



# Agricultural policies for efficient, inclusive and sustainable value chain development- comparative analysis of Nepal and India

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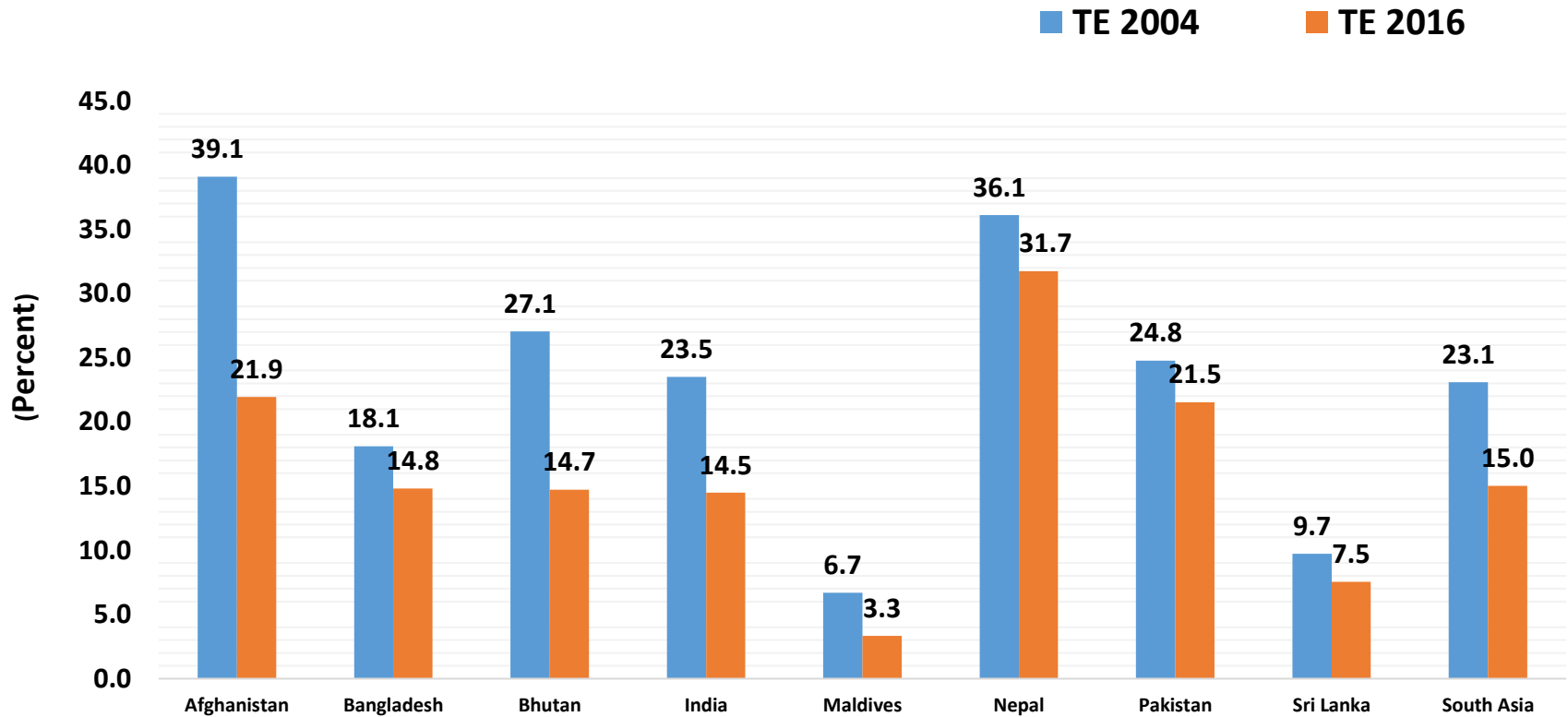
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**Major  
challenges  
of  
Agriculture  
in the  
region**

