

# **Agricultural Development in Nepal: Challenges and Opportunities**

**NRNA ICC's Regional Expert Conference**

**San Francisco, California, USA**

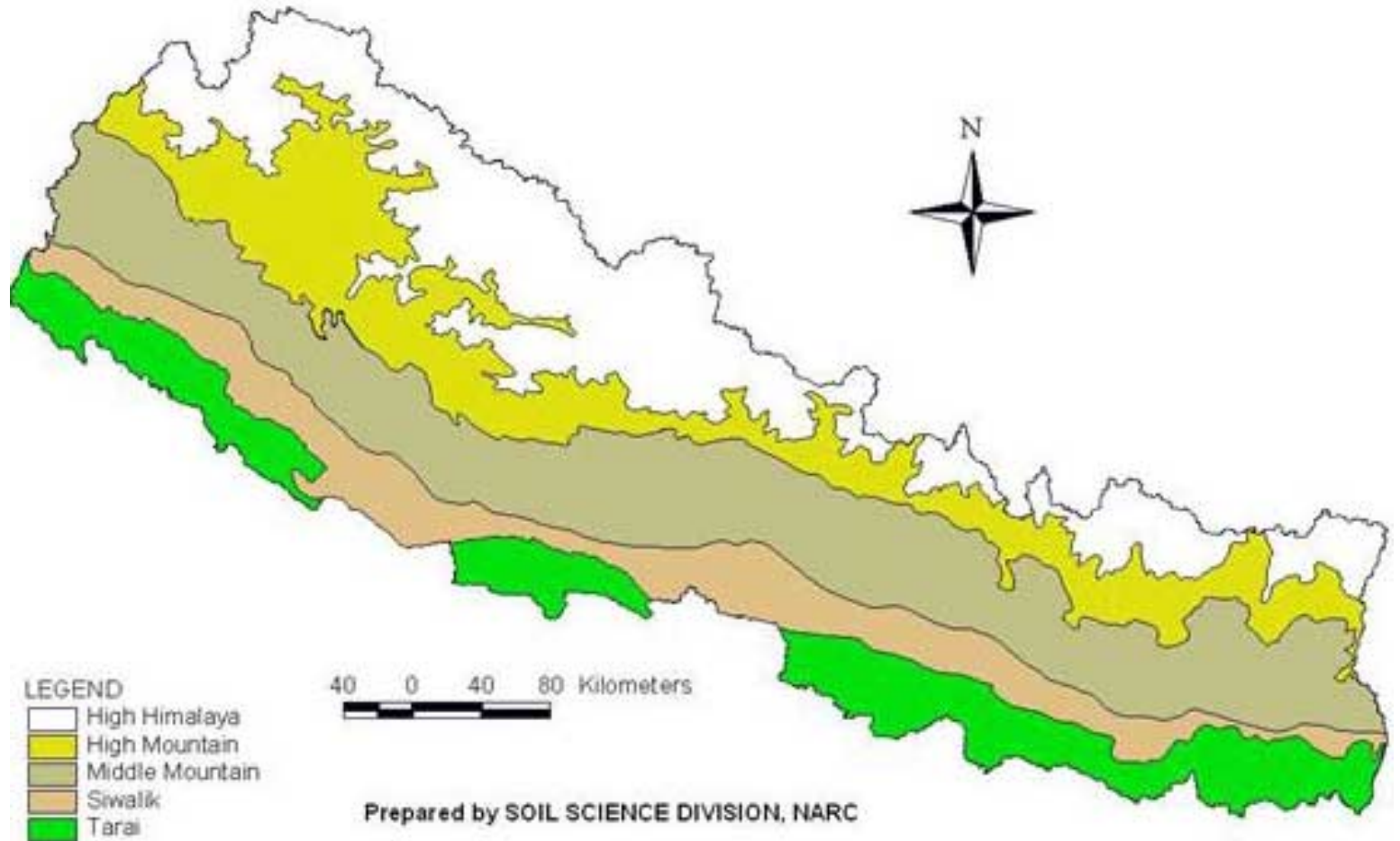
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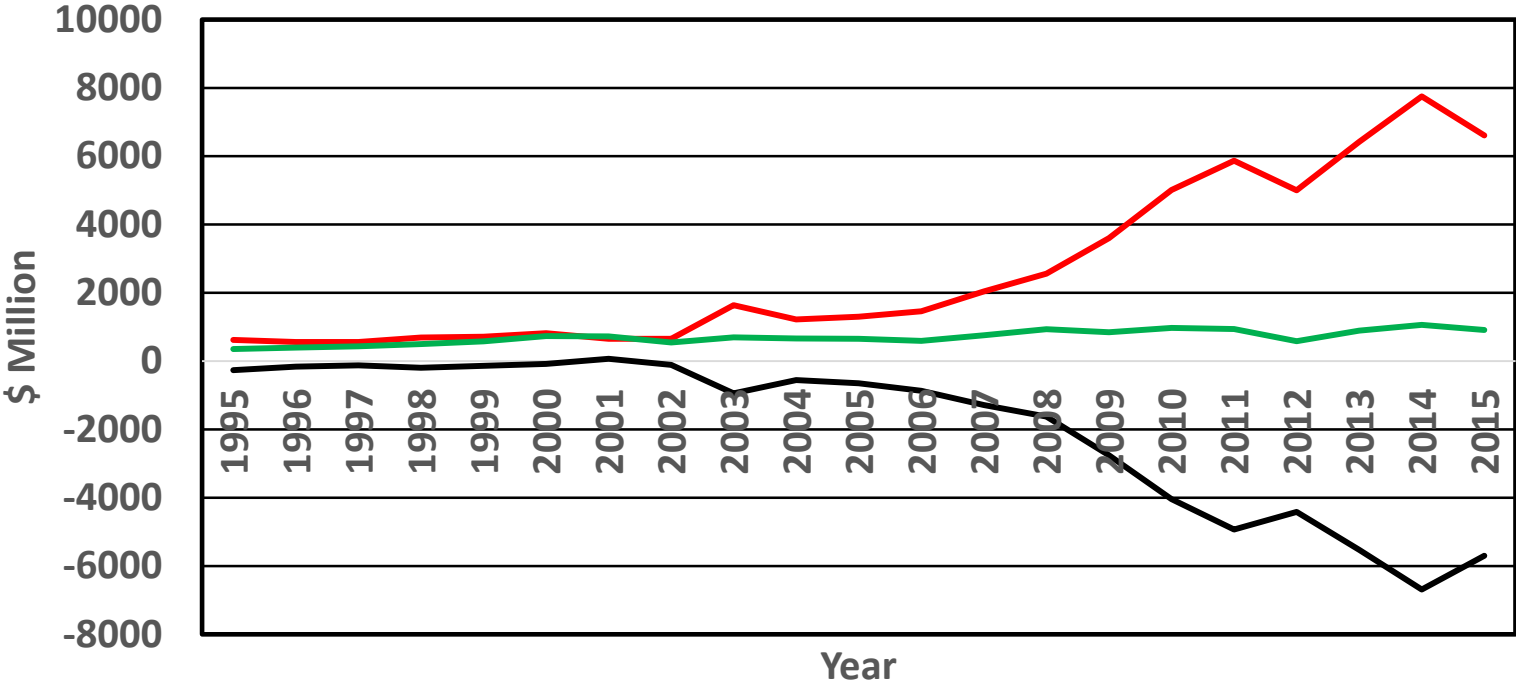
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# Physiographic Regions of Nepal



