



World Food Programme



SAVING
LIVES
CHANGING
LIVES

Market System Resilience

Contents

What is the Market?

Market system

Market system resilience

WFP CO in market monitoring

What is Market?

- *Place*, where people & institutions buy and sell for their agents.
- *Physical marketplace* - exchange of products (e.g., supermarkets, kiosks, market stalls).
- *Organized markets* - stock or auction markets.
- *Online markets* – through online (e.g., ebay, amazon, daraz, nepbay)
- *Barter system* – exchange of goods and services



The Key Concepts

A market functions well if:

- The features influencing behaviour of buyers and sellers are stable and predictable.
- The interactions between sellers, and between sellers and buyers are transparent and
- Supplies are sufficient, regular and predictable at affordable, stable and predictable prices.



Market system

- A *market system* is a dynamic space—incorporating resources, roles, relationships, rules and results—in which private and public actors collaborate, coordinate, and compete for the production, distribution, and consumption of goods and services.
- The *market system* includes all the firms in interrelated value chains—input providers, producers, traders, processors, wholesalers and retailers; the supporting services (e.g., finance, transport, information services) for those actors; and the formal and informal enabling environment in which they operate.

Market system

Characteristics of the market system:

Market and prices:

Market is an institution or mechanism that brings buyers and sellers into contact.

Society decides:

- What the economy should produce
- How production can be organized efficiently, and
- How the fruits of production are to be distributed

Market System Resilience

Resilience

Walker et al. (2004) “the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks.”

Resilience is now generally understood to describe a process—the capacity to withstand, adapt and transform.

Resilience is the ability of the system to bounce back and return to a fixed stable state equilibrium following a shock.

Resilience defines as “the ability of countries, communities and households to manage change, by maintaining or transforming living standards in the face of shocks or stresses—such as earthquakes, drought or violent conflict—without compromising their long-term prospects” (DFID n.d.)

Market System Resilience

Market System Resilience

Market system resilience is the ability of a market system to respond to shocks and stresses in a proactive fashion to sustain inclusive market functions that serve vulnerable producers, business owners, workers, and consumers (RTI).

Market systems resilience is defined more broadly as the ability of the system to draw on system-level resources—such as social safety nets, early-warning systems, emergency relief systems—in the face of shocks and stresses (USAID).

Market System Resilience

Why important?

As relatively new area and yet to explore more in development, market system resilience is important because it addresses the capacity of a market system to absorb, adapt, or transform in the face of shocks and stresses.

Key shocks to the market system

- *Economic shocks*—food price volatility, cash crop price volatility, and fuel price volatility
- *Social shocks*—political instability, unstable or ineffective governance, and trade policies
- *Environmental shocks*—natural resource degradation from floods, drought, erratic rainfall, soil fertility, mining, etc.
- *Health shocks*—health crises such as Ebola, COVID-19 pandemic, HIV/AIDS or the impact of aflatoxin on nutrition and wellbeing.

