

Improving Productivity & Competitiveness of Punjab

THE BUSINESS PLAN OF PUNJAB

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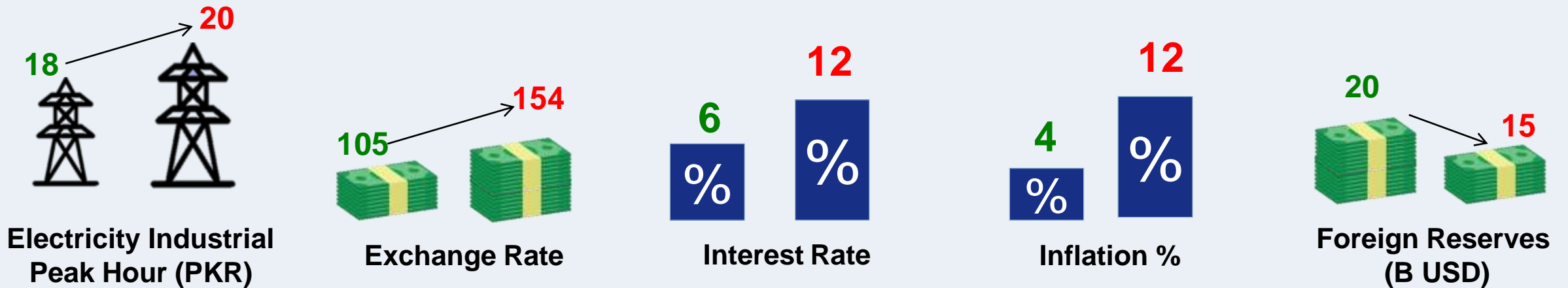
The Urban Unit
Urban Sector Planning & Management Services Unit (Pvt.) Ltd.



IMF Extended Fund Facility (EFF)

- Pakistan is currently in an IMF program as a result of a severe Balance of Payment crisis
- The Program is designed to correct the macroeconomic imbalances bedeviling the economy
- The program includes
 - establishment of a market based exchange rate mechanism
 - Maintaining positive real interest rates
 - No government borrowing from the SBP
 - Curtailing primary Deficit to 0,6 percent of GDP
 - Raising electricity tariff to clear the circular debt problem

EFF and Cost of Doing Business 2016 to 2019



Increasing Cost of Production

Increasing Cost of Consumption

Punjab's Strategy to Bounce Back!

*Improving
Resource Efficiency*



*De-regulation &
Governance
Reforms*

*Reducing the
Cost of Doing
Business*

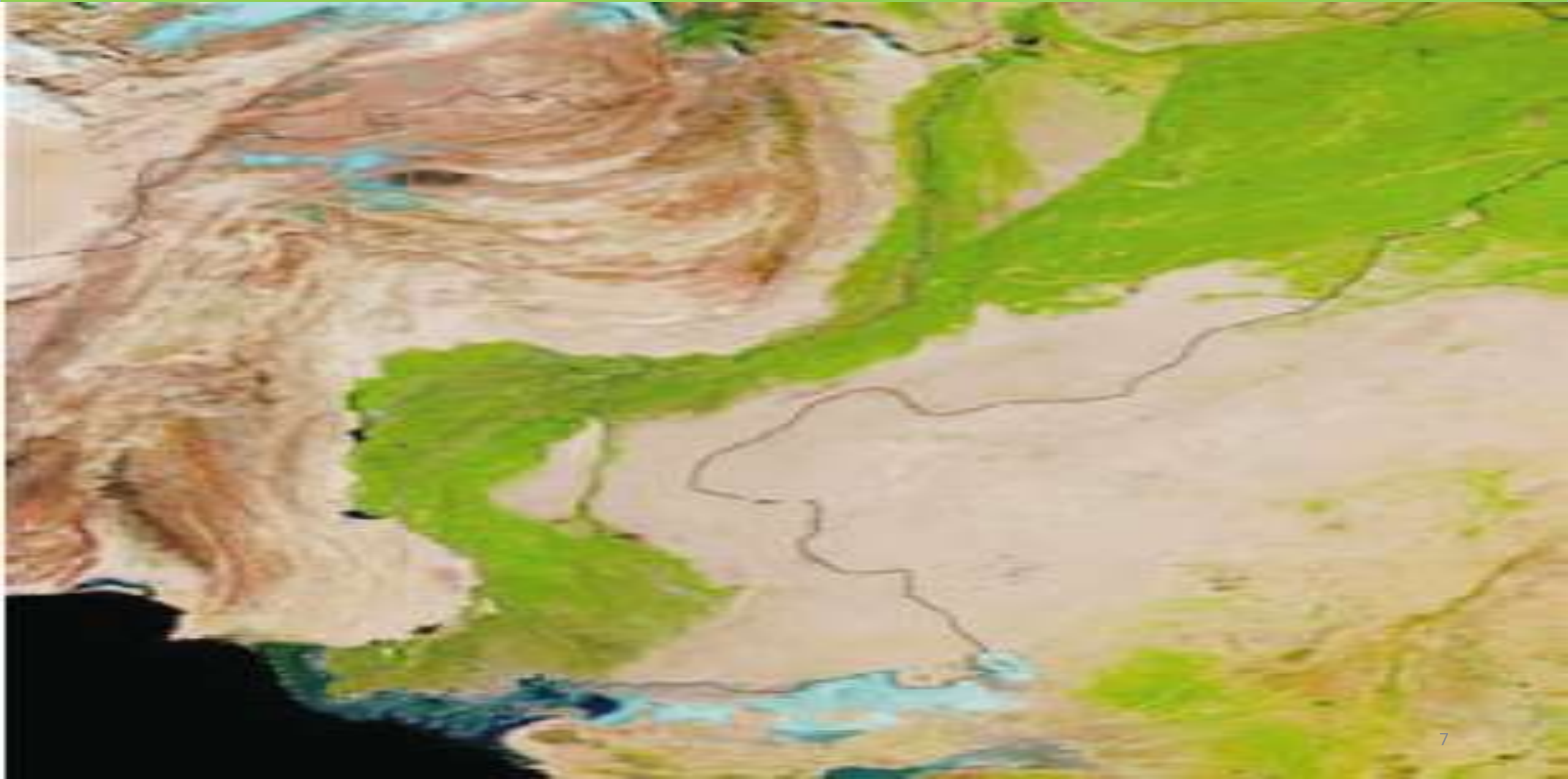
*Improving the
Investment
Climate*

Where do we stand?

Global Rankings: Complete Transformation required to move into top half

| Index | Total | China | Pakistan | India | Malaysia | Turkey | Vietnam |
|--|-------|-------|----------|-------|----------|--------|---------|
| Transparency Corruption Perceptions Index 2018 | 180 | 87 | 117 | 78 | 61 | 78 | 117 |
| WEF Global Competitiveness Index 2019 | 141 | 28 | 110 | 68 | 27 | 61 | 67 |
| Doing Business World Bank 2019 | 191 | 46 | 136 | 77 | 15 | 43 | 69 |
| Heritage Foundations' Index of Economic Freedom 2019 | 186 | 100 | 131 | 129 | 22 | 68 | 128 |
| UN Human Development Index 2018 | 189 | 86 | 115 | 130 | 57 | 64 | 116 |
| Social Progress Index 2019 | 149 | 89 | 125 | 103 | 46 | 71 | n/a |
| INSEAD Global Innovation Index 2019 | 129 | 14 | 105 | 52 | 34 | 56 | 42 |
| UN E-Government Development Index 2018 | 192 | 65 | 148 | 96 | 48 | 53 | 88 |
| Yale Environmental Performance Index 2018 | 180 | 120 | 169 | 177 | 75 | 108 | 132 |
| WEF Global Enabling Trade Index 2016 | 136 | 61 | 122 | 102 | 37 | 59 | 73 |
| Swiss KOF Globalization Index 2016 | 207 | 71 | 113 | 107 | 31 | 42 | 89 |
| WEF IT Network Readiness Index 2016 | 139 | 59 | 110 | 91 | 31 | 48 | 79 |
| World Bank Logistics Performance Index 2018 | 160 | 26 | 122 | 44 | 41 | 47 | 39 |

Today's Pakistan



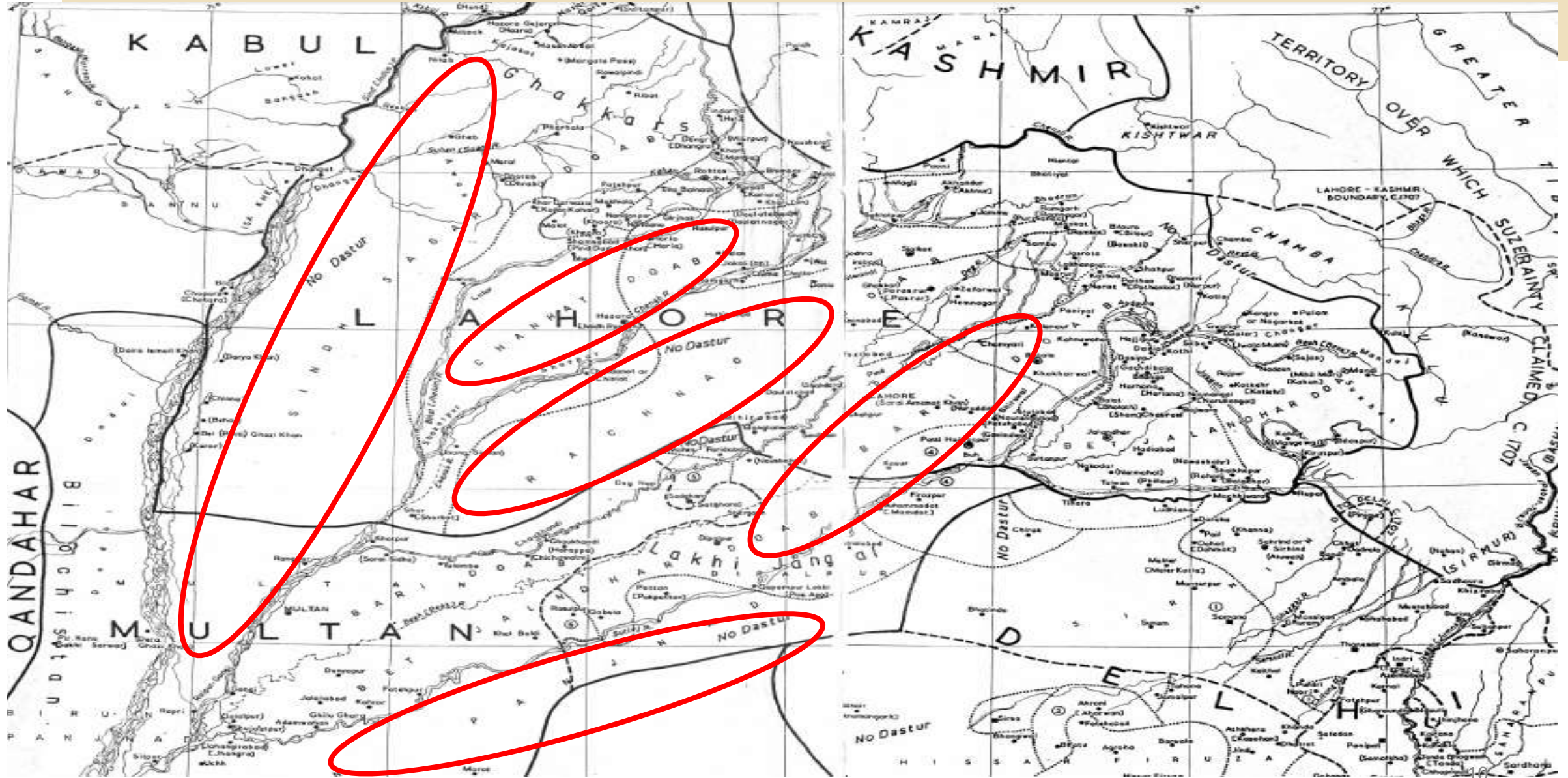


DARK HOLES OF PAKISTAN
LIGHTS REFLECT DEVELOPMENT

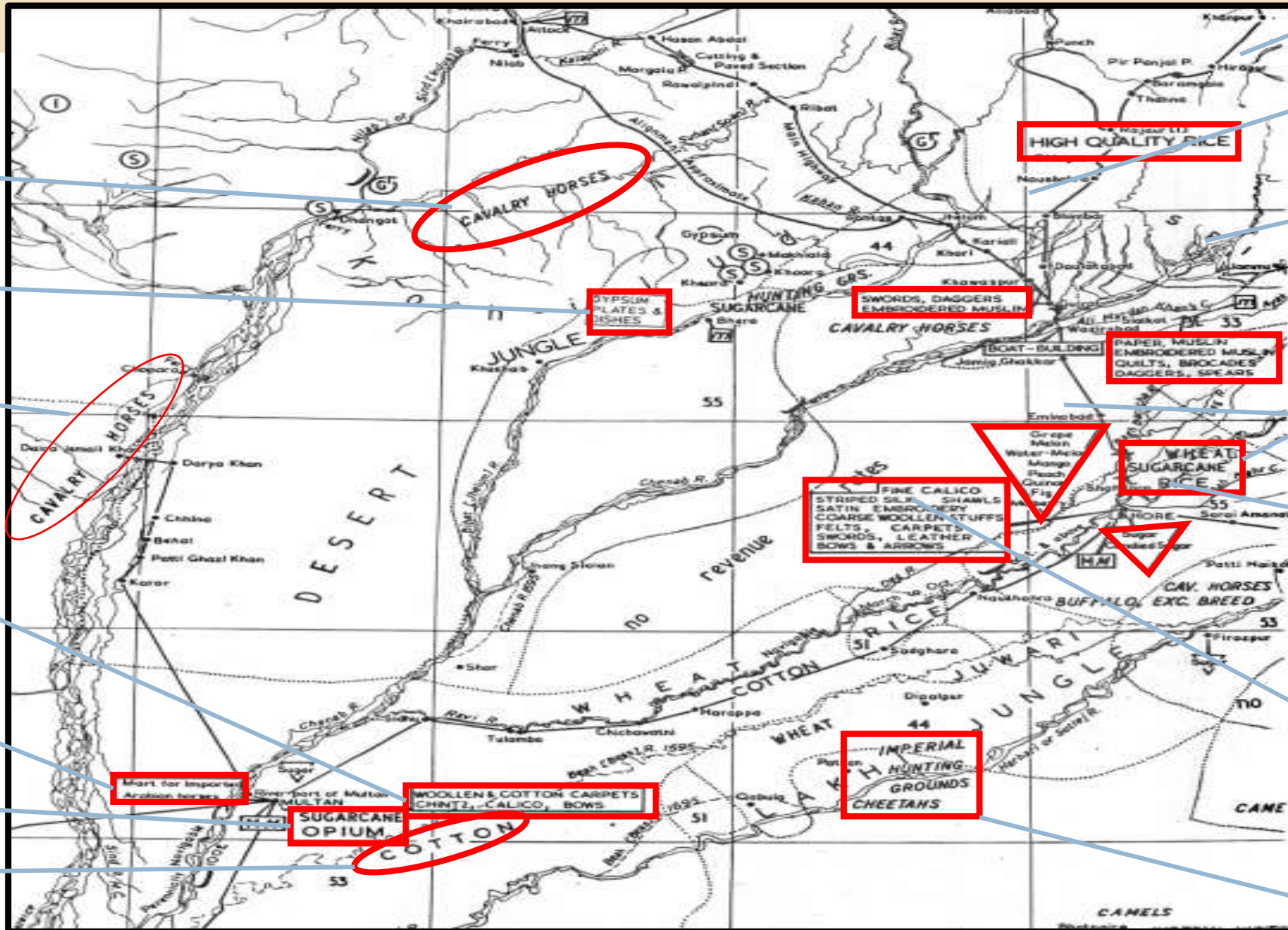


Punjab: Economic Backbone of Pakistan

Land Between the Rivers - 1595



River-based Economic Landscape of Punjab 1595



Calvary
Horses

Gypsum
plates and
Dishes

Calvary
Horses

Woolen and
cotton carpets,
Chintz, Calico,
Bows
Mart for
imported
Arabian
horses

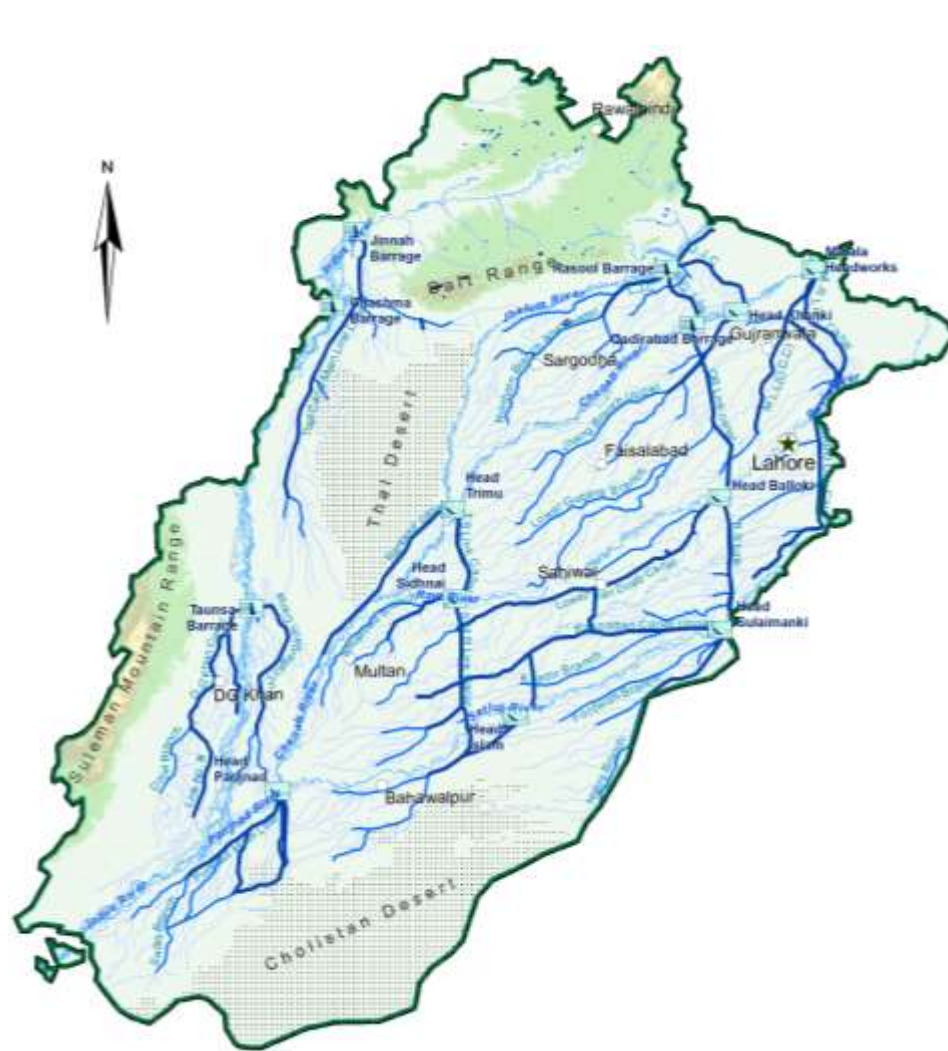
Sugar
Cane,
Opium
Cotton

High quality
rice
Swords,
Daggers,
Embroidered
Muslin,
Paper, Muslin,
Quilts,
Daggers,
Spears
Wheat, Sugar
cane, Rice

