Consumer Perceptions, Preferences and Awareness Towards Potential Geographical Indication of Products in Tanzania

*Innocensia John**

Abstract

This paper assesses consumer awareness, preference and perception of high-quality products from information provided in the market, and on the labels for coffee and rice products in Mbeya and Kilimanjaro regions of Tanzania. This paper is a part of a study that was established to understand the potential of geographical indication protection in Tanzania, which looked at producers, sellers, and consumers. The study collected data from a sample of 130 consumers: 58 and 72 rice and coffee consumers, respectively. A mixed method approach was used to analyse data; specifically a logit model was used to understand the determinants of consumers awareness; and providing a clear description of the different factors that determine consumers' preferences and perceptions. The results showed that 62% of the consumers had awareness of the different qualities they seek in a product. Price and label/brand information were found to be the main factors influencing and signalling the preferences and perceptions of consumers to high-quality products.

Keywords: consumers, geographical indication, products, Tanzania, policy

JEL Classification *Q18, D18, L15,*

1. Introduction

Geographical Indication (GI) labelling adds value to products through product differentiation based on quality recognition that is linked to the region/area of production. The label protects consumers through the provision of certified information regarding product attributes, and enhances and preserves the identity and cultural heritage of the region where a product is produced (Addor et al., 2003; Guin et al., 2020). The label assists consumers to determine the quality of a product and/or of the production process, and to differentiate the authentic from the fake. Placing a product under GI protection reduces the likelihood of piracy, fraud, and counterfeiting. It links consumers and producers, and this boosts producers' incomes through increased price premiums and market access (Josling, 2006).

Establishing the quality of a product linked to the area of production may be identified by producers, but consumers' understanding and acceptance is an important prerequisite for GI success (Supeková et al., 2009). Consumers pay

---

*Department of Agricultural Economics and Business, University of Dar es Salaam: jinnocensia@ gmail.com/ innocensia@udsm.ac.tz

increasing attention to the quality of products they consume, and demand high quality products for which they are willing to pay more. Only when consumers learn about the quality of products does it becomes more meaningful for producers to invest more in producing high-quality products. McCluskey and Loureiro (2003) acknowledged that increasing demand for high quality will make product-attribute labelling an important marketing tool. They explained that only when consumers consider quality will a product command a premium as there is an increasing number of marketed products with unobservable quality attributes. The EU-style formal Geographical Indications (GI) is a tool used in protecting products from unfair competition, high quality products with attributes linking quality to the territory of production; and it has succeeded in providing consumers with information regarding product attributes. For instance, coffee (e.g., Ziama-Macenta coffee from Guinea Conakry), once assigned GI certification, has shown the potential of increasing its value in the market. This means that consumers have placed value on the traceability of the coffee they drink (Teuber, 2010).

The absence of GI laws in Tanzania that govern the protection of high-quality products is a main challenge to people (producers) in realising the real benefits of labelling their products with geographical information. Even though Tanzania is one of founder members of the WTO since 1995, and party to the Trade-Related Aspects of Intellectual Property Rights (TRIPS), the country has no specific policy and/or legislation governing protection through GIs. Tanzania has a high potential of GIs due to its many unique products. For such potential to be developed, however, there needs to be a policy in place to protect origin products (identified by their quality attributes linked to their areas of production).

Creating value of Tanzania's high-quality products must be in line with creating awareness on GI, which helps consumers to value products and labels providing them with information on the products they consume. Consumer's awareness is important in understanding product attributes that influence their buying decisions of a product (Nabwire, 2016). Only when consumers learn about, and appreciate quality, is it meaningful for producers to invest in producing high-quality products. Therefore, the introduction of quality label information of products will have to be supported by the creation of awareness of the label or brand.

A survey conducted in 2014 identified five potential GI products from a list of 14 agricultural crops (coffee, rice, sugar, cloves and aloe vera) for further in-depth producer study (John et. al., 2016). In 2017 a survey was conducted on consumers to establish the link between producer information on product quality and consumer awareness on the quality for potential GI products as an important prerequisite for successful GI registration. The study was set to understand if consumers were aware of the attributes perceived by producers, and what was their take on the labels in relation to the value they put on the products and the information provided on the labels.

The overall objective of this study is to assess consumers' awareness, perception, and preferences of high-quality products from information provided on product labels and in the market. A label is assumed to provide a consumer information about the quality of a product, thereby acting as a marketing tool for the product, and enhancing consumers' preference for quality products. The two research questions addressed are: (i) How does the place of origin influence consumers' awareness of GI and high-quality products? (ii) Which factors are key in influencing consumers preference and perception for a high-quality labelled product?

2. Prospects for a GI Law in Tanzania

Tanzania is on a path towards having a national intellectual property rights policy (Tanzania's intellectual property (IP) laws had their latest revision back in 2002), for the protection of GIs. Therein, Kyela rice and other potential agricultural crops for GI protection have been earmarked for a national branding strategy. Currently, GI in Tanzania is only considered in the industrial property law, a branch of intellectual property that has distinct subject matters that are protected—or capable of being protected—under the corresponding legislation.