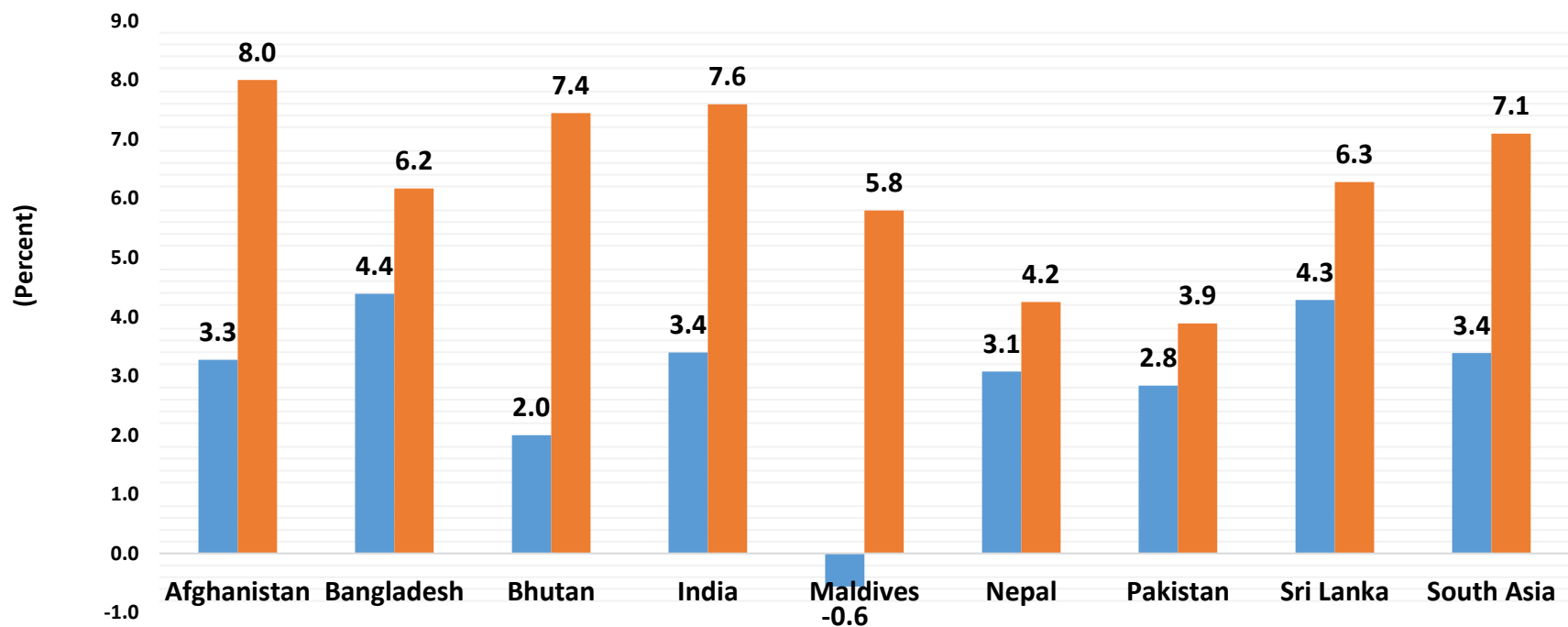
- **Lagging productivity growth**
  - **Small and fragmented land holding**
  - **Long and fragmented value chain**
  - **Weak linkage to input markets**
  - **Weak linkage to domestic downstream markets**
  - **Limited opportunities to participate in global and regional value chains**
- 

