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Integrated Marketing Approach as a Rural Development Tool

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1. Introduction

Rural development consists of a wide variety of new activities such as the production of high quality and region-specific products with a particular regional image, nature conservation and landscape management, rural tourism and the development of short food supply chain (SFSC). In order to provide the rural development, there is a strong interaction among the producer, manufacturer, marketer, government official and consumers. In other words, the farmers should attitude rationally with a production model protecting the generic and rural sources, stimulating the rural potential and spurring the rural development by considering the effective production planning and farm management at the agricultural food production circulation. On the other hand, at the marketing line, the marketers should design/process the food products by accounting the consumers purchase models, as well. In order to do so, it should be analyzed the target consumer markets, and determined the consumers purchase attitude and behaviours towards the food products along with their purchase powers due to production and consumption effectiveness.

Rural development is defined to be a multi-dimensional process encompassing improved provision of services, enhanced opportunities for income generation and local economic development, improved physical infrastructure, social cohesion and physical security within rural communities, supporting active representation in local political processes and effective provision for the vulnerable (Topcu, 2008; Topcu & Yavuz, 2008).

Rural development, more specifically, covers three different but interrelated dimensions (Topcu, 2009): the first is the economic dimension including in both capacity and opportunities for the poor and low-income rural households to benefit from the economic growth process and measures to reduce intra/inter-sectoral income inequalities to reasonable levels. The second is the social dimension supporting social development of poor and low-income households or disadvantaged groups, eliminating inequalities in social indicators, promoting gender equality and women's empowerment and providing social safety nets for vulnerable groups. The third is the political dimension creating the opportunities for the poor and low-income communities in rural areas, including women and ethnic minorities, providing effectively and equally participate in the political processes at the village level and beyond compared with any other categories of the population within and outside rural areas.

As a result, the priorities of the rural development supported by developed countries and EU focuses not only on improving the competitiveness of the agricultural and non-agricultural sectors (*Axis-1*) targeting measures at promoting knowledge and improving human potential, restructuring and developing physical potential and promoting innovation, improving the quality of agricultural production and products; and improving the environment and rural areas (*Axis-2*) based on the measures targeting the sustainable use of agricultural and non-agricultural lands, but also on the quality of the life in rural areas and diversification of the rural economy (*Axis-3*) involving the needed conditions to diversify the rural economy comprising diversification into non-agricultural activities, the creation and development of micro-enterprises with a view to promoting entrepreneurship and developing economic production and encouragement of rural tourism activities, to improve the quality of the life in the rural areas, to realize a training and information measure for economic actors and a skills-acquisition and animation measure with a view to preparing and implementing a local development strategy; and the leader approach (*Axis-4*) related to area-based local development strategies intended for well-identified sub-regional rural territories, local public-private partnerships, bottom-up approach with a decision-making power for local action groups concerning the elaboration and implementation of local development strategies, multidisciplinary design and implementation of the strategy based on the interaction between actors and projects of different sectors of the local economy, the implementations of innovative approaches and cooperation projects and networking of local partnerships (Beckett, 2005).

The rural development in this context places emphasis on facilitating change in rural environments to enable poor people to earn more, invest in themselves and their communities, and contribute toward maintenance of the infrastructure key to their livelihoods. To improve the quality of the life in rural area and enable the rural communities to earn more by taking into consideration four Axes and the economic, social and political dimensions of the rural development, therefore, producers, marketers and policy-makers have considerably focused on the scarce source management, effective agricultural production and marketing planning, and new food markets.

As a result, the rural development in terms of the effective source management, production, and marketing planning has increasingly consisted of a wide variety of new activities such as the production of high quality and region-specific products with a particular regional image, nature conservation and landscape management, rural tourism and the development of short food supply chains (*SFSC*) for the last decades in developing countries, (Knicker & Renting, 2000). Really, the number and variety of the new activities is much larger, and the first of which is the reconfiguration of the rural resources used in both within the farm and between agriculture and other rural activities based on the technique and economic effectiveness for the production of the agricultural products. Another is the *SFSC* providing a link between urban consumers and rural food producers being valuable in developing sustainable communities, and it bases on integrated marketing approaches fulfilling a number of functions for the farm, household, region and society at large.

In recent years, the emergence of new forms of dynamism in agricultural commodity markets has increasingly necessitated integrated marketing tactic and strategies based on not only the creation, operation and evaluation of the new or alternative *SFSC* considering

consumer-oriented marketing mix or strategies (consumer wants and needs, cost to satisfy, convenience to buy, and communication) and being one of the key dimensions of new rural development patterns (Topcu, 2006), but also marketing tactics resulting from the segmentation of food markets (segmentation), target segment of the oriented market (targeting) and position of food products (positioning) (*STP*) (Topcu, 2009).

The construction of the new *SFSC* configurations forms a crucial element in the strategies underlying these new practices as organic/natural, local and specific food farming, quality production and direct selling; and thus, it covers actors who are directly involved in the production, processing, distribution, and consumption of new food products (Renting *et al.*, 2003). The differences of quality along the *SFSC* which consumer demands and new producer supplies are associated with specific production techniques result from a diversity in farming systems and territorial settings, different cultural and gastronomic traditions, a diversity in the organizational structures of the *SFSC*, variations in consumer perceptions, and also from substantial differences in institutional and policy support.

The development of the new *SFSC* has attracted much more attention with a new food process, innovation politics beginning to fill gaps left by conventional government regulation and with the growing public concern over the provenance and manipulation of foods. From a rural development point of view, this new resurgence of interest in more natural or more local types of food comes at the critical time for the land-based production sector. It offers potential for shifting the production of food communities out of their industrial mode and to develop supply chains that can potentially short-circuit the long, complex and rationally organized industrial chains within which a decreasing proportion of total added value in food production is captured by primary producers (Marsden *et al.*, 2000). For the production sector this means that through developing new quality definitions associated with locality or region or specialty and nature, new associational networks can be built which involve radically different types of the *SFSC*. The *SFSC* engenders different relationships with consumers and may engage different conventions and constructions of quality.

A key characteristic of the *SFSC* is their capacity to re-socialize/specialize food, thereby allowing the consumer to make value-judgments about the relative desirability of foods on the basis of their own knowledge, experience, or perceived imagery. Commonly such foods are defined either by the locality or even the specific farm where they are produced; and they serve to draw upon and enhance an image of the farm and/or region as a source of quality foods. The *SFSC* seeks to redefine relationship between the producer and consumer by giving clear signals of the origin of the food product. They are also expressions of attempts by producers and consumers alike to match new types of supply and demand. Notable here are the additional identifiers which link price with quality criteria and the construction of quality. However, a common characteristic is the emphasis upon the type of relationship between the producer and the consumer in these supply chains and the role of this relationship in constructing value and meaning.

The *SFSC* being the ability to engender some form of connection between food consumer and producer/processor includes three main types (Marsden *et al.*, 2000) accepted as face-to-face: consumer purchase a food product direct from the producer/manufacture on a face-to-face basis; spatial proximity: products are produced and retailed in the specific region of production, and consumers are made aware of the local nature of the product at the point of

retail; and spatial extended: value and meaning laden information about the place of production and those producing the food is translated to consumers who are outside of the region of production itself and who may have no person experience of that region. The *SFSC*, here, was taken into consideration the supply-side direct marketing based on farming type of food products, but the demand-side of the *SFSC* based on consumers purchase attribute and behaviours toward food products and their buying models is deficient, and thus, it should be made up for this deficiency for the rural development by making the needed production planning through the scarce source management providing the technical and economic effectiveness and by producing supply amount responding to consumers purchase patterns. That is, spurring the rural development and stimulating the rural potential through effectively management of the scarce sources in rural area could be accomplished with some combination of the consumer-oriented (demand-side) integrated marketing tactic and strategies.

In a highly urbanized society, integrated marketing tactics and strategies in agricultural sector provides a link between urban consumers and rural food producers that can be valuable in developing sustainable communities. Farmers, rural advocates and government officials, therefore, look to integrated marketing as a means of identifying alternative income sources, preserving small farms, strengthening economic and social ties between farms and urban residents, and as an outlet for organic and specialty farm products (i.e. local products). Direct sales to consumers that are one of the most effective tolls of the integrated marketing with consumer-oriented can benefit small farms and rural communities in general by channelling a large share of urban residents' spending on food and recreation back to the communities where food is grown. On the other hand, direct purchases from farmers provide city residents with a source of cheap fresh produce and an opportunity to get in touch with their rural roots (Gale, 1997).