In the process of trying to protect its crops from unfair pricing, the Ministry of Agriculture established commodity boards, such as coffee, cashew, cotton, sisal, tea and pyrethrum boards. The aims of the boards are to formulate and implement development strategies; provide regulatory services to ensure quality products; finance research; and to disseminate information to stakeholders in their respective industries.

Tanzania's legal framework for the protection of origin products is that of the Trade and Service Marks, that follows Act No. 12 of 1986. Being a member of the African Regional Intellectual Property Organization (ARIPO) since 1999, Paris Convention since 1963, WIPO Convention since 1983, and the WTO/TRIPS since 1995 gives an opportunity to the country to protect its products through the Banjul Protocol of ARIPO. However, the Banjul Protocol has not yet been incorporated in the national trademark laws of Tanzania, implying that it is not possible to obtain valid trademark protection in the country via an ARIPO registration designating Tanzania. The importance and benefits of GI can be learnt from Penja pepper, Oku honey, and Ziama-Macenta coffee: the first three African products to be awarded Protected Geographic Indications (PGIs) by the African Intellectual Property Organization (OAPI) (Chabrol et al., 2017).

It should be noted that Zanzibar has its own legal framework that is different from that of Tanzania Mainland. Zanzibar has made efforts in incorporating GI in its industrial law for the protection of spices, specifically cloves. Being among the producers of high-quality clove, Zanzibar's clove quality and standards have been well-recorded and maintained in the world market. The high quality has been supported by the geographical environment, and complimented by a good grading system instituted by the Zanzibar State Trading Cooperation (ZSTC) during the purchasing process of cloves from producers (John, 2017).

With no law in Tanzania that protects GI products as stated above, only a few policies have shown how GI may be incorporated, e.g., in the Plant Breeders Rights within the agricultural policy. The creation of a full and widely recognized GI system within Tanzania could offer a distinctive example of social construction of markets that articulates three simultaneous processes that have been used by Niederle and Gelain (2013) in Brazil when creating an institutional environment for their food markets for GI registration. The first, is a market structure that requires the development of a social network, including a variety of actors involved in production and consumption circuits (producers, consumers, associations, and government). The second, is to render an organized and well-established network, and a stable institutional arrangement (laws, norms, rules, and conventions) that allows actors to exchange. Finally, is the process of negotiation around the configuration of a specific convention of quality for GI products, generating compromises between different evaluative conceptions. Currently the protection of Tanzania's agricultural products can be obtained through certification or collective trademarks.

3. Theoretical Analysis of Consumers Awareness and Perception

This study builds its understanding of GI using the theory of asymmetric information to understand the importance of product information known by producers: the theory of consumer preferences, and the theory of consumption value (TCV). The existence of asymmetric information for goods and reputation, often communicated through distinctive signs, plays an important economic role of signalling a certain level of quality that consumers learn to expect (Folkeson, 2005; Rangnekar, 2004). Only when consumers learn about the quality of products that it becomes meaningful for producers to invest in producing high-quality products (Shapiro, 1983). The aspects of economic theory relating to the use of distinctive or quality signs, such as geographical names, are to do with the information theory; or with Shapiro's model on reputation. These theories demonstrate the importance of: (i) preventing market distortions that arise when there is asymmetry of information between producers and consumers; and (ii) averting the consequences of such asymmetry of information on the level of output quality (Andreu Mas-Colell et all., 2017).

With regard to the information theory, an asymmetry of information between producers and consumers gives rise to market failure. Information asymmetry impacts negatively on the market: the quality of total supply drops, higher-quality products are driven out of the market, and some consumers will no longer be able to satisfy their preferences (Akerlof, 1970; OECD, 2000). GIs function as a signalling device for consumers interested in the area of geographical origin of a product. When consumers buy based on a product's reputation, a producer who decides to go into a high-quality market is compelled to invest to build her/his reputation (Shapiro, 1983). It could thus be said that geographical indications are a result of a process whereby collective reputation is institutionalized to solve certain problems that arise from information asymmetry and free-riding on reputation (Belletti et al., 1999). Apart from the role of GIs in overcoming the detrimental effects of information asymmetries and free-riding on reputation, they also reflect inherent values associated with a region: and thus a regional quality. As such, territory goes beyond

its purely informative role and acquires the characteristics of an attribute (Pacciani, et al., 2001). The characteristics of the region or place of origin of a product are then captured in the origin-labelled product.

The theory of consumption value (TCV) was developed by Sheth et al. (1991). It provides a valuable contribution as to why (or not) a consumer buys a product, product category, and a brand based on a value perspective. The theory provides an understanding of the consumption of a product, and the motivation and values in the consumption of a product. TCV examines consumption value from a behavioural perspective, and provides perceived-value typologies (Tanrikulu, 2021). The theory provides an understanding of consumer choice behaviour, which is important in understanding consumption patterns and decisions when making purchases. Brand/label information influences consumer preferences/demands for high-quality goods which signals the values that consumers place on the products. Such purchasing behaviour reveals the attitude of consumers towards quality products.