# Share of Agriculture in GDP in South Asia



# Growth rates in GDP and agricultural GDP in South Asia during 2003 to 2016

■ Agricultural growth rate  
■ GDP growth rate





# ■ INDIAN AGRICULTURE

# Declining size of holdings



## Changes in the average size of holding

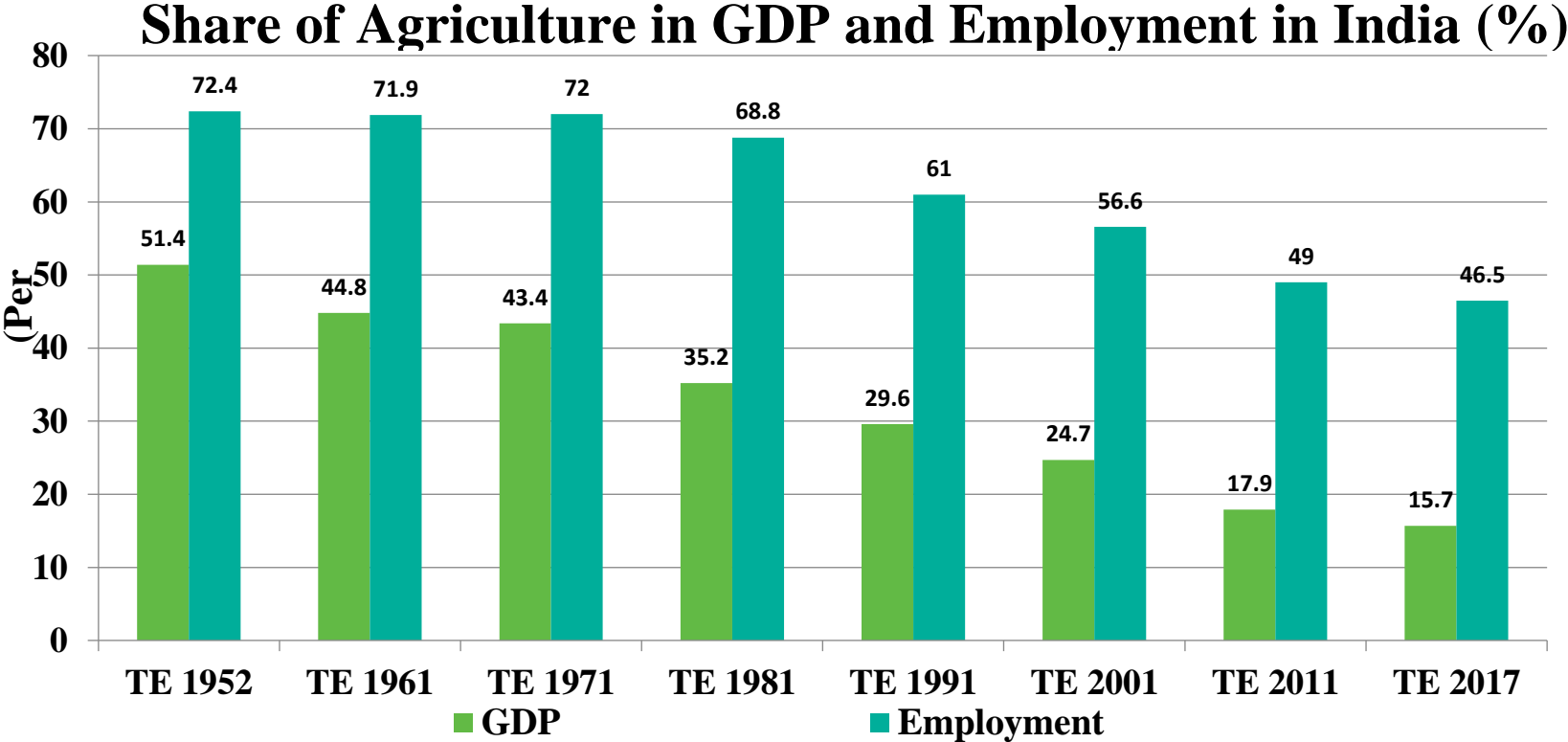
Size Group	Average Size (Ha)					
	1970-71	1980-81	1990-91	2000-01	2010-11	2015-16
Marginal	0.40	0.39	0.39	0.40	0.39	0.38
Small	1.44	1.44	1.43	1.42	1.42	1.41
Semi-Medium	2.81	2.78	2.76	2.72	2.71	2.70
Medium	6.08	6.02	5.90	5.81	5.76	5.72
Large	18.1	17.41	17.33	17.12	17.38	17.10