Today, most local foods move from the farm gate to the consumers through a highly efficient food marketing system taking advantage of scale economies and specialization to keep processing and distribution costs low. Most farmers are content to devote their limited time to what they know best (planting, growing, harvesting food) and leave the processing and marketing to agribusiness, however direct sales to consumers seems to be gaining popularity among farm producers.

The outward spread of suburbs and residential development of rural farming communities has spurred direct marketing by reducing alternative food networks or by using the *SFSC* between farmers and consumers. On the other hand, increased interest in food safety, the environment and alternative agriculture has also supported growth of direct sales. Local or organic agricultural products are frequently grown by small farmers favouring direct marketing at farm-gate price. Consumers of these products like to deal face-to-face with growers to ensure that the specific products were grown as chemical-free and higher quality, or with other techniques. Complementing that preference, ecological awareness spurs the interest of consumers in agricultural tourism, farm-based recreational activities, and direct-selling arrangements involving contact with farms and farmers. Community supported agriculture (CSA) as a new form of direct selling spurred by interest in organic, local and specific products and ecological awareness (Gale, 1997). CSA usually involves a cooperative arrangement in which consumers pay nearby farmers a fixed amount of money at the beginning of the growing season and over the course of the season receive a bag each

week containing whatever produce is being harvested at that time. In some CSA arrangements, consumers pick up their produce at the farm, while in others a central distribution point is established in town. CSA producers usually use organic and specific product growing methods, and participants generally value the freshness and organic nature of the produce and direct contact with the people who grow their food. It helps growers with cash flow, since they are paid at the beginning of the season. Consumers shoulder more of the risk in CSA because they pay a fixed amount, regardless of the quality and quantity of the harvest.

As a result, integrated marketing approach accounting the relationships between the product diversification and design based on the target consumers purchase attitude and behaviours, and production planning making it possible to make effective use of rural resources plays a role in rural development by encouraging an environment of entrepreneurship and innovation, attracting agricultural tourists, and promoting alternative forms of agriculture.

On the other hand, integrated marketing tactic and strategies could have positive economic and social impacts on rural and urban communities, and its clearest impact is the direct flow of the income from the target consumers to farmers. Farmers selling directly to the consumers by using the SFSC retain the value added to their food products through various transportation and marketing activities that are usually performed by urban-based wholesale and retail establishments. A larger portion of the consumer's retail food expenditure returns to the rural communities where food is growing or processing. Premium or retail prices, furthermore, accepted as cost proving consumer satisfaction for organic, local and specialty food product sold directly to target consumers are often higher than farm-gate prices for the similar items. The price differences for some directly marketed or processing food products provide an additional economic benefit to local rural economy. By providing convenience to buy for target consumer masses, additionally, direct marketing could also contribute to the rural economy by preserving small farms.

By adding a recreational component to food consumption, many marketing enterprises draw urban people to farm communities, where they may spend additional dollars on restaurant/home meals prepared by local, organic or specific food products, shopping, and other service. Such agricultural tourism could have a multiplier effect on local economies. Agricultural tourism is associated mainly with types of direct marketing that include an on farm recreational component. Other direct marketing efforts require that farmers do most of the travelling, and thus, the economic impact of direct marketing on the farm community is much lower when farmers instead of consumers do most of the travelling. As considered the farmers' markets and distribution channels for CSA groups, it is stated in some study that they are often at urban and suburban locations and the vendors making full-time and part-time growers travel approximately 35.5 and 19.5 km to farmers markets (Gale, 1997; Marsden *et al.*, 2000).

While most of the travelling to food markets is done by the vendors, consumers also travel either to purchase the specific food product (local, organic) or to eat the processed traditional specific foods through agricultural tourism, and to patronize farmers' markets. The markets in many communities just outside the urban fringe are close enough to draw urban and suburban consumers to their communities. More remote communities need to work harder to draw urban visitors to farmers' markets by establishing an identity

associated with a locally grown product, lifestyle, heritage or a concentration of farms offering products and services for sales.

The *SFSC* and direct marketing of the most important components of integrated marketing as a rural development tool cover not only economic activities in rural communities but also social issues. Social factors are among the important reasons to spur the rural development and to introduce easily or increase popularity of integrated marketing tactics and strategies. In order to stimulate the rural development potential by improving life quality of rural communities and creating a social connection between rural and urban communities through diversification of rural economy based on agricultural and non-agricultural activities are always needed the integrated marketing approaches. The integrated marketing tactic and strategies take into consideration, therefore, all dimensions of the social, cultural and economic relationships among the market actors, and provide opportunity to target individual consumer satisfaction/loyalty and to the effective production planning according to the allocation of the optimal scarce sources based on the specific food products by connecting to related units the interactions between demanders and suppliers. To do so, marketers must first divide the individual customers into homogenous market segments by taking into consideration consumers purchase attitude and behaviours through integrated marketing tactics (*STP*), and then redesign the marketing strategies for the target customer masses by considering the specific or local food product attributes (marketing mix) (Topcu & Uzundumlu, 2009).

In order to reach to these aims, Ispir sugar bean¹ growing in only Ispir² rural area, being a local branded product with region of origin, and playing an important role in rural development models by making it possible to make effective use of natural resources, and stimulating rural development potential was selected as a case food product, and then integrated marketing tactic and strategies were used for the product. This study, therefore, was designed to explore firstly the individual consumers purchase attitude and behaviour towards Ispir sugar bean by using the factor, cluster and descriptive with cross-tabulation and ANOVA analyses for the integrated marketing tactics accounting the product, consumer and marketing environment-related factors, and then to design integrated marketing strategies based on the marketing mix covering the intrinsic and extrinsic attributes of Ispir sugar bean by using conjoint analysis.

2. Material and methods

2.1 Material and determination of sample size

The data of the present research were obtained from a survey conducted in Erzurum, Turkey. In order to determine the sample size, while minimizing sample bias and representing the population correctly; the city centre was divided into three sub-districts: the east and south-sides Yakutiye with 44075, the west-side Aziziye with 11500, and the north-side Palandoken with 30022 households (Anonymous, 2009). To determine the sample size, following formula was used (Topcu, 2009a):

¹ The species being one of the most popular dry bean ecotype is usually called as “Ispir Seker Fasulyesi” in both the research area and Turkey.

² Ispir district of Erzurum province located in Northeast part of Turkey is a microclimate small town along Coruh valley with an altitude of 1250 m of sea level.

$$n = \frac{Z^2 * p * (1 - p)}{c^2} = 250$$

Where;

n = Sample size

Z = Z value, (used 1.96 for 95% confidence level)

p = percentage picking a choice, (0.8 used for sample size needed)

c = confidence interval, (used 0.05 = ± 5)

Then, based on the population of each sub-district, weighted sample size and distribution of the surveys for each district were determined proportionally. Out of 250, the number of questionnaires of Yakutiye, Palandoken and Aziziye sub-districts were 128, 88 and 34, respectively.

Using the information obtained from food science and marketing literatures and prior experiences of the researchers, a draft questionnaire was prepared. Then, in order to control non-sampling error which stems from ambiguous definitions, poor instructions, questionnaire wording, format and length, pre-test was done on randomly selected 14 (6, 5 and 3) consumers at the target regions. The flow and naturalness of the questionnaire were tested, and the order and timing of the questions were re-arranged. The questionnaire was modified before starting the fieldwork.

In order to select consumer households in each district for this final questionnaire, simple random sampling method (i.e., each member of the population has an equal chance of being chosen) was used. For this end, each district was divided into sub-districts. Then, face to face survey method was done with randomly selected heads of households (this could be either wife or husband) in various parts of the sub-districts in order to represent the population adequately. The survey was conducted either at their residence or at shopping centres.

2.2 Questionnaire and data used for integrated marketing tactics

Participants in the survey were asked to respond to each statement, indicating the significance level of the food attributes for them using a Likert-format 1-5 scale (where 1 refers to the least important, and 5 refers to the most important attributes). Of the 41 factors affecting the consumers purchase attitude and behaviours towards Ispir sugar bean, the six are related to the sensorial attributes (taste and flavour, texture and aroma, hardness and relish, quality standard, quality stability and colour and appearance after cooking of the product); the seven are stated by the physical and chemical properties (freshness/newness, calibre size, longer shelf life, thinness of bean-crust, shorter cooking period, organic product, being more resistant against to diseases and pests); the ten are covered by the extrinsic food attribute referring the marketing mix (Ispir region of origin, cost to satisfy, price-quality relation, local brand, willingness to be private label and manufacturer branded product, advertisement, package design and attraction, convenience to buy the product and promotion); the five are determined by consumer-related factors covering personal and psychological attitudes (on the special invitation and days, the popularity of the product, the protection of the generic sources, confidence to the product, compliance with other dishes); the four are explained by the social environment (the effects of customs, previous experience

related to the product, the effects of the reference group and social environments and the effect of social statute); the three are determined by trust to the SFSC (more hygienic production and marketing, trust to the manufacturer and retailer) and the six are represented by the factors spurring the rural development (to provide the effective usage of the rural scarce sources, to contribute to the supply stability, employment opportunities and economy of the rural region, to decrease the rural migration from rural to urban area, representing the rural area).