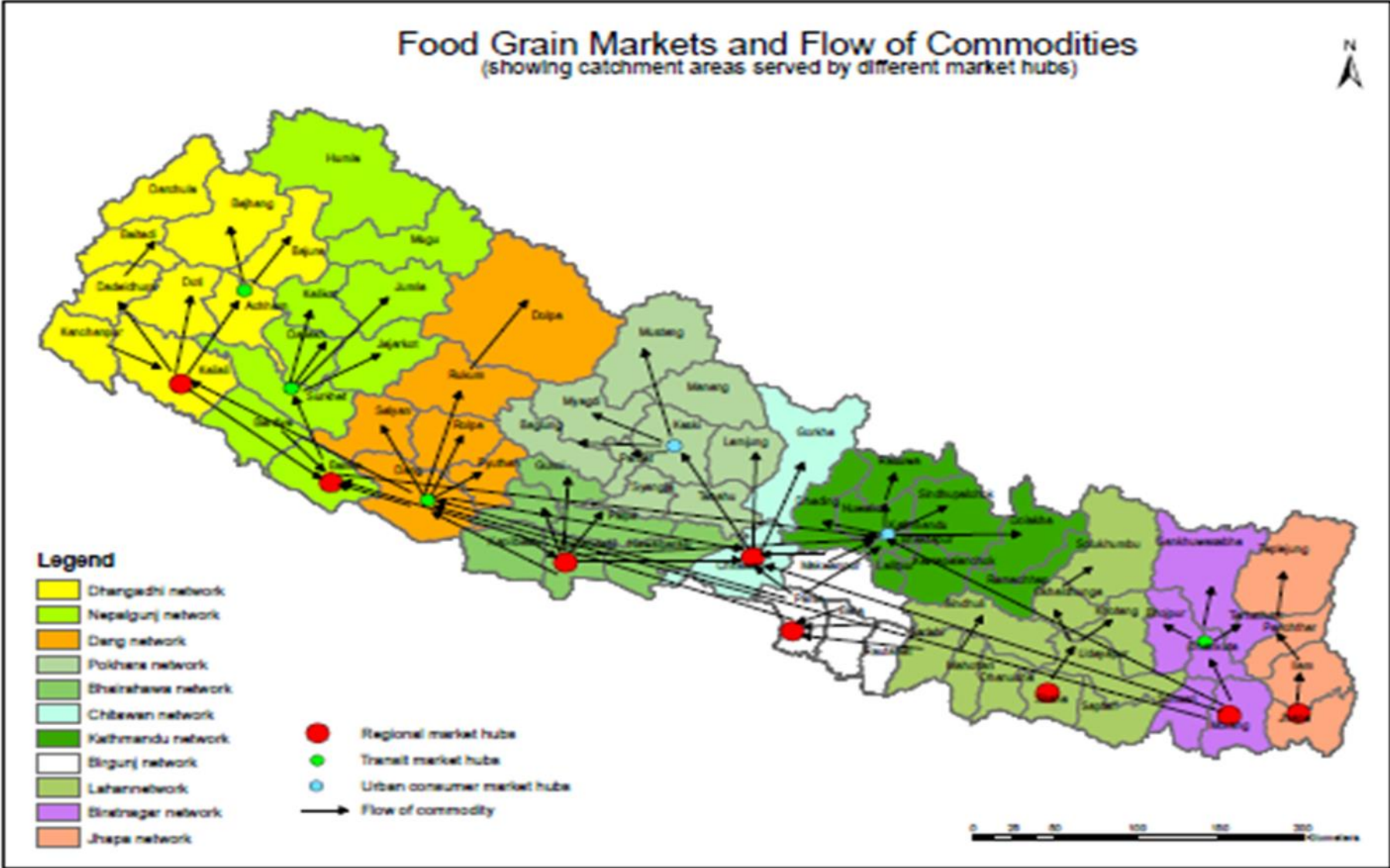
Determinants of resilience

- *Household adaptive capacity*
- *Livelihood diversifications*
- *Social capital*