## Indian agriculture : predominance of smallholders

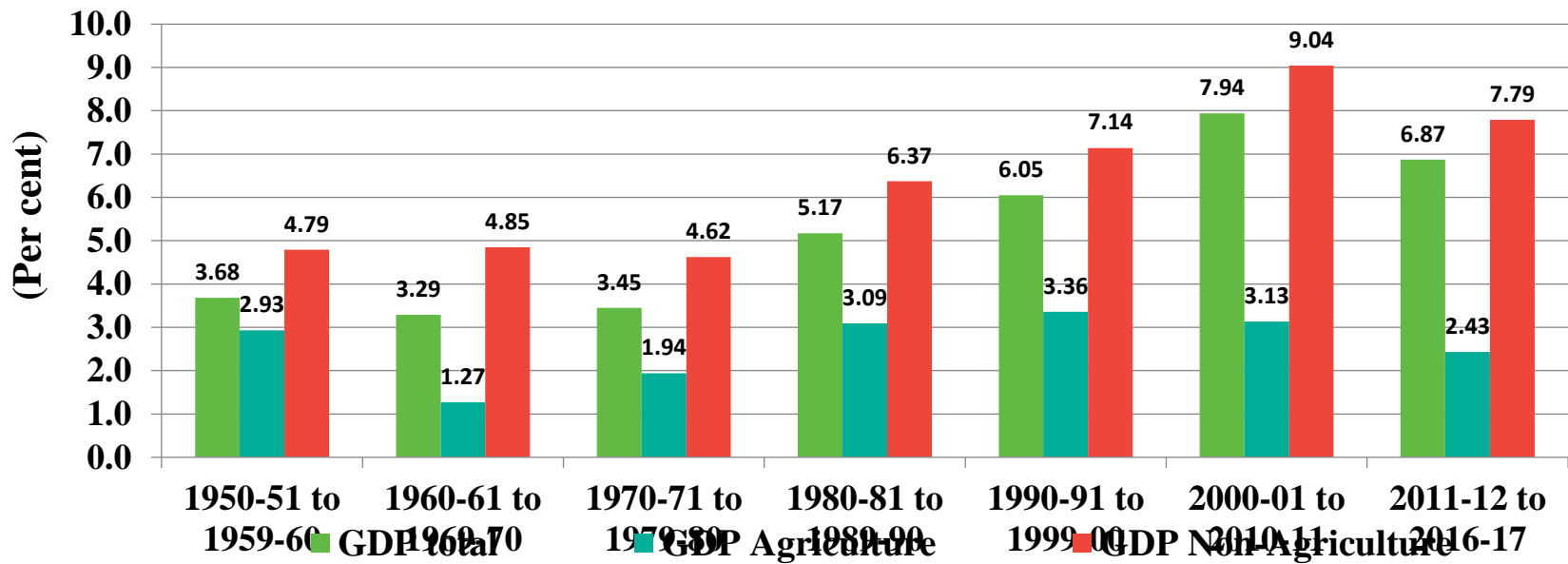
Year	Number (million)	Share by size-group (%)			Area (million ha)	Operational area by size-group (%)		
		Marginal and Small (< 2)	Semi-medium (2-4)	Medium and Large (> 4)		Marginal and Small (< 2)	Semi-medium (2-4)	Medium and Large (> 4)
1970-71	70.5	70	15	15	162.1	21	19	61
1980-81	81.6	74	14	12	163.3	26	21	53
1990-91	88.9	78	13	9	163.8	32	23	44
1995-96	115.6	80	12	8	163.4	36	24	40
2000-01	120.8	82	12	6	159.9	39	24	37
2010-11	138.3	85	10	5	159.6	45	24	31
2015-16	145.7	86	9	5	157.1	47	24	29