Each question was reduced to a single statement to which responses were collected using the Likert scale described above. We also gathered demographic and socioeconomic information (gender, age and occupation groups, education, total and food expenditures and the income levels of the consumers) in the survey. Age, monthly total and food expenditures and incomes of the consumers were calculated at three different levels.

2.3 Statistical methods used for integrated marketing tactics

After editing and coding the data, we first analyzed them by the factor analysis to determine the main factors affecting the consumers purchase attitude and behaviours towards Ispir sugar bean, and then by cluster analysis to form the homogeny food market segments of the target consumer mass by taking into consideration the results of the factor analysis, and finally by descriptive analysis using the cross-tables to determine the food market segments of the homogeny food consumer based on their demographic and socioeconomic characteristics. SPSS statistical software was used to perform these analyses.

These techniques has been used widely in many marketing researches on food attributes including food products such as beef (Oliver *et al.*, 2006), cheese (Murray & Delahunty, 2000), conventional food (Wadolowska *et al.*, 2007; Topcu *et al.*, 2009), pasteurized milk (Topcu, 2006), soft drink (Enneking *et al.*, 2007); liquate oil (Topcu *et al.*, 2008; Topcu *et al.*, 2010) and yogurt (O'Connor *et al.*, 2006; Haddad *et al.*, 2007).

Factor analysis is a data reduction technique that reduces the number of variables used in an analysis by creating new variables (called factors) that combine redundancy in the data (SPSS 15.0, 2006). The first step in a factor analysis is to determine the number of relevant factors. Therefore, the factor analysis conducted for this study reduced the number of food attributes from seventeen to five factors having Eigen-values greater than 1.0, determined by Principal Component Analysis³ using Varimax rotation method⁴. Factor analysis was employed initially to identify underlying dimensions that may explain the correlation among a set of food attributes and the associated consumption values. The affiliated purpose of factor analysis in this study was to identify from all the attributes those that accounted for a relatively large proportion of the variance of the sample. This subset could then be used for consumer segmentation.

³A factor extraction method used to form uncorrelated linear combinations of the observed variables. The first component has maximum variance. Successive component explain progressively smaller portions of the variance and are all uncorrelated with each other. Principal component analysis is used to obtain the initial factor solution. It can be used when a correlation matrix is singular.

⁴This method is an orthogonal rotation method that minimizes the number of variables that have high loading on each factor. It simplifies the interpretation of the factors.

The second step of the analysis involved using k-means cluster analysis. Clustering algorithms can be classified into two categories: hierarchical and non-hierarchical. Hierarchical clustering algorithms start with n clusters, equal to the number of observations, and proceed until all observations are in one cluster. In non-hierarchical clustering, the researcher specifies the number of clusters in the data set *a priori*. Since in this study eight consumption/preference value categories were identified, the number of classes could be specified, thus non-hierarchical k-means clustering was used. The k-means procedure selects “ m ” random points from the data set. These are used as cluster seeds and all other points are assigned to the nearest cluster seed. Successive iterations involve replacing the current cluster seed by the cluster mean, and then reassigning all points to the nearest new cluster seed. The process continues until there is no change in cluster means from the previous iteration or the difference is very small. Hence, the clusters of consumers were generated on the basis of relative homogeneity of their attitudes towards food attributes based on consumers’ food expenditure and income levels. The pattern of consumption values associated with these attributes could be identified through examining the outcome of the segments.

The final step was to use cross-tabulation to examine the distribution of the clusters deal with the three food expenditure and income levels, and demographic and socioeconomic attitudes. In order to measure if the relation among personal characteristics and their positions is or not, it was used chi-square test of independence. If the p-value is not less than 0.05, the null hypothesis is accepted. This means that demographic characteristics and their position levels are statistically independent (Yildiz *et al.*, 2006).

2.4 Generation of orthogonal design and questionnaire for integrated marketing strategy

Conjoint analysis is a multivariate technique based on the assumption that purchasing behavior reflects a choice, within a product category, among products which possess a set of differentiating attributes. This technique has been used widely in many marketing researches including food products such as oil, yogurt, cheese, milk, bean etc. (Krystallis & Ness, 2005; Topcu, 2006; Haddad *et al.*, 2007; Mtimet *et al.*, 2008; Topcu & Isik, 2008; Topcu, 2009a; Topcu *et al.*, 2010).

In this study, to determine the factors influencing consumer purchasing decisions for Ispir sugar bean, pre-market researches were done in July, 2009 to learn its origin, prices, weight in grams, brand and package types and calibre sizes. After obtaining these data based on factors and factor levels in Table 1, the plan file which consists of product profiles to be rated by the respondents were generated by using the orthogonal design procedure in SPSS statistical program (SPSS 15.0, 2006a).

With 9 factors and total 30 factor levels, we get 41472 potential product profiles which is quite unmanageable number to deal with⁵. In order to avoid this problem, we need to

⁵ Nine factors affecting consumers purchase attitudes for Ispir sugar bean are brand types, origin, caliber size, price, package types, weight, production types, selling points and promotion. There are total 30 factor levels, of which four factor levels for brand type; four factor levels for price; four factor levels for package type; four factor levels for selling point; three factor levels for origin; three factor levels for caliber; three factor levels for weight in grams; three factor levels for production type; and two

Factors		Factor Levels		
Brand types	Manufacturer (MB)	Private label (PL)	Local brand (LB)	Generic (GB)
Prices (€/kg)*	5.6	5.1	4.7	3.7
Origin mark	Karsur (KR)	Hortik (HR)	Ispir (ISP)	
Package types	Nylon bag (NB)	Plastic box (PX)	Paper bag (PAB)	Paper box (PAX)
Selling Points	Market (MM)	Selling cooperative (SC)	Food shop (FS)	E-market (EM)
Calibre size (mm)	Less than 8 (SM)	Between 8 and 10 (ME)	More than 10 (LA)	
Weight (kg)	1	2.5	5	
Production types	Organic (OR)	Conventional (CO)	Not important (NI)	
Promotion	Yes			No

*The prices of the products were converted from Turkish Lira (TL) to Euro (€) using the exchange rate on July 15, 2009. The conversion rate used was 2.15 TL/€.

Table 1. Factors and their levels for Ispir sugar bean used in conjoint analysis

generate a representative subset known as an orthogonal design, typically the starting point of a conjoint analysis. After generating orthogonal design, the number of product profiles has been reduced to 34 cases (Table 2). Survey forms were designed based on these 34 product profiles. SPSS conjoint uses the full-profile approach, where respondents rank, order, or scores a set of profiles, according to preference (SPSS 15.0, 2006a). In this study, respondents were asked to rank the 34 profiles from the most to the least preferred.

2.5 Statistical methods used for integrated marketing strategies

The data file was created with the preference ranking of these profiles collected from the respondents. Before analyzing the data with the conjoint procedure, *factors* subcommand must be described. We can specify the model describing the expected relationship between factors and rankings via *factors* subcommand (Topcu, 2006; Topcu, 2009a; Topcu *et al.*, 2010). The discrete model indicates that factor levels are categorical and no assumption is made about the relationship between the factor and the ranks. On the other hand, the linear model indicates an expected linear relationship between the factor and ranks. The expected direction of the linear relationship can be specified with the keywords *more* and *less*. The linear-less indicates that lower levels of a factor are expected to be preferred, while the linear-more indicates that higher levels of a factor are expected to be preferred. Specifying more or less will not affect estimates of utilities (Hair *et al.*, 1998; SPSS 15.0, 2006a).

According to the characteristics of the factors, we used discrete, linear-less and linear-more models in this study. Selling point and brand type, origin, calibre size, package type, production type and weight in grams were modelled as discrete because there is no prior knowledge as to the influence of Ispir sugar bean attributes on purchase intent. Price and

factor levels for promotion. The combinations of 30 factor levels give us the total of 41472 potential product profiles (4x4x4x4x3x3x3x3x2 = 41472).

