

Traditional and modern consumption patterns of dried fruits and nuts in Central Asia: A cross-country analysis

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1. INTRODUCTION AND PROBLEM STATEMENT

- Global demand** for tree nuts and dried fruits grows, supported by healthy and sustainable diets.
- In Central Asia** dried fruits and nuts are vital for nutrition and incomes:
 - Important producer, due to favorable climate and traditional practices.
 - Represent an important part of traditional food heritage.
- Producers** face structural constraints:
 - fragmented value chains, limited access to certification, and weak market infrastructure.
- Consumption patterns** in Central Asia are evolving:
 - Urbanization, rising incomes, global connectivity are reshaping demand toward modern attributes
- Research gap:**
 - Limited attention to local consumer market dynamics and how socio-demographic factors shape traditional vs. modern preferences.
- Research question:**
 - What consumer segments exist in the Central Asian dried fruit and nut market, and how do socio-demographics shape the balance between traditional and modern food preferences?

2. CONCEPTUAL FRAMEWORK OF RESEARCH

		Traditional Food Consumption	Modernized Food Consumption
Product	Production	Traditional drying	Innovative drying
	Degree of processing	Dried whole product	Snacks
	Packaging	No packaging	Packaged
	Ways of buying	- Bazaars - Farm markets - Small kiosks	- Organic - Online shops - Supermarkets
	Quality aspects	Not important	- Important - Certification
	Consumption context	- Cultural festivities - Family events	- As a side dish - As a snack at work - Sport activities
Consumer Food-related lifestyle	Purchasing motivations	- Origin - Price - Taste - Aroma - Appearance	- Health benefits - Credence attributes - Food safety - Environmental protection - Social support
	Cooking application	Baking, cooking	Baking, cooking
	Socio-demographics	- Age - Gender - Education - Income	- Age - Gender - Education - Income