Grape melon,
water melon,
mango, peach,
fig
Sugar Cane,
Candied sugar

Fine Calico,
striped Silk,
Shawls, Satin
embroidery,
Coarse woolen
stuffs and
felts, Carpets,
Swords,
Leather, Bows
& Arrows
Hunting

Irrigation as a Transformation Driver – A Game Changer

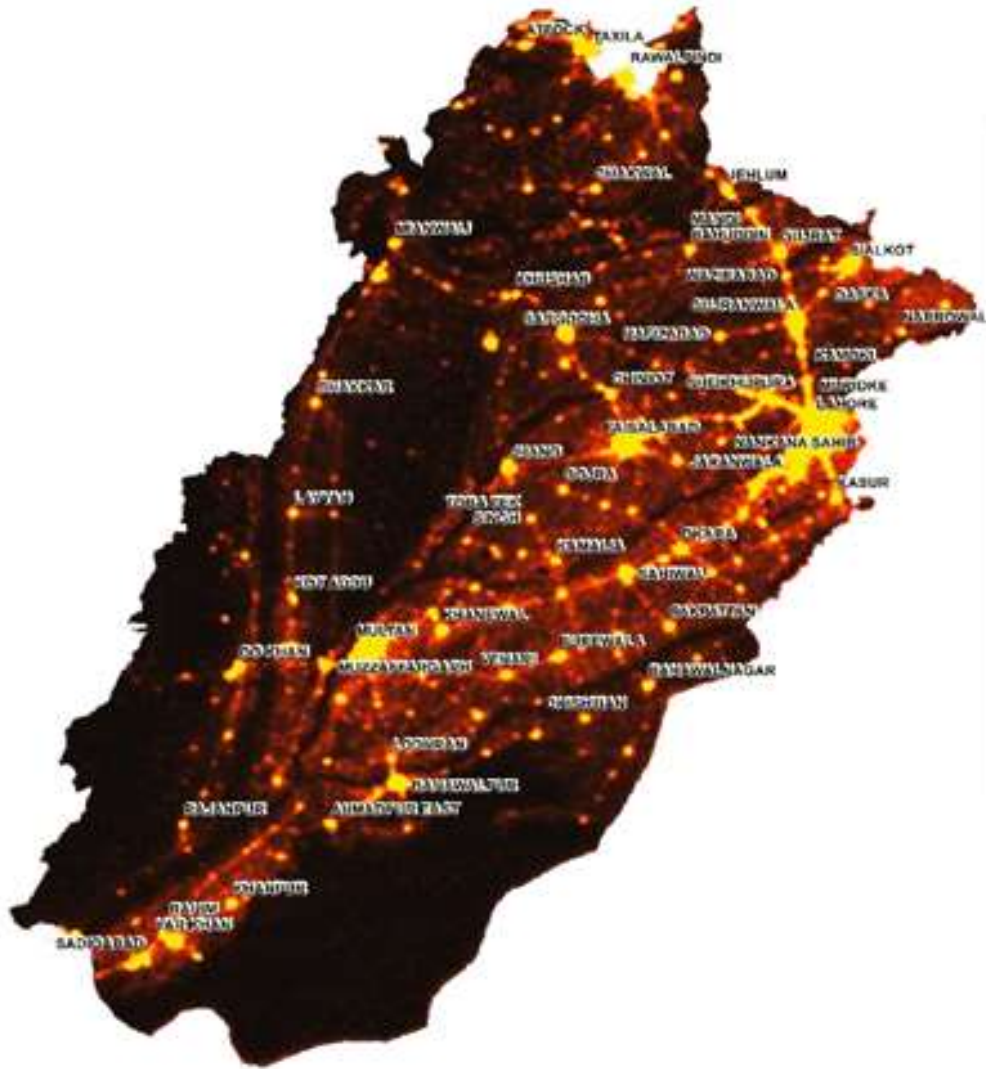


Irrigation Network (1800s-2017)

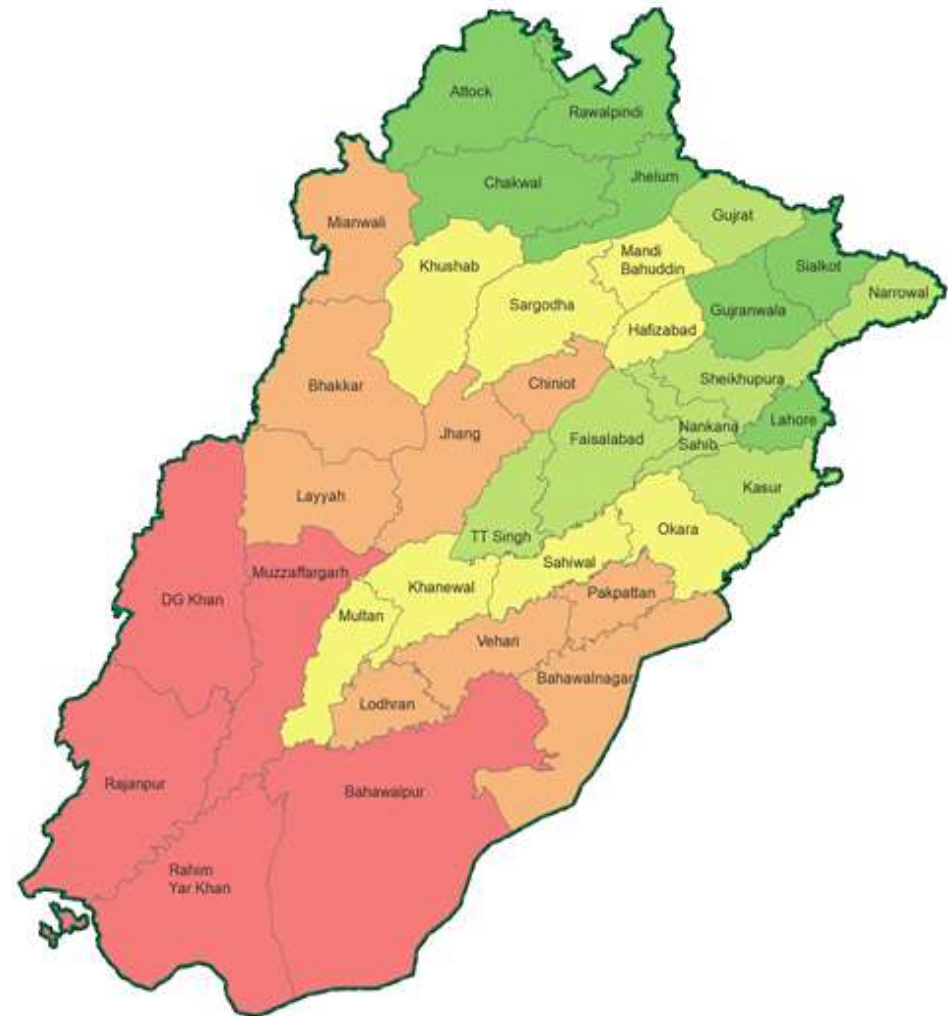


Land Cover (2017)

Development and Poverty

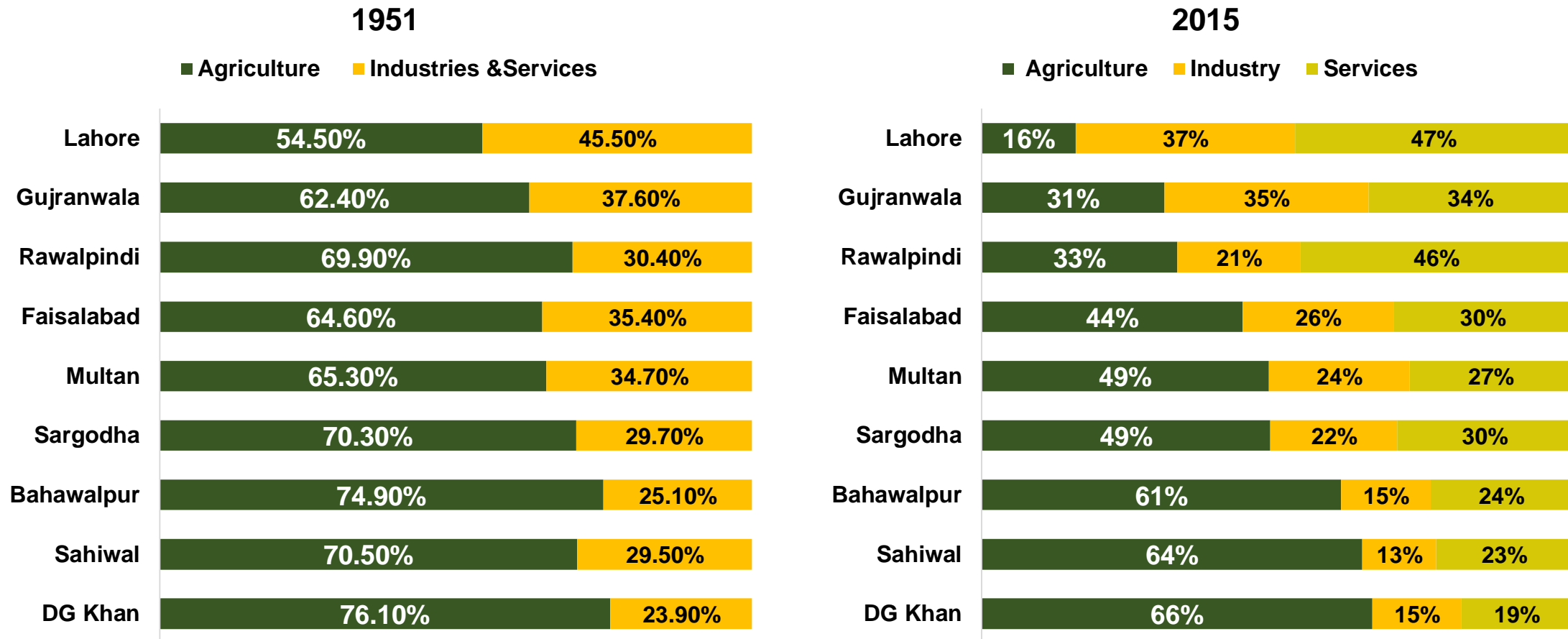


Night Light (2014)



Poverty (2016)

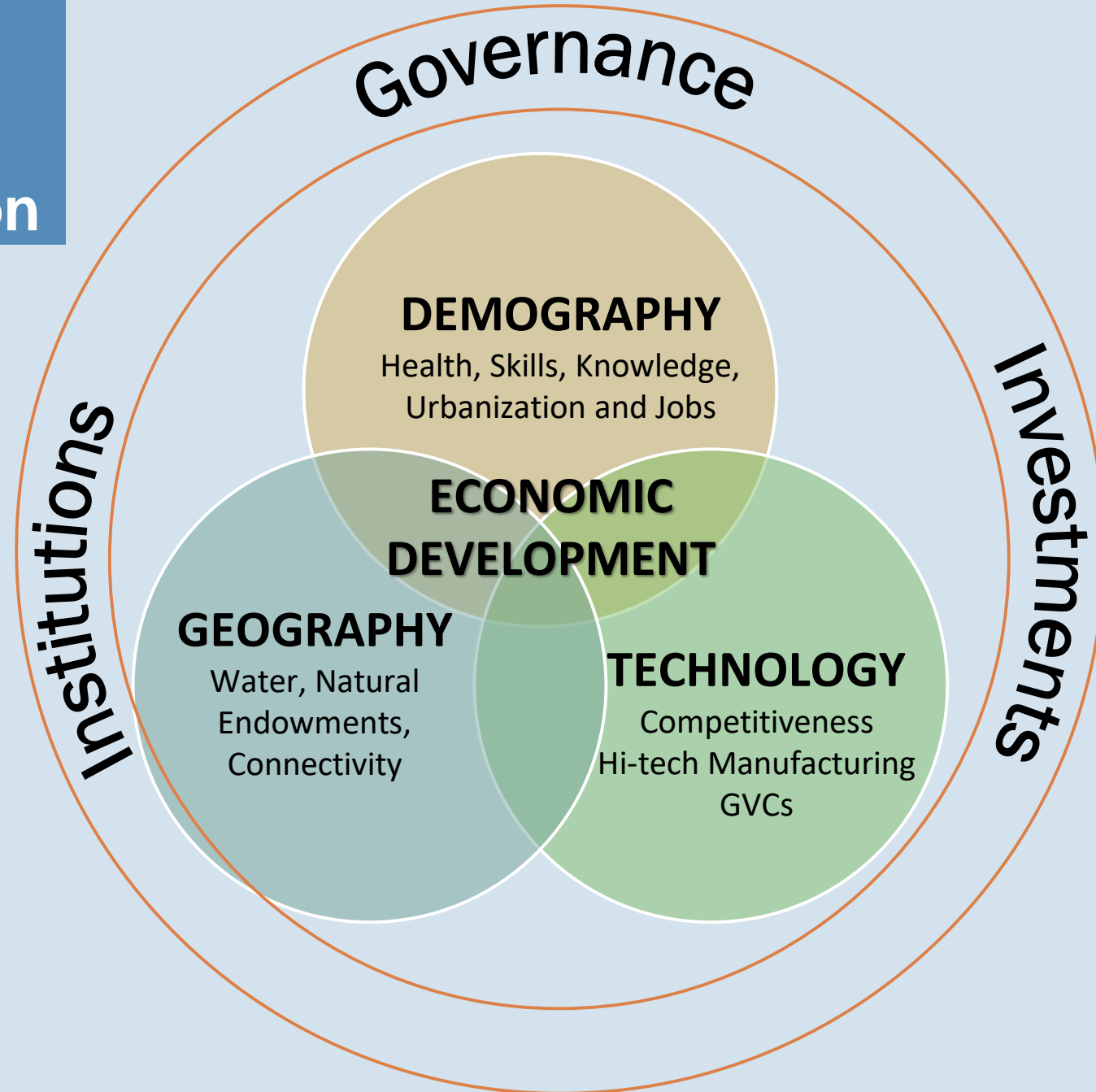
Economic Structure Transitions at Divisional Levels (by employment share)



South Punjab is still predominantly agriculture and has not attained transformations due to poor infrastructure and human capital.

Transition Drivers

Sources of Competitive Advantage & Transformation



Population & Demographics

The Opportunity in Numbers

- 6th Largest Population
- 6th Largest WAP
- 10th Largest Labor Force
- Highly Competitive Wages
- Increasing Youth Bulge
- Need to create greater number of jobs annually

Potential Factory of the World



Punjab Spatial
Strategy

Business
Plan of Punjab



The Urban Unit

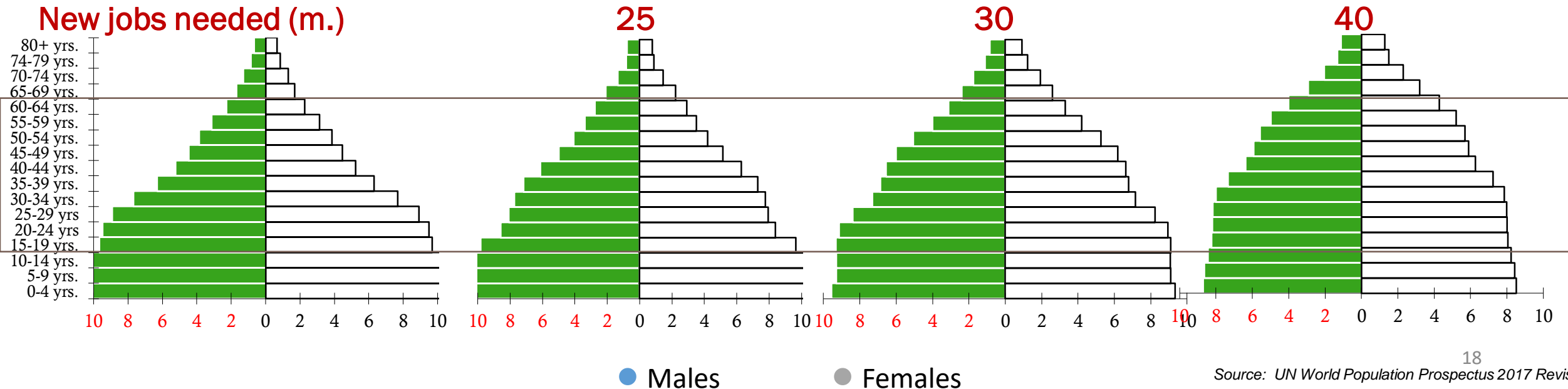
Urban Sector Planning & Management Services Unit (Pvt.) Ltd.