Card no	Brand	Origin	Calibre	Price	Package	Weight	Production	Selling points	Promotion
1	MB	ISP	LA	3.7	PAB	1	OR	FS	Yes
2	MB	HR	ME	4.7	NB	5	OR	SC	Yes
3	GB	KR	SM	4.7	PAB	1	OR	EM	No
4	LB	ISP	LA	4.7	PAB	1	CO	FS	Yes
5	PL	ISP	LA	5.1	PX	5	OR	SC	No
6	GB	HR	ME	5.1	PAX	1	CO	FS	No
7	LB	HR	SM	5.1	PAB	5	OR	MM	No
8	MB	HR	SM	5.6	PAB	1	CO	SC	Yes
9	MB	HR	SM	5.6	PAX	5	NI	FS	No
10	GB	ISP	SM	4.7	PAX	5	OR	MM	Yes
11	PL	KR	ME	5.1	NB	1	OR	FS	Yes
12	GB	HR	SM	3.7	NB	1	OR	SC	Yes
13	MB	ISP	ME	3.7	PAB	2.5	OR	EM	No
14	LB	KR	ME	4.7	PAX	2.5	NI	SC	No
15	LB	HR	LA	3.7	NB	1	NI	MM	No
16	PL	HR	ME	5.6	PAB	1	OR	MM	No
17	LB	KR	SM	5.6	PX	1	OR	SC	No
18	PL	HR	SM	4.7	PX	1	NI	EM	Yes
19	MB	HR	LA	4.7	PX	1	OR	FS	No
20	MB	KR	SM	3.7	PX	2.5	CO	FS	No
21	PL	HR	SM	4.7	NB	2.5	CO	MM	No
22	PL	KR	SM	3.7	PAB	5	NI	FS	Yes
23	GB	KR	SM	5.6	NB	5	CO	EM	No
24	LB	HR	ME	4.7	NB	5	OR	FS	Yes
25	GB	HR	LA	5.1	PAB	2.5	NI	SC	Yes
26	LB	ISP	SM	5.6	NB	2.5	OR	FS	Yes
27	GB	ISP	ME	5.6	PX	1	NI	MM	Yes
28	LB	HR	ME	3.7	PX	5	CO	EM	Yes
29	LB	HR	SM	5.1	PAB	1	OR	EM	Yes
30	GB	HR	SM	3.7	PX	2.5	OR	FS	No
31	PL	HR	LA	5.6	PAX	2.5	OR	EM	Yes
32	PL	ISP	SM	3.7	PAX	1	CO	SC	No
33	MB	ISP	SM	5.1	NB	1	NI	EM	No
34	MB	KR	SM	5.1	PX	2.5	CO	MM	Yes

Table 2. Combination for Ispir sugar bean used in conjoint analysis

promotion, however, were modelled as linear-less and linear-more, respectively. Price was assumed to follow a linear-less model since it, typically, shows an inverse relationship with purchase intent. On the other hand, promotion was assumed to follow linear-more relationships in that consumers are expected to exhibit more positive attitudes towards product promotions (Haddad *et al.*, 2007; Topcu, 2009).

The conjoint analysis of the data generates a utility score, called a part-worth, for each factor level. These utility scores, similar to regression coefficients, provide a quantities measure of the preference for each factor level, with larger values corresponding to greater preference. Utility values are expressed in a common unit, allowing them to be added together to give the total utility, or overall preference, for any combination of factor levels (Topcu, 2009a).

3. Results and discussion

3.1 Results of the factor analysis for the integrated marketing tactics

Market segmentation being one of integrated marketing tactics and related to the target consumers purchase attitude and behaviours towards Ispir sugar bean attributes including

the product, consumer and marketing environment-related factors separated the target food market into some consumers segments according to the main factors derived from the factor analysis being the first step of the market segmentation based on the main factors.

Kaiser Normalization (*KMO*) which compares partial correlation coefficients with observed ones, therefore, was calculated as 0.93 for Ispir sugar bean attributes, and this meant that the data set for the factor analysis was at a perfect level since the test score was greater than 0.50 (Table 3). The principal component analysis using Varimax rotation method grouped the forty-one variables related to the bean attributes into the eight factors with Eigen-values greater than 1.0, which these factors explained the 65.92% of the total variance.

Being the first of these factors, *F1* explained the 36.00% of the total variance, and consisted of the factors related to the generic and rural natural sources of Ispir sugar bean (being more resistant against to diseases and pests of the product, confidence to the product, organic product, trust to producer/manufacturer, more hygienic production and marketing, longer shelf life, freshness/newness, quality stability, protection of the generic sources and thinness of bean-crust). *F1*, therefore, could be called by the protection of the generic and rural natural sources of Ispir sugar bean.

Referring to 6.20% of that, *F2* gave us some important information about the rural development based on Ispir sugar bean with regard to the effective usage of the rural scarce sources, contribution to the supply stability, employment opportunities and economy of the rural region and the rural migration decrease etc. It, thus, could be determined by the rural development based on Ispir sugar bean/local product. Reporting 4.77% of that, *F3* gathered together the variables related to willingness to demand a branded product with Ispir region of the origin of the consumers, which covered the private label (*PL*), local (*LB*) and manufacturer branded (*MB*) products, registration with Ispir region of the origin, representing the rural area, and it could be named by brand awareness/demand with Ispir

Variables	Factor loadings*								
	F1	F2	F3	F4	F5	F6	F7	F8	F9
Protection of the generic and rural natural sources (F1)									
Resistant against to diseases and pests	0.681	0.173	0.057	0.003	0.127	0.246	0.042	0.130	0.149
Confidence to the product	0.637	0.129	0.107	0.237	0.291	-0.011	0.162	0.008	0.077
Organic product	0.605	0.189	0.086	0.309	0.108	0.159	0.170	-0.043	0.013
Trust to producer/manufacturer	0.603	0.332	0.082	0.174	0.223	-0.085	0.319	0.161	0.094
Freshness/newness	0.600	0.130	0.149	0.270	0.008	0.241	0.390	0.101	-0.080
Quality stability	0.556	0.140	0.117	0.201	0.138	0.374	-0.079	0.163	-0.164
Protection of the generic sources	0.555	0.276	0.002	-0.002	0.221	0.427	0.120	-0.045	0.143
Longer shelf life	0.548	0.317	0.228	0.180	-0.054	-0.022	0.115	0.319	0.001
Hygienic production and marketing	0.537	0.185	0.146	0.279	0.213	-0.053	0.133	0.352	-0.054
Thinness of the bean-crust	0.506	-0.001	0.242	0.437	0.142	0.119	0.032	0.069	0.188
The rural development based on local product (F2)									
Contribution to employment opportunity	0.301	0.794	0.159	0.083	0.069	-0.084	0.105	0.088	0.048
Protection the supply stability	0.275	0.791	0.199	0.137	0.048	0.043	0.059	0.121	-0.008
The effective use of the scarce sources	0.192	0.783	0.135	0.126	0.136	0.251	0.125	0.037	-0.005
The rural migration decrease	0.238	0.692	0.015	0.043	0.215	0.294	-0.011	0.133	0.047

