMPARED TO CROP FARMING



**1.01%**

Rate at which Crop Agriculture GDP grew b/w 2011-12 to 2016-17

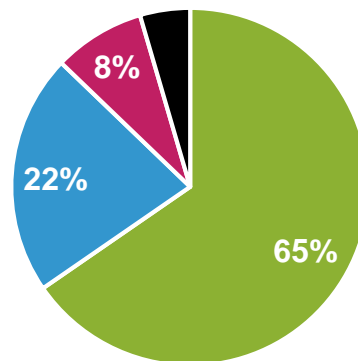


**6.63%**

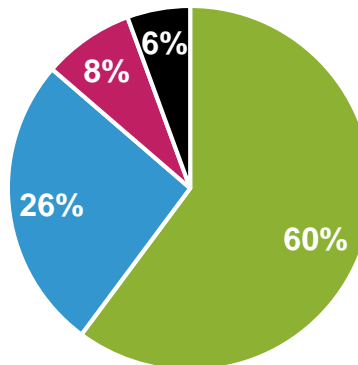
Rate at which Animal Agriculture GDP grew b/w 2011-12 to 2016-17 (livestock + fisheries)

## INCREASING SHARE OF LIVESTOCK IN AGRI GVA

Component wise Agri-GVA 2011-12



Component wise Agri-GVA 2016-17



■ crops ■ livestock ■ forestry and logging ■ fishing and aquaculture

Source: National Accounts Statistic 2018, MOSPI

# LIVESTOCK – A RAPIDLY GROWING INCOME SOURCE FOR FARMERS

## LIVESTOCK COMPONENT REPORTED ONE OF THE HIGHEST GROWTH RATES FOR AGRI HHs INCOMES DURING 2003-16

Particulars	% CAGR in income from Various sources during 2002-03 to 2015-16
Cultivation	2.99%
Livestock	10.23%
Wages	4.06%
Non-farm income/Other sources	11.18%

## SHARE OF LIVESTOCK IN AGRI HHs INCOMES DOUBLED DURING 2003-16

Particulars	% share in total income	
	2003	2016
Cultivation	46%	35%
Livestock	4%	8%
Wages	39%	34%
Non-farm income/Other sources	11%	23%



# LIVESTOCK INCOME CRUCIAL FOR FARMERS WITH LOWER LANDHOLDINGS

% SHARE OF VARIOUS SOURCES IN TOTAL INCOME					
Size classes	<0.01 ha	0.01-0.4 ha	0.41-1.00 ha	1.01-2.00 ha	>2.00 ha
Sources of income	% share	% share	% share	% share	% share
Cultivation	7%	22%	31%	45%	52%
Livestock Rearing	17%	8%	8%	8%	7%
Other Enterprises	3%	6%	6%	4%	7%
Wage labour	43%	44%	37%	28%	23%
Govt/Pvt service	27%	19%	17%	14%	11%
Other sources	3%	1%	2%	1%	1%
Total					

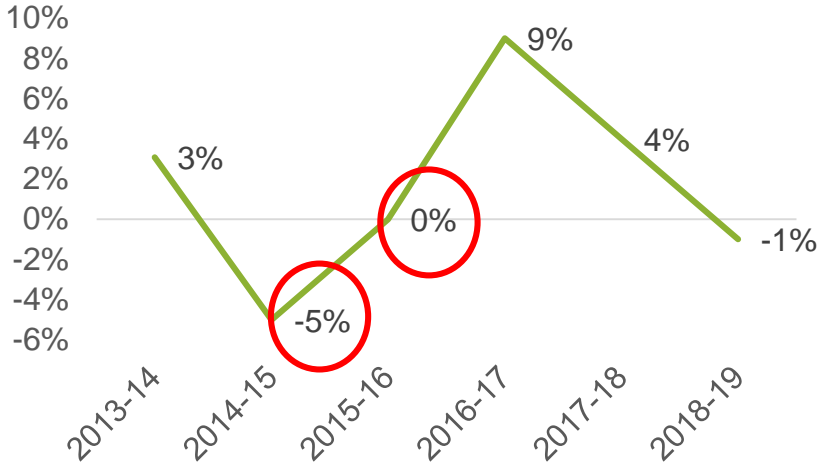
**WITH LIMITED AVAILABILITY OF LAND, MARGINAL FARMERS HEAVILY RELY ON OTHER SOURCES OF INCOME LIKE LIVESTOCK**