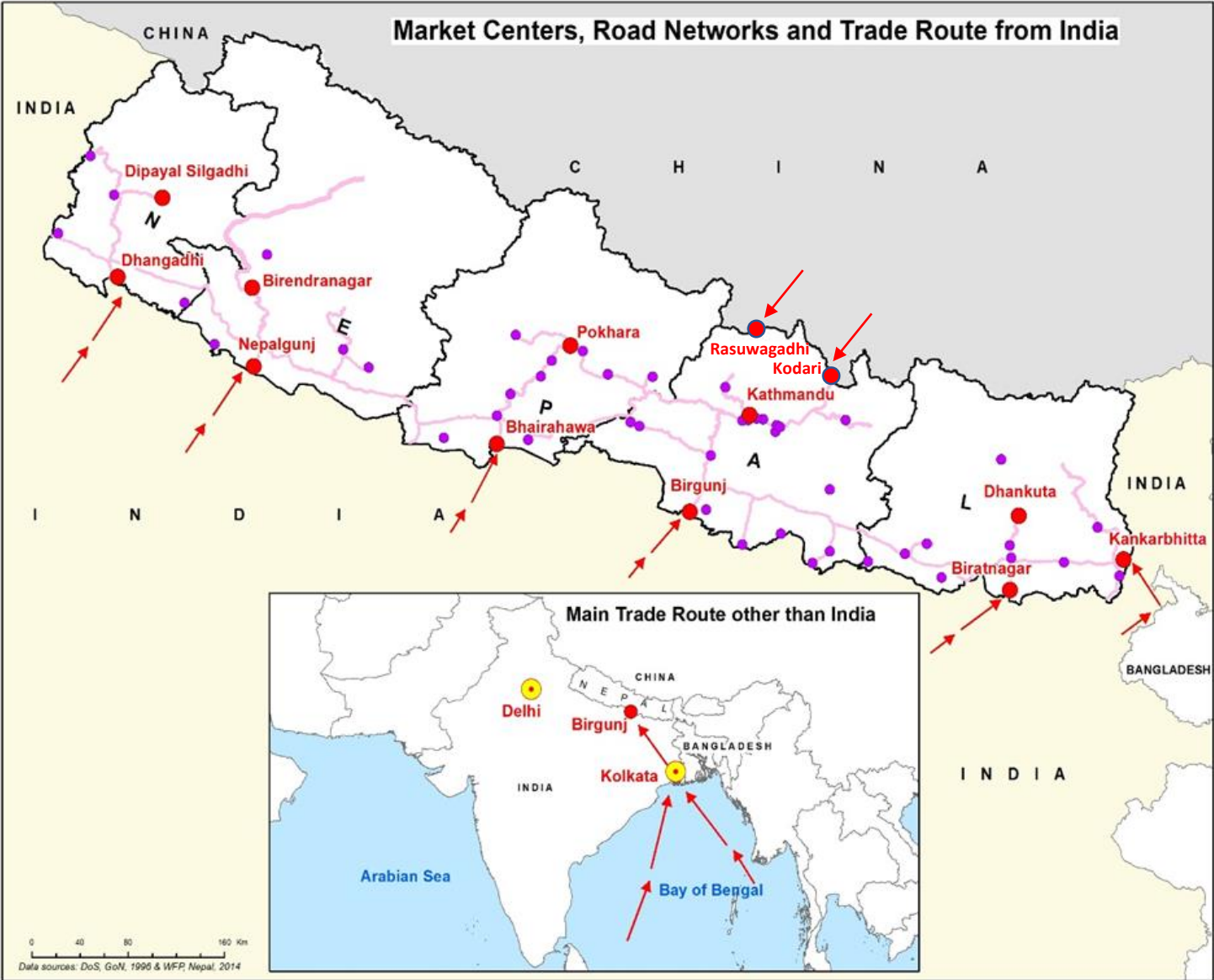
Market System Resilience in Nepal

- ❖ **Road network and infrastructure**
- ❖ **Informal and unorganized markets**
- ❖ **Market information system**
- ❖ **Government policies and priorities**
- ❖ **Geographical heterogeneity**
- ❖ **Largely relied on India**
- ❖ **Occurrence of frequent disaster and shocks**