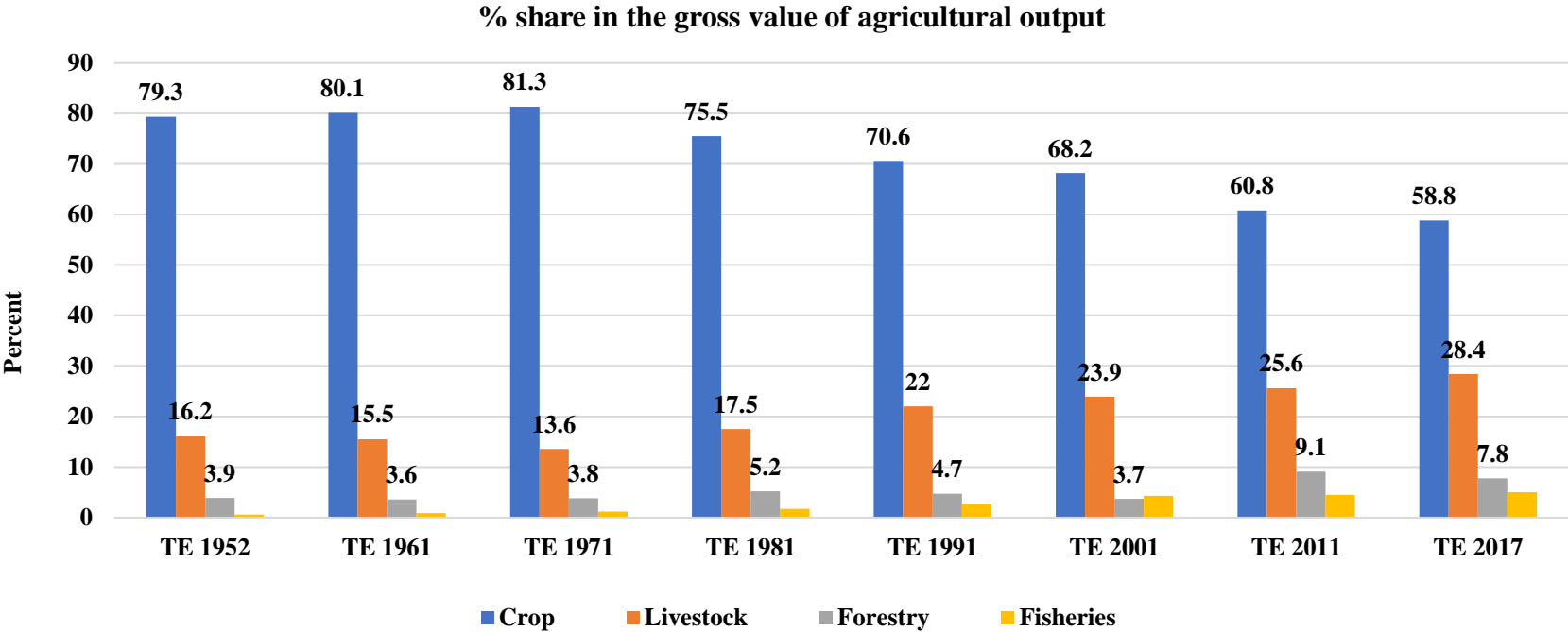
# Income and employment



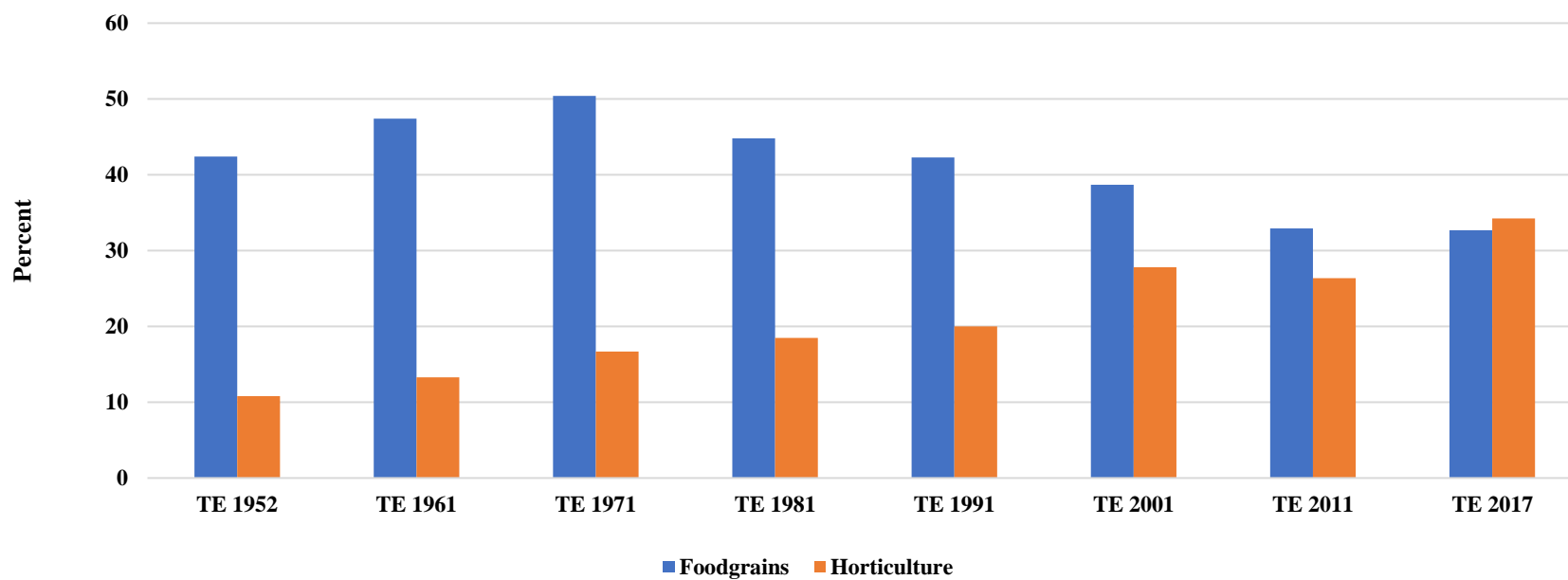
**Annual Growth rate in GDP Agriculture and Non-Agriculture (%)**