Source: NABARD

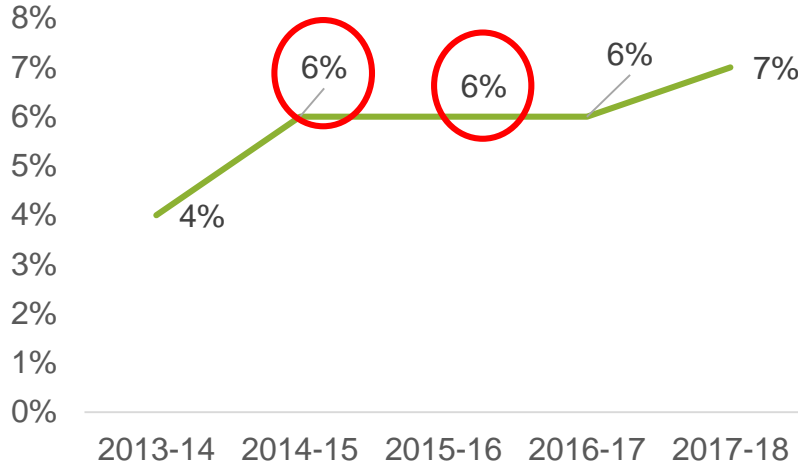
# LIVESTOCK PRODUCTION IS IMMUNE TO MONSOON VAGARIES

## LIVESTOCK PRODUCTION CONTINUED TO GROW EVEN IN DROUGHT YEARS

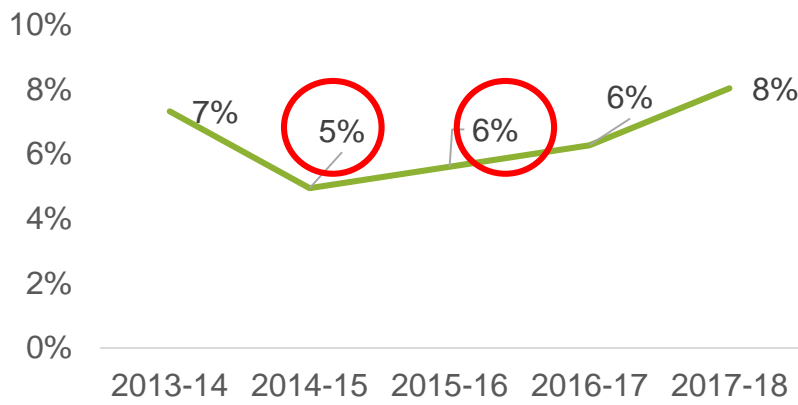
### Growth in food grains production



### Growth in milk production



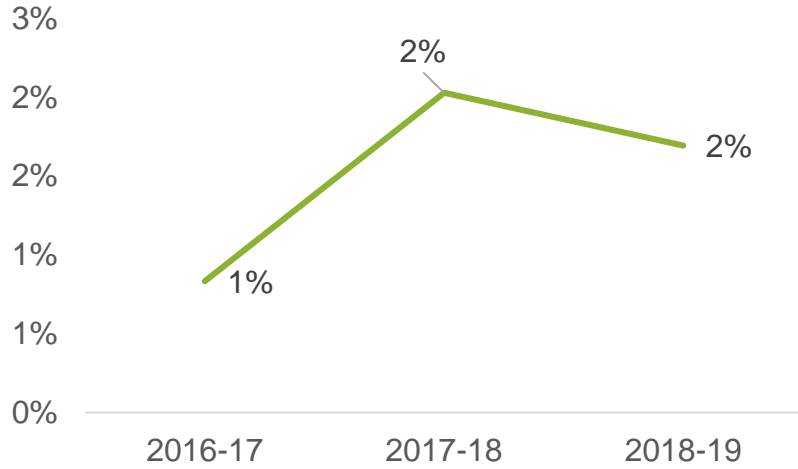
### Growth in egg production



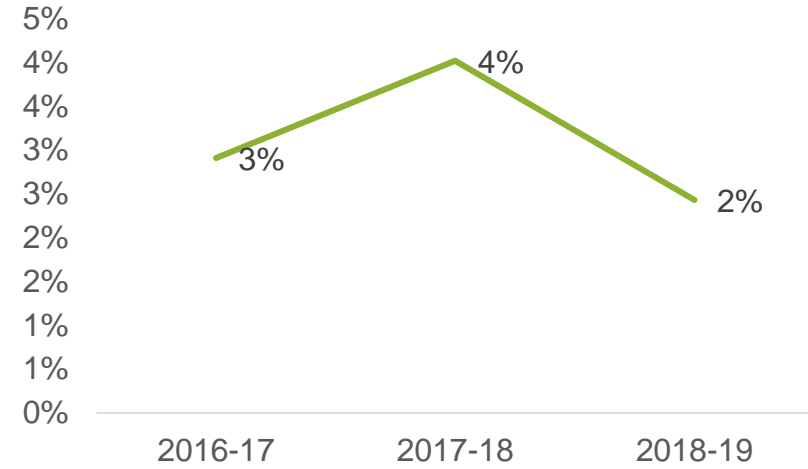
Source: Ministry of Agriculture website

# LIVESTOCK HAS BETTER PRICE STABILITY AS COMPARED TO FOOD GRAINS

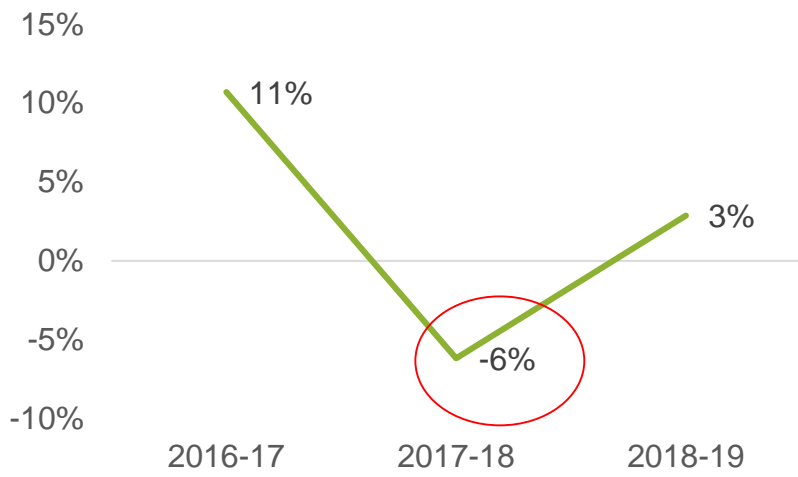
### WPI (Eggs, Meat & Fish)



### WPI (Milk)



### WPI (Food grains)



Source: Office of Economic Adviser



# LIVESTOCK OFFERS A STABLE SOURCE OF INCOME AND EMPLOYMENT

- Unlike crop farming, livestock is not seasonal and can be carried out throughout the year
- Dairy is a source of income for over 100 million households, with 77% of total milk being produced by small, marginal and landless farmers
- More than 4 million people are employed directly and indirectly to Poultry sector
  - Employment opportunity expected to increase by 15% per annum in coming years

Source: GCMF (Amul) presentation to the Ministry of Commerce

# DOMESTIC DEMAND DRIVERS CONTINUE TO BE STRONG

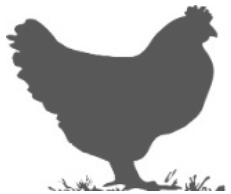
## LIVESTOCK DEMAND IS SET TO INCREASE

### I. *Rising per capita income*



The country's per-capita income is estimated to have risen by 10% to ₹10,534 a month during the financial year ended March 2019

### II. *Increasing animal protein consumption*



*B/w 2010-14, animal protein consumption grew by 5.2%, whereas plant protein consumption grew only by 3.8%*

### III. *Absolute population addition*



India's population is expected to continue to grow until mid-century, reaching an estimated 1.68 billion in the 2050s