<https://www.expeditionsnepal.com/wp-content/uploads/2016/11/physiographic-map-of-nepal.jpg>

# Trade Balance (1995-2015)



— Imports (\$ M) — Exports (\$ M) — Trade Deficit (Export-Import) (\$ M)

Data source: [atlas.media.mit.edu/en/profile/country/npl](http://atlas.media.mit.edu/en/profile/country/npl).

## DEPENDENT ON INDIA FOR AGRICULTURAL IMPORTS

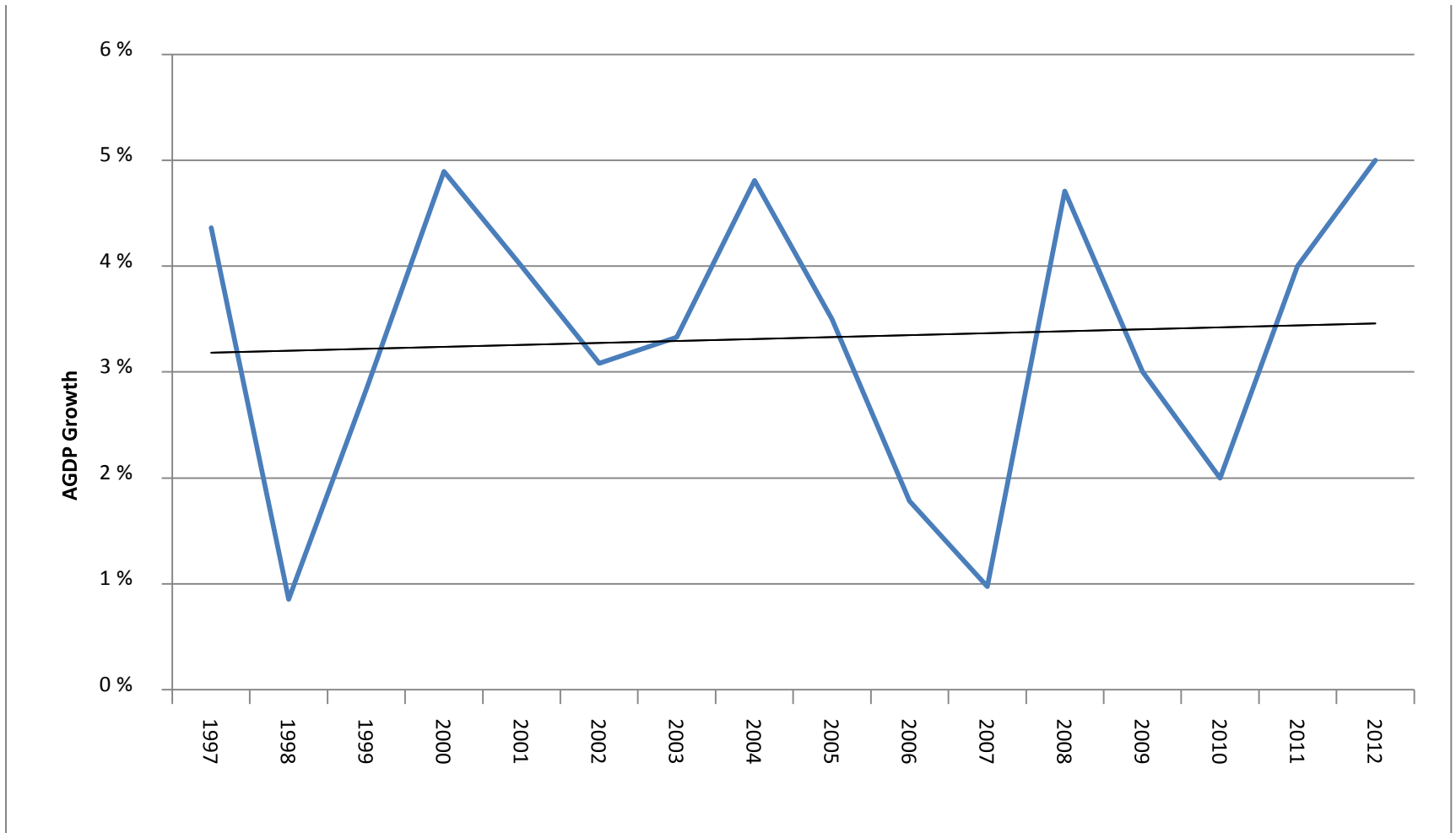
- A negative trade balance of Rs. 622,374.56 million (Rs.774,684.20 million import and Rs. 85,319.10 million export) for the fiscal year 2014/2015, of which 63.22% was with India, 14.21% with China, and 22.57% with other countries.
- The top two imports in 2014/2015 included agricultural products (Rs 137.12 billion) followed by petroleum products (Rs. 112.16 billion).