Supply Route in Nepal



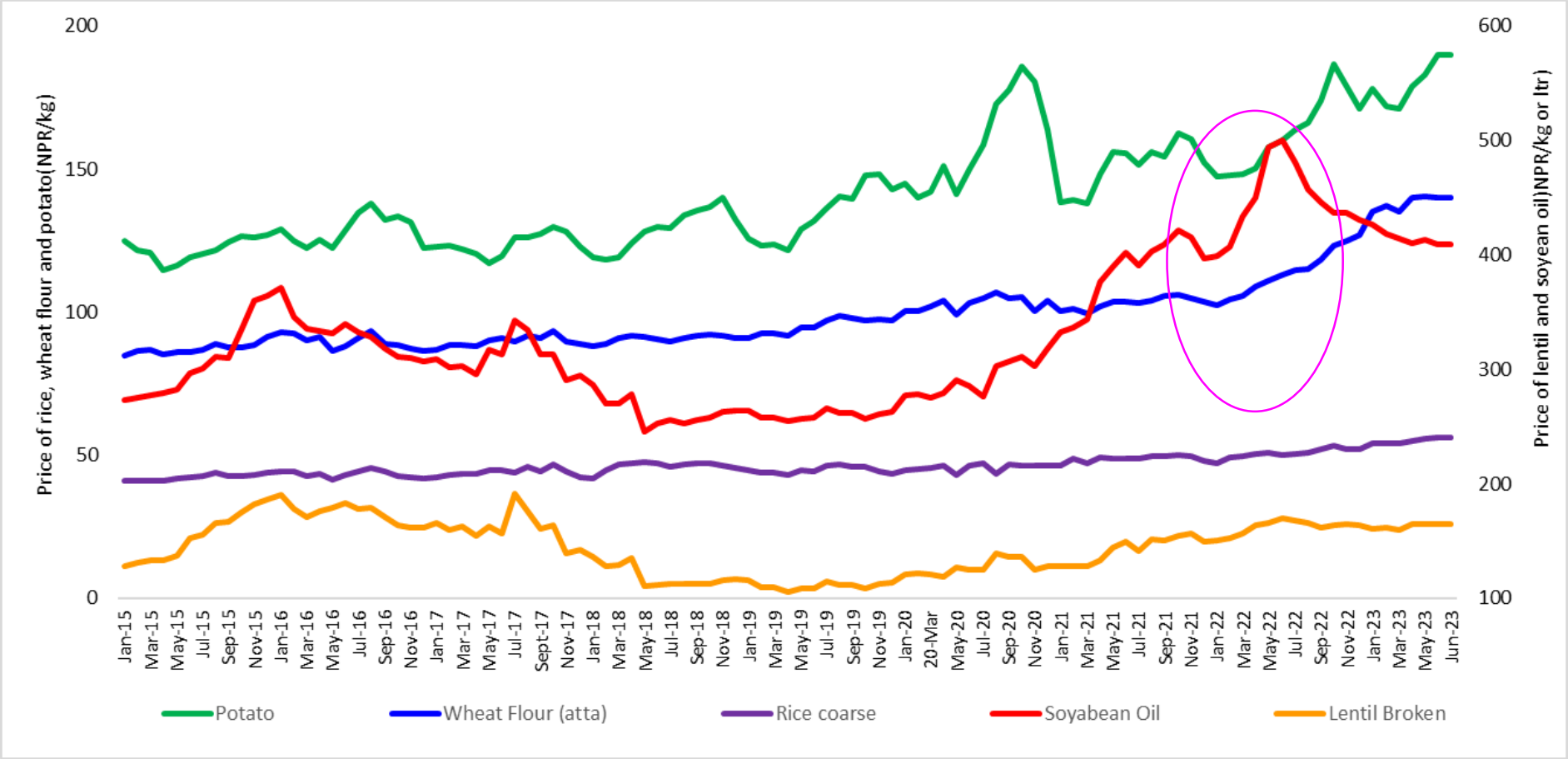
Commodity Trade Route in Nepal



Market Monitoring in WFP Nepal

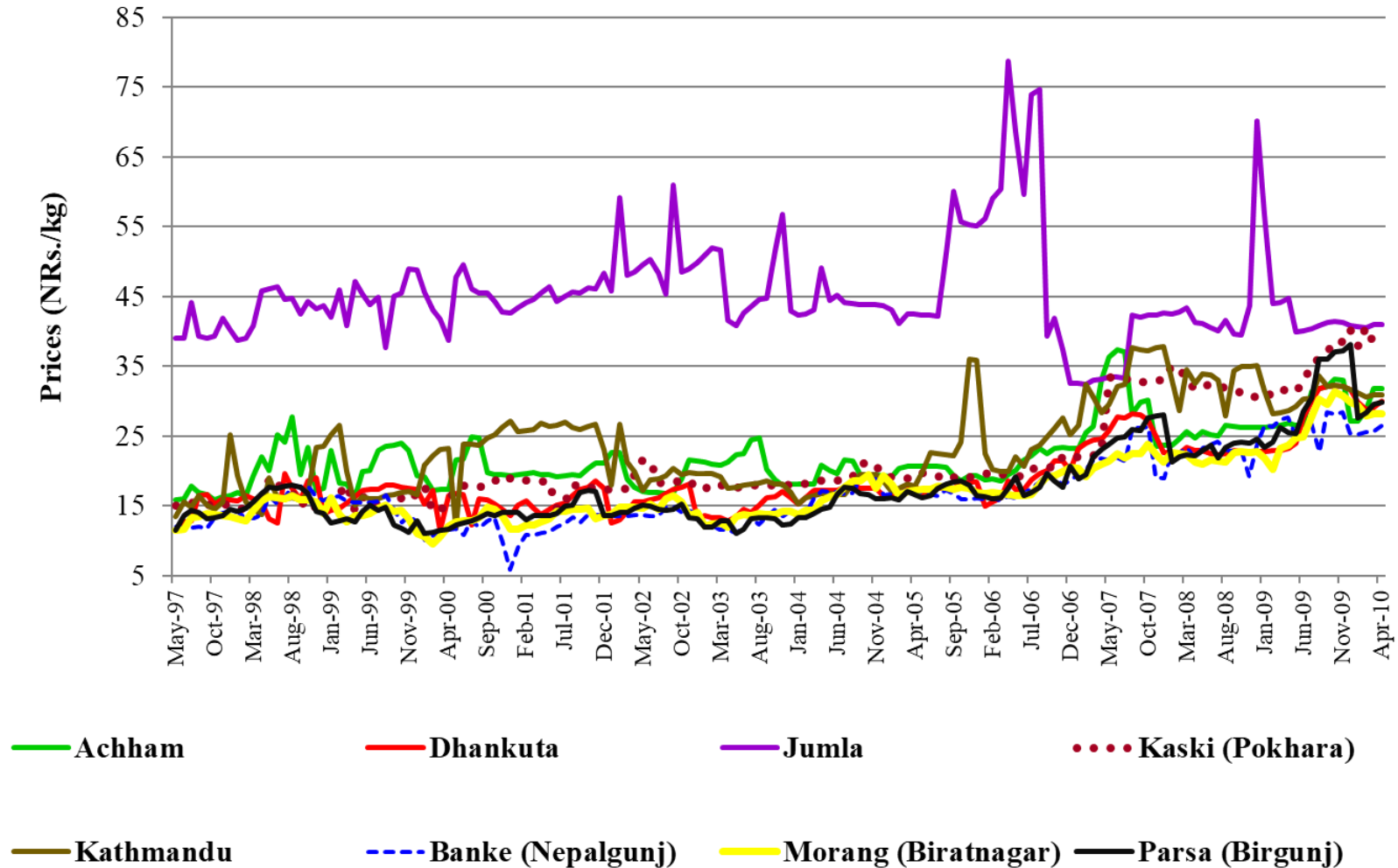
- **Monthly monitoring of market situation and food prices in 25+ districts**
- **Update market situation and price trend**
- **Periodic market assessment such as pre-crisis market situation and market functionality index (MFI)**