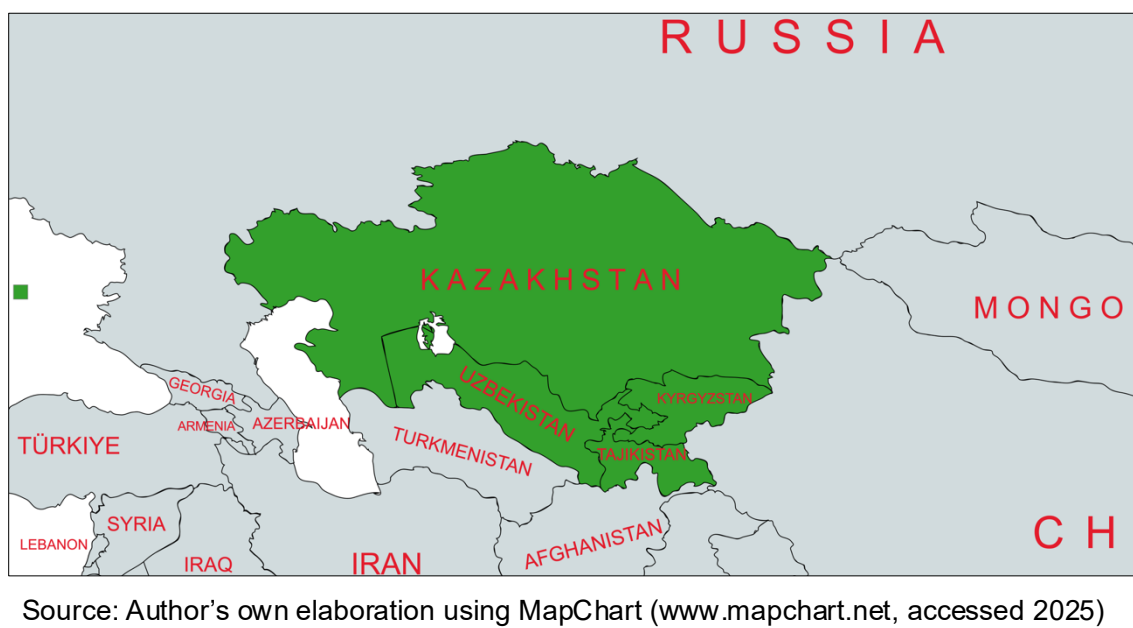
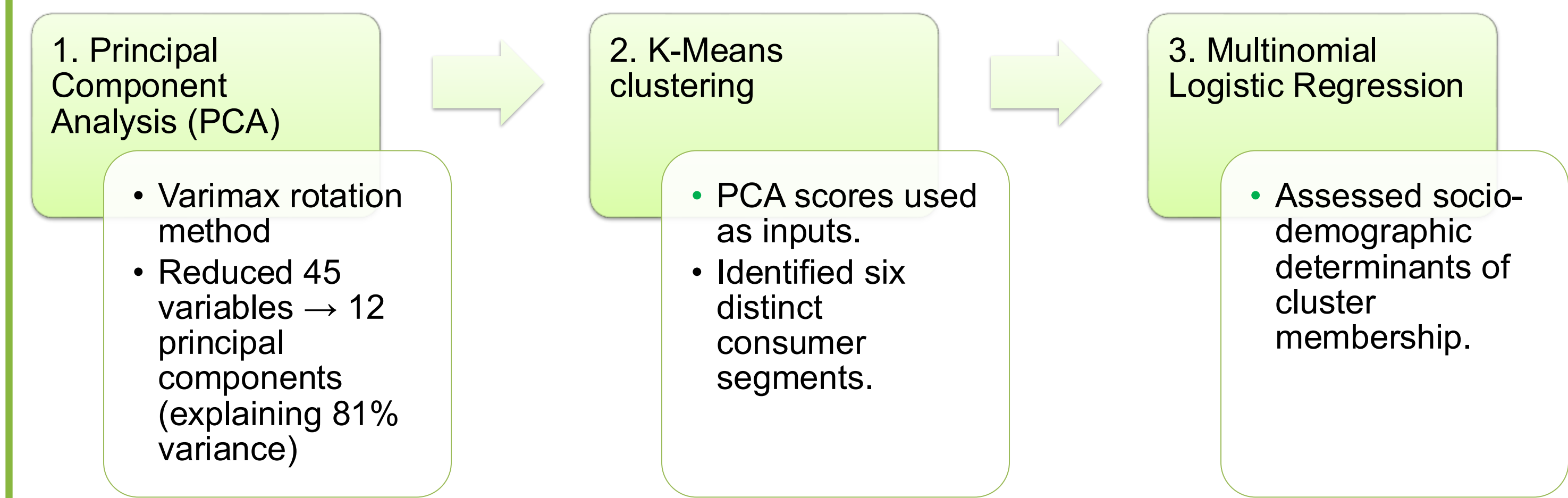
Figure 1. Conceptual Framework. Source: own construct based on literature review

3. Methodology

Data Collection:

- Survey conducted in Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan.
- 2,482 respondents (urban & rural) between March 2024 – Feb 2025.
- Survey instrument:**
- 45 attitudinal & behavioral items on product attributes, lifestyle, and consumption contexts.
- Socio-demographic variables: gender, age, education, income, employment, household size, urban/rural.

Analytical Strategy



Source: Author's own elaboration using MapChart (www.mapchart.net, accessed 2025)