(CBS, 2016)

# Major agricultural commodities imported in 2014/2015:

Cereals	Rs. 35.12 billion
Fat and edible oil	Rs 22.51 billion
Vegetables	Rs 15.93 billion
Fruits and nuts	Rs 10.54 billion
Animal fodder	Rs. 10.02 billion
Oil seeds	Rs. 9.11 billion
Coffee, tea and spices	Rs. 4.27 billion
Sugar and confectionary	Rs. 3.49 billion
Beverages	Rs. 2.92 billion
Tobacco	Rs. 2.55 billion
Llive animal	Rs. 2.42 billion
Dairy products	Rs.2.15 billion
Fish	Rs. 1.15 billion

(CBS, 2016)



## Growth of Agricultural GDP

Source: MOF National Accounts Estimate 2012 (at constant prices)

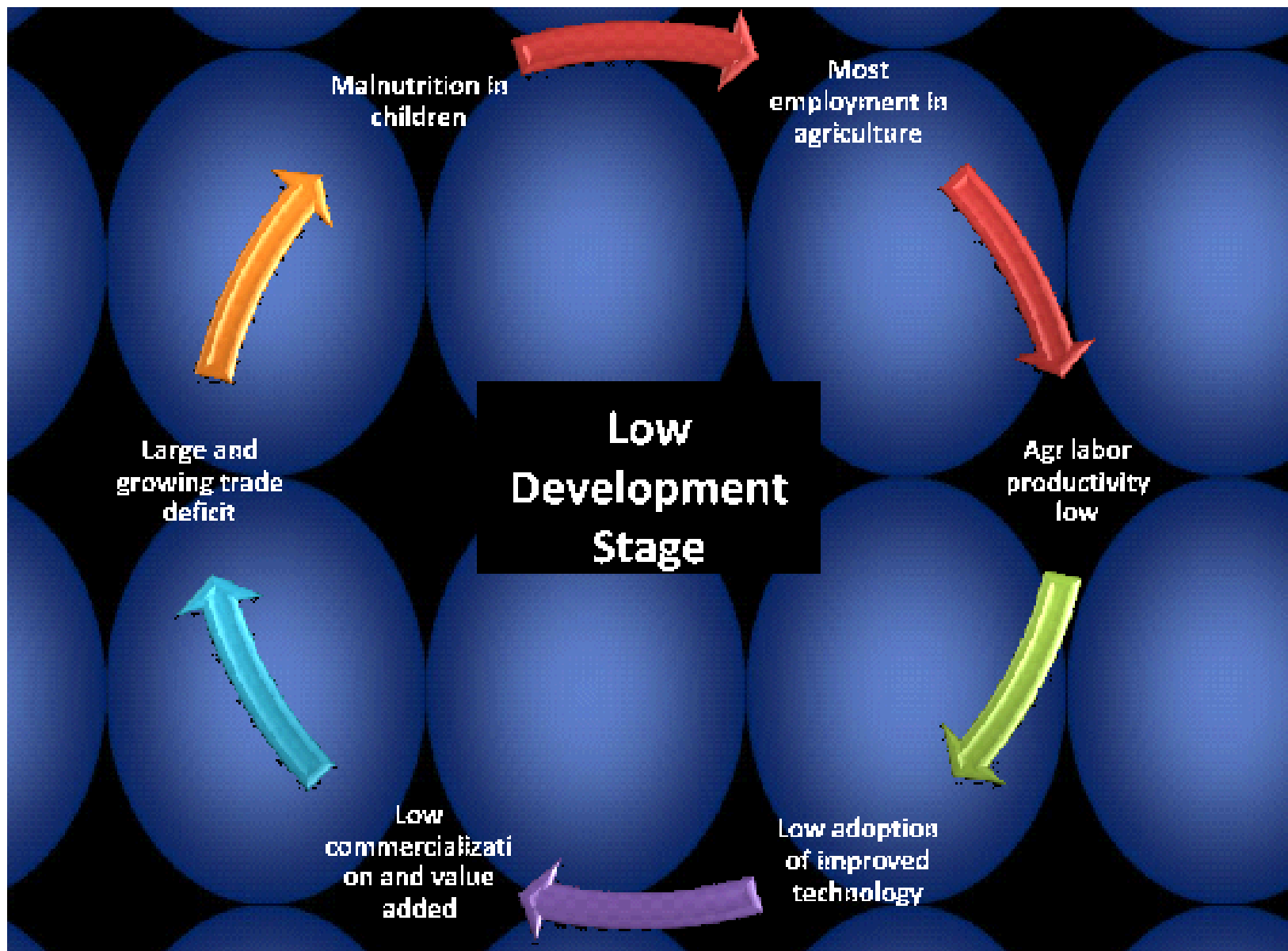
(MoAD, 2014)