Working Age Population (WAP).... Demographic Dividend

- Youth bulge phenomena to continue for at least next 30 years
- WAP (15-65 years) to increase by 80 million
- Nearly 3 million jobs will be required annually
- Job creation must become central pillar of public policy

| | 2017 | 2027 | 2037 | 2047 |
|-----------------|------|------|------|------|
| Population (m.) | 208 | 240 | 274 | 305 |
| WAP (m.) | 125 | 150 | 175 | 200 |
| LFP rate | 55% | 60% | 68% | 80% |



Labor Force Profile of Punjab (Millions)

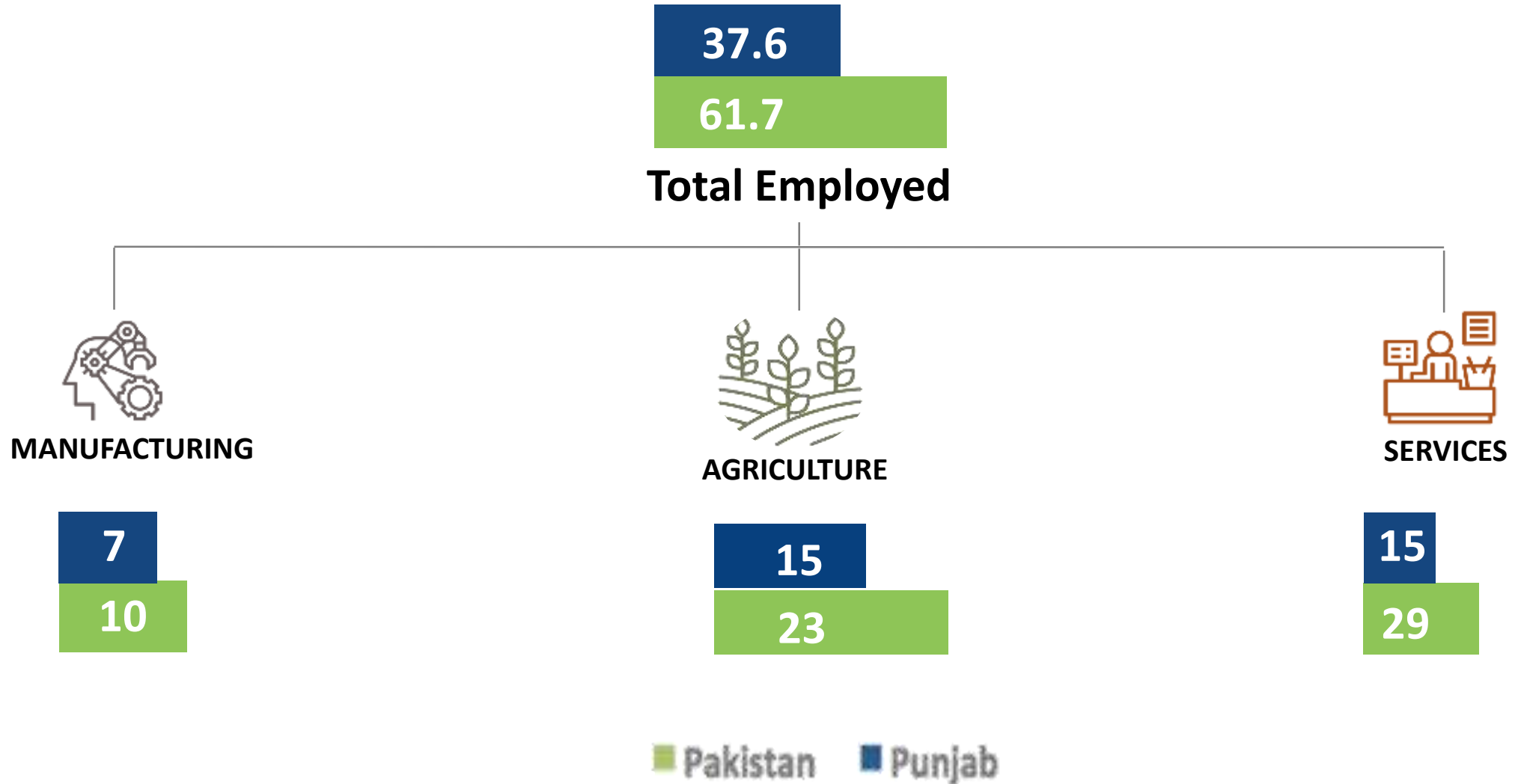


| Population | Working Age Population | Labor Force | Employed | Male | Female |
|------------|------------------------|-------------|----------|------|--------|
| 110 | 72.7 | 40 | 37.6 | 27.2 | 10.4 |

72%

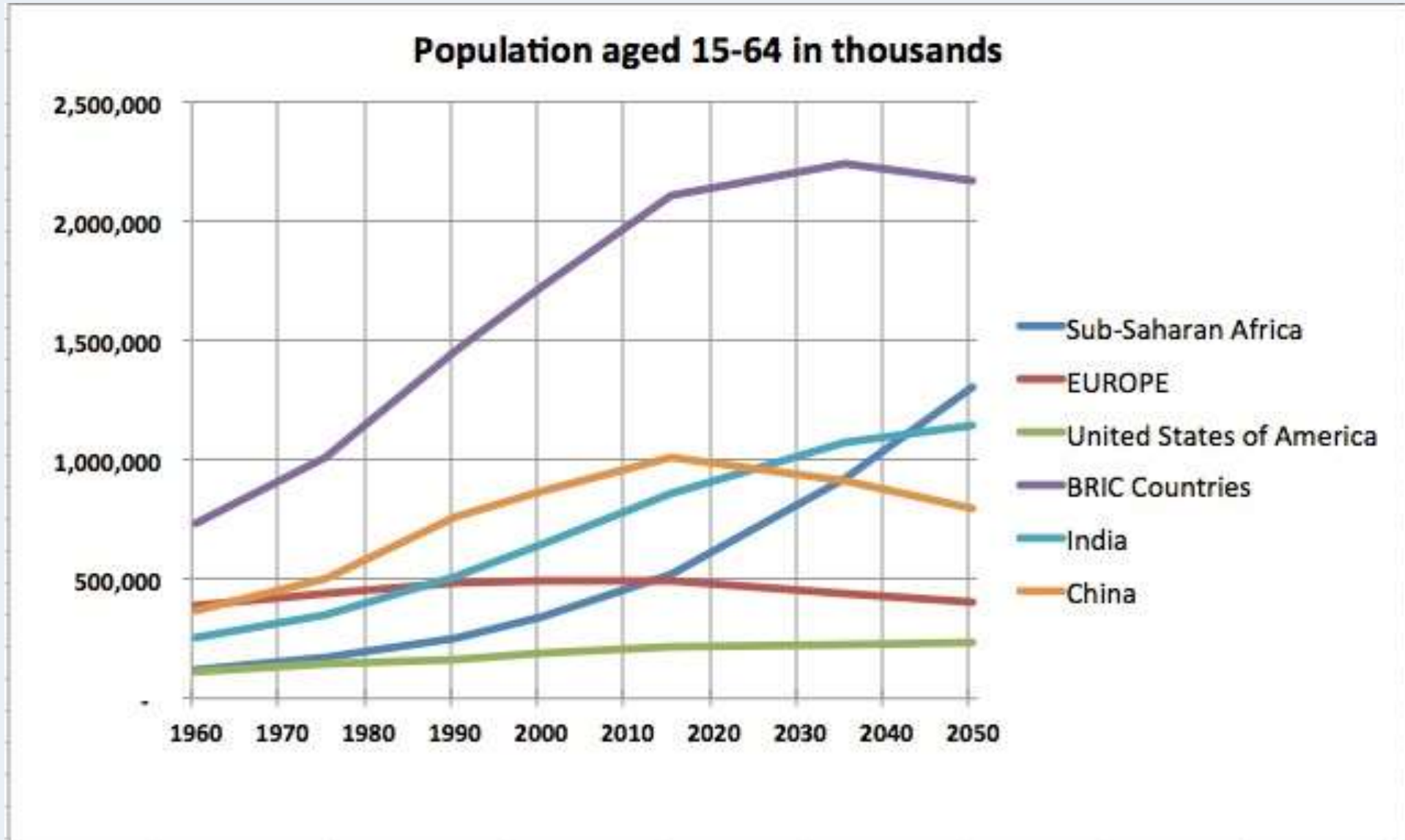
28%

Punjab vs Pakistan: Distribution of Employed Labor Force (Millions) in 3 Major Sectors



Working Age Population – Global Trends

China and Europe shedding WAP



Working Age Population – Losers & Gainers

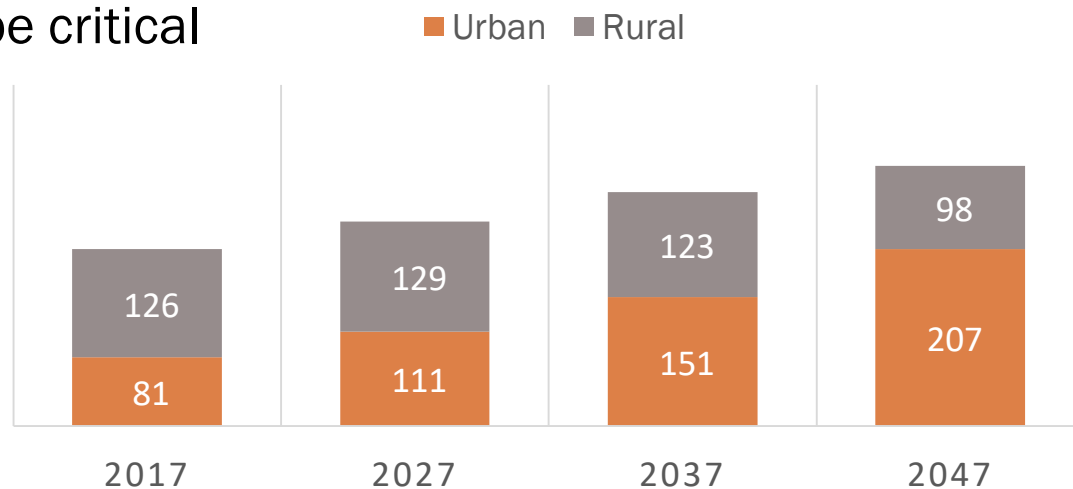
- Biggest drop in WAP of 200 million is projected for China followed by East-Asian economies of Japan, Thailand, and South Korea
- Europe will lose another 85 million WAP
- The biggest gainer of WAP are going to be South Asia (India & Pakistan) and Africa (led by Nigeria)
- Pakistan's WAP will increase by 90 Million under the UN estimates

With appropriate policies
Pakistan can become the next
'Factory of the World'

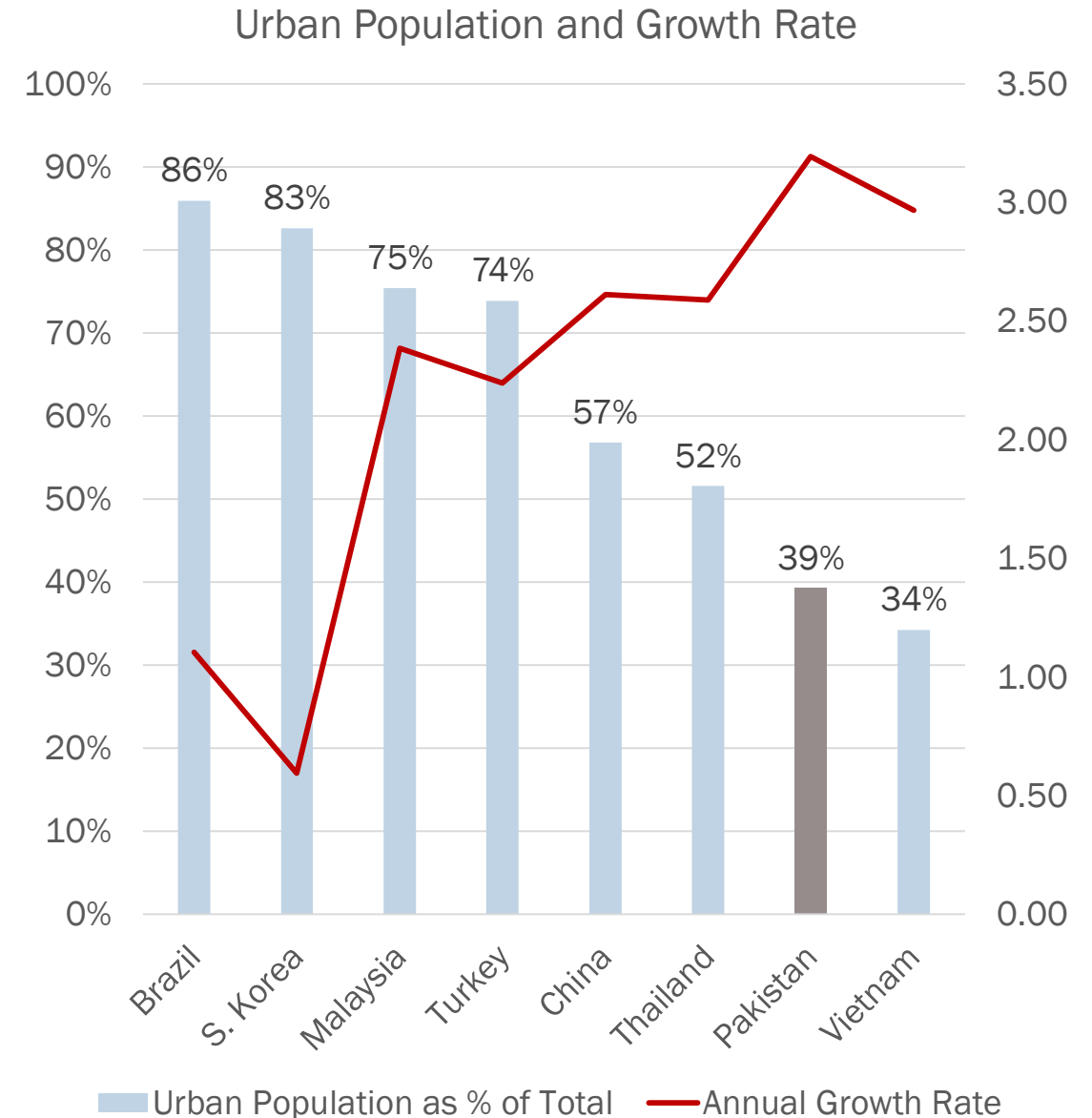
| Countries | WAP (Millions) | | WAP |
|-------------|----------------|-------|-------------|
| | 2015 | 2050 | Gain/(Loss) |
| China | 1,015 | 815 | (200) |
| Europe | 494 | 409 | (85) |
| Japan | 78 | 56 | (22) |
| Thailand | 49 | 38 | (11) |
| South Korea | 37 | 27 | (10) |
| India | 860 | 1,123 | 263 |
| Pakistan | 115 | 205 | 90 |

Growing Urbanization Advantage – Home of the Factory of The World

- If the current urbanization trends continue, then Pakistan’s urban population can be around 70% inline with urbanization of Middle Income Countries
- Urban Growth will lead to agglomeration benefits
- Cities will have to grow 2.6x to provide for migrating population; opportunity and strain on resources
- Agricultural efficiency & productivity to be enhanced to match urban demand & low labour availability
- Managing & channelizing urbanization is going to be critical



Data Source: Population Census 2017

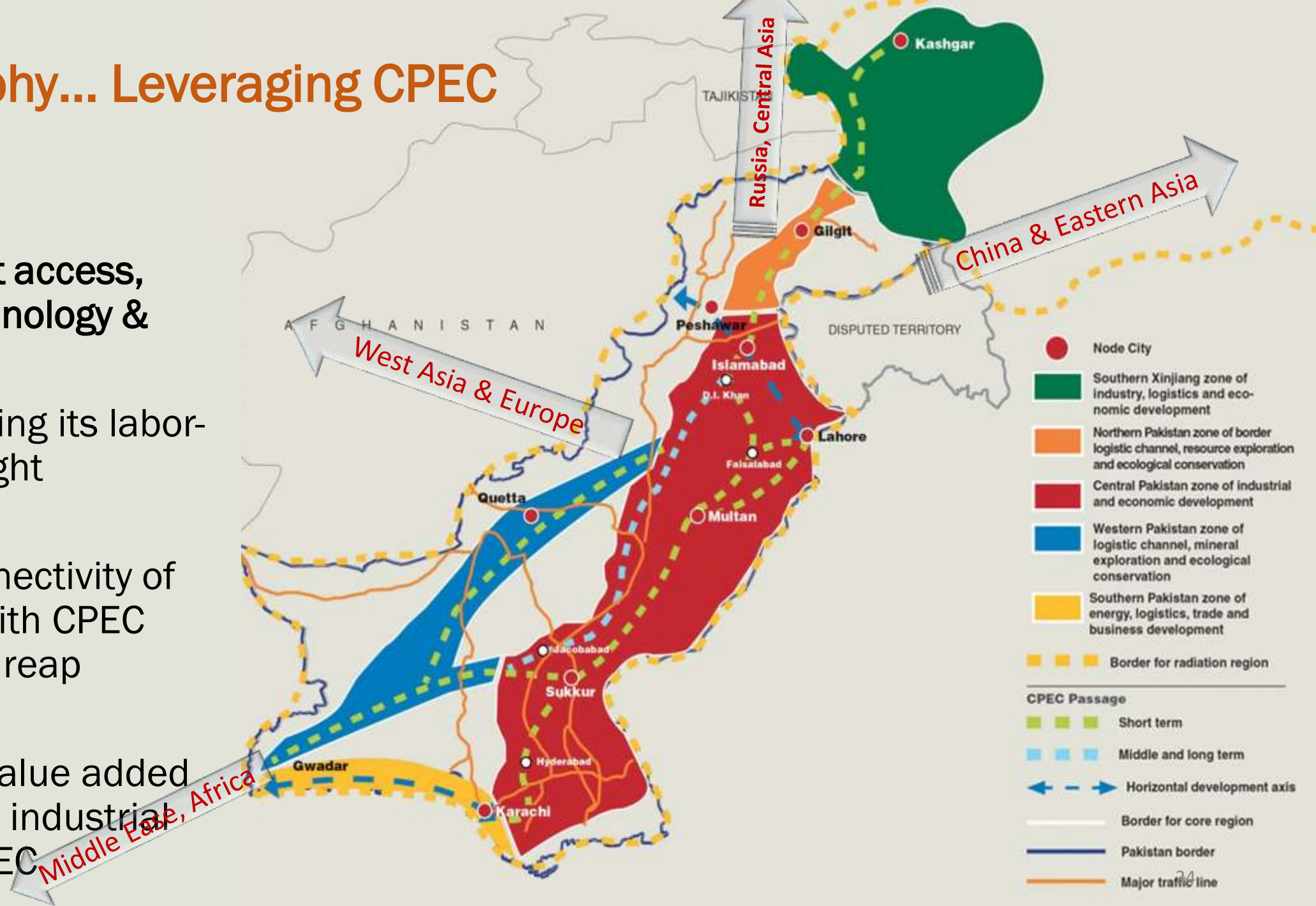


Source: World Bank (data.worldbank.org)