Variables	Factor loadings*								
	F1	F2	F3	F4	F5	F6	F7	F8	F9
Contribution to region economy	0.384	0.502	0.433	0.204	-0.035	-0.126	-0.127	0.223	0.055
Consumers' brand demand with Ispir region of origin (F3)									
Willingness to buy a <i>PL</i> product	-0.009	0.108	0.735	0.052	0.368	0.042	0.143	0.072	0.072
Willingness to buy a <i>MB</i> product	0.123	0.147	0.731	0.065	0.407	-0.037	0.069	0.037	0.038
Willingness to buy a <i>LB</i> product	0.402	0.160	0.556	0.034	-0.082	0.316	0.176	0.064	-0.042
Registration with Ispir region of origin	0.227	0.182	0.532	0.270	-0.005	0.275	0.156	-0.028	-0.019
Representing the rural area	0.241	0.183	0.513	0.112	0.077	0.375	0.247	0.150	-0.140
Sensorial quality attributes (F4)									
Taste and flavour	0.249	0.058	-0.007	0.789	0.084	0.115	0.143	0.155	-0.119
Texture and aroma	0.160	0.181	0.174	0.775	0.053	0.100	0.113	0.160	0.196
Hardness and relish	0.412	0.181	0.126	0.612	0.084	0.059	0.285	0.068	-0.092
Product quality	0.200	0.112	0.141	0.523	0.191	0.312	0.216	0.271	-0.200
The effectiveness of the SFSC (F5)									
Promotion	0.245	0.140	0.067	0.158	0.668	-0.071	0.022	0.293	0.140
Advertisement	0.083	0.035	0.328	0.011	0.612	0.154	0.017	0.141	0.303
Convenience to the product	0.300	0.167	0.171	0.002	0.600	0.137	0.246	0.119	-0.110
Trust to the retailers	0.435	0.109	0.110	0.227	0.551	0.080	-0.014	0.152	0.000
Social statute (F6)									
The effect of the customs	0.214	0.134	0.172	0.143	0.051	0.662	0.061	0.212	0.273
Prior experiences related to the product	0.156	0.205	0.176	0.309	0.162	0.557	0.062	-0.021	-0.063
The effect of the social classes	-0.071	0.336	0.178	0.126	0.466	0.550	0.151	-0.006	0.123
The effect of social/reference groups	-0.039	0.427	0.277	0.128	0.289	0.495	0.268	0.031	0.093
The appearance and taste quality after cooking (F7)									
The shorter cooking period	0.202	0.111	0.094	0.178	0.129	0.011	0.736	0.158	0.002
The popularity of the product	0.121	0.111	0.362	0.237	0.155	0.110	0.570	0.083	0.245
The appearance and colour after cooking	0.395	0.020	0.290	0.303	0.035	0.235	0.492	-0.006	-0.097
The calibre size of the product	0.316	0.304	0.350	0.108	0.046	0.087	0.462	0.217	0.131
Hedonic quality (F8)									
The cost to satisfy	0.071	0.121	0.051	0.186	0.329	-0.010	0.135	0.744	0.036
Price and quality relation	0.261	0.113	0.064	0.131	0.137	0.216	0.100	0.736	0.025
The package appearance and attraction (F9)									
The appearance and design of package	0.084	0.051	0.020	-0.044	0.157	0.047	0.040	0.019	0.821
Eigen-value									
	14.758	2.541	1.996	1.798	1.404	1.337	1.125	1.053	1.013
Share of explained variance (%)									
	35.996	6.196	4.868	4.386	3.425	3.261	2.743	2.567	2.472
Cumulative ratio of explained variance (%)									
	35.996	42.192	47.061	51.448	54.873	58.133	60.876	63.444	65.915
KMO (Kaiser-Meyer-Olkin) Statistic									0.928
Bartlett's test of Sphericity									(Chi-square, df: 820): 5844.46 (p: 0.000)

*Bold numbers indicate the largest loading for each variable.

Table 3. Factors and correlated variable loadings related to Ispir sugar bean attributes.

region of origin for sugar bean. Characterized by 4.39% of that, *F4* could be represented by the sensorial quality attributes covering taste and flavour, texture and aroma, hardness and relish and quality of Ispir sugar bean.

Considering the 3.43% of that, *F5* was constituted by some marketing mix related to promotion, advertisement, convenience to the product, trust to retailer of Ispir sugar bean, and thus it could be entitled by the effectiveness of the *SFSC* or direct marketing taking into consideration the relationships between the consumer and the food retailers. Taking in 3.26% of that, *F6* became from the combinational of relative relationship among the effects of the social environment and class, the reference groups and customs on the consumers purchase attitude and behaviours and the prior experiences related to the product, and thus it could be termed by social statute of the target consumers.

Implicating 2.74% of that, *F7* informed about the shorter cooking period, the popularity of the product, the colour and appearance after cooking and calibre size, and it could be dominated by the appearance and taste quality after cooking. Accounting for 2.57% of that, *F8* indicated the relationships between the cost to satisfy and price-quality relation for Ispir sugar bean, therefore, it could be styled by the hedonic quality. Finally, taking into consideration 2.47% of that, *F9* associated with the package appearance, design and attraction, and thus it could be called by the package appearance and attraction.

3.2 Results of the cluster analysis for the integrated marketing tactics

The cluster analysis being the second step of the market segmentation taking into consideration the main factors obtained from the factor analysis separated the target food market into the homogenous consumer market segmentations, and then the consumers' want and needs were determined homogenously at each the food market segment. This had a very important for the dynamic actors of the food markets. Because, the marketers or producers could implement the food production and marketing tactics and strategies considering the wants and needs of the target homogenous consumer segments and based on Ispir sugar bean attributes into target homogenous market segments.

Three clusters had group means that could be explained reasonably. The final cluster centres and the number of cases in each cluster are shown (Table 4). The total number of cases was 250. Cluster 3 (*C3*) was the largest group with 141 (56%) consumers. Consumers in this group cared more about the effectiveness of the *SFSC* (*F5*), the appearance and taste quality after cooking (*F7*) and hedonic quality (*F8*). Cluster 2 (*C2*) was the smallest group, made up of 30 (12%) consumers. The rural development based on local product (*F2*), consumers' brand demand with Ispir region of origin (*F3*) and the package appearance and attraction (*F9*) were the dominant factors for consumers in this group. As for Cluster 1 (*C1*) being the second largest consumer segment, there were 79 (32%) consumers in this group, and the protection of the generic and rural natural sources (*F1*), the sensorial quality attributes (*F4*) and the social statute (*F6*) were the most important factor in their preference decisions.

3.3 Results of target market segmentation for integrated marketing tactics

Cross-tabulation giving some fundamental information about the relationships between three food market segments of the consumers and their demographic and socioeconomic characteristics makes the supplier/marketers or the manufacturer/producers to orient into

Factor interpretation	Clusters ^{6*}		
	C1	C2	C3
Protection of the generic and rural natural sources (F1)	0.554	0.366	-0.256
The rural development based on local product (F2)	-0.055	0.181	0.025
Consumers' brand demand with Ispir region of origin (F3)	0.191	10.807	-0.078
Sensorial quality attributes (F4)	0.027	-0.783	-0.008
The effectiveness of the SFSC (F5)	-0.122	0.036	0.056
Social statute (F6)	0.048	-0.143	-0.021
The appearance and taste quality after cooking (F7)	-0.931	0.088	0.432
Hedonic quality (F8)	-0.463	-0.287	0.217
The package appearance and attraction (F9)	-0.058	120.155	-0.045
Number of cases in each cluster	79	30	141
% of total cases in each cluster	31.6	12.0	56.4

*Final cluster centre scores are very important in 0.01 significant levels according to F statistic.
*Bold numbers indicate the largest final cluster centre scores for each factor. The total number of cases (n): 250

Table 4. Final cluster centres and the number of cases in each cluster

the relevant food market segments, and it were shown in Table 5. These characteristics of the target consumers included gender, age, education, occupation, monthly total and food expenditure, and income.

The results of the target market segmentation showed that there were more male than female consumers in all the consumer groups. C1, C2 and C3 market segments of the target consumers dominated the highest male/female ratios with 87%, 83% and 71%, respectively. The results of the distribution of the consumers based on their age groups indicated that C1, C2 and C3 had the highest portions with 42%, 37% in the middle-age group (41-55 age group) and with 38% in the younger-age group (24-40 age group), respectively. As for the education levels of consumers, the lowest ratio in all the clusters was made up of literate (i.e., those who can read and write but do not have a diploma) people. The consumers with a college degree dominated C1 (45%) and C3 (36%), while high school graduates dominated in C2 (70%).

The results of the occupational distribution among the clusters stated that white-collar state employee, small-scale retailer and blue-collar state worker had the highest ratios, but housewife, student and unemployment had the lowest ones in all the clusters. Especially, C1, C3 and C2 were embodied the white-collar state employee (with 34% and 36%) and the small-scale retailer (with 44%), respectively. As accounted the total and food expenditures of the households, the results showed that while monthly total expenditure were commonly less than €425 in C2 with 53% and C3 with 51% but between €425-€850 in C1 with 50%, monthly food expenditure were less than €160 in all the clusters. As for income levels, those

⁶ The numbers in this table indicate final cluster centres which displays for each case the final cluster assignment and Euclidian distance between the case and cluster centre used to classify the case.