## Performance Indicator of Nepal and Neighboring Countries

Country	Average GDP% over 1995-2010	Average Agricultural GDP% over 1995-2010	GDP/cap (\$) in 2010	Arable Land/capita (ha) In 2008	Cereal yield (kg per ha) In 2010	Ag GDP/arable land (\$/ha) in 2008
Bangladesh	5.6	3.6	673	0.054	3890	1845
China	9.9	4.1	4393	0.082	5460	4467
India	7.2	2.8	1477	0.139	2471	1277
Pakistan	4.2	3.7	1007	0.122	2803	1586
Nepal	4.1	3.0	524	0.082	2374	1665

Source: World Development Indicators at <http://data.worldbank.org/data-catalog/world->

(MoAD, 2014)

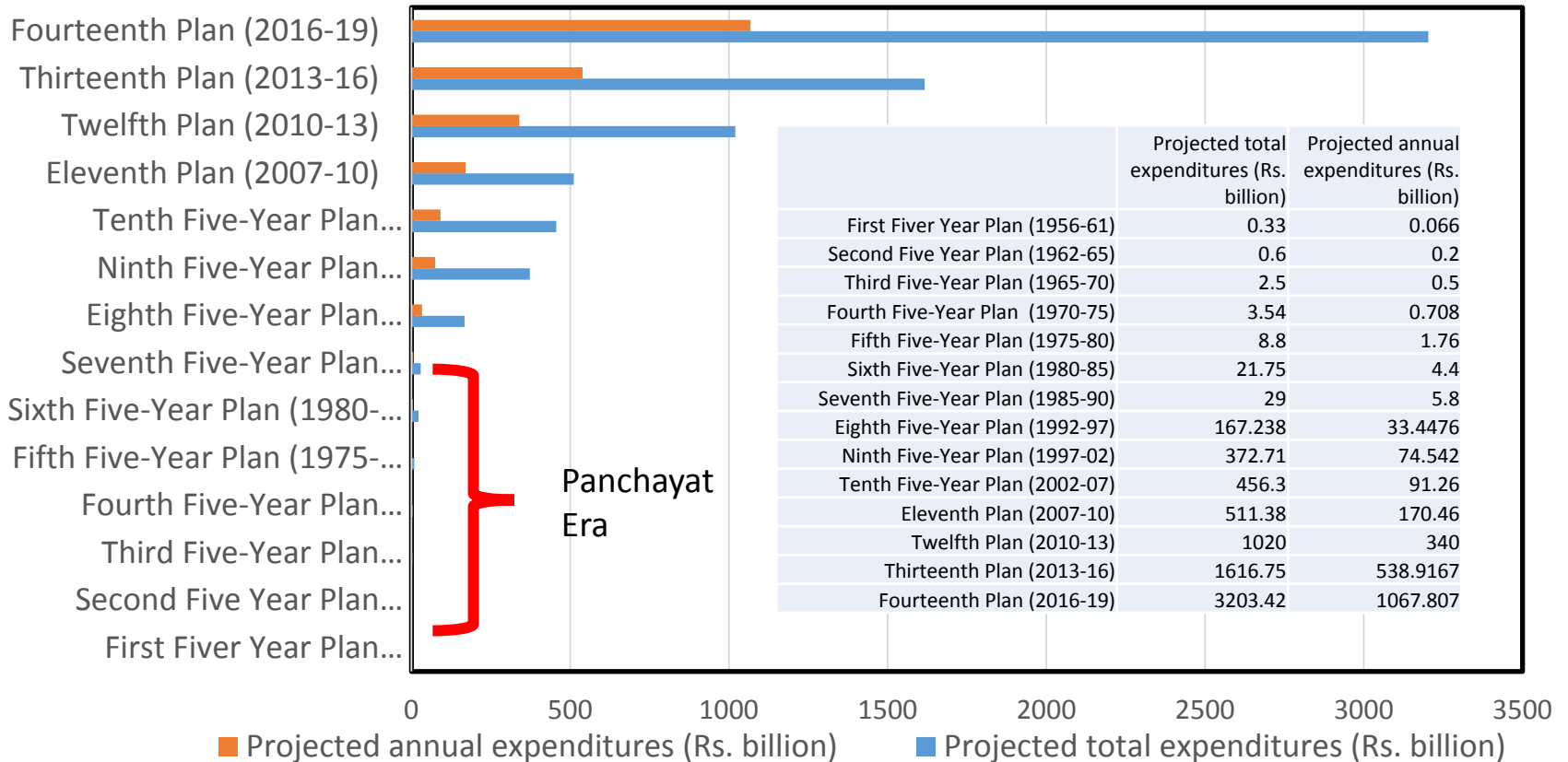


## Low Development Stage of Nepalese Agriculture

(MoAD, 2014)



# Periodic Plans and Projected Expenditures



## SOCIO-ECONOMIC STATUS

- 25% population is below the poverty line
- 41% children suffering from stunting and chronic malnutrition
- Total outstanding public debt of Rs. 627.8 billion in 2015/16
- Outstanding per capita debt Rs. 22,159 in 2015/16
- Outmigration of almost 5 million youths for foreign employment

## HISTORICAL PERSPECTIVE

- Establishment of *Krishi Adda*, 1921
- Department of Agriculture, 1952
- Five Year Plans, 1956
- Ministry of Agriculture and Irrigation, 1974
- Government decision to strengthen Cooperatives, 1991
- Ministry of Agriculture and Cooperative, 1999
- Ministry of Agriculture, Land Management and Cooperatives, 2018
- APP, ADS
- Multilateral and bilateral agencies, INGOs, NGOs

# CURRENT AGRICULTURAL DEVELOPMENT PROGRAMS

- ❖ Agriculture Development Strategy (2015-2035)
- ❖ Prime Minister Agriculture Modernization Project (PM-AMP), (2016-2025)
- ❖ Zero Hunger Challenge National Action Plan (2016-2025)
- ❖ Multi-sector Nutrition Plan (MSNP) (2013-2017 (2023))
- ❖ Fourteenth Three Year Plan (2016-2019)

## MULTILATERAL, BILATERAL, AND OTHER PROGRAMS

- Project for Agriculture Commercialization and Trade (PACT), 2009-2018, World Bank.
- Raising Incomes of Small and Medium Farmers Project (RISMFP), Asian Development Bank