Geography... Leveraging CPEC

Source of Market access, Investment, Technology & Connectivity

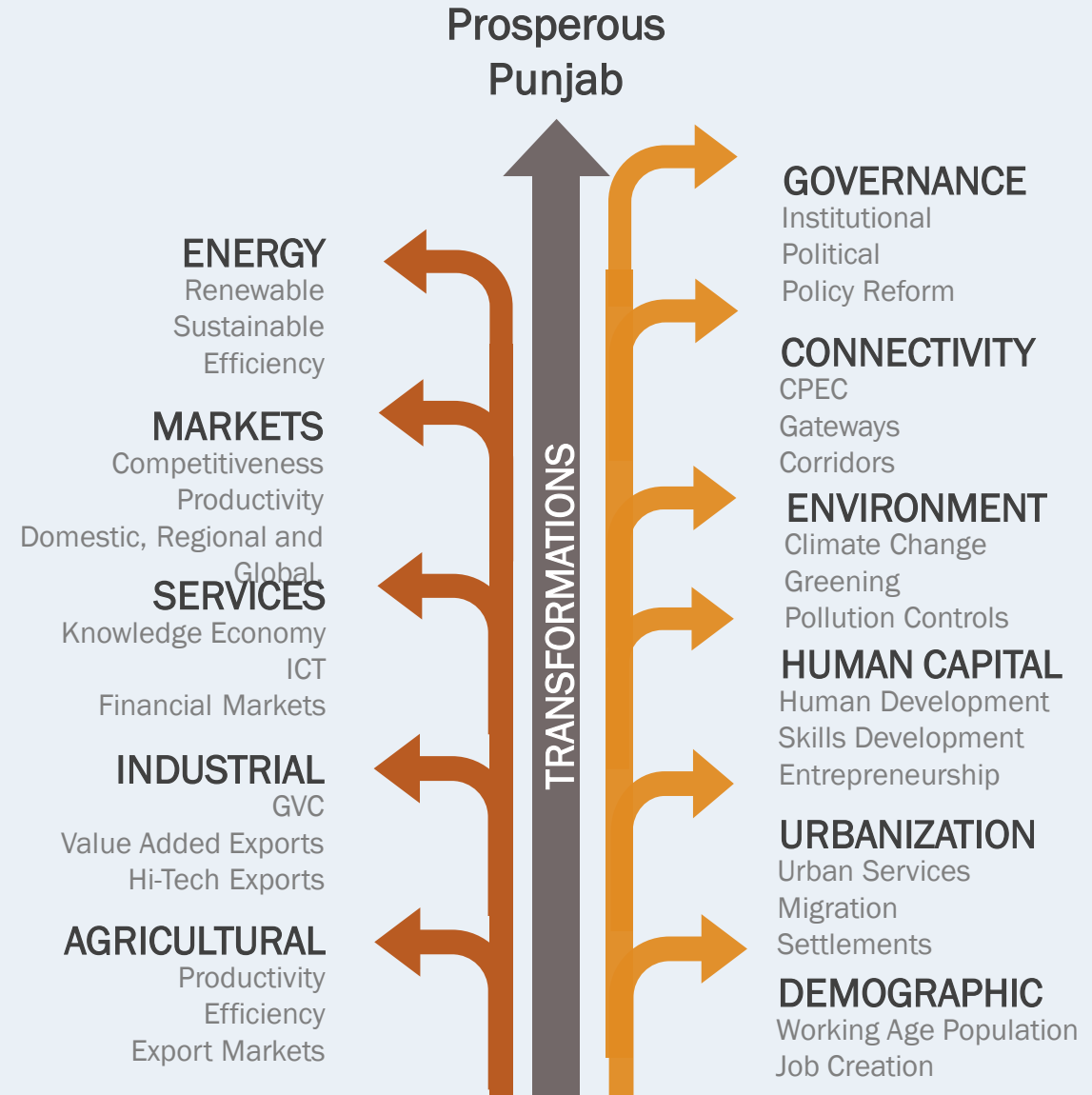
- China is relocating its labor-intensive and light manufacturing
- Increasing connectivity of growth nodes with CPEC alignments can reap benefits
- Focus on high value added agricultural and industrial zones along CPEC



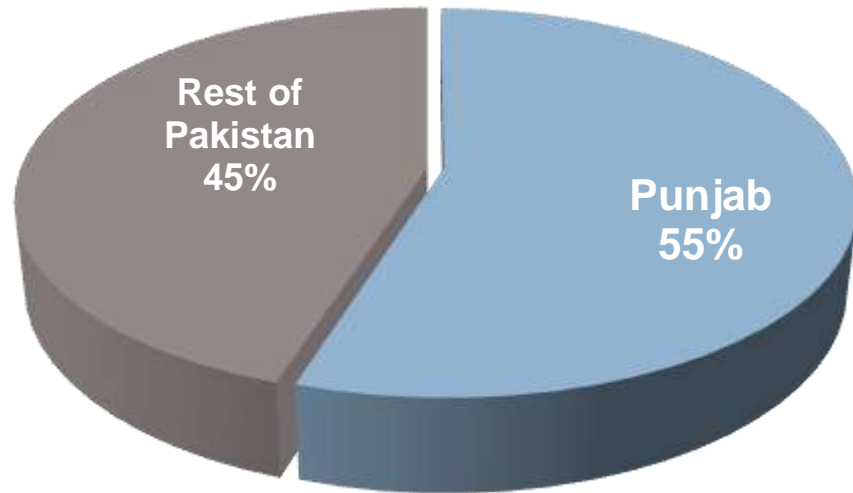
Punjab Vision 2047 – Pakistan at 100

Punjab as a healthy, educated, prosperous, equitable and environmentally sustainable federating unit of a dynamic Pakistan emerging as a member of “Middle / High Income Group of Countries”

Transforming from an inward looking agrarian driven to an outward looking export driven economy, fueled by socio-economic transformations, based on creating a global competitive advantage:



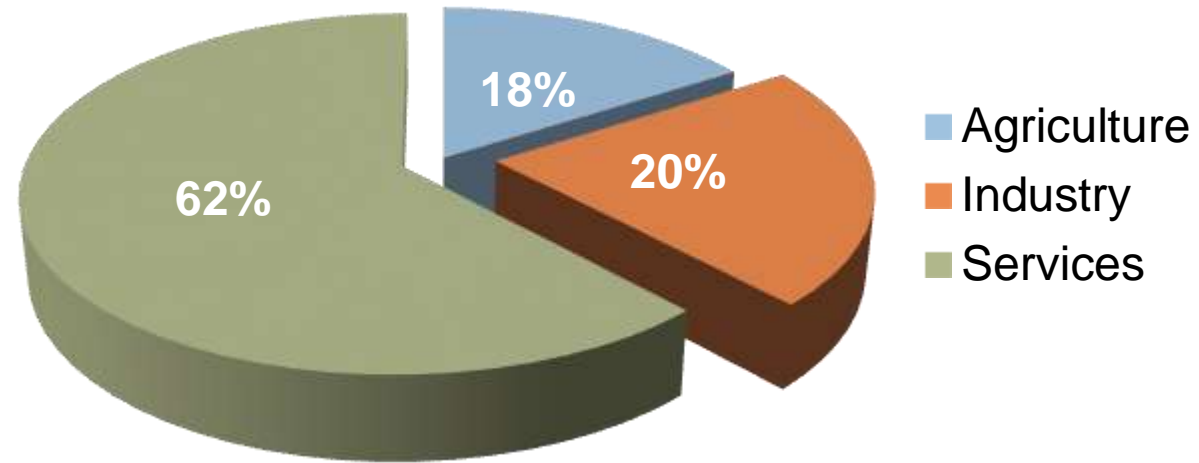
Punjab Share in national GDP



• **Pakistan GDP:** US\$ 285 Billion*

Sources: * Economic Survey 2019

Punjab GDP Sectoral Distribution



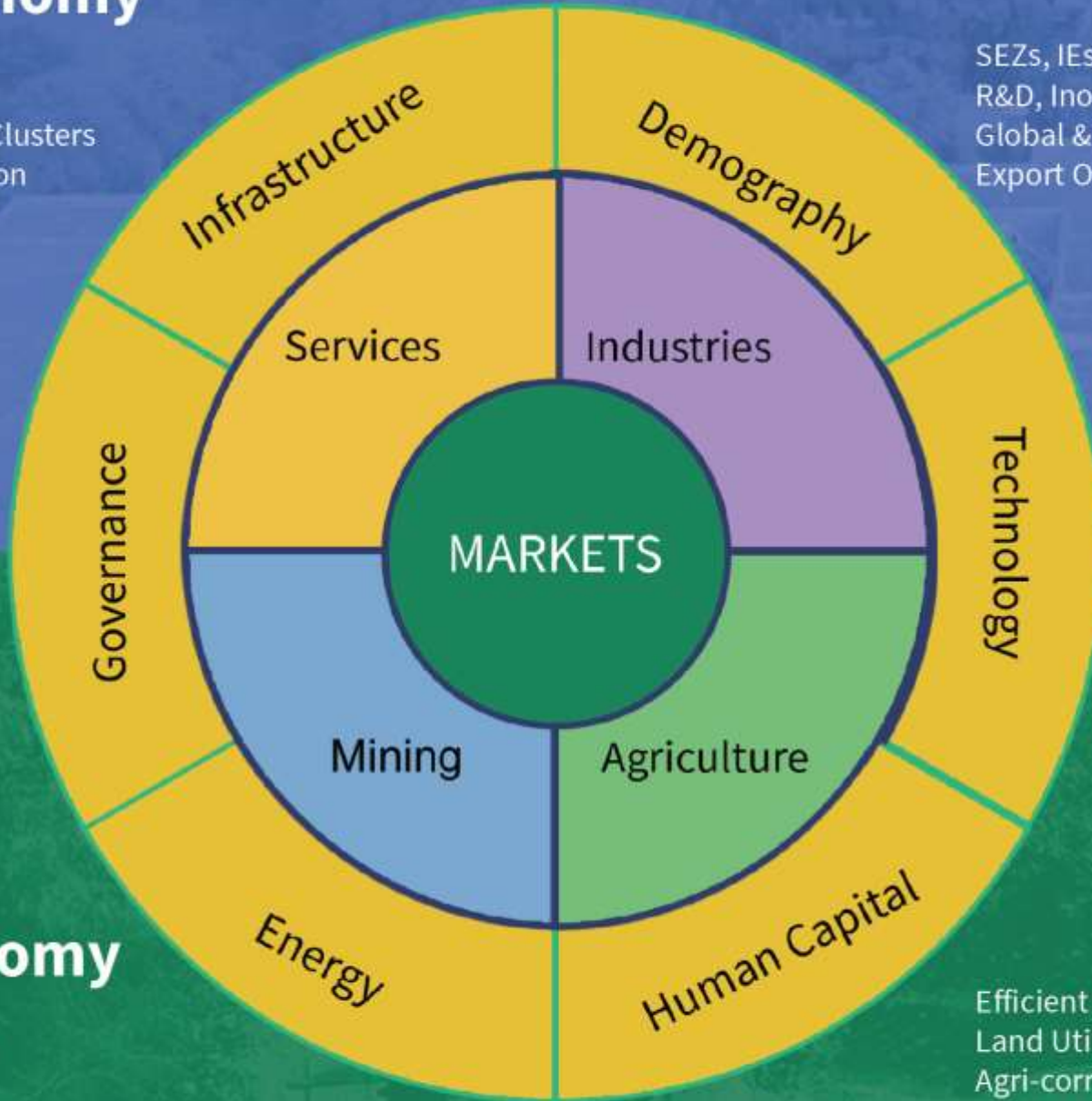
Punjab GDP: US\$ 157 Billion**

** Punjab Economic Report (2017)

Urban Economy

System of Cities
Services Sector
Hi-tech & Knowledge Clusters
Industrial Agglomeration
Freight & Connectivity

SEZs, IEs & Industrial Corridors
R&D, Innovation
Global & Domestic Markets
Export Orientation



Rural Economy

Resource Extraction
High Value Crop Zones
Dairy & Livestock
Agro-based Industry
Farm to Market Connectivity

Efficient Water Management
Land Utilization Management
Agri-corridors
Global Agri Market

Finance &
Investment

Punjab Spatial Strategy 2047

CPEC
Connectivity

Urban Economy and Management of Cities

Punjab Urban Business Plan

Area: **205,344 km²**

Population: **110 million**

Urban Pop.: **40 million (37%)**

(Population Census 2017)

ADMINISTRATIVE STRUCTURE

9 Divisions

36 Districts

194 Cities & Towns

URBAN GOVERNANCE STRUCTURE

1 Metropolitan Corp.

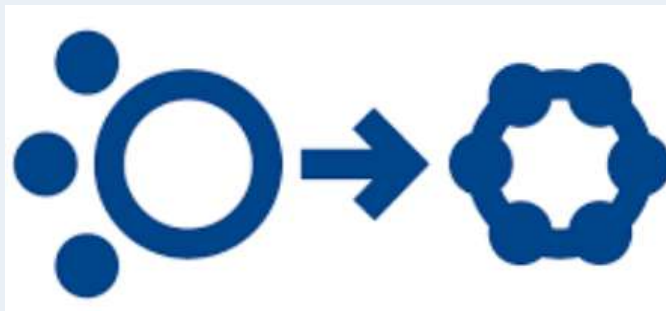
11 Municipal Corp.

182 Municipal Committees



Urbanization Business Plan

**Punjab will have to move from a low value-added agricultural economy
To a higher value-added industrial & services economy in the urban sector
in order to cater for the needs of a rapidly urbanizing population**



AGGLOMERATION BENEFITS

Clustering of firms and services allows for the reduction in **transactional costs** resulting in better **competitiveness** and **productivity**



JOB CREATION

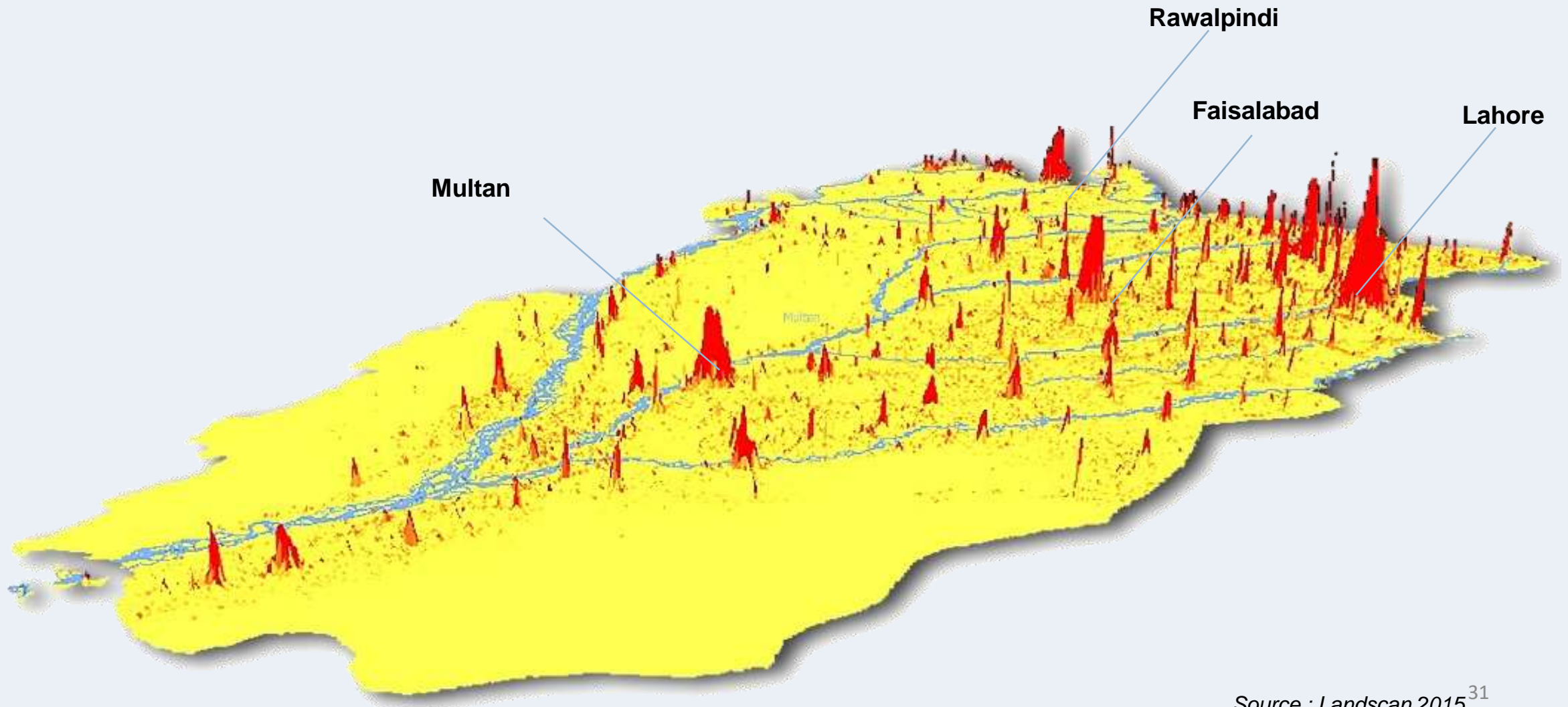
The top 10 percent of cities achieved 9.2 percent annual jobs growth, On average, job growth was faster in market towns and production centers at 3.5% (WB 2015)



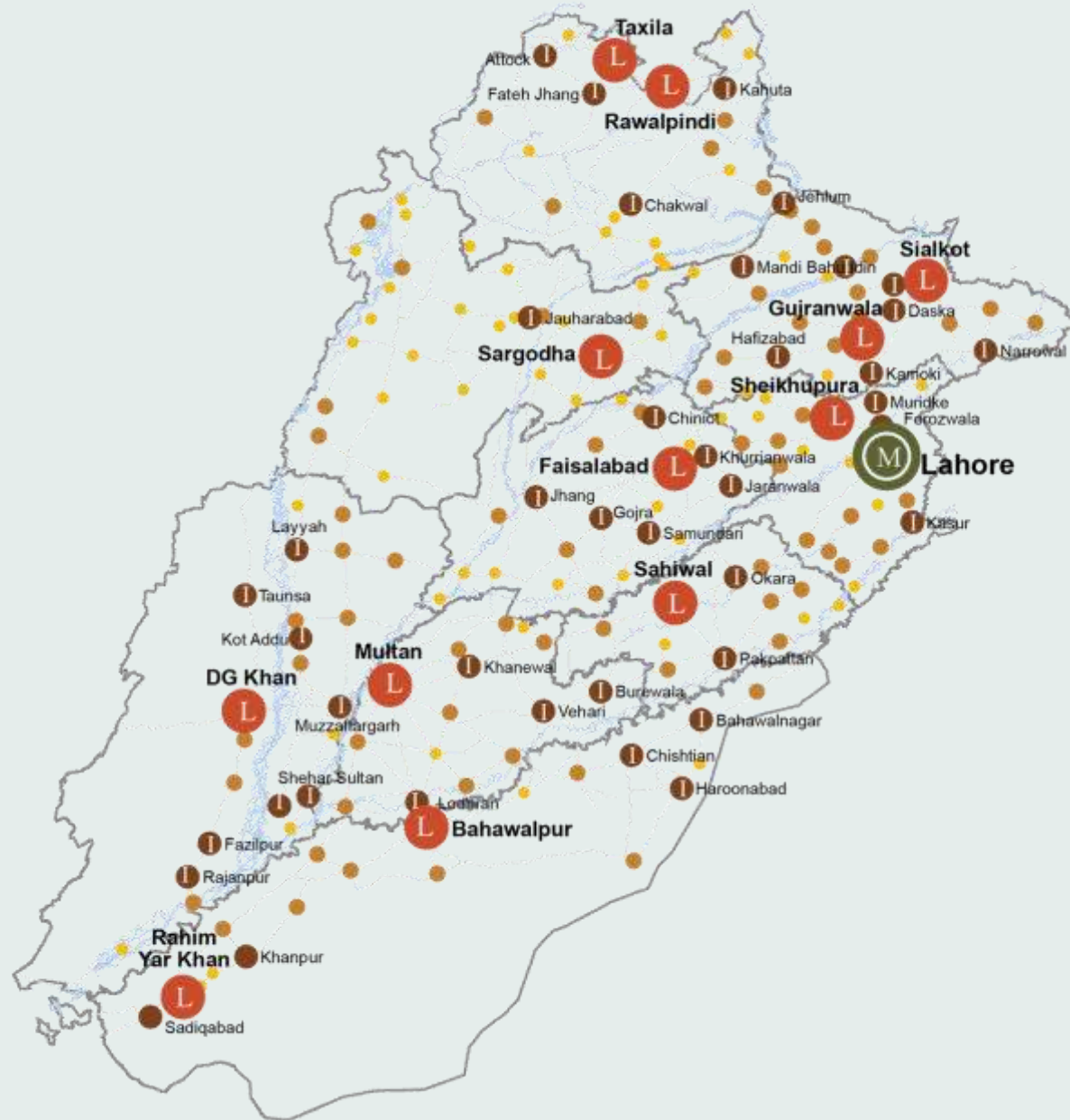
HIGHER GDP GROWTH

Urban areas have higher value-addition opportunities and GDP per capita. Urban areas contribute more than 80 percent in the global GDP