Price trend of major food commodities in Nepal

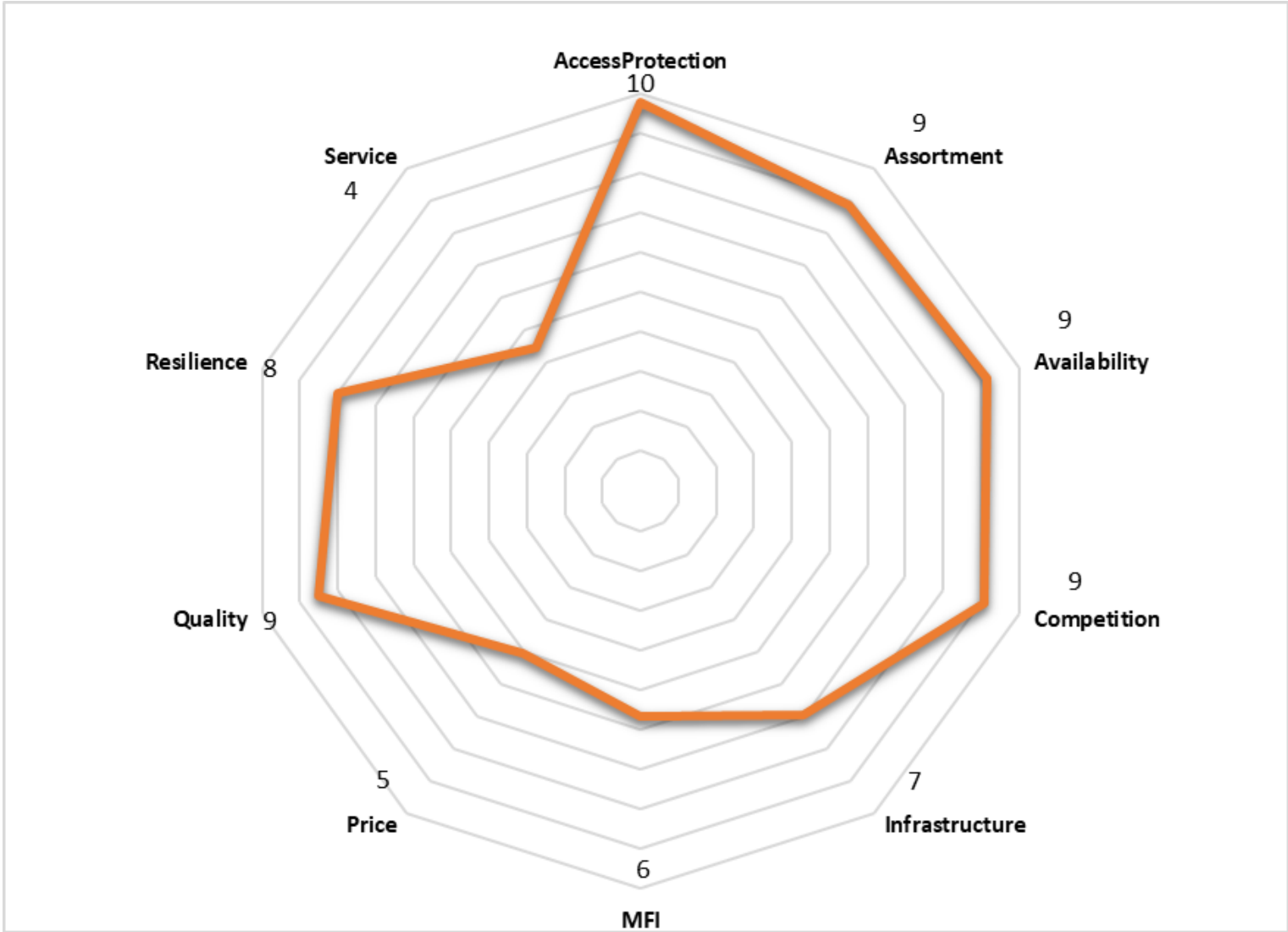


Market Performance in Nepal

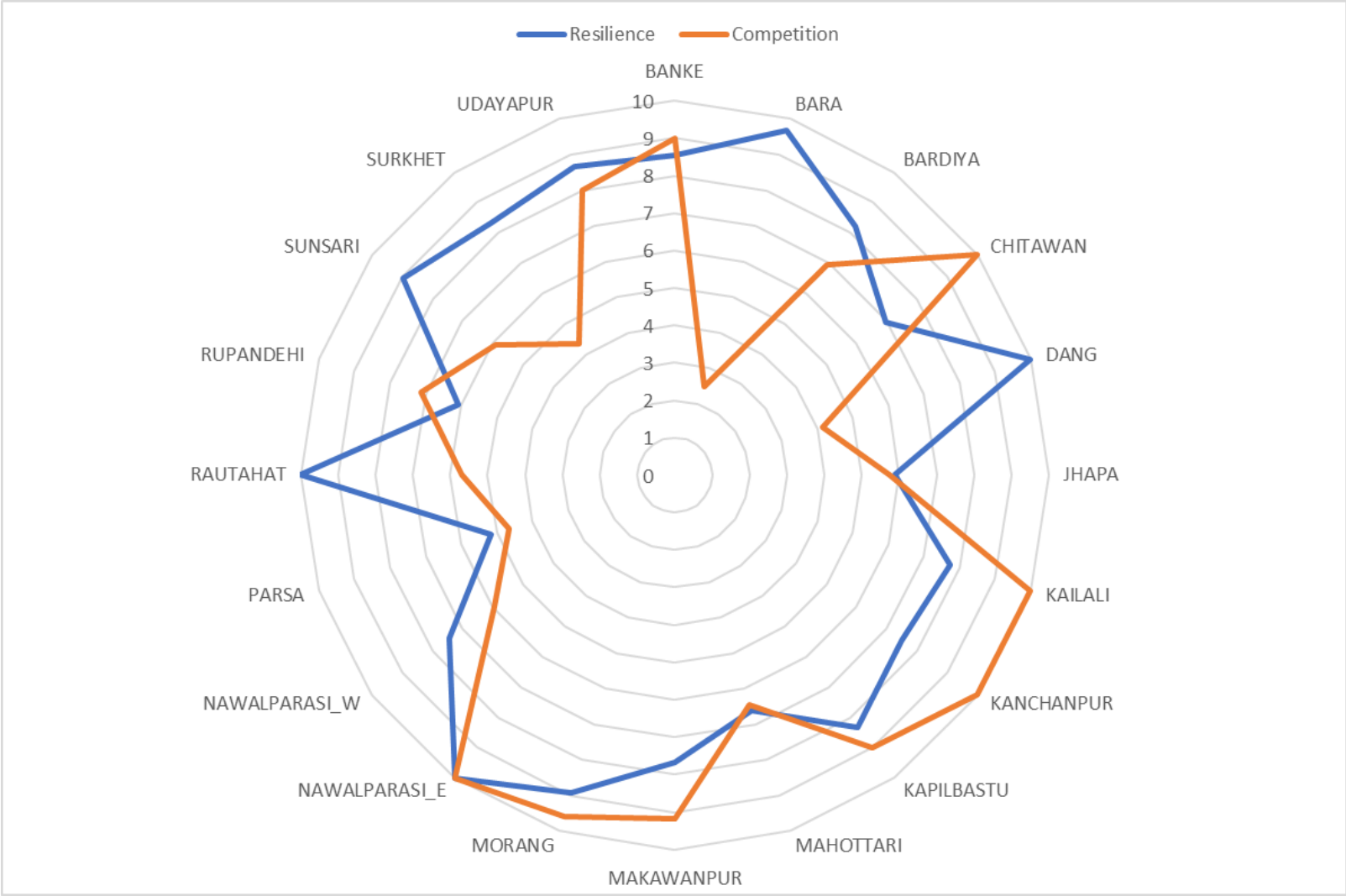
Spatial trends of coarse rice prices over 1997-2010