Source: United Nations

# MID DAY MEAL SCHEME CAN GIVE A BIG BOOST TO LIVESTOCK DEMAND ; ESPECIALLY EGGS

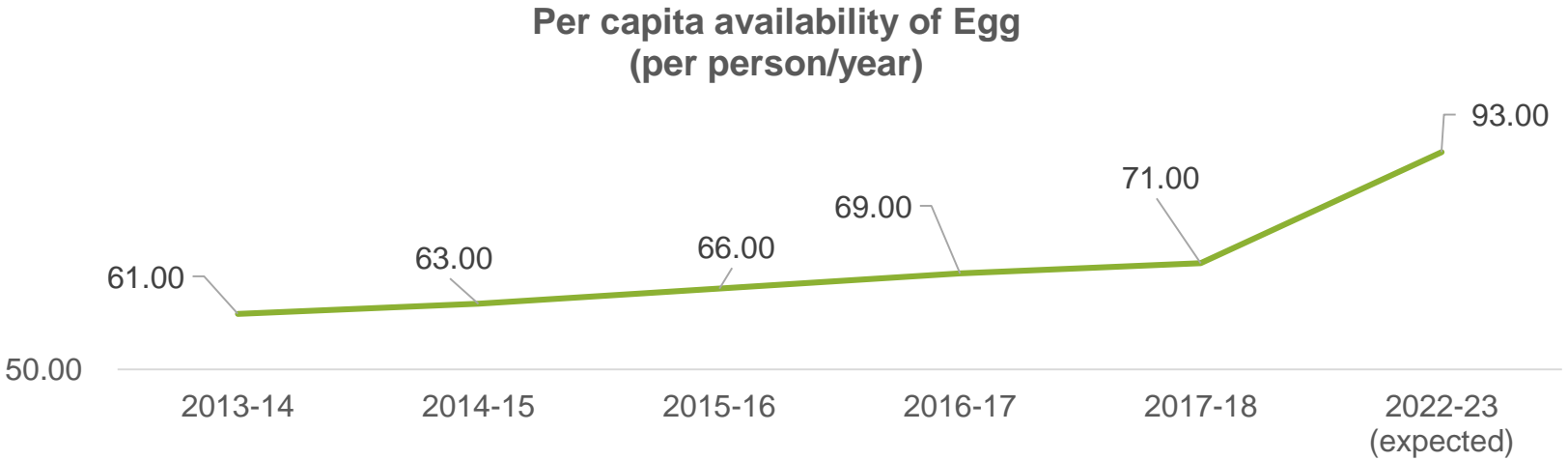
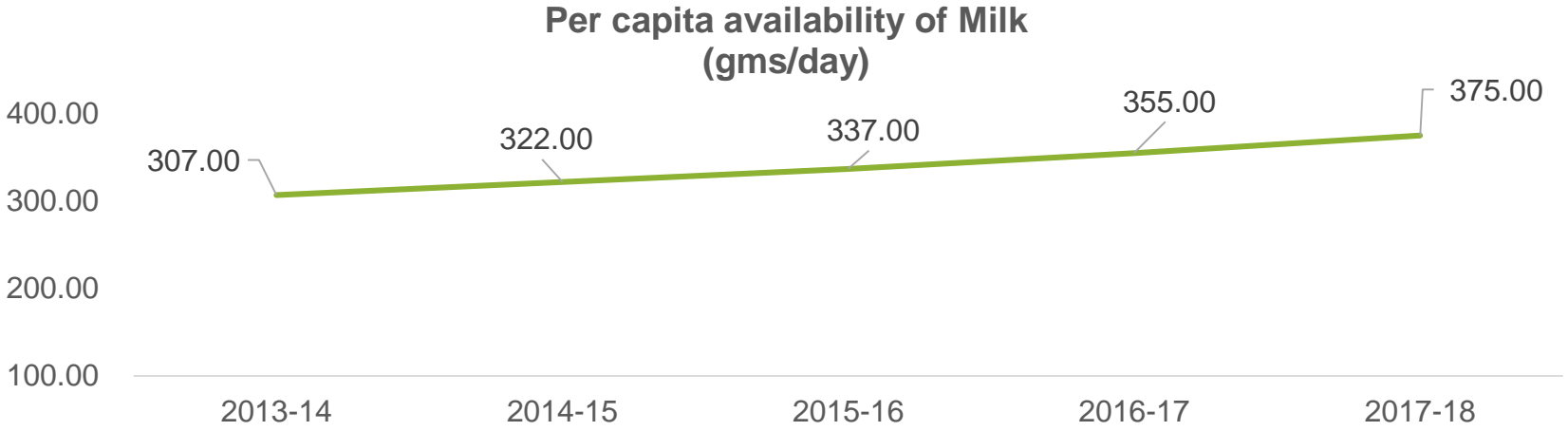
- Currently only 14 states out of 29 states and 7 union territories serve eggs under mid day meal scheme