- Knowledge-Based Integrated Sustainable Agriculture in Nepal (KISAN) project, USAID.
- High Mountain Agribusiness and Livelihood Improvement (HIMALI) Project, Asian Development Bank.
- Inclusive Growth Program in Nepal (UNNATI), DANIDA.
- Samarth-Nepal Market Development Program (Samarth-NMDP), DFID.
- Sahaj- Nepal Agricultural Market Development Program (Sahaj-NAMDP), SDC.

# AGRICULTURE DEVELOPMENT STRATEGY (ADS) 2015-2035



**Vision: “A self-reliant, competitive, and inclusive agriculture sector that drives economic growth and contributes to improved livelihoods and food and nutrition security leading to food sovereignty.”**

(MoAD, 2014)

1. Food and Nutrition Security
2. Poverty Reduction
3. Agricultural Trade Competitiveness
4. Higher and more equitable Income
5. Farmers' Rights ensured and strengthened

Inclusion

Sustainability



Private Sector,  
Cooperative  
Sector

Connectivity

Governance

Productivity

Profitable  
Commercialization

Competitiveness

**Strategic Framework of the Agricultural Development Strategy**

(MoAD, 2014)

# FLAGSHIP, CORE AND OTHER PROGRAMS

## FLAGSHIP PROGRAMS

1. Food and Nutrition Security Program
2. Decentralized Science, Technology, and Education Program
3. Value Chain Development Program
4. Innovation and Agro-entrepreneurship Program

## CORE PROGRAMS

**Governance**: policies, coordination and implementation, integrated planning, monitoring and evaluation, capacity-building.

**Productivity**: agricultural education, irrigation, inputs, improved breeds, sustainable farming.

**Profitable commercialization**: investment climate, contract agriculture, tax policy, agricultural finance, roads, markets, power.

**Competitiveness**: market infrastructure, exports, food quality and safety

## OTHER PROGRAMS

Apple development program, Pomegranate, Mango, Flower, Orange, Cardamom, Tea and Coffee, Onion, Orange, Mushroom, Industrial crop, Oilseed, Soil testing, Animal health service, Livestock market, Agribusiness, Plant protection, etc.