# Composition of agricultural output

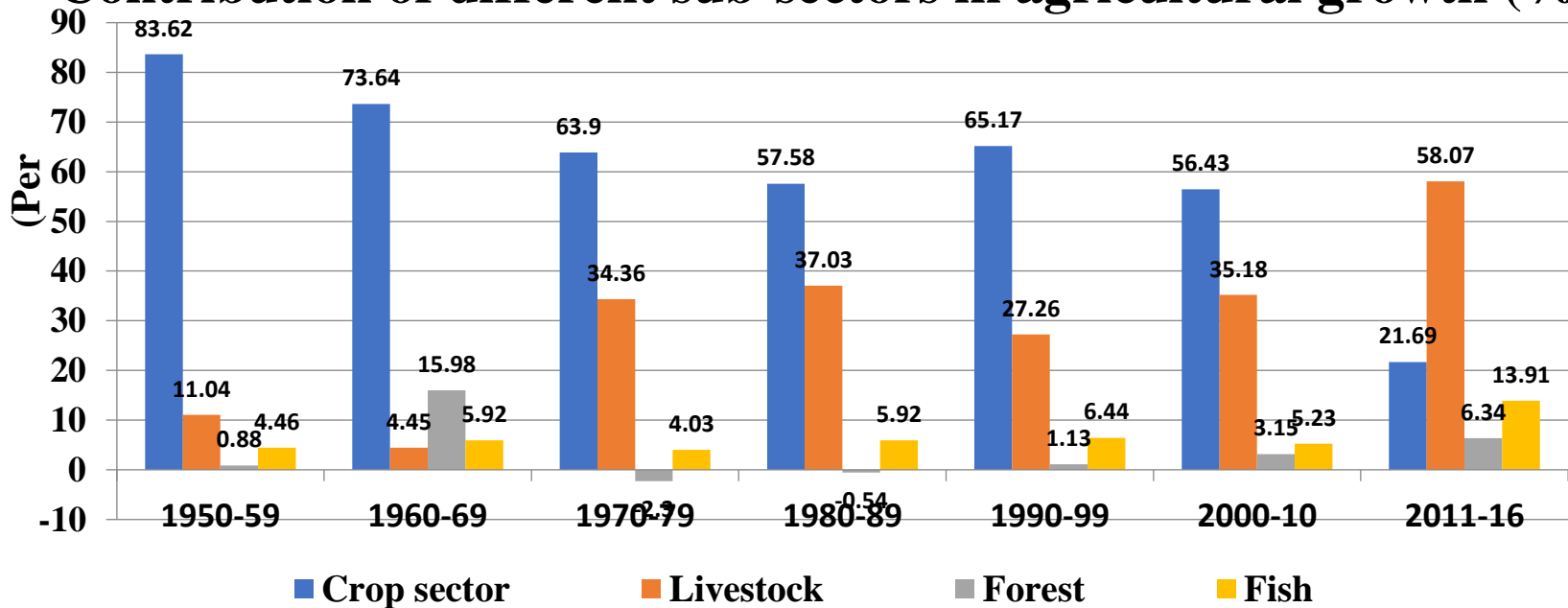


## % share in value of crop output



<b>Period</b>	<b>Crop sector</b>	<b>Livestock</b>	<b>Fisheries</b>	<b>Horticulture crops</b>	<b>Non-Horticulture crops</b>	<b>Cereals</b>
<b>1950-51 to 1959-60</b>	<b>3.06</b>	<b>1.42</b>	<b>5.79</b>	<b>0.74</b>	<b>3.52</b>	<b>3.95</b>
<b>1960-61 to 1969-70</b>	<b>1.70</b>	<b>0.41</b>	<b>4.00</b>	<b>4.87</b>	<b>1.09</b>	<b>2.10</b>
<b>1970-71 to 1979-80</b>	<b>1.79</b>	<b>3.92</b>	<b>2.90</b>	<b>2.86</b>	<b>1.49</b>	<b>2.40</b>
<b>1980-81 to 1989-90</b>	<b>2.24</b>	<b>4.91</b>	<b>5.67</b>	<b>2.63</b>	<b>2.12</b>	<b>2.89</b>
<b>1990-91 to 1999-00</b>	<b>3.02</b>	<b>3.79</b>	<b>5.36</b>	<b>5.95</b>	<b>2.07</b>	<b>2.24</b>
<b>2000-01 to 2010-11</b>	<b>2.85</b>	<b>4.29</b>	<b>3.63</b>	<b>3.78</b>	<b>2.46</b>	<b>1.83</b>
<b>2011-12 to 2016-17</b>	<b>0.98</b>	<b>5.30</b>	<b>7.49</b>	<b>3.88</b>	<b>-0.28</b>	<b>0.26</b>