Nos. in bliion	
Current volume	Additional volume potential from non egg serving states
7.9	4.5

Upto 8th standard of Gov and Government aided school students are considered as beneficiaries  
ASSUMPTIONS 25 kids per anganwadi  
2 eggs per week for states which does not serve eggs to calculate potential volume

Source: Analysis by Srinivasa farms

# PER CAPITA AVAILABILITY OF LIVESTOCK PRODUCTS HAS REPORTED CONSISTENT GROWTH OVER THE YEARS



Source: Ministry of Animal husbandry



# HOWEVER ANIMAL PROTEIN INTAKE CONTINUES TO BE LOWER THAN HEALTH STANDARDS

Item	Recommended Intake	Rural India Intake	Urban India Intake
	(Gms/day)		
Poultry	29	6	8
Eggs	13	4	7
Fish	28	9	8
Dairy	250	145	183



Item	Recommended Intake	Rural India Intake	Urban India Intake
	(Gms/day)		
Protein	459	194	242

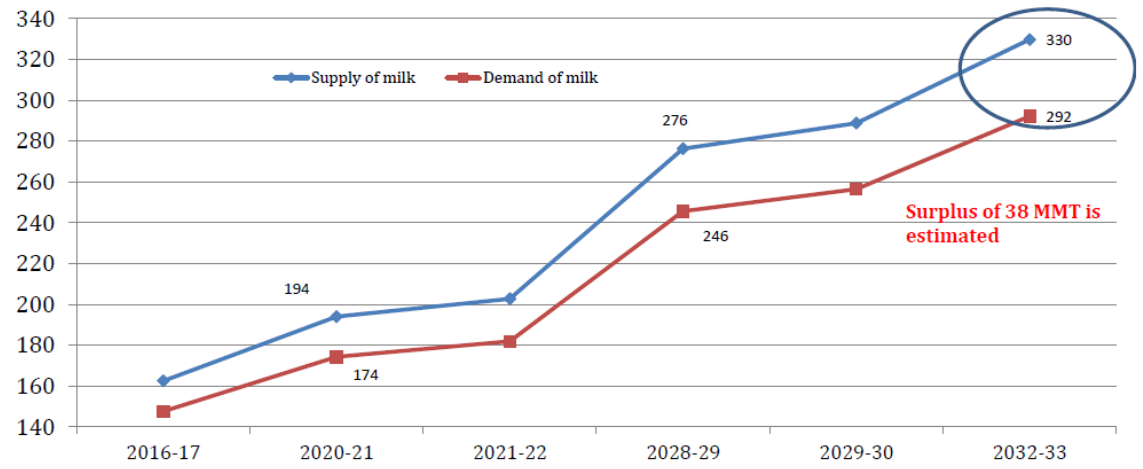
Source: EAT-Lancet Commission report



# NEED TO IMPROVE LIVESTOCK EXPORTS

- India is one of the top most producers of eggs in the world
- Egg exports from India stand at ~1-2% of its production, despite the country being one of the lowest cost producers in the world
- India is the largest producer of milk in the world
- India's current production of milk is in excess of its demand and is expected to be so till 2022-23. India also has one of the most economical milk prices in the world

**Supply and demand estimates as per NITI Aayog report**



Source: GCMF (Amul) presentation to Ministry of Commerce, Ministry of agriculture document on National Action Plan for Eggs & Poultry-2022

# KEY LEVERS TO BOOST EXPORTS OF MILK AND EGGS

- Livestock in total contributes to only 9% of total processing units in the country (8% dairy and 1% other livestock)
- Developing infrastructure for egg processing - Eggs are mostly exported in processed forms (Dried egg/liquid egg)
- There are only four-five egg processing units in the country with most of them based in South-India
- Due to lack of scale of operations and adequate infrastructure, traded price for processed egg exports from India do not fall in the lowest price quartile, making them less competitive
- Developing value added products and making Indian dairy products competitive & compliant with global standards
- Exploring Geographical Indication (GI) branding technique for milk & milk products from India

Source: Government of Gujarat document on Establishment on Egg powder unit in the state, Food Processing Ministry's official website, Food and Agriculture Organization (FAO) of the United Nations



THANK YOU FOR YOUR TIME AND CONSIDERATION