



Preference Modeling of Urban Consumers towards Organic Vegetables at Kathmandu Metropolis, Nepal



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Research Problem

Demand of organic vegetables is going up in the urban areas of Nepal. However, the questions to be addressed before making production and marketing decision are how consumers react with such newly introduced vegetables and what factors of the commodity make consumption appealing to consumers?



Objectives

- ❖ To find the attitude of the urbanites towards organic vegetables and factors affecting willingness to buy.
- ❖ To evaluate preferential difference of consumers to tomato attributes.

Research Methodology

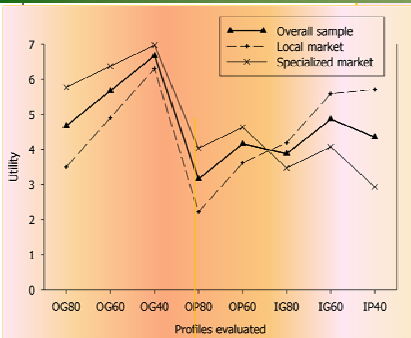


- ❖ Purposive selection of 100 consumers, 50 each from organic and non-organic markets
- ❖ Standard questionnaire based on conjoint analysis (CA) for data collection
- ❖ Willingness to buy was dealt with logistic regression
- ❖ CA for preferential modeling
- ❖ Attributes of the tomatoes evaluated (2*2*3):
 Types (organic and inorganic)
 Quality (good and poor)
 Price (40, 60 and 80 NRs/kg)
- ❖ An orthogonal design was generated with eight profiles using SPSS Conjoint 16.0

Tomato types	Quality	Price	Profiles
Organic (O)	Good (G)	80	OG80
Organic (O)	Good (G)	60	OG60
Organic (O)	Good (G)	40	OG40
Organic (O)	Poor (P)	80	OP80
Organic (O)	Poor (P)	60	OP60
Inorganic (I)	Good (G)	80	IG80
Inorganic (I)	Good (G)	60	IG60
Inorganic (I)	Poor (P)	40	IP40



Results



❖ In general, consumers are willing to buy organic vegetables. Once certification is done, more consumers would be willing to buy them.

❖ Family income, family size, knowledge of health risk of inorganic vegetable consumption and education significantly affect willingness to buy organic vegetables.

❖ Price is the decisive factor followed by quality in the aggregate model while tomato type is a decisive factor followed by price at the specialized market.

❖ Relative important given to tomato types increases with increasing education.

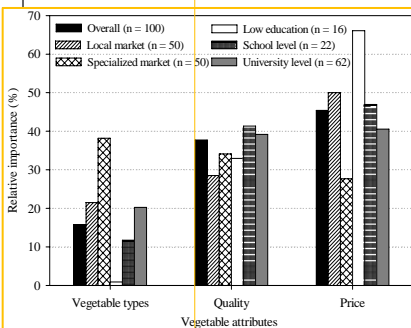
❖ The most preferred combination of tomato would be organic with high quality and low price (NRs 40/kg).

Variables	Coefficient	SE	dy/dx
Intercept	-0.699ns	3.80	
Age (year)	0.064ns	0.05	0.01
Family income (dummy)	4.33**	1.58	0.80
Family size	-0.95*	0.46	-0.01
Sex (dummy)	-1.82	1.61	-0.24
Knowledge of health risk (dummy)	3.66*	1.80	0.49
Education (year)	3.09**	1.22	0.45
Quality consideration (dummy)	1.16	1.23	0.09

-2LL = 20.28, Omnibus tests of model coefficients= 91.09**, Cox & Snell R² = 0.60; Nagelkerke R² = 0.84; Percentage correct = 91

Willingness	1	2	3	4
Willing to buy	60	38	2	0
If price is reduced	78	22	0	0
Importance of price	47	38	5	10
Knowledge of health	50	45	0	5
Certification	71	21	0	8

1: Extremely willing, 2: Somewhat, 3: Somewhat unwilling, 4: Don't know



$$Y_i = 6.35^{**} + 0.81 * V_{21i} + 1.51^{**} * Q_{2i} + 0.05^{**} * P_{23i}, R^2 = 0.94, n=100$$

(Conjoint model over all samples)

Conclusions

- The positive utility to organic tomatoes shows better prospects of organic vegetables.
- Consumer positive attitude and willingness to organic vegetables also proves the same.
- The study highlights the need for niche organic markets and certification.
- There is a need to resort in depth study covering other vegetables and larger sample.

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