Demographic characteristics		Number of cases in each cluster					
		C1		C2		C3	
		High-income White-collar employee		Middle-income Small-scale retailer		Low-income White-collar employee	
		Number	%	Number	%	Number	%
Gender	Male	69	87	25	83	100	71
	Female	10	13	5	17	41	29
	χ^2 test of independence	$(\chi^2 = 6.725, df = 2, p: 0.035)^{**}$					
Age Groups	24-40 age	32	40	10	33	54	38
	41-55 age	33	42	11	37	51	36
	56-75 age	14	18	9	30	36	26
	χ^2 test of independence	$(\chi^2 = 3.995, df = 4, p: 0.407)^*$					
Education	Literate	1	1	0	0	4	3
	First school	17	21	21	70	38	27
	High school	26	33	5	16	48	34
	College	35	45	4	14	51	36
	χ^2 test of independence	$(\chi^2 = 8.079, df = 8, p: 0.426)^*$					
Occupation	White-collar state employee	27	34	10	33	52	36
	Blue-collar state worker	16	20	3	10	20	14
	Businessman	1	1	0	0	11	8
	Small-scale retailer	15	19	13	44	26	18
	Pensioner	18	24	4	13	28	20
	Housewife	1	1	0	0	2	2
	Student	1	1	0	0	1	1
	Unemployed	0	0	0	0	1	1
	χ^2 test of independence	$(\chi^2 = 21.096, df = 22, p: 0.515)^*$					
Total Expenditure	Less than €425***	34	43	16	53	72	51
	Between €425 and €850	39	50	14	47	63	45
	More than €850	6	7	0	0	6	4
	χ^2 test of independence	$(\chi^2 = 2.232, df = 4, p: 0.693)^*$					
Food Expenditure	Less than €160***	44	56	16	53	72	51
	Between €160 and €325	28	35	12	40	61	43
	More than €325	7	9	2	7	8	6
	χ^2 test of independence	$(\chi^2 = 3.643, df = 4, p: 0.456)^*$					
Income Groups	Less than €450***	24	30	11	37	69	49
	Between €450 and €900	40	51	14	47	63	45
	More than €900	15	19	5	16	9	6
	χ^2 test of independence	$(\chi^2 = 3.446, df = 4, p: 0.468)^*$					

***The prices of the products were converted from Turkish Lira (TL) to Euro (€) using the exchange rate on August 15, 2011. The conversion rate used was 2.8 TL/€.

**p>0.01

* p>0.05

Table 5. Demographic characteristics and cluster number of cross-tabulation cases.

with less than €450 income dominated in C3 with 45%, whereas the respondents in C1 and C2 had an income between €450 and €900.

3.4 The characteristics of the target consumer segments for the integrated marketing tactics

Based on the final cluster centres of the factors and demographic characteristics of the consumers in each cluster, the cluster profiles were determined. The main demographic characteristics of C1 depicted the white-collar state employee consisting of the mature-aged consumers (41-55 age group) with higher income and education (college degree) levels. This cluster is called “mature-aged high-income white-collar state employee”. The most important factors in this cluster, on the other hand, were the protection of the generic and rural natural sources, the sensorial quality attributes and the social statute. The consumers with high education and income gave a major importance to the natural local food products based on the protection of the natural and generic sources, and could create a strong demand for these food products by combining their purchase power along with their wants and needs.

The dominant demographic characteristics in C2 determined the mature-aged consumers (41-55 age group) occupied the small-scale retail with a middle-income level and first education graduate, and thus C2 can be called “mature-aged middle-income small-scale retailer”. The most important main factors in C2 were the rural development based on local product, the consumers’ brand demand with Ispir region of origin and the package appearance and attraction. These factors indicated that respondents in C2 took into consideration the rural development models based on branded local food products.

Finally, the main characteristics of the respondents in C3 were mostly described by the white-collar state employee figuring on younger consumers (24-40 age group) with a low-income level and high education graduate. This group was called “young low-income white-collar state employee”, and the effectiveness of the SFSC, the appearance and taste quality after cooking and hedonic quality were the most influential factors on the purchase decisions or the wants and needs of the respondents in C3. This means that the highest significance was ascribed to consumer satisfaction with the SFSC of Ispir sugar bean based on hedonic quality before and after cooking.

The producers and marketers determining not only the consumers’ want and needs related to Ispir sugar bean through the food market segmentation but also their purchase models through the target market segments by analyzing their purchase powers and attitude and behaviours according to their socioeconomic and demographic characteristics could rearrange the farming and marketing systems. In order to respond to the target homogenous market segments through the SFSC, they could effectively produce new food product, and introduce the redesigned food products (with integrated marketing strategies-marketing mix) into the target market segments, and thus they could reach to the position of the target food market. By doing so, the active dynamics at the food market could use effectively the rural scarce sources responded to the purchase models of the target consumers, increased the diversification of the rural economy, protecting the generic and natural sources and stimulating the rural potential, tend the rural tourism to the rural areas, and thus they could support the rural development by improving the quality of the rural life and contributing the rural economy.

3.5 Results of the conjoint analysis for the integrated marketing strategies

While the producer/manufacturers taking into consideration the purchase patterns/demands of the target consumers have made the effective farm management and planning based on the rural potential and the food product diversity in recent years, the marketer/retailer have also redesigned the food products according to the consumer-oriented actual marketing strategies or marketing mix including the data/information obtained from the market/marketing research by means of the marketing tactics. For this end, the suppliers have generally used the conjoint analysis.

The results of this study showed that it was correlations between observed and expected preferences, the utility values (part-worth) for each factor level and relative importance for each factor which has an important effective on the marketing mix to be introduced by taking into account the customer-based integrated marketing strategies for Ispir sugar bean as shown in Table 6. Pearson's R and Kendall's tau statistics measured as 0.987 ($p:0.000$) and 0.875 ($p:0.000$), respectively imply that it was a significant correlation between the observed and expected preferences, and the ordinal data set obtained from respondents was appropriate for conjoint model (Topcu, 2009).

The part-worth (utility value) coefficients with the highest positive and the lowest negative of factor levels obtained from conjoint analysis results indicated that these factor levels were preferred more than other factor levels. The results also show that while the most preferred brand types and origin marks for sugar bean were manufacturer brand (*MB*) and Ispir origin mark (*ISP*), the least preferred factor levels for these two factors were generic brand (*GB*) and Hortik origin mark (*HR*), respectively. As expected, utility values of respondents were maximized by the manufacturer brand and Ispir origin mark based on brand strategy derived from brand types and origin marks which bring about a meaningful identification to any product.

As for calibre sizes and selling points, the factor levels of Ispir sugar bean with more than 10 mm (*LA*) as calibre size which refer to standardization of agricultural food products and food shops (*FS*) as a selling point which implement retailing strategy were preferred much more, for the part-worth coefficients of these factor levels are higher than that of other ones. Calibre sizes of dry beans could have an important function for texture, convenience during cooking and appearance after cooking. Food shops functioning at retailing sector, which is one of the most important chains of the marketing channel take part at the end of the supply chain, and buy the food products in large quantities from either producers or manufacturers, or could manufacture their own food products, and then directly sell the food products to the end-consumers.

Due to shortening of their marketing chains, marketing margin of food shops is lower than that of other retailers. In addition to, they have a broad food product diversification, a wide food line and an effective shelf depth, and are the most important sellers for local food products, as well. They, hence, could service with a lower price and a wide food variety to the end-consumers, and completely create customers retailer loyalty (Topcu & Uzundumlu, 2009).

On the other hand, factor levels of Ispir sugar bean with organic production (*OR*) as a production type, selling promotion (*Yes*), with paper bag (*PAB*) as a package type, 1 kg as

Factors	Factor Levels	(Part-worth)	Relative importance (%)	Standard Error
Origin marks	HR	-0.511	12.343	0.250
	KR	-0.106		0.293
	ISP	0.617		0.293
Brand types	GB	-2.027	14.790	0.325
	LB	0.260		0.325
	PL	0.627		0.325
	MB	1.139		0.325
Calibre sizes (mm)	SM	-2.093	12.320	0.250
	ME	0.385		0.293
	LA	1.708		0.293
Selling Points	SC	0.813	6.396	0.325
	EM	-2.056		0.325
	FS	1.116		0.325
	MM	0.127		0.325
Weight in grams (kg)	1	0.542	4.445	0.250
	2.5	-0.600		0.293
	5	0.058		0.293
Package types	NB	-0.582	5.100	0.325
	PX	-0.265		0.325
	PAB	0.729		0.325
	PAX	0.118		0.325
Prices (€/kg)	3.7	-2.290	26.734	0.168
	4.7	-4.580		0.335
	5.1	-6.870		0.508
	5.6	-9.160		0.671
Production types	OR	1.605	13.483	0.252
	CO	0.255		0.293
	NI	-1.890		0.293
Promotion	No	-3.287	4.389	0.375
	Yes	-1.644		0.750
Constant (α)		24.787		0.737
Correlations between observed and estimated preferences				
		Value	Significance level	
Pearsons's R		0.987	0.000	
Kendall's tau		0.875	0.000	

Table 6. Conjoint analysis results for Ispir sugar bean

weight in grams had the highest part-worth coefficients among that of these factors. In other words, respondents paid more attention for Ispir sugar bean with these factor levels, and preferred those rather than the other factor levels. Consumers have recently preferred much more organic products instead of conventional products so that organic products could be purified from toxic substances such as pesticide, hormone etc. which are harmful for public health. On the other hand, retailers, in recent years, have separately established the organic and conventional food departments in order to provide customer satisfaction, to attract new customers and to retain current those (Topcu, 2009).