# IMPLEMENTATION CHALLENGES

- Lack of supporting legislations, policies, and resources for program implementation
- Lack of necessary manpower
- Low level of engagement of private sector in agricultural investment
- Weak coordination among implementing agencies
- Wide-spread corruption and fragmented policies and programs
- Overlapping programs and weak monitoring and evaluation
- Weak connection between producers and government agencies

# SHORTAGE OF AGRICULTURAL LABOR

- 2,226,152 labor permits, about 8% of the country's total population, were issued for foreign employment during the six-year period from 2008/09 to 2013/14, with 137% increase between 2008/09 to 2013/14.
- Although men accounted for 95.1% of the total labor permits, a 239% increase on the number of permits acquired by women during this period suggest that Nepal will also increasingly loose women workforce to foreign employment in the future.

(Government of Nepal, Ministry of Labor and Employment, 2014)

# CONVERSION OF AGRICULTURAL LAND TO OTHER USES

Total Land Area = 14,335,100 ha

	% OF LAND AREA	AGRICULTURAL LAND AREA (HA)	
1961	24.846	3,561, 698.95	
1981	28.692	4,113,026.89	
2001	29.710	4,258,958.21	
2015	28.748	4,121, 054.55	(-137,904 HA)

(The World Bank, 2018)

# CHRONIC LOW LEVEL OF AGRICULTURAL PRODUCTIVITY

## Productivity Gaps for Selected Agricultural Commodities

Product	Units	Current Production	Potential Production
Fish	t/ha/year	3.6	10
Timber	m <sup>3</sup> /year	0.337	13.4
Paddy	t/ha/year	2.72	10-12
Vegetables	Mt/ha/year	12.8	17
Buffalo-Milk	Liters/Lactation	900	2000

(MoAD, 2014)

# FOOD AND NUTRITION SECURITY, FOOD SAFETY

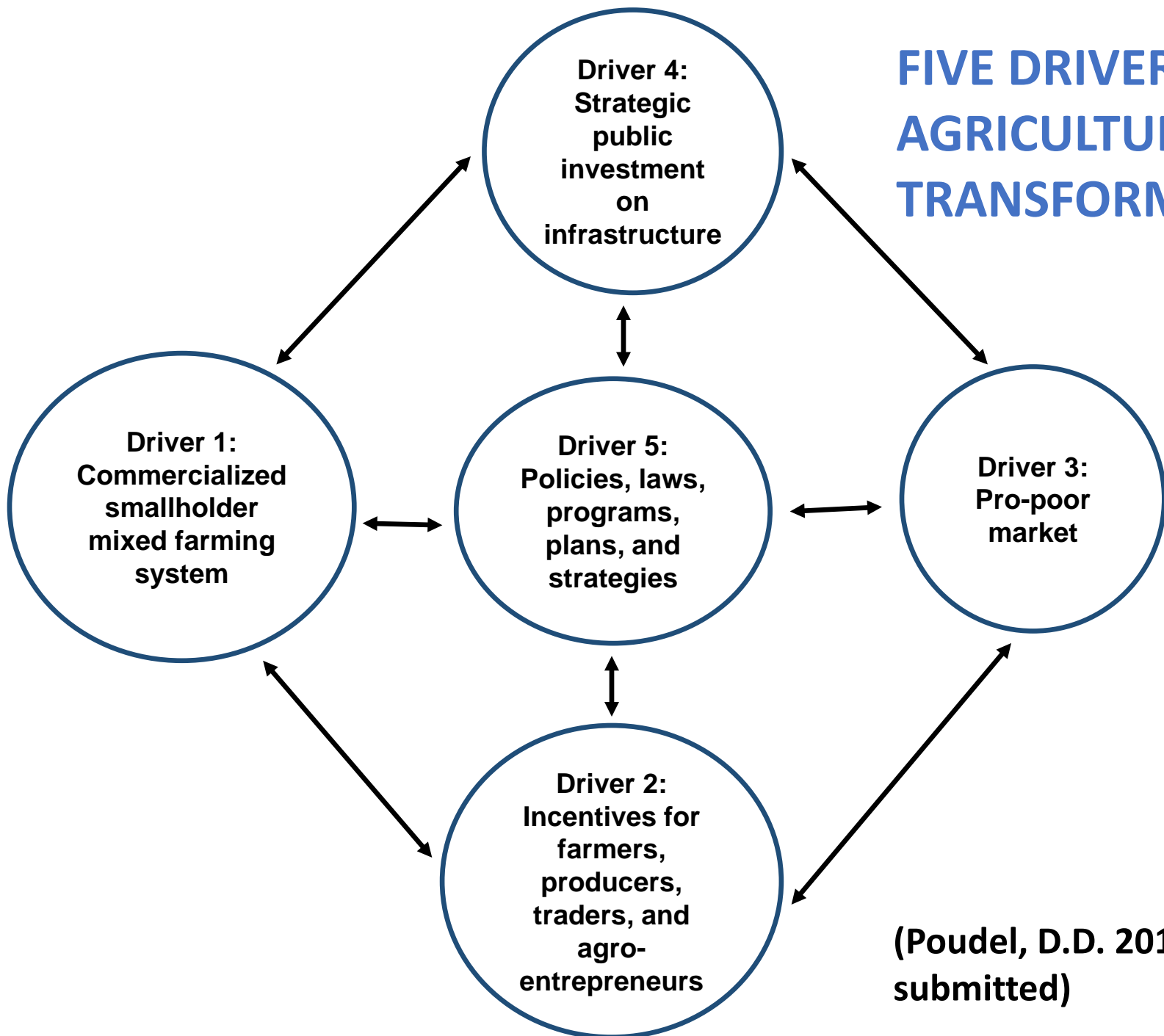
- Constitutional provision of food and nutrition security
- Malnutrition in children
  - Children suffering stunting 36%
  - Children suffering from wasting 10%
  - Children suffering from anemia 53%
- Malnutrition in women of reproductive age
  - 41% suffer from anemia
  - 17% suffer from long term energy deficiencies