4. RESULTS

4.1. Consumer clusters

ETHICAL CONSUMERS



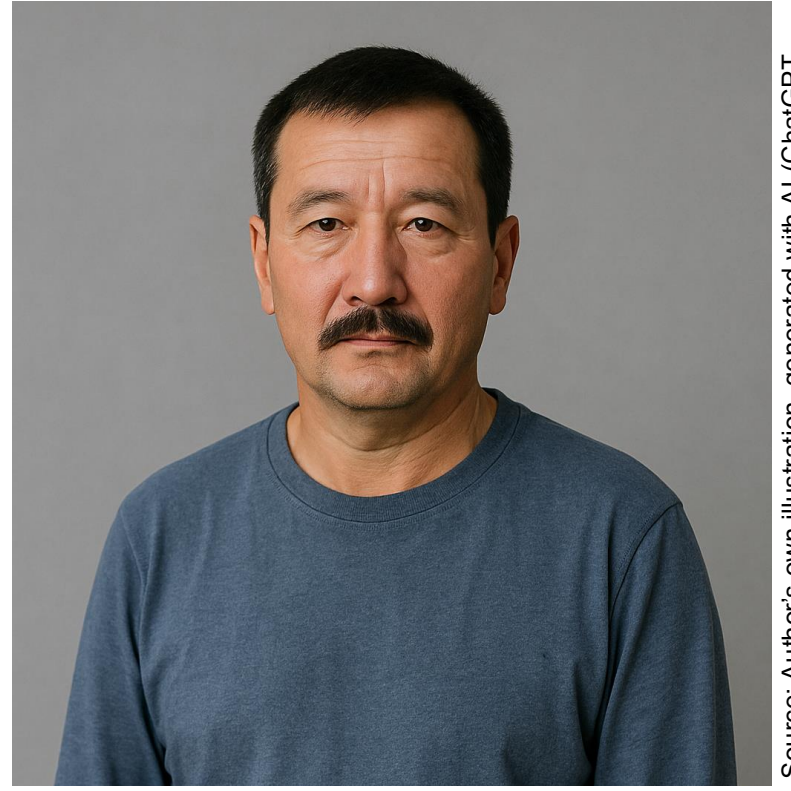
Share in CA - 34.5%

Age: 25 - 45
Gender: Mostly female
Income: Medium
Education: Higher
Places: Markets, Kiosks
Residence: Urban, peri-urb.
Preferences: Social and environmental responsibility

Key motivations:

- Concern for farmers' welfare, sustainable production

INDIFFERENT CONSUMERS



Share in CA - 16.8%

Age: 45-65
Gender: Mostly male
Income: Low-medium
Education: Basic
Employment: No or retired
Places: Groceries, bazaars
Preferences: Bulk, unpackaged, cheap purchases

Key motivations:

- Low interest in quality, health, or environmental impact
- Prioritizes quantity and affordability

HEALTH-FOCUSED



Share in CA - 24.5%

Age: Average (40-60)
Gender: Mostly male
Income: High
Education: University degree
Places: Supermarkets
Residence: Urban
Preferences: High-quality, safe and packaged

Key motivations:

- Focus on physical health, food safety and chemical-free prod.

ORGANIC EXPERIENTIALISTS



Share in CA - 6.2%

Age: Younger (25 - 40)
Gender: Mostly female
Income: Medium to high
Education: Master's degree
Employment: Employed
Places: Organic stores
Preferences: Organic, attractive and ethical package, mix of nut and fruits

Key motivations:

- High interest in aroma, appearance, and organic certifications
- High value of health qualities

CULTURAL TRADITIONALISTS



Share in CA - 16.3%

Age: Average (45-65)
Gender: Mostly female
Income: Average
Place: Local bazaars or village markets
Residence: Rural and village
Preferences: Prefer local dried fruits without packaging

Key motivations:

- Prioritizes taste, aroma, local origin. Daily, family festivities

DIGITAL INNOVATORS



Share in CA - 1.7%

Age: Young (25-35)
Gender: Mostly male
Income: High
Employment: Employed
Family: Newly married
Education: High
Places: Online
Preferences: Convenience, transparency, innovatively dried

Key motivations:

- Enjoys digitally enabled shopping and mobile payments

4.2. Cross-country variations:

Kazakhstan

- Ethical Consumers (45.7%)
- Organic Experientialists (16%)

Kyrgyzstan

- Cultural Traditionalists (27.6%)
- Ethical Consumers (26.6%)

Tajikistan

- Cultural traditionalists (24.1%)
- Health-focused consumers (24.3%)
- Lowest in certified or digital channels

Uzbekistan

- Ethical Consumers (37.29%)
- Health-Focused cluster (29.2%)

4.3. Socio-demographic predictors:

Gender:

- Women more likely in health, ethical, and traditional clusters.

Age:

- Older → Health & Ethical;
- Younger → Traditional + Organic.

8. Conclusion

Hybrid Transformation

- Central Asian dried fruit and nut markets reflect both tradition and modernity.
- Traditional use remains rooted in bazaars, home cooking, and festivities.
- Modern trends highlight health, certification, sustainability, and digital retail.

Policy & Market Implications

- Tailored strategies needed → no one-size-fits-all.
- Support traditional consumers with local branding and cultural preservation.
- Provide modern/ethical consumers with certification, labeling, and traceability.
- Expand digital access for urban youth; improve food literacy & affordability for rural and low-income groups.

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