Market Functionality Index (MFI)



Market Functionality Index (MFI)



Market Functionality Index (MFI) by District

Province	District	Assortment	Availability	Price	Resilience	MFI
Province 1	Jhapa	10.0	10.0	4.2	8.8	6.0
Province 1	Morang	9.5	10.0	3.3	7.5	5.7
Province 1	Sunsari	10.0	10.0	4.2	8.8	5.8
Madhesh	Bara	6.0	0.0	4.2	5.8	3.1
Madhesh	Dhanusha	9.0	10.0	7.5	10.0	6.1
Madhesh	Mahottari	7.0	10.0	7.5	8.8	5.3
Madhesh	Parsa	9.0	5.8	4.2	6.7	5.6
Madhesh	Rautahat	7.0	0.8	4.2	5.4	3.4
Madhesh	Saptari	7.0	10.0	7.5	10.0	5.9
Madhesh	Siraha	10.0	10.0	7.5	10.0	6.2
Bagmati	Makwanpur	6.0	5.0	5.8	5.8	5.0
Gandaki	Baglung	5.0	10.0	2.5	6.3	5.2
Gandaki	Kaski	6.0	10.0	5.0	6.3	6.8
Lumbini	Banke	10.0	10.0	7.1	7.5	4.9
Lumbini	Bardiya	9.0	10.0	7.5	10.0	6.1
Lumbini	Kapilbastu	10.0	10.0	2.5	8.8	5.5
Lumbini	Nawalparasi	10.0	10.0	0.0	7.9	4.1
Lumbini	Rupendehi	10.0	10.0	1.3	8.5	4.8
Karnali	Jumla	8.0	6.7	5.0	5.0	2.7
Karnali	Surkhet	10.0	10.0	1.7	7.5	4.8
Sudurpaschim	Kailali	10.0	10.0	7.5	7.5	7.7
Sudurpaschim	Kanchanpur	9.3	10.0	5.8	7.5	7.2
Nepal	Average	8.9	9.1	5.0	8.0	6.0

Price transmission

Source	SS	df	MS	Number of obs = 77		
				F(2, 74) = 18.28		
Model	1.79	2	.8959	Prob > F = 0.0000		
Residual	3.62	74	.0490	R-squared = 0.3307		
				Adj R-squared = 0.3126		
Total	5.42	76	.0713	Root MSE = .22139		
lrc_nepal	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	
lrc_india	0.709	.3486	2.03	0.046	.0142232	1.40332
lrice_thai	0.207	.1975	1.05	0.297	-.1859526	.6010528
_cons	0.531	.5266	1.01	0.317	-.5183769	1.580266

High Food Inflation: Top Ten Countries