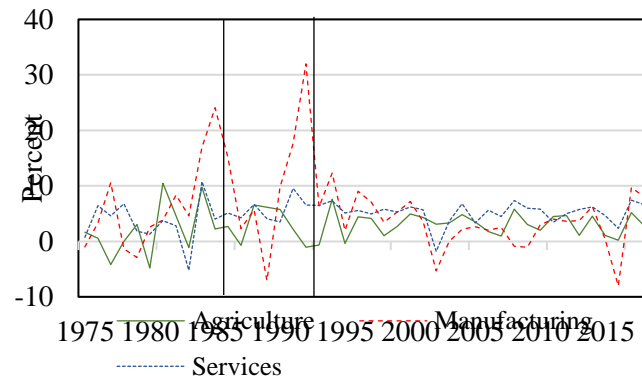
## Contribution of different sub-sectors in agricultural growth (%)



# Agricultural sector in Nepal

- Lower and fluctuating agricultural growth
- Decelerating total factor productivity growth
- Eroding competitiveness
- Rising imports of agricultural commodities and widening trade gap

- Growth of sectoral value added



# Challenges of Agriculture sector in Nepal

1. Lower investments and weak infrastructure
2. Climate change
3. Governance challenges
4. Migration led challenges
5. Agricultural trade challenges
6. COVID-19 induced challenges



## Prospects for agriculture sector in Nepal

- Shift in consumption pattern and dietary diversity
- Increasing commercialization and diversification of agriculture
- Emerging high value chains and increasing vertical integration
- Expanding agricultural credit and insurance markets

### Food basket in Nepal: the changing trends

Food commodities	Annual per capita food consumption (kg)		Change (%)
	1995	2011	1995-2011
Cereals	177.1	163.4	-7.7
Pulses	7.1	11.1	55.1
Milk	18	39.8	121.3
Edible oils	3.8	7.4	97.3
Vegetables	31.4	54.5	73.4
Fruits	6	14.5	141.3
Non-veg	4.6	9.8	111.2
Sugar	3.09	4.59	48.5

# Prospects for agriculture sector in Nepal

- **Evolving governance opportunities**
  - Transition to federal structure
  - Greater participation of local development authorities
- **Proximity to two largest consuming countries**
- **Non-farm diversification**
  - Non-Timber Forest Products and Agro-forestry
- **Covid-19 induced opportunities**
  - Digitalization
  - Mechanization
  - Transition in food system
  - Conducive ecosystem for agri reforms

# Way forward

- **Ensure food security and make agriculture remunerative**
  - **Bridging yield gaps of food crops**
    - **Technology, policies and institutions**
  - **Promote adoption of improved technologies**
    - **Seed, nutrients, mechanization**
  
- **Increase investment in agriculture sector**
  - **Enhance public investment**
    - **Irrigation, rural roads, electrification, and agri R&D**
  - **Attract participation of private sector**
    - **Agricultural extension**
    - **Backward and forward integration**

# Way forward

- **Promote agricultural diversification** towards more remunerative commodities
  - Strengthen policies towards:
    - **Infrastructure development for perishable commodities**
    - **Quality standards of agro-processed commodities**
    - **Promote contract farming and develop domestic and regional value chains**
    - **Consolidate farmers for production and marketing (institutional innovation)**
  
- **Explore trade opportunities of niche commodities**
  - **Address non-tariff barriers**
  - **Capacity building for Good Agricultural Practices**

# Instruments of policy

- **An instrument is defined as something which the manager or actor can change or manipulate in order to produce a desired effect.**
  - **Economic quantity such as interest rate or**
  - **Institutional framework such as nationalization of banks.**
- **An instrument- the means by which the policy objectives are pursued.**
- **The effectiveness of an instrument in achieving the intended policy objectives**
  - **dependent not only on the change in the instrument**
  - **but also on how the instrument is used**

# Instruments of policy

- **We can use a number of policy instruments to achieve the policy goals.**
- **In agriculture, the major policy instruments may be**
  - **Input subsidy**
  - **Price support**
  - **Food subsidy**
  - **Direct payments**
  - **Warehouse receipts**
  - **Infrastructure services**
  - **Agricultural trade regulations**
  - **Exchange rate management**
  - **public investments in agricultural infrastructure**

# Instruments of policy

- Apart from these instruments, amendments in the acts or framing some rules and regulations can also be used as instruments to achieve the policy goals.
- The instruments are not static in nature.
- Sometimes, changes in the rules and regulations of international institutions can compel a nation to make necessary changes in the policy instruments to make them compatible and compliant with the international ones.
  - **Transition from quantitative restrictions (QRs) to import tariffs regime**