Population Density



Punjab Cities 2047



Legend

Mega Cities | 1
> 10,000,000

Large Cities | 12
1,000,001-10,000,000

Intermediate Cities | 43
250,001-1,000,000



Small Cities | 73
100,000-250,000

Towns | 65
< 100,000




System of Cities

Legend



Primary Cities

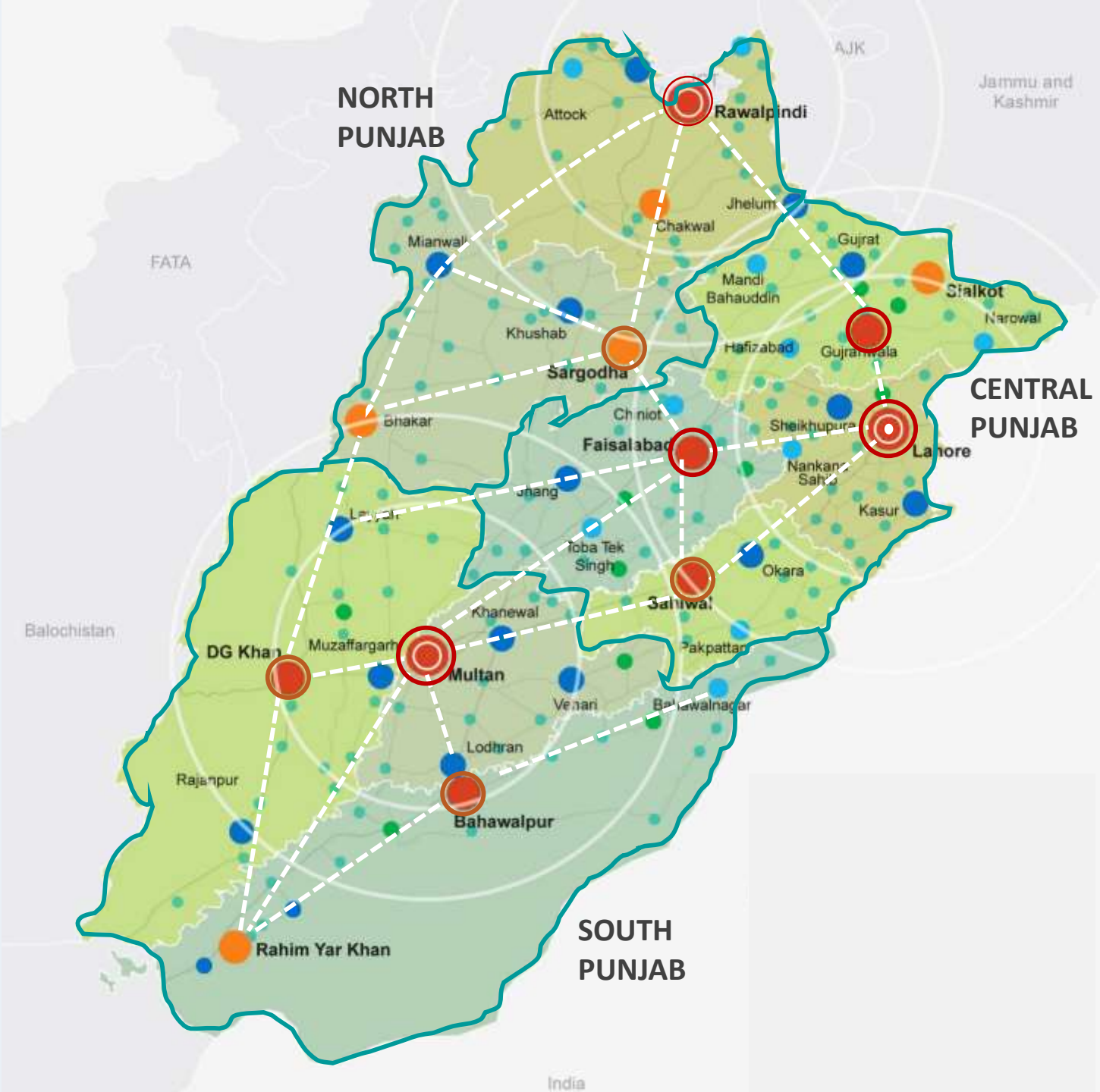
- Primary Gateway (Global City) 
- Secondary Gateway 

Intermediate Cities

- Tertiary Gateway 
- Inter-district Hub 
- District Hub 

Towns

- Large Town 
- Town 



17 Economic Hubs

Rawalpindi & Taxilla
 LSM & Heavy Industries , IT & Hi-tech,
 Knowledge & Innovation, Hospitality &
 Tourism

Chakwal
 Chemicals, Mines & Minerals Processing

Sargodha
 Food Processing & Agro Based Industry

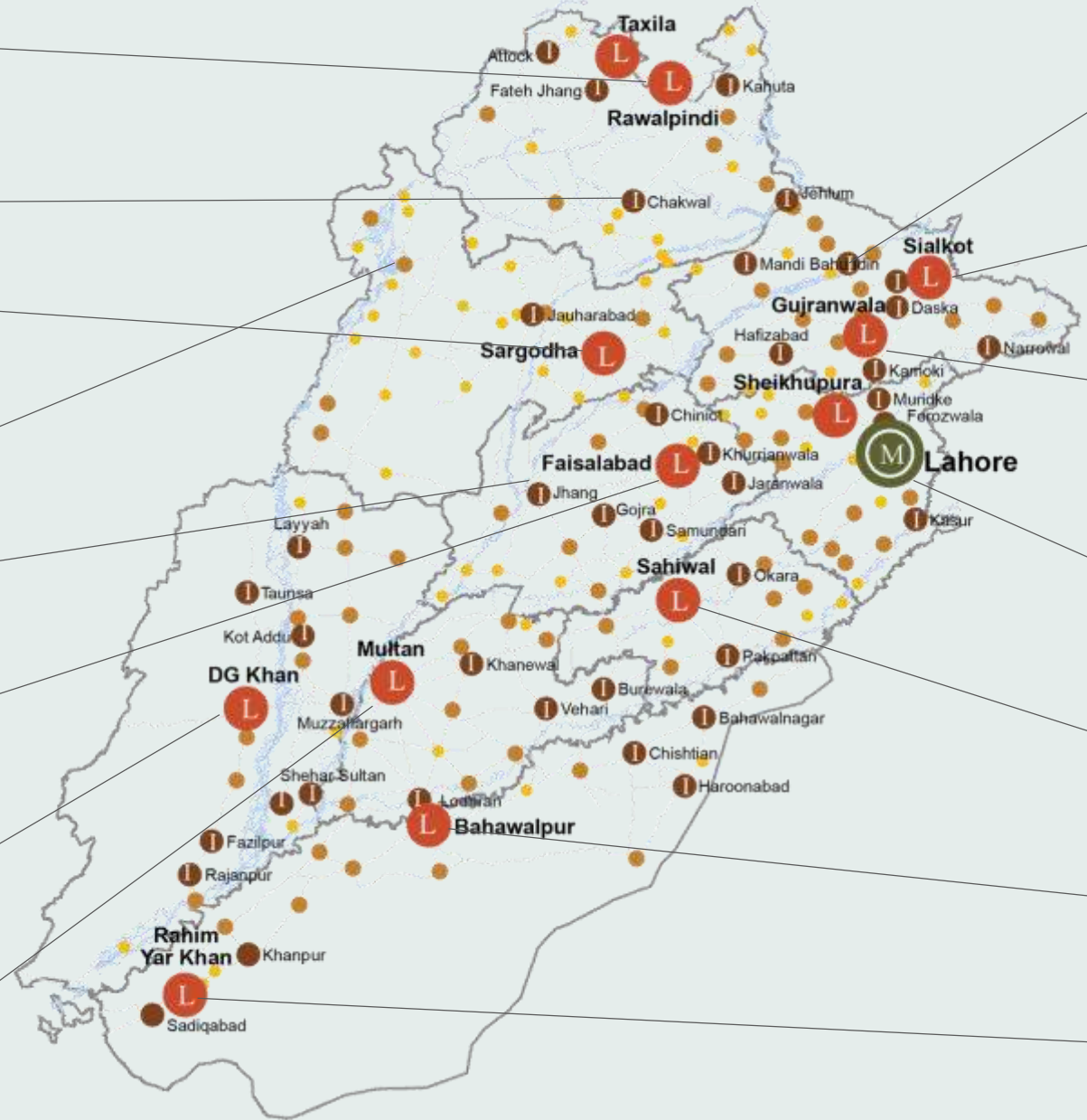
Mianwali
 Logistics, Minerals & Nuclear, Wheat,
 Pulses

Jhang
 Agro-based industry, dairy, livestock,
 food processing, Cotton

Faisalabad
 Textile & Clothing, Chemicals, Transport
 & Basic Manufacturing, Maize

DG Khan
 Logistics and Food Processing, Minerals
 & Nuclear, Cotton, Wheat, Pulses

Multan & Muzaffargarh
 Food Processing, Value Addition, Power
 & Energy, Agro Based Industry,
 Transport and Storage, pottery



Gujrat
 ICT, Furniture, Ceramics, Non
 Electrical Machinery & Basic
 Manufacturing, Hi-tech

Sialkot
 Clothing, Leather Products,
 Protective wear, Surgical Equipment
 And Sports Goods

Gujranwala
 Innovation, Consumer Electronics &
 Light Engineering, Cutlery, Sanitary
 fittings, Rice

Lahore
 Hi-tech, IT, Knowledge &
 Innovation, R&D, Chemicals,
 Clothing and leather footwear
 Hospitality, Tourism &
 Pharmaceutical, autoparts

Sahiwal
 Food Processing, Cotton, Agro
 based & Dairy

Bahawalpur
 Food Processing, Agro based,
 Cotton, Hospitality & Tourism

Rahim Yar Khan
 Auto Parts, Food Processing, Agro
 Based, Dairy & Logistics

Size of Services Sector in Punjab : USD 100 Billion



RETAIL & WHOLESALE



FINANCIAL SERVICES



HOTELS & RESORTS



RESTURANTS



REAL ESTATE



EDUCATION



HEALTHCARE



COMMUNITY SERVICES



INFORMATION TECHNOLOGY



RECREATIONAL ACTIVITIES



MEDIA



TELECOM



ELECTRICITY



OIL & GAS



WATER & SANITATION



TRANSPORT & LOGISTICS



GOVERNMENT SERVICES

Manufacturing and Mining

- Factory of the World



Manufacturing & Mining

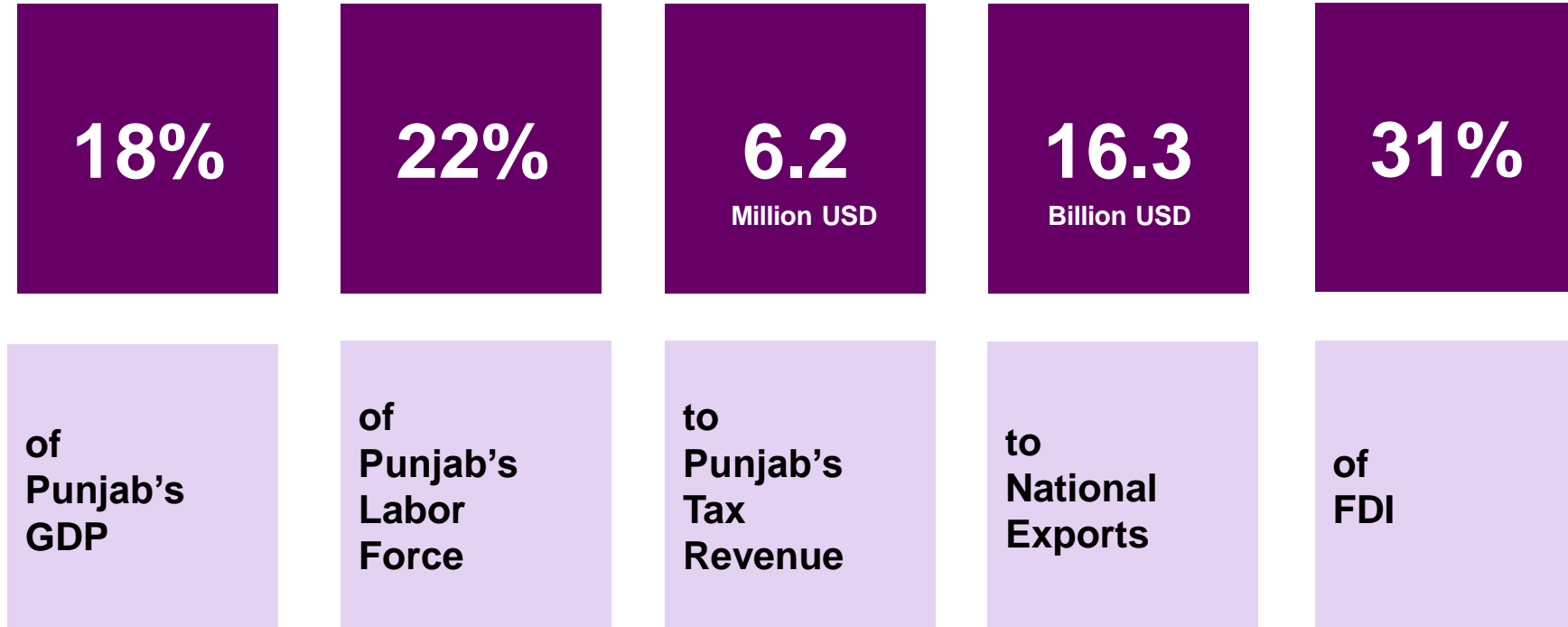
Value Added
Diversified
Products

Industrial
GVCs & CPEC

Productivity
Enhancement

Competitiveness
& Markets

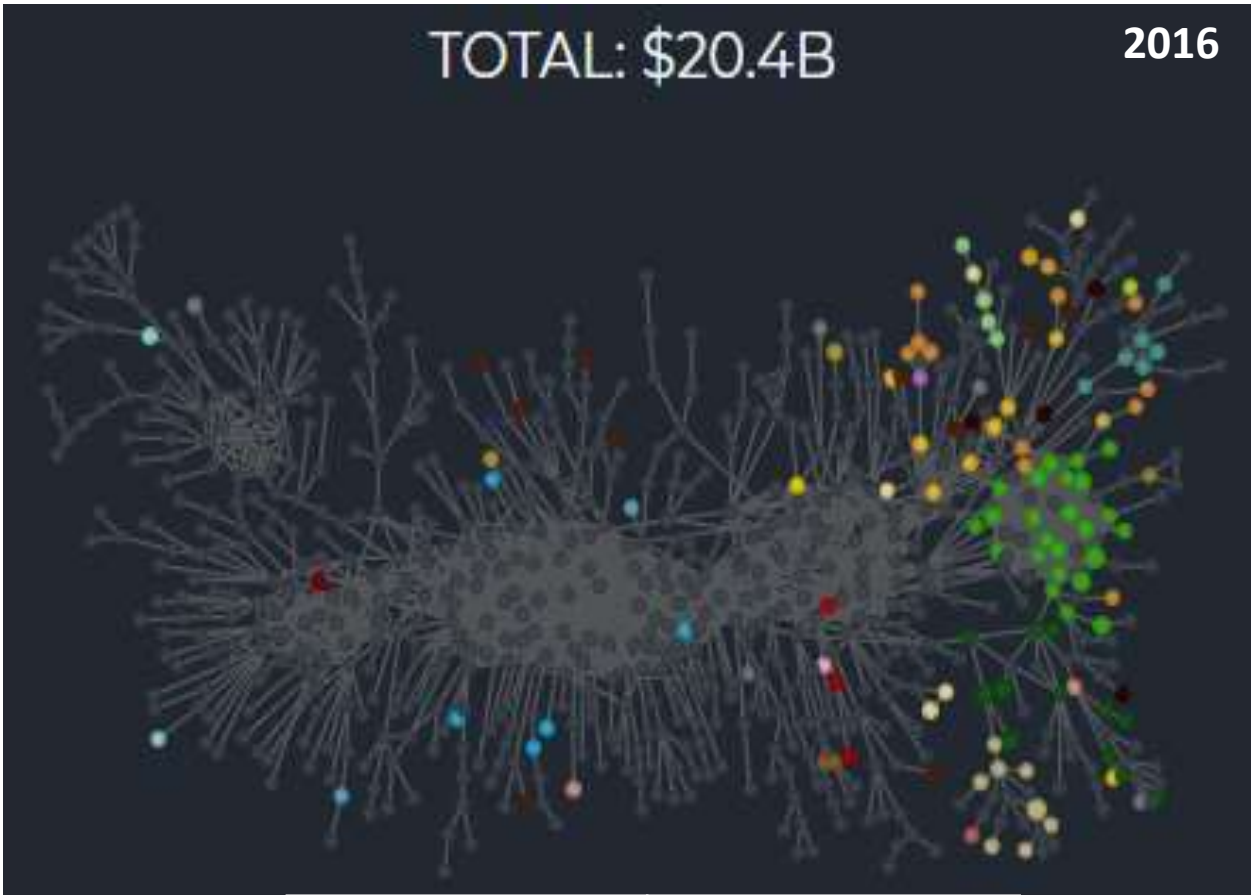
Industrial Sector Snapshot



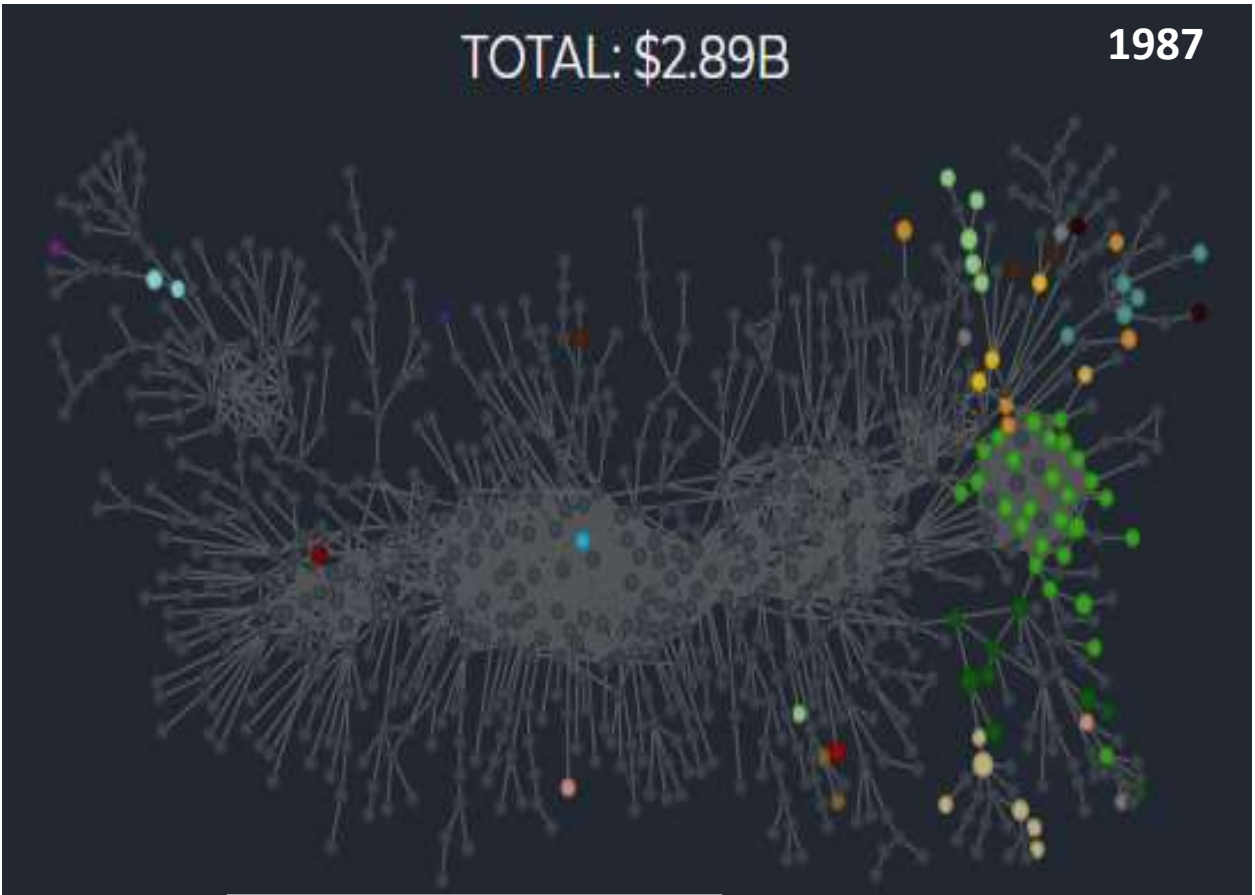
Pakistan's Exports comparison of past thirty years