(Nepal Food and Nutrition Sector Portal, 2017)
- Safe and nutritious food, Department of Food Technology and Quality Control (DFTQC), Ministry of Agriculture, Land Management and Cooperatives, GoN.

# TOP DOWN, OVERLAPPING, DISCONNECTED, AND EXPENSIVE AGRICULTURAL PROGRAMS

- PM-AMP, MSNP, Zero Hunger Initiatives and Fourteenth Plan (top down and overlapping)
- Governmental Programs vs multilateral and bilateral programs (disconnected)
- Federalization of the nation (disconnected)
- Exclusion
- Expensive

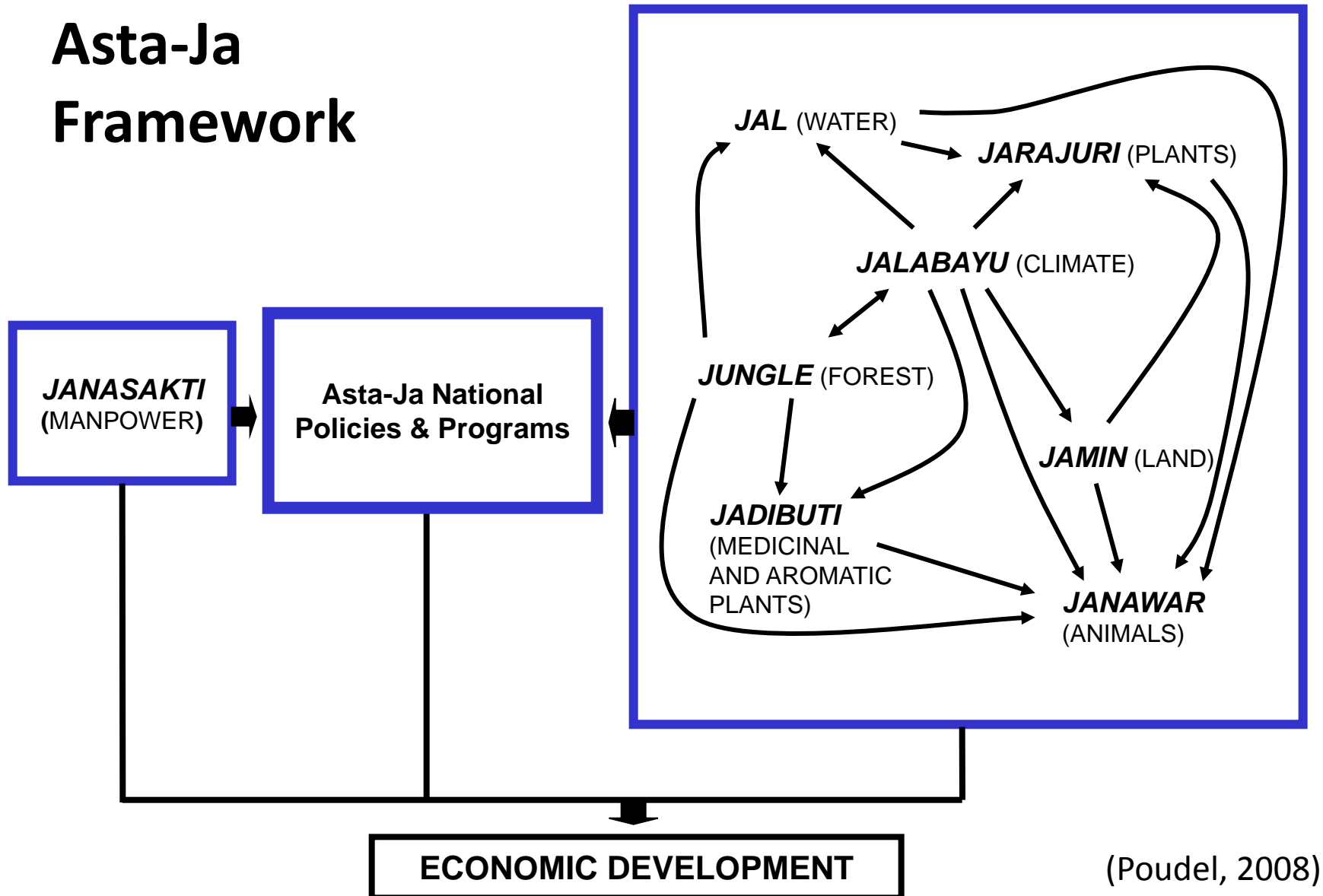
# FIVE DRIVERS OF AGRICULTURAL TRANSFORMATION



(Poudel, D.D. 2018. To be submitted)