# Phases in Agricultural Policy

- **Pre-green revolution period (1950/51 to mid 1960s)**
- **Green revolution period (1965/66-1979/80)**
- **Wider technology dissemination phase (1979/80 to early 1990s)**
- **Post-reform phase (Early 1990s to 2003/04)**
- **Period of recovery (2004/05 onwards)**



# Pre-green revolution period (1950/51 to mid 1960s)

- **Tremendous agrarian reforms**
  - **Abolition of intermediary landlordism**
  - **Security of farming to tenants**
  - **Ownership of land to tenants**
  - **Imposition of land ceiling**
  - **Consolidation of land holdings**
- **Institutional changes,**
  - **Strengthening of cooperative credit institutions**
  - **Launch of community development programme**
- **Development of major irrigation projects**
  - **Expansion of area was the main source of growth**

# Green revolution period (1965/66-1979/80)

- **Agricultural policies during this period evolved in the wake of**
  - **Severe food crisis consecutively**
- **Reliance on food imports and food aid may lead to heavy costs**
  - **Political pressure**
  - **Economic instability**
- **Rapid spread of new seeds of HYV of wheat and rice, which were available with CGIAR institutes like CIMMYT and IRRI**

# Green revolution period (1965/66-1979/80)

- Govt took bold decision to go for the import and spread of HYV of wheat and rice, which involved use of fertilizers
  - Quantum jump in yield
    - Incremental production of 30 million tonnes in just six years
- Increase in productivity became the main source of growth in crop output
- Biggest achievement - self-sufficiency in foodgrains
- FCI and APC were created during this period
- Agrarian reforms took back seat during this period
- More emphasis on
  - Research, extension, input supply, credit, marketing, price support and spread of technology

# Wider technology dissemination phase (1979/80 to early 1990s)

- The next phase in Indian agriculture began in early 1980s.
- Agriculture policy lacked direction and was marked by confusion.
- Agricultural growth accompanied by increase in real farm income led to emergence of interest groups and lobbies
- Considerable increase in subsidies and support to agriculture during this period
- Public sector spending in agriculture for infrastructure development started showing decline in real terms
- The output growth, concentrated in very narrow pockets, became broad based and got momentum.
- The rural economy started witnessing process of diversification
  - High growth in Milk, fishery, poultry, vegetables, fruits etc.

# Post Reform Phase (Early 1990s to 2003/04)

- **Initially agriculture took a back seat**
- **New Agricultural Policy came out,**
  - **Incentive structure**
  - **Infrastructure**
  - **Technology**
  - **Market development**
  - **Extension**
  - **Regulations**
  - **Input supply**
  - **Tenancy etc.**
- **NAP aims to attain output growth rate in excess of 4 percent per annum in agriculture sector based on efficient use of resources**

# New Agricultural Policy

- **The NAP resolution describe the strategy and policy alternatives under the following heads**
  - **Sustainable agriculture**
  - **Food and nutrition security**
  - **Generation and transfer of technology**
  - **Inputs management**
  - **Incentives for agriculture**
  - **Investment in agriculture**
  - **Institutional structure**
  - **Risk management**

## Period of recovery (2004/05 onwards)

- Doubling agricultural credit
- Decentralized procurement
- Initiatives for balanced nutrient management
- Focus on climate resilient agriculture
- Agricultural market reforms-E-NAM, Model APMC Act, Model Contract Farming Act etc.
- Emphasis on agro-processing and value addition
- Model land leasing law
- **Doubling farmers' income**
- Waves of waiving off agricultural loans
- New mechanisms for fixation of MSP

## Period of recovery (2004/05 onwards)

- **Emphasis on Farmers' Producer Organization**
- **Emphasis on rural marketing**
- **Enactment of farms reforms acts**
  - *The Union government enacted two new farm laws for agriculture and modified the Essential Commodities Act 1951 for September 2020.*



# Rationale for reforms

- Agriculture was not in the ambit of major economic reforms of 1990s
- Imbalance between demand and surplus
- Need to improve export competitiveness
- Faster growth of allied sectors with little intervention by the Govt.
- Predominance of marginal and small holdings
- Poor integration of markets
  - *Horizontal and vertical*
- Need for accelerating processing and value addition
- Discouraging trend in investment and capital formation in agriculture

# Way forward

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*Thank you*