In point of economic theory, selling promotions have always increased consumer demands as if having a price discount; hence they have an effect as if buying more food products. In other words, the products with selling promotion could considerably decrease costs to consumer and their ratios among total food expenditures, and create a significant demand

increase. Not only do paper bags (*PAB*) selected as a package type maximize respondents' utility values, but also they give a measurement of their sensibilities related to environment. Since while a paper material may be decomposed in about one year on the earth, a nylon material may be decomposed in a longer time period than thirty years, and then could also threaten the biological life on the earth. On the other hand, today, conventional family structure that has more family members has increasingly turned into core family structures; hence, food consumption of core families could be less than that of conventional families, and people could pay more attention smaller packaged food products in order to prevent decay of food attributes such as nutritive value, texture, flavour etc. For example, dry bean could keep indefinitely if stored in a cool and dry place, but as time passes, their nutritive value and flavour degrade and cooking times lengthen.

With regard to price of Ispir sugar bean, the results of this study also show that there was an inverse relationship between prices and their utility values, as expected. This means that consumers preferred dry bean with lower price (€3.7) per kg to those with higher price (€5.6) per kg in view of the fact that lower prices led to higher utility values. Prices that are an effective instrument during introduction and application of marketing strategies should be regulated to target consumer masses and created price diversification according to income levels of the target homogenous consumer groups. This finding is supported by previous researches related to how affecting the marketing strategies and consumers' demands of food product prices (Yi & Jeon, 2003; Topcu, 2006; Topcu & Isik, 2008; Topcu et al., 2009; Topcu, 2009).

The results also show relative importance of each factor that has an important effect on integrated marketing strategies focusing on individual customers purchase attitude and behaviours in Table 6. Price having the most important effect on target consumers' buying models played a characteristic role on customer-oriented marketing strategies with 26.73% relative importance among all factors preferred. So, marketers to introduce Ispir sugar bean to target markets or consumer masses should pay more attention its price, and create price diversification according to both its attributes such as calibre size, brand types, origin marks etc. and socioeconomic attitude of the target markets and customer masses. Following this factor, the most second factor for respondents was brand types with 14.79% relative importance; but to give purchase decision of a specific brand should be focused on the factor levels of brand types. This means that respondents took into consideration the brand type of a product after its price, and then also preferred a specific brand by comparing the utility values of each brand levels.

Third and fourth important factors affecting purchase decision of target consumers for Ispir sugar bean were production types and origin marks with 13.48% and 12.34% relative importance, respectively. There is a close relationship between production type and origin mark of an agricultural product; therefore, for people have a lot of information about attributes and nature of the product they could give a decision about if not preferring it. Just as these two factors have a close relationship, so do the brand type and origin mark.

On the other hand, calibre size and selling point of Ispir sugar bean were preferred as fifth and sixth factors with 12.32% and 6.40% relative importance, respectively. With calibre sizes, agricultural products could be standardized and diversified by product category management strategies. With regards to selling points, retailers not only easily reach to individual customers but also increase the product lines and shelf depths by means of

product category management and retailing strategies (Topcu, 2004). Therefore, retailers could design private label products with integrated marketing strategies, and create loyal customers by using advantages of a closer relationship with individual customers. The least significant three factors affecting respondents' Ispir sugar bean preference were promotion, weight in grams and package types with 4.39%, 4.45% and 5.10% relative importance, respectively. As a result, to develop and introduce designing integrated marketing strategies for Ispir sugar bean, marketers could apply these last three factors after the first six factors.

The results of this study also show consumers' total utilities in Table 6 derived from utility values of each factor level in Table 4 by being taken into consideration 34 product profiles designed with orthogonal cards in Table 2. In other words, calculated from utility values of each factor level with orthogonal card profiles obtained from orthogonal design, total utilities were given in Table 7. For example, the total utility (*TU*) of Ispir sugar bean with *MB* as brand type, *ISP* as origin mark, *LA* as calibre size, €3.7 as price per kg, *PAB* as package type, 1 kg as weight in grams, *OR* as production type, *FS* as selling point, and Yes as promotion for card number 1 is:

$$TU = \alpha + U(MB) + U(ISP) + U(LA) + U(€3.7) + U(PAB) + U(1 \text{ kg}) + U(OR) + U(FS) + U(Yes);$$

$$TU = 24.787 + 1.139 + 0.617 + 1.708 - 2.290 + 0.729 + 0.542 + 1.605 + 1.116 - 1.644 = 28.309$$

As calculated the total utilities for 34 Ispir sugar bean profiles in Table 7, product profiles with card number 1 and card number 23 were maximized and minimized respondents' total utilities with 28.309 and 5.789, respectively. In light of these findings, which the integrated marketing strategies based on the target consumer mass for Ispir sugar bean could marketers design and then, apply? The answer of this question could be given by being analyzed the cards maximizing and minimizing the total utilities of the target consumer mass in Table 7. Referred to the cost to customers of Ispir sugar bean, price levels in the card number 1 and 4 are lower than that in the card number 23 and 9; therefore, price which have the highest relative importance could firstly be differentiated according to attitudes and socioeconomic characteristics of the target consumer mass and Ispir sugar bean attributes, and marketers should apply price strategies with lower price levels for the consumers.

The second most important strategy of marketing for Ispir sugar bean also was brand strategy, which *MB* was preferred more than the other brands. This brand has a function as both national and international brand, and respondents demand introduction of Ispir sugar bean under a *MB* name to the target markets. Marketers, accordingly, should design it with the *MB* names registered by manufacturers, and introduce it with this brand name to target markets. Additionally, origin mark and production type along with a brand name could also be used to bring about an effective identification to food products by brand strategies. To provide identification to Ispir sugar bean, therefore, marketers who focus on respondents' purchase attribute and behaviours should also put together *OR* production type and *ISP* origin mark under a *MB* name. As doing so, they could combine with *MB* management strategy as an important part of the integrated marketing strategies with 40.62% relative importance of these factors affecting preferences of the target consumer mass.

On the other hand, with product category management strategy, Ispir sugar bean with calibre sizes, package types and weight in grams could diversify with 36 marketing mix combinations, which have Ispir sugar bean with *LA*, *PAB* and 1 kg maximizing the

Card #	Brand	Origin	Calibre	Price	Package	Weight	Production	Selling points	Promotion	Total utilities	Ranking
1	MB	ISP	LA	3.7	PAB	1	OR	FS	Yes	28.309	1
2	MB	HR	ME	4.7	NB	5	OR	SC	Yes	21.470	4
3	GB	KR	SM	4.7	PAB	1	OR	EM	No	13.514	28
4	LB	ISP	LA	4.7	PAB	1	CO	FS	Yes	23.790	2
5	PL	ISP	LA	5.1	PX	5	OR	SC	No	19.793	9
6	GB	HR	ME	5.1	PAX	1	CO	FS	No	14.508	24
7	LB	HR	SM	5.1	PAB	5	OR	MM	No	14.805	21
8	MB	HR	SM	5.6	PAB	1	CO	SC	Yes	14.857	20
9	MB	HR	SM	5.6	PAX	5	NI	FS	No	10.277	33
10	GB	ISP	SM	4.7	PAX	5	OR	MM	Yes	16.968	14
11	PL	KR	ME	5.1	NB	1	OR	FS	Yes	19.860	8
12	GB	HR	SM	3.7	NB	1	OR	SC	Yes	18.600	13
13	MB	ISP	ME	3.7	PAB	2.5	OR	EM	No	21.029	5
14	LB	KR	ME	4.7	PAX	2.5	NI	SC	No	15.900	17
15	LB	HR	LA	3.7	NB	1	NI	MM	No	18.864	12
16	PL	HR	ME	5.6	PAB	1	OR	MM	No	15.844	18
17	LB	KR	SM	5.6	PX	1	OR	SC	No	13.096	29
18	PL	HR	SM	4.7	PX	1	NI	EM	Yes	12.917	30
19	MB	HR	LA	4.7	PX	1	OR	FS	No	22.254	3
20	MB	KR	SM	3.7	PX	2.5	CO	FS	No	16.366	16
21	PL	HR	SM	4.7	NB	2.5	CO	MM	No	14.143	27
22	PL	KR	SM	3.7	PAB	5	NI	FS	Yes	19.294	10
23	GB	KR	SM	5.6	NB	5	CO	EM	No	5.789	34
24	LB	HR	ME	4.7	NB	5	OR	FS	Yes	20.894	6
25	GB	HR	LA	5.1	PAB	2.5	NI	SC	Yes	14.495	25
26	LB	ISP	SM	5.6	NB	2.5	OR	FS	Yes	14.306	26
27	GB	ISP	ME	5.6	PX	1	NI	MM	Yes	11.472	31
28	LB	HR	ME	3.7	PX	5	CO	EM	Yes	18.979	11
29	LB	HR	SM	5.1	PAB	1	OR	EM	Yes	14.749	22
30	GB	HR	SM	3.7	PX	2.5	OR	FS	No	16.435	15
31	PL	HR	LA	5.6	PAX	2.5	OR	EM	Yes	14.874	19
32	PL	ISP	SM	3.7	PAX	1	CO	SC	No	20.089	7
33	MB	ISP	SM	5.1	NB	1	NI	EM	No	10.307	32
34	MB	KR	SM	5.1	PX	2.5	CO	MM	Yes	14.730	23