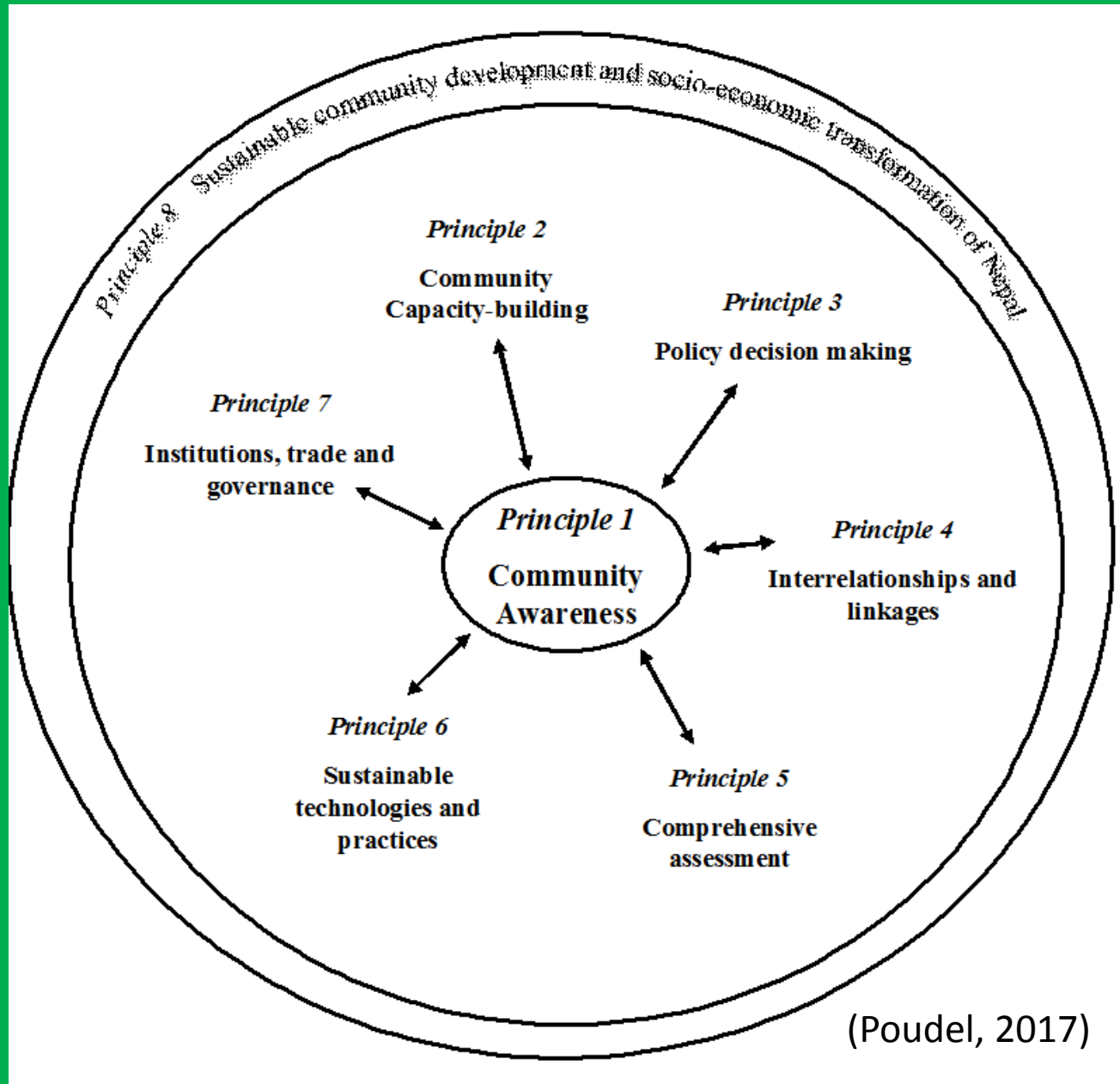
# FOOD SYSTEMS AND NATURAL RESOURCES

## Asta-Ja Framework





# Principles of Asta-Ja



(Poudel, 2017)

# Conclusions

- Program coordination and implementation is a real challenge.
- Five drivers of Inclusive Agricultural Development (IAD):
  - 1) Policies, plans, strategies, regulations, and agreements,
  - 2) Incentivized individual farmers, traders, and agro-entrepreneurs,
  - 3) Pro-poor market,
  - 4) Commercialization of smallholder farming system,
  - 5) Strategic public investment on infrastructure.
- Comprehensive review of existing agricultural development initiatives and the development of National Agricultural Development Strategy (NADS) is suggested.

**Thank You!**