Pakistan increased its exports by 8 times from 1987 to 2016

TOTAL: \$20.4B 2016



TOTAL: \$2.89B 1987



Electronics

Machinery

Chemicals

Metals, Iron and Minerals

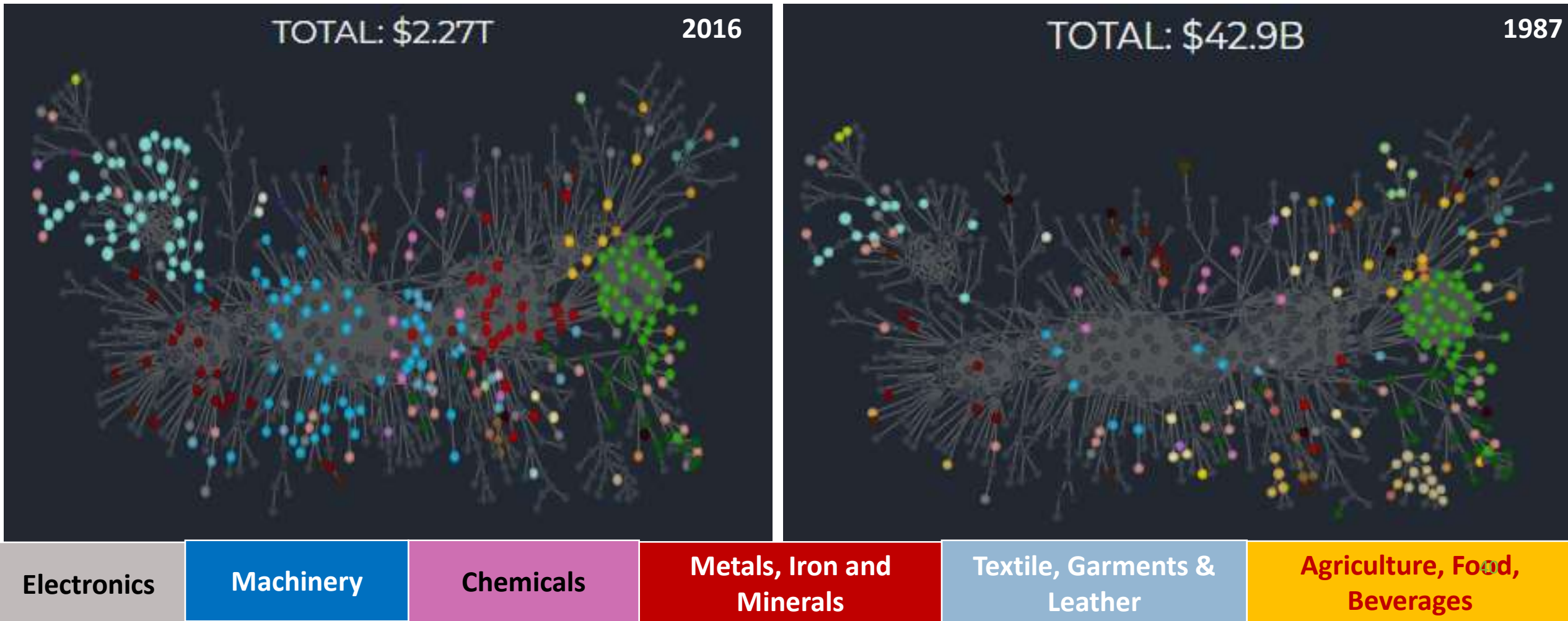
Textile, Garments & Leather

Agriculture, Food, Beverages

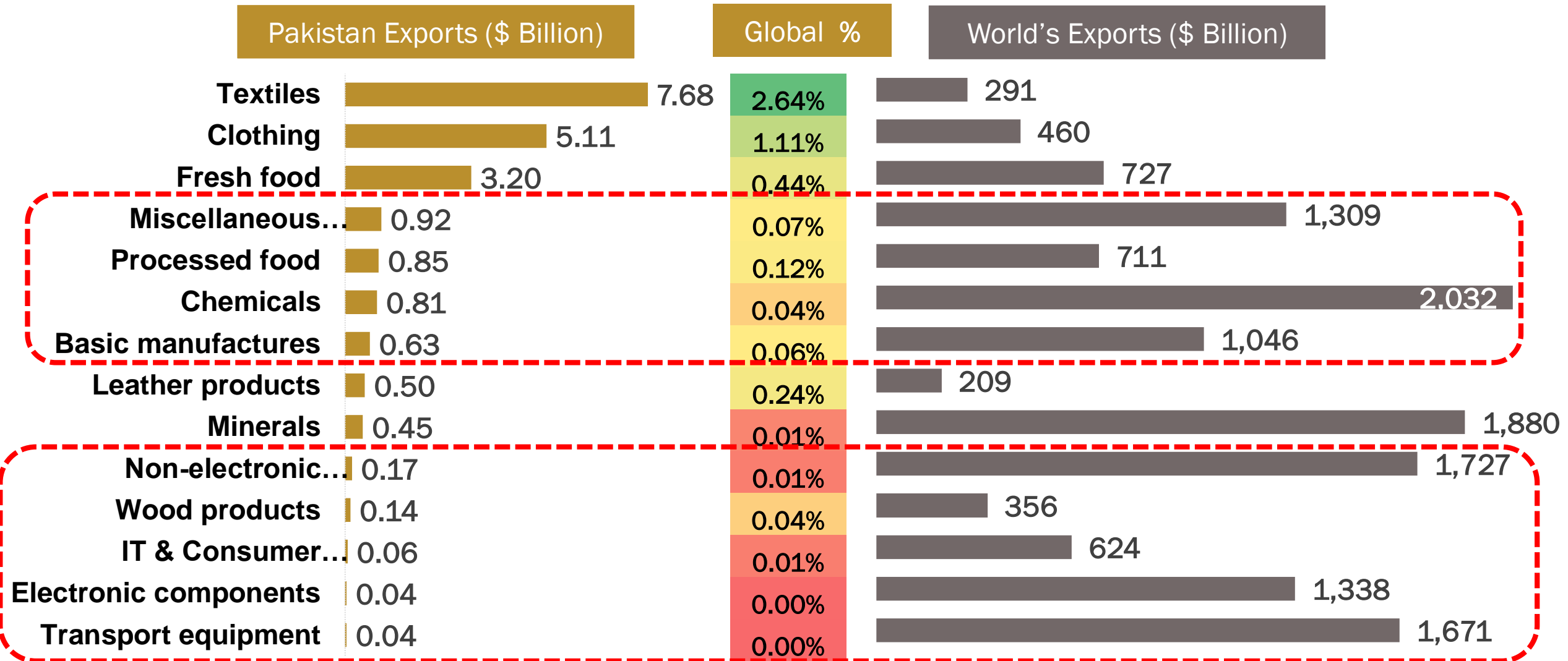
Source: MIT Atlas

China's Exports comparison of past thirty years

China increased its exports by 65 times in from 1987 to 2016

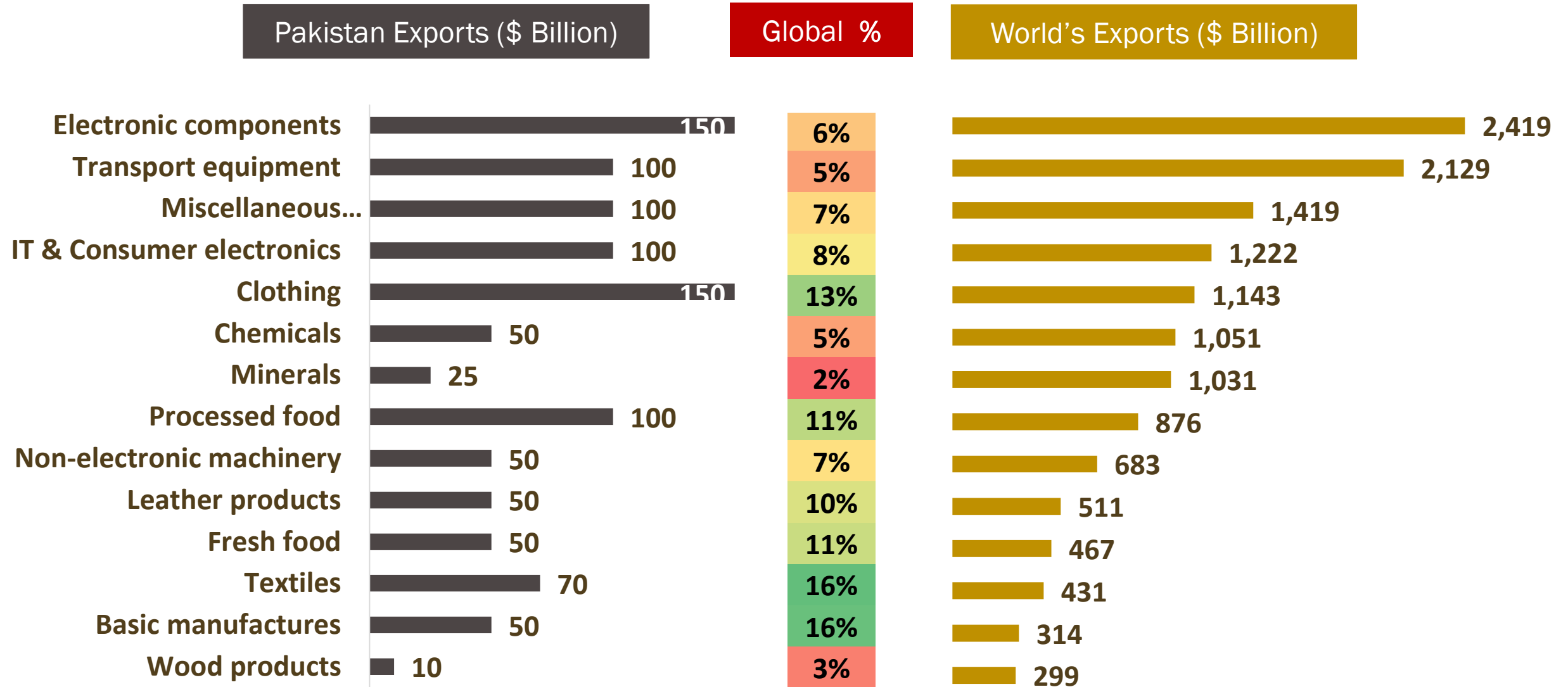


Pakistan's Exports by Value Chains vs Global Focus

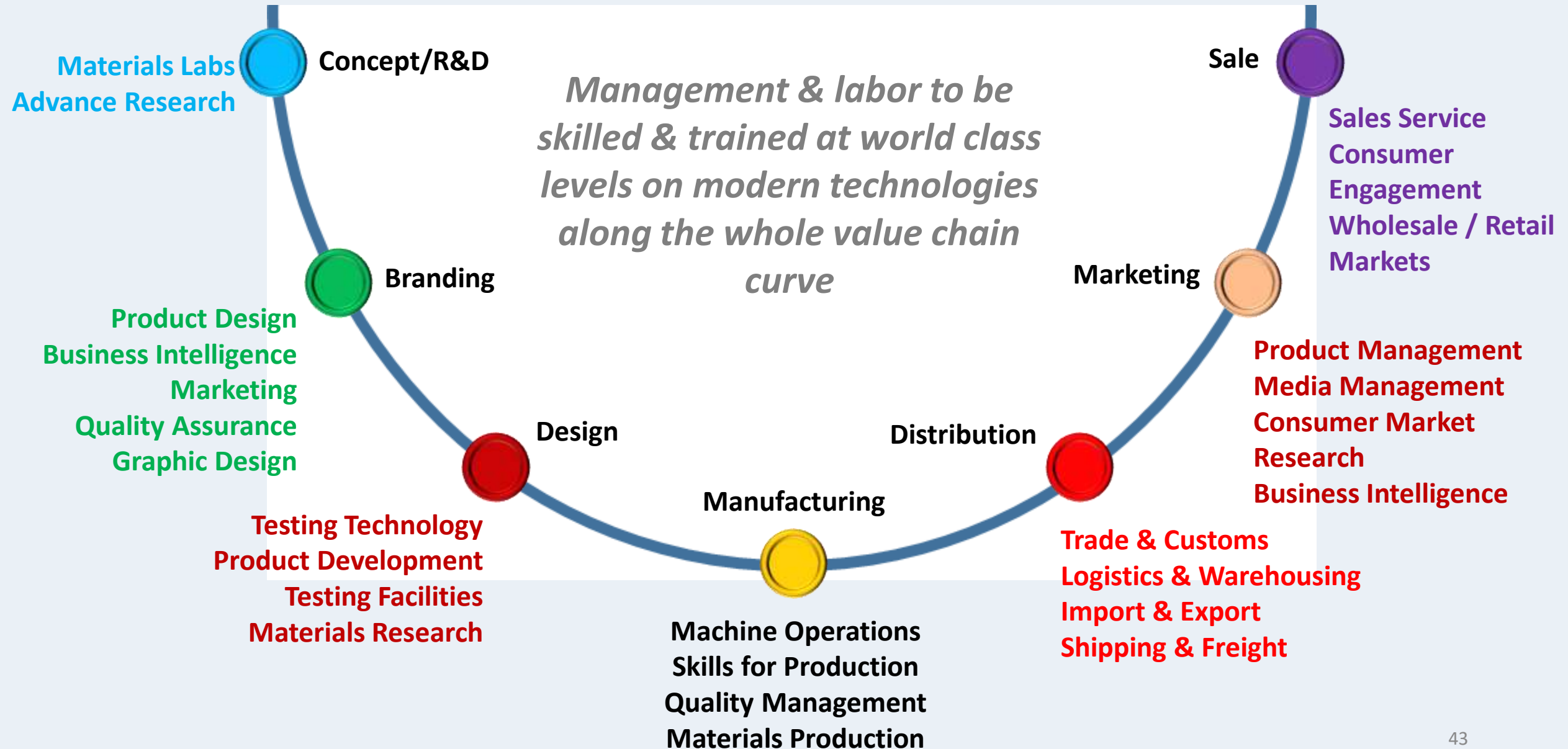


Pakistan's Exports Targets versus Global Scenario by 2047

Pakistan needs at least \$ 1,000 billion of exports by 2047



Develop Comprehensive Eco-System for GVCs



Agriculture & Rural Economy

- Value Chains & Value Creation



**AGRICULTURE & Rural
Economy**

**High Value
Cropping
Pattern**

**Agricultural
GVCs & CPEC**

**Integrated Farm
Management**

**Efficient Use of
Water**

Agricultural Transformation – How Many Global Value Chains?