Table 7. Total utilities of Ispir sugar bean profiles under orthogonal design

respondents’ total utilities. Marketers, in that case, could considerably increase the product line and depth of Ispir sugar bean by this marketing strategy. Respondents, then, could successfully select the product varieties being fit for them and maximizing their total utilities (Table 8). As conducting retailing strategy together with product category management; retailers could significantly enlarge their shelf depths, and effectively use selling promotions. As a result of this, consumers could more prefer Ispir sugar bean designed with category management and retailing strategies at food shops where work with wider food product varieties according to their socioeconomic characteristics and purchasing attitudes.

Consequently, integrated marketing strategies with individual customer-focused maximizing the consumers’ total utilities for Ispir sugar bean consisted of the price strategy with lower price; of the MB strategy registered with ISP origin mark and selected OR production type, of the product category management with LA calibre size, PAB package type and 1 kg weight in gram, of the retailing strategies with FS selling point and applying selling promotion.

Card #: 1	Card #: 23
Brand types : Manufacturer brand	Brand types : Generic brand
Origin mark : Ispir	Origin mark : Karsur
Calibre sizes (mm) : More than 10 mm	Calibre sizes (mm) : Less than 8 mm
Price (€/kg) : €3.7	Price (€/kg) : €5.6
Package types : Paper bag	Package types : Nylon bag
Weight in grams (kg) : 1 kg	Weight in grams (kg) : 5 kg
Production types : Organic	Production types : Conventional
Selling point : Food shop	Selling point : E-market
Promotion : Yes	Promotion : No
a) Maximum Utilitys	b) Minimum Utility

Table 8. Product profiles maximizing and minimizing consumers’ total utilities

4. Conclusion

The aim of the study was to analyze the integrated marketing tactic and strategies as a rural development tool through the target market segmentation considering the purchase patterns of the homogenous consumer segments at the target food markets and the market positioning envisaging the redesign of Ispir sugar bean as a local food product in developing countries. The factor and cluster analyses were used to determine the marketing tactics, and then the conjoint analysis was also used for the marketing strategies.

The results of the study showed that the food market for Ispir sugar bean designed as three different segments by means of the target food market segmentation according to the interactions among the consumers purchase attitude and behaviours, their socioeconomic and demographic characteristics along with Ispir sugar bean attributes. The first market segment was restructured by high-income white-collar state employee overrating the natural Ispir sugar bean by thinking the production of the generic and the rural natural sources. For this segment, therefore, it could implement the marketing strategies with the organic production/farming type and the region of the origin as Ispir rural area.

On the other hand, middle-income small retailers constructed the second market segment, and they gave careful attention the marketing tactics with the rural development models based on branded local Ispir sugar bean, and supported the rural economy. So, the marketers could utility from the marketing strategies such as the brand including Ispir region of the origin, packaging and the farming type based on the local food products. As for final market segment, it was formed by low-income white-collar state employee accounting the consumer satisfaction with the *SFSC* for Ispir sugar bean. The supplied market dynamics could considerably use the marketing strategies covering low-price applications, standardization, quality, retailing and direct sales.

The producers (farmers and manufacturer) producing by taking into consideration the integrated marketing tactics and strategies using the consumer-oriented data and information obtained from the market research based on the target food market segmentation could decrease meaningfully the production costs without the surplus supply by allocating the rural scarce sources to the local food product patterns with relative superiority for the rural area or adapting well to the rural region and by reconfiguring the farm departments and lands with an effective farm management. The competitiveness of the farms and other firms, moreover, based on agriculture improved by means of the protection

of the generic sources and the improvement of the rural natural environment could also gain a major momentum to the rural tourism. On the other hand, the marketers of the rural local food products processing and designing Ispir sugar bean by considering the marketing tactics and strategies implying the marketing information through the target food market segmentation of the consumers could meet effectively the market demands, and thus they could also provide the consumer satisfaction or loyalty.

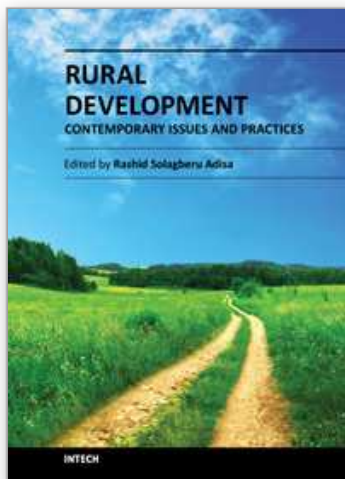
The integrated marketing approach providing a string positive interaction among the producer, marketer, consumer, the rural advocates and government officials could improve the quality of life in the rural area, and strengthen the economic and social ties between the farms and urban residents with the increasing diversification of the rural economy. As a result of those, the integrated marketing tactics and strategies could play a major role on the rural development by encouraging an environment of entrepreneurship and innovation, attracting the agricultural tourists, and promoting alternative forms of agriculture, could spur the rural development based on local food products by stimulating the rural potential, and could create a positive economic and social impacts on the rural and urban communities, which farmers could retain the added values to their products through various transportation and gained marketing margins and the consumers could also buy the food products with a lower market price. The market dynamics and the rural advocates, therefore, should look to the integrated marketing as a means of identifying alternative income sources, preserving small farms, strengthening the rural economic and social structures and an outlet for the organic and specialty farm products.

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Rural Development - Contemporary Issues and Practices

Edited by Dr. Rashid Solagberu Adisa

ISBN 978-953-51-0461-2

Hard cover, 408 pages

Publisher InTech

Published online 20, April, 2012

Published in print edition April, 2012

Development of rural areas has witnessed increasing attention globally, especially over the past three to four decades. The highpoint in the renewed global interest in the development of rural people and their environment was reached with the setting of the Millennium Development Goals (MDGs) in the year 2000. All of the set goals are basically rural development goals. With less than four years to the deadline for the achievement of the MDGs, it is almost certain that the goals are far from being achieved in, especially, most developing countries for whom the MDGs were essentially set. The struggle thus continues for rural development. As long as problems of poverty, disease, illiteracy, unemployment, poor infrastructure, environmental degradation and others persist (or increase) in rural communities, better and more result-oriented solutions to perennial and emerging problems of rural communities would be required. But rural development, in spite of the variations in thresholds of rurality among nations, is not exclusively a Third World or ‘developing countries’ process, owing to its multi-dimensionality. It is a global phenomenon that obviously requires global strategies. This book not only looks at rural development from its multi-dimensional perspectives, it is also a product of the experiences and expertise of distinguished scholars across the continents. Aiming to provide a comprehensive single volume that addresses salient issues and practices in rural development, the book covers themes ranging from sustainable agriculture, biodiversity conservation, strategic environmental assessment, renewable energy, rural financial resources, assessment of protected areas to statistics for rural development policy. Other subject matters covered by the book include social marginality, land use conflict, gender, cooperatives, animal health, rural marketing, information and communication technology, micro-business, and rural economic crisis. The book is thus an invaluable source of useful information on contemporary issues in rural development for researchers, policy makers, and students of rural development and other related fields.

How to reference

In order to correctly reference this scholarly work, feel free to copy and paste the following:

Yavuz Topcu (2012). Integrated Marketing Approach as a Rural Development Tool, Rural Development - Contemporary Issues and Practices, Dr. Rashid Solagberu Adisa (Ed.), ISBN: 978-953-51-0461-2, InTech, Available from: <http://www.intechopen.com/books/rural-development-contemporary-issues-and-practices/integrated-marketing-approach-as-a-rural-development-tool>

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