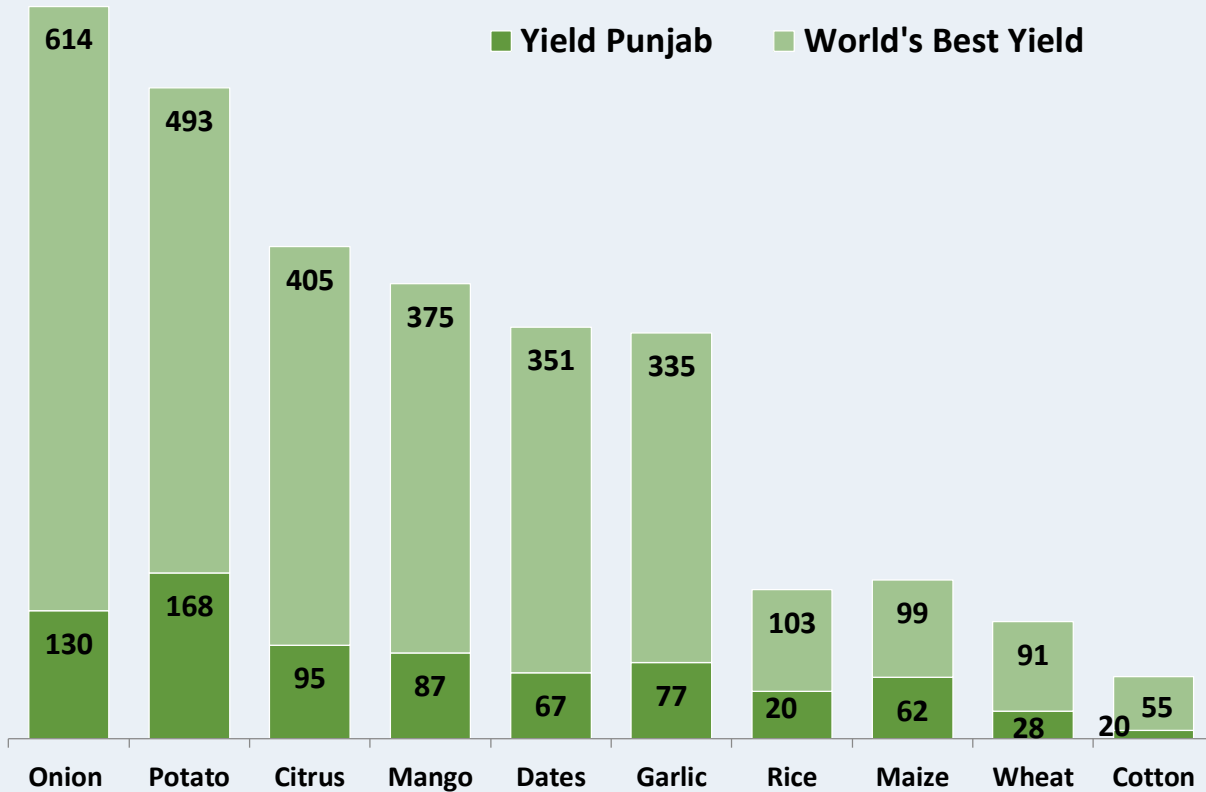


Hi Value Agriculture Business Plan

- **Land Utilization and Cropping Pattern multiplier up to 4x -- \$ 150b/year**
- **Productivity improvements 3 to 4x**
- **Water efficiency and network expansion up to \$40 billion**
- **Implement Supply Chain Management for Global Markets**
 - **Land & Water Utilization Management (Agricultural Corridors)**
 - **Farm Support Systems (Inputs, Extension and Capacity Building)**
 - **Product Management and Markets (Global and Domestic Product Markets)**
 - **Research and Development**

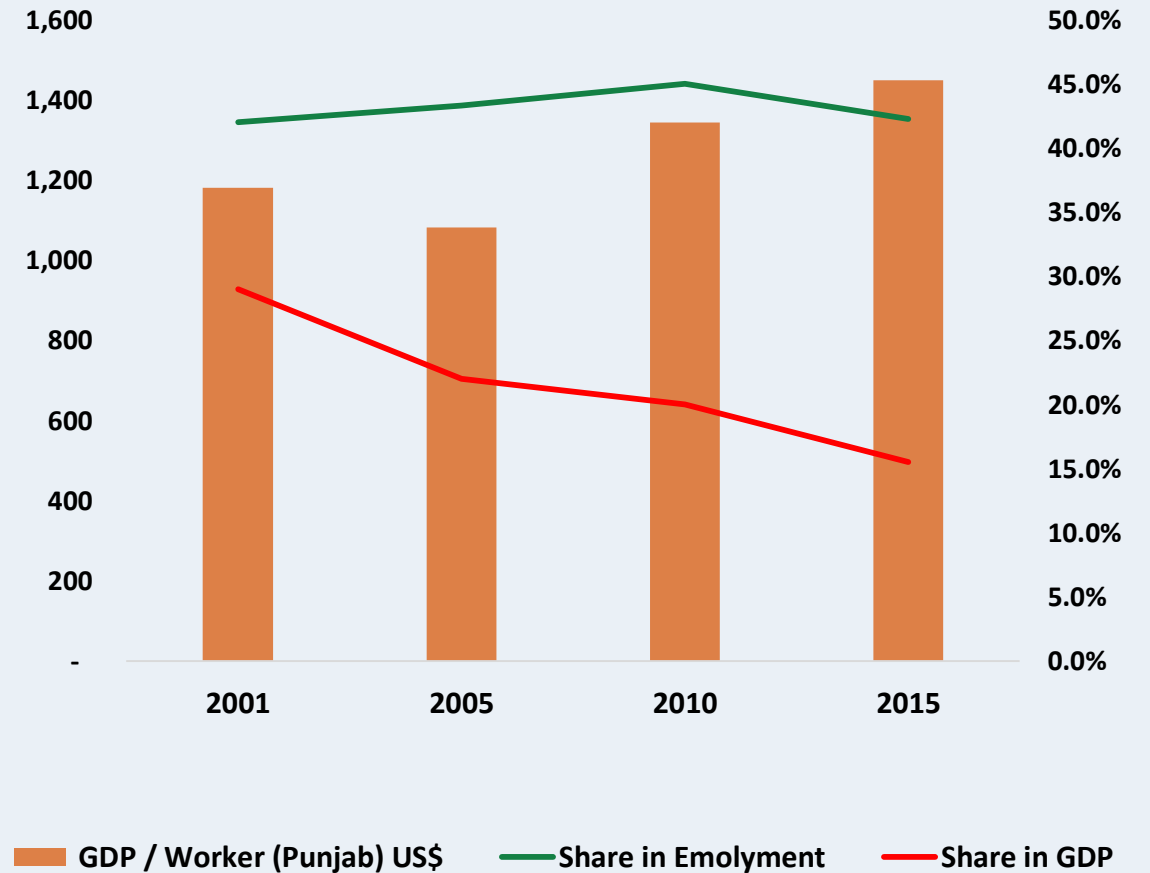
Productivity opportunity

Yield Comparisons (Maund/Acre)



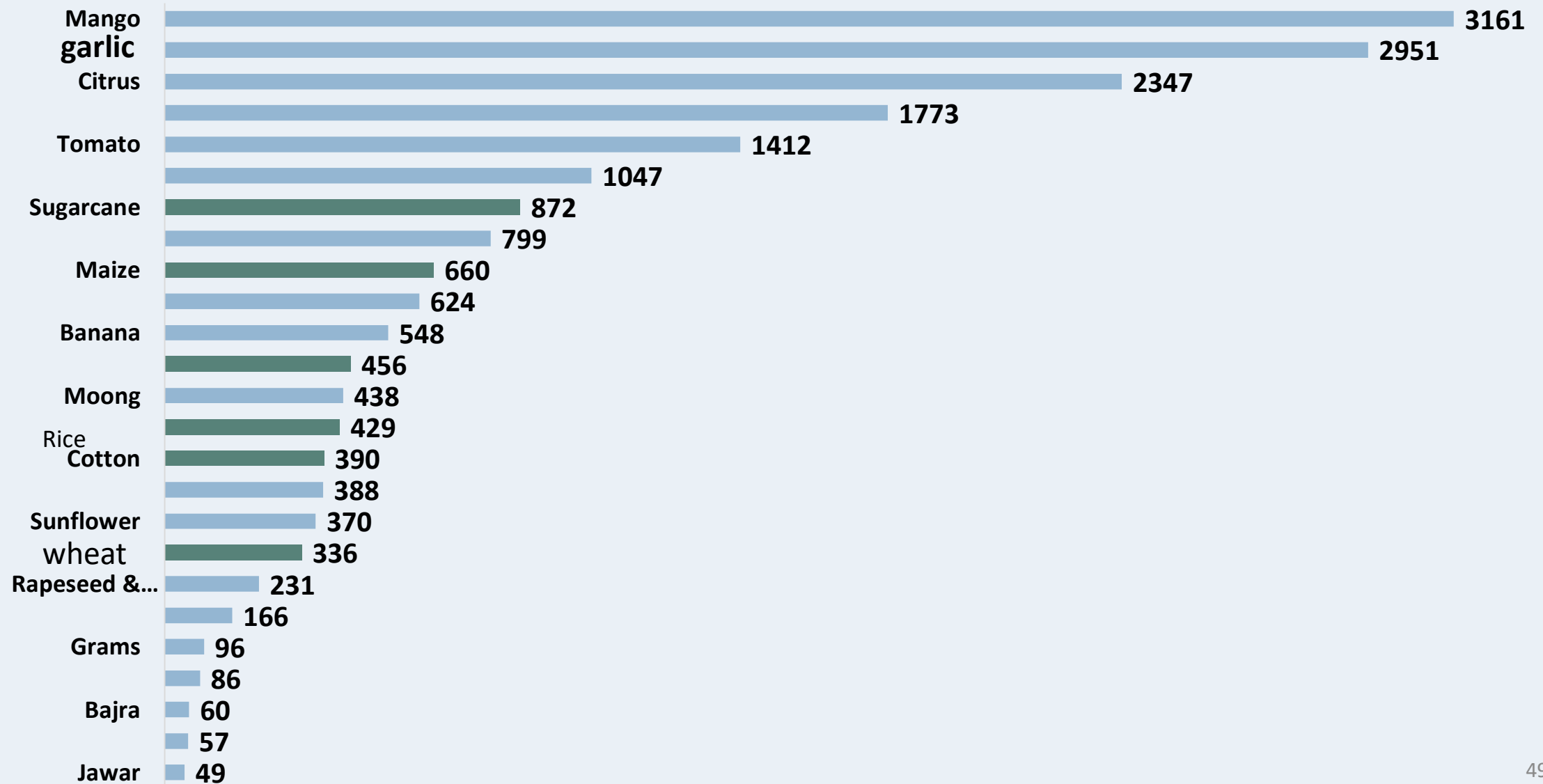
Source: FAO Statistics (2016)

Agriculture Value added per worker (US\$)

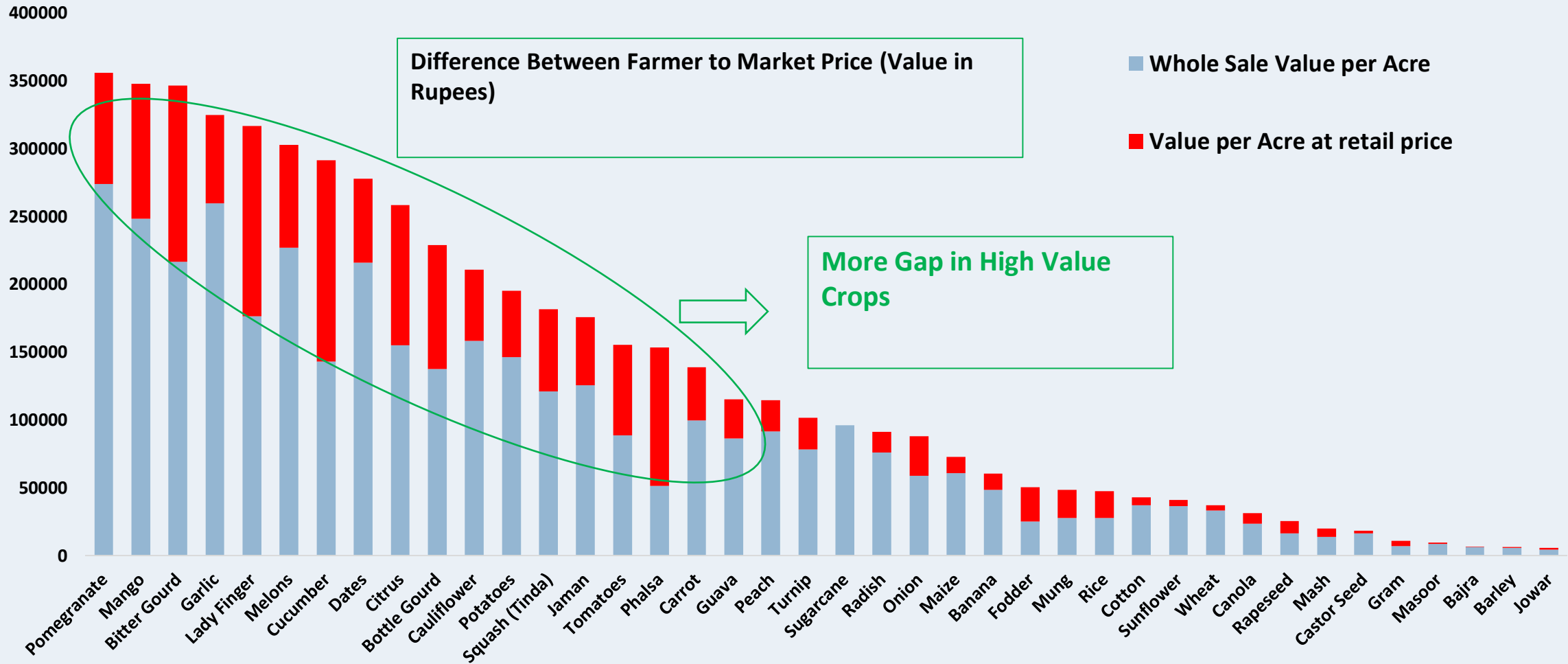


Source: LFS (2014-15)

Output Value per Acre at retail price (\$ US) -- Cropping Mix Opportunity

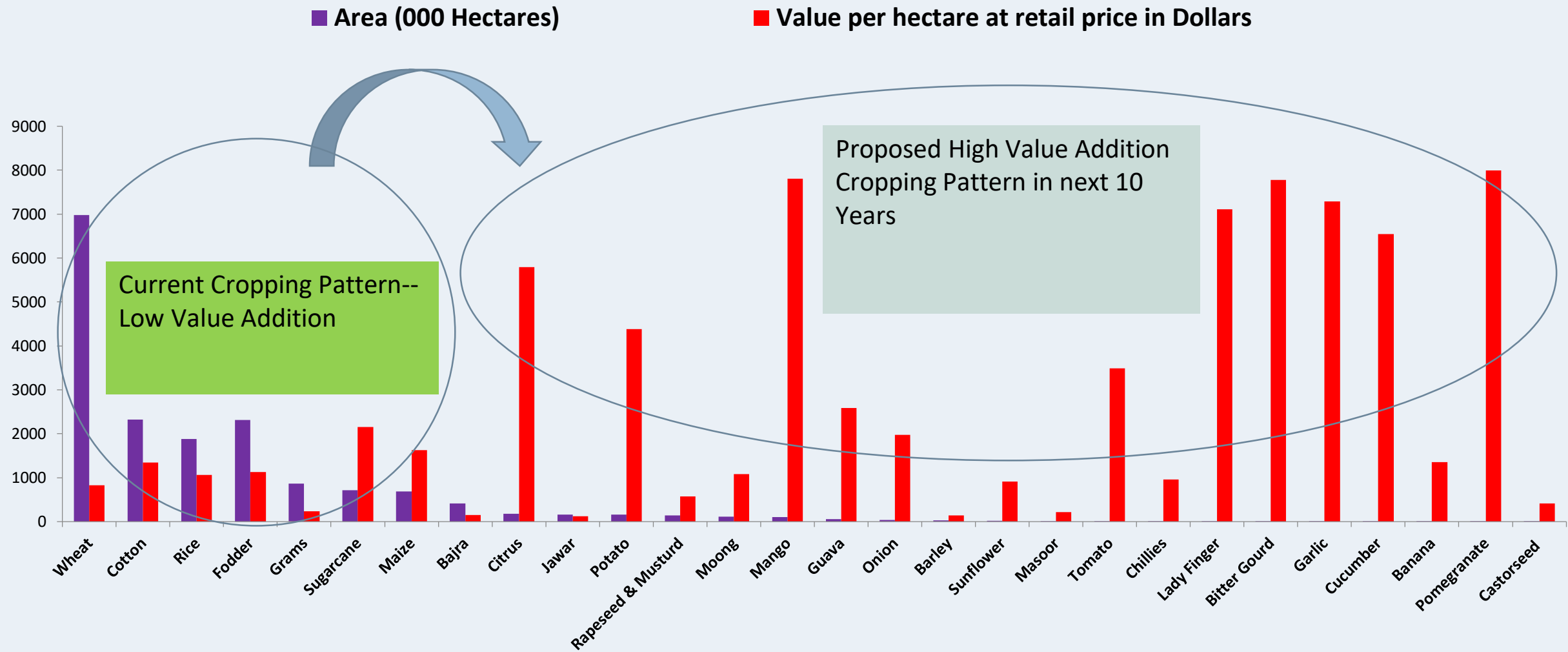


Market Efficiency Opportunity for greater farmer income



Source: The Urban Unit calculations based on AMIS data

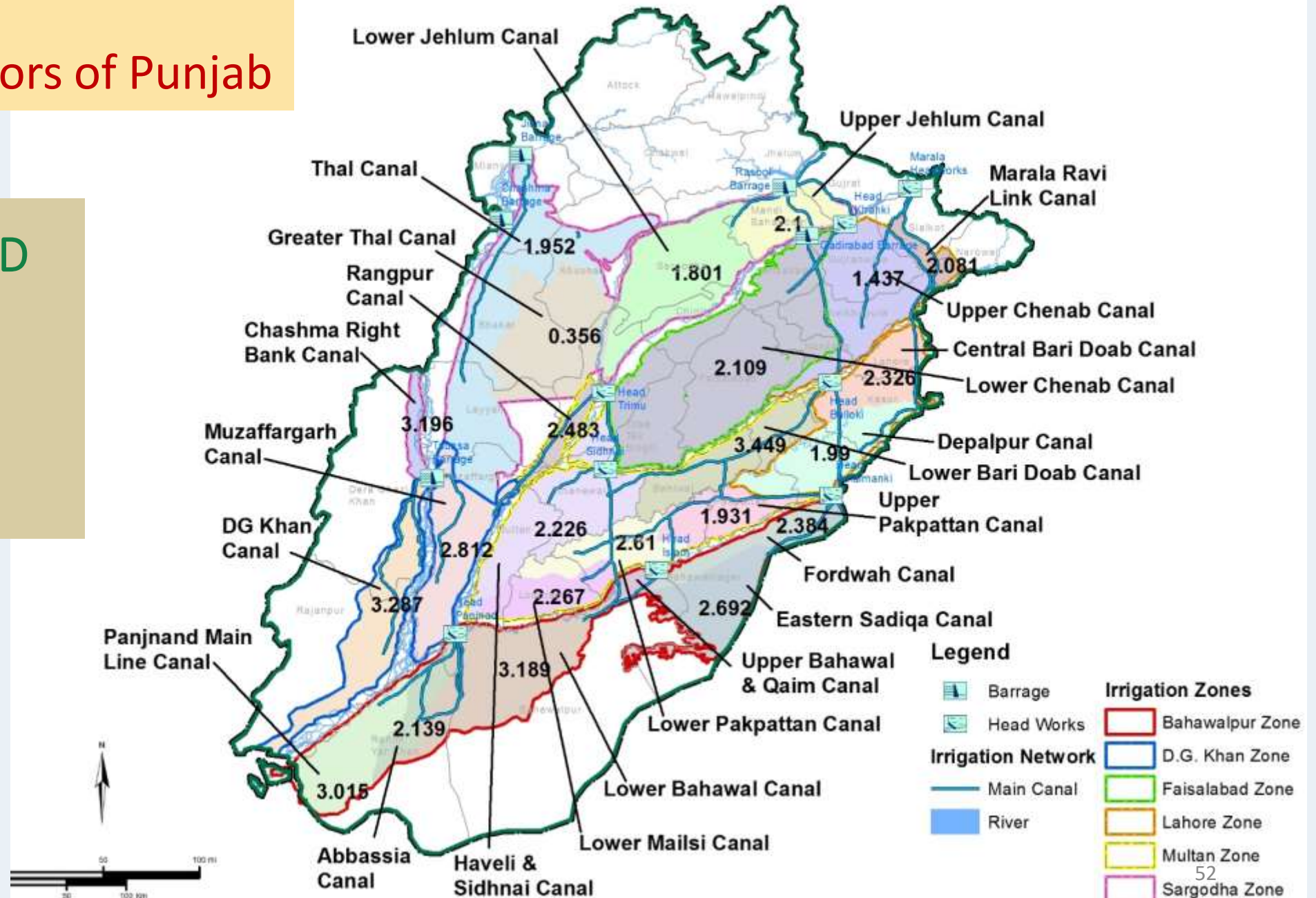
Transformation From Low Value Crops to High Value Crops



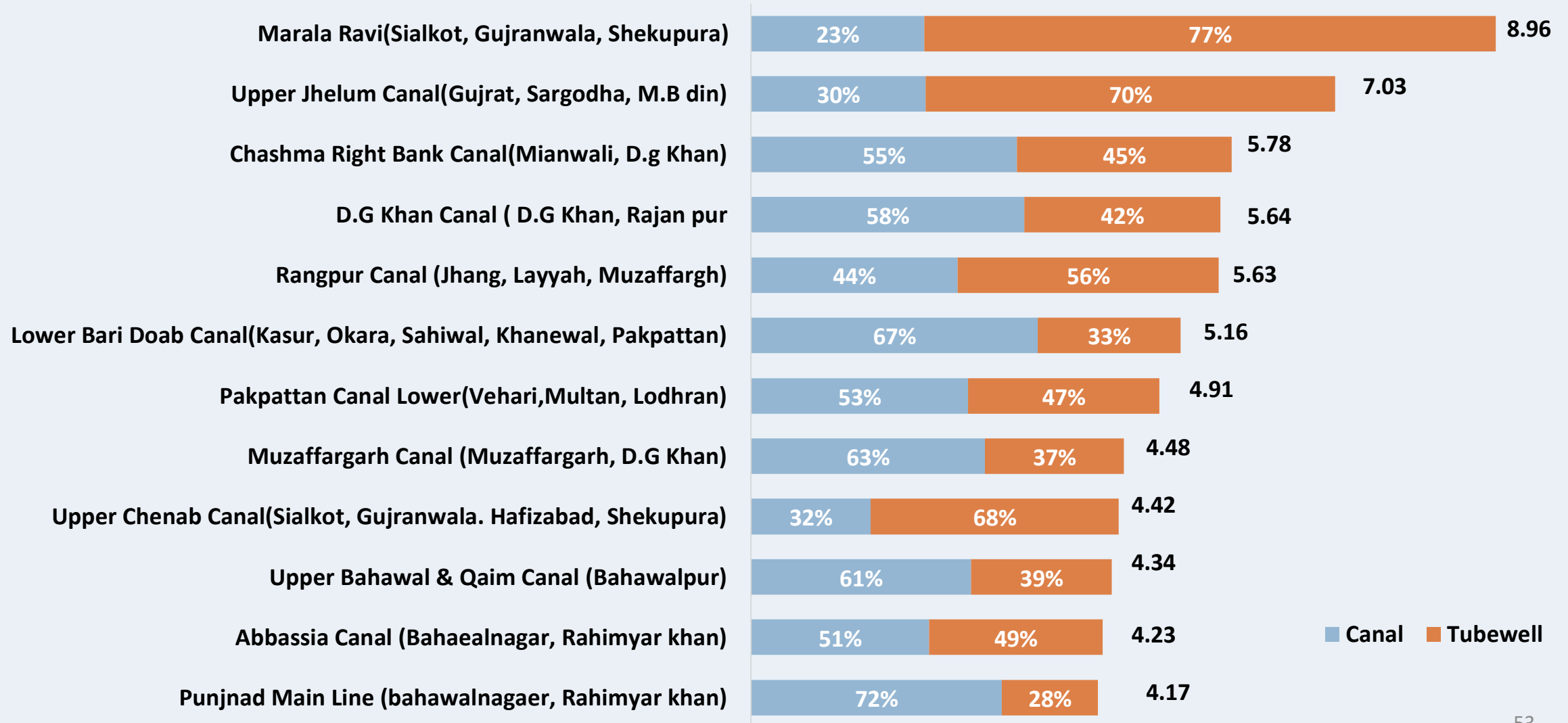
Source: The Urban Unit calculations based on AMIS data

Revamping The Agricultural Corridors of Punjab

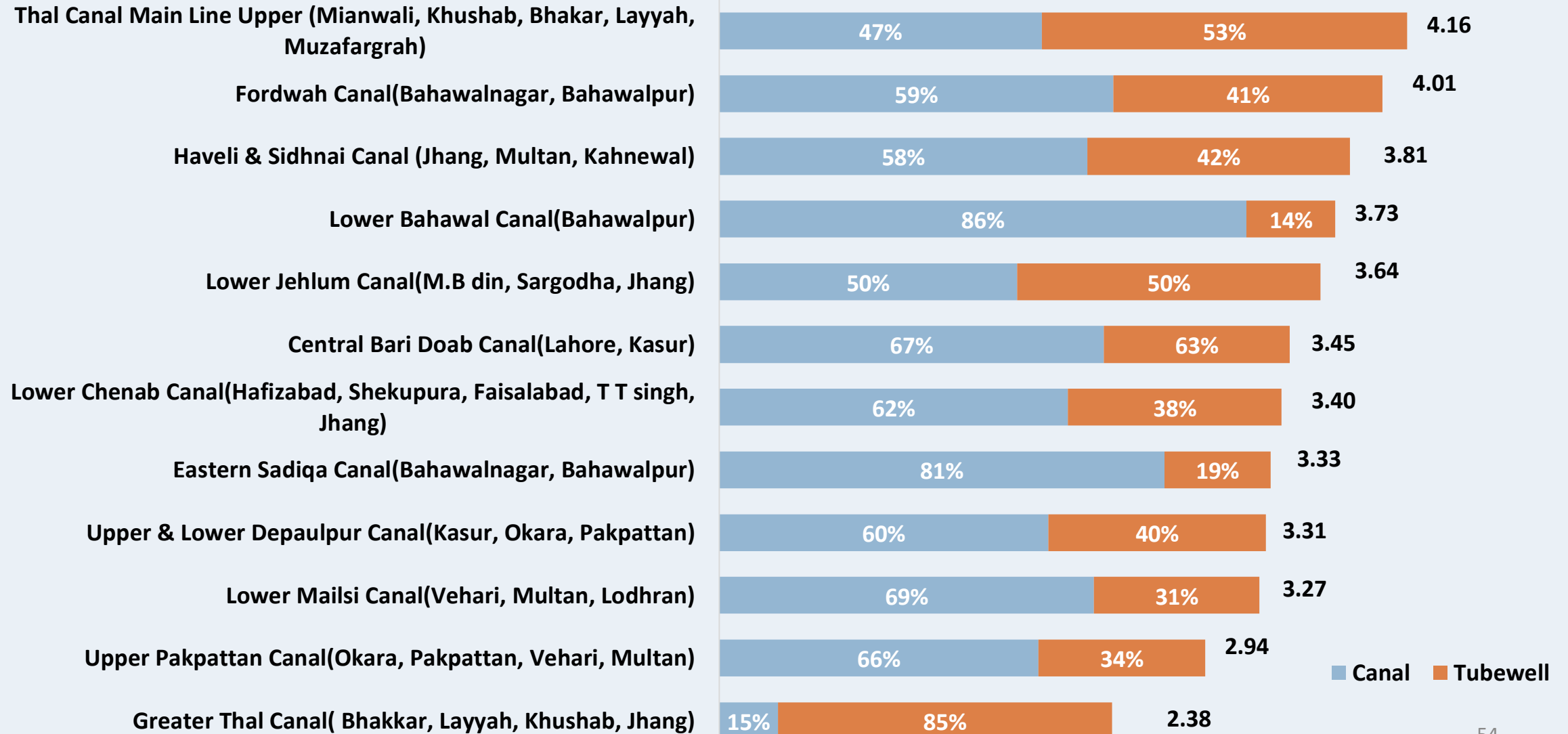
CANAL COMMAND AREAS & CANAL WITHDRAWALS (AVG. FT/ACRE)



TOTAL WATER USED (FT/ACRE) By Agriculture Corridor (Australian Standard 2ft/acre Murray Darling River Authority)

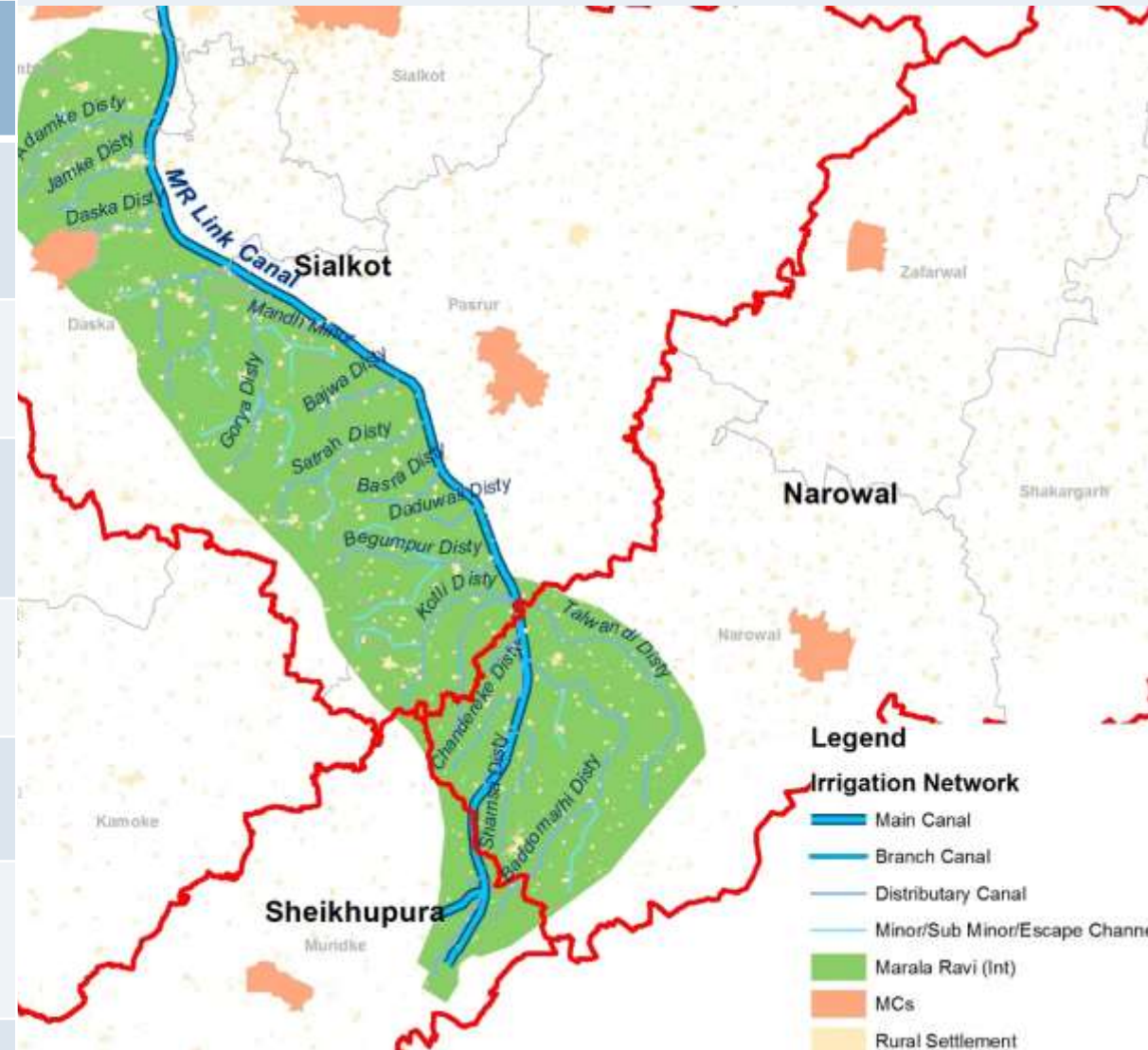


TOTAL WATER USED (FT/ACRE) By Agriculture corridors

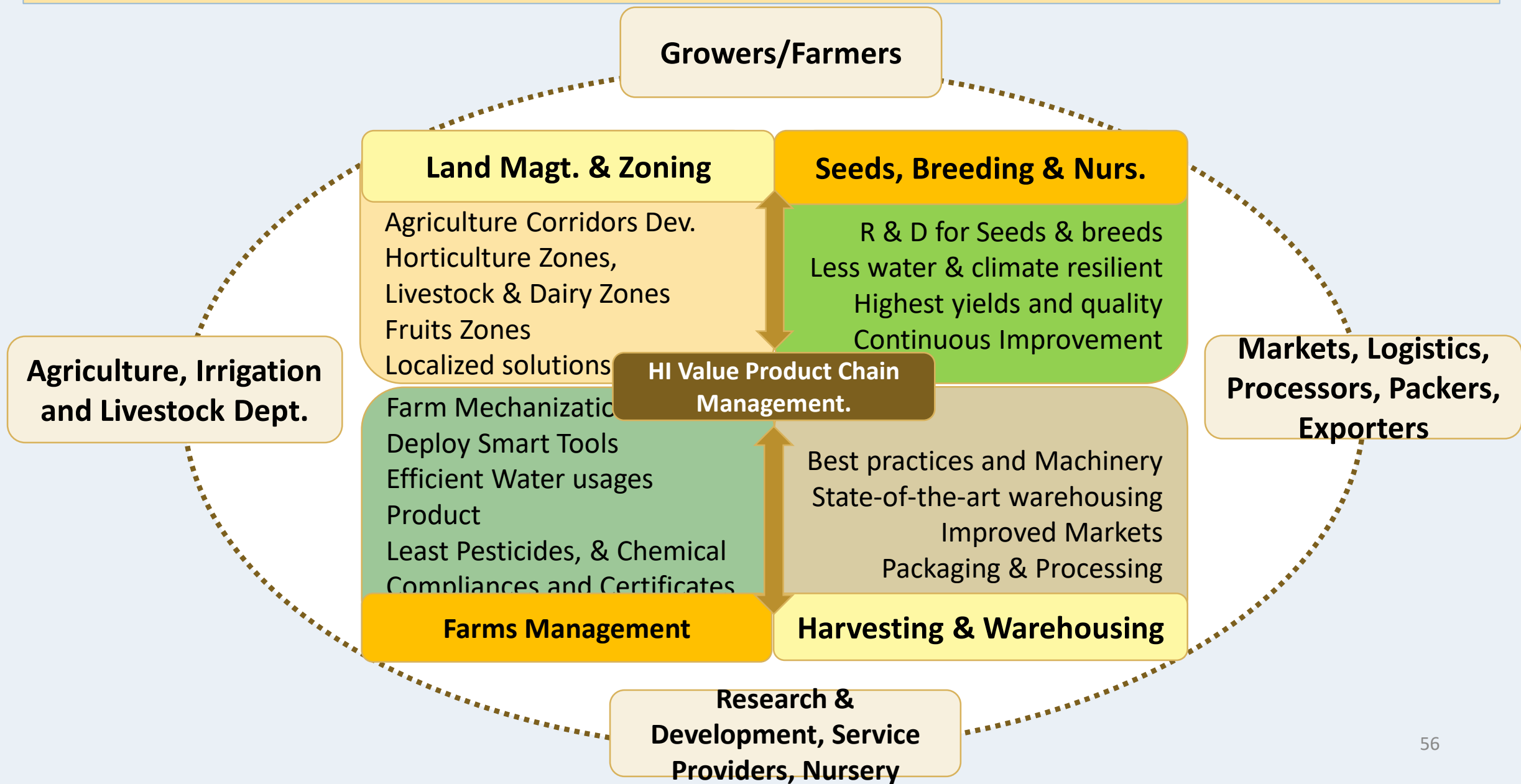


Potential of Marala Ravi Canal Corridor 200,000 Acres

| Units | Narowal | Sialkot | Sheikhupura | Total |
|-------------------------------------|---------------------|---------------------|----------------|-----------------|
| Total cultivated area (acres) | 437,190 | 622,440 | 780,520 | 1,840,150 |
| Area under MR canal | 56,395 | 132,194 | 13,943 | 202,532 |
| Current area used under major crops | Wheat, rice, | Wheat, rice, | Wheat, rice, | - |
| Horticulture Potential | Potato / ladyfinger | Garlic / ladyfinger | Tomato/Rice | - |
| Fruit Orchard | Guava | Guava | Guava | - |
| Current MR Revenue | \$ 43 M | \$ 92 M | \$ 10 M | \$ 145 M |
| Potential Revenue | \$ 278 M | \$ 652 M | \$ 68 M | \$ 995 M |



Business Plan Dairy Punjab, Meat Punjab, Citrus Punjab, Mango Punjab, Guava Punjab, Horticulture Punjab, Wheat Punjab, Cotton Punjab, Maize Punjab, Oilseed Punjab etc



PPP Projects In Punjab



Roads
Projects : 22
Portfolio: PKR 202.13 Billion



Health
Projects : 12
Portfolio: PKR 105 Billion



Housing
Projects : 02
Portfolio: PKR 3.60 Billion



Food
Projects : 02
Portfolio: PKR 0.3 Billion



IT & Governance
Projects : 08
Portfolio: PKR 51 Billion



Agriculture
Projects : 01
Portfolio: PKR 2.0 Billion

PPP Projects In Punjab



**Local Government
Projects : 14
Portfolio: PKR 29.89 Billion**



**Women Development
Projects : 01
Portfolio: PKR 1.0 Billion**



**Tourism & Sports
Projects : 03
Portfolio: PKR 4.97 Billion**



**Industries
Projects : 05
Portfolio: PKR 11.64 Billion**



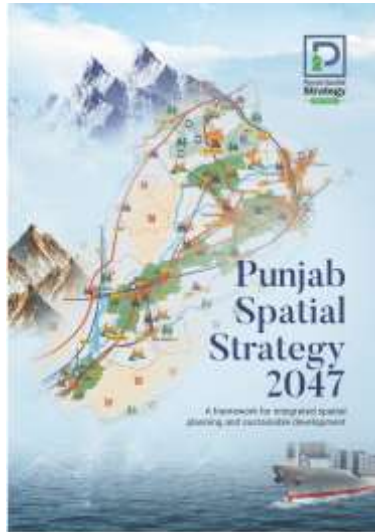
**Transport
Projects : 04
Portfolio: PKR 10.9 Billion**



**Urban Development
Projects : 06
Portfolio: PKR 10.05 Billion**

Government of Punjab: the Frontline of Policy Reform

Reform of Departments & Entities, Development & current Budgets



Productivity, Efficiency &
Competitiveness