The theory of consumer preferences defines preferences as subjective (individual) tastes; and are measured as the utility of various bundles of goods. Consumers rank bundles of goods from the most preferred to the least preferred, according to the utility they give them. Preferences are independent of income and prices; and also likes and dislikes of goods are independent of the ability to purchase. Preferences are linked to information known about the good that influences the choice.

4. Methodology
4.1 Study Design
A sample size of 130 consumers aged between 18 and 56+ years was selected through face-to-face screening interview in local markets, supermarkets, and local shops. Besides age, the respondents were screened on a key variable of their consumption and purchase status. They were asked two key questions: whether they had *consumed,* and *made purchases* of the product in question in the last six months. If the answer to both questions was 'Yes', then the respondent was selected for interview. The respondents were then asked if they would be willing to participate in the survey questions. Of the interviewed respondents, a total of 150 were contacted, out of which only 20 were not willing to participate.

At this point, a consumer of a product was defined as anyone who had *bought* and *consumed* the product, which were the important aspects to get a reflection on both the price and the attributes/quality of the product. The respondents were asked if they consumed and/or carried purchases of the research products in hand. Two products—rice from Kyela, and coffee from Kilimanjaro—were studied. These products were established as key potential products by a research done in 2014 on product characterization for potential original products in Tanzania (John et al., 2016).

Some of the questions were on the respondents' understanding of quality products and their perception of the attributes of the product; and if they could link the quality with the region of origin. Also, they were asked if they could differentiate such a product

from other similar products in terms of quality and price; how long they had been consuming the product; and reasons for consuming the product. These questions were meant to establish their understanding of the product in place. The respondents were then asked if they ever read labels on products before they made purchases, and how important that information was in their choice to purchase. This provided an understanding of the key information they seek when deciding to purchase a product.

4.2 Analytical Framework

A number of studies have investigated consumers' valuation and preferences of GI labels using different products of interest (Krystallis & Ness, 2005; Seetisarn & Chiaravutthi, 2011; Török et al., 2022). Specifically, they found younger age, high level of education, and income as some of the key factors that determine consumers' awareness and preferences. Other key variables were place of origin, reputation, and prior product information, or label information. Product information was sourced by asking consumers their awareness on ways they can link product information to region of origin, understanding of quality products, attributes of a product (if consumption is due to attributes, and which attributes are more important), and how often they read labels or seek prior information on products before making a purchase. In this case, consumer awareness is the knowledge that a consumer has on a product, which influences decision-making on the purchase or consumption of a product (Nabwire, 2016).

This study accessed consumers awareness, perception, and preferences of quality products. One of the models employed was consumer awareness, where the dependent variable here has a binary outcome: a consumer is either aware, or not aware. In such a case logit or probit models may be used. The difference between the two models lies in this assumption about the distribution of the errors: the logit model assumes standard logistic distribution of errors; while the probit model assumes normal distribution of error terms. The study employs a logit model. The dependent variable is dualistic and takes the value of one (1) if a consumer is aware; or zero otherwise. The logit model can be specified as a function of all independent variables X_1 to X_n (Table 1), and ε representing the random disturbance (Greene, 2002).

$$Y_i = f(X_1, X_2, \ldots \ldots X_n) + \varepsilon$$

Consumer preference of quality products was estimated from a factor analysis to group the different factors associated with respondents' purchasing intent. The variables included in the analysis were: information provided on labelled products, geographical information, product reputation, selection criteria, frequency or product consumption, and purchase. The perceptions on the different attributes (price, region of origin, organic, healthy, taste, and aroma) were measured on a five-point Likert scale (1= strongly disagree, and 5 = strongly agree).

4.3 Characteristics of Consumers

The sample of consumers included persons above the age of 18 who made purchases and earned some sort of income: in this case, 72% cent of the sampled respondents were in the 18–35 age group. Some of the key factors that influence consumers preferences—

as also stated by Čačić et al. (2011)—are age, education, and income. According to Aprile, Caputo and Nayga (2012), younger individuals, and those with higher educational and income levels, attach great importance to both quality and information when purchasing products. As expected, 35% of the employed sample, who also had secondary education level and above (57%), were more aware of quality from information they seek prior to making purchases. With an almost equal number of male (66 = 51%) and female (64 = 49%) interviewed, the study showed the importance which both groups put on quality and information when making purchases (Table 1).

Table1: Characteristics of the Consumers

Variable Name	Description	Frequency	Percent
Gender	Female	64	49.23
	Male	66	50.77
Age	18–35	72	55.38
	36–54	51	39.23
	55+	7	5.38
Education	No Education	2	1.54
	Primary education	54	41.54
	Secondary education	36	27.69
	College/University	38	29.23
Marital status	Single	39	30
	Married/with partner	73	56.15
	Divorced/Separated	11	8.46
	Widower	7	5.38
Occupation	Farming	17	13.08
	Employed	78	60
	Unemployed	35	26.92
Income	Less than 200,000	73	56.15
	200001–400000	32	24.62
	Above 400000	25	19.23
Consume product regularly	No	11	8.46
	Yes	119	91.54
Time been consuming the product	1–10yrs	44	33.85
	11–20yrs	20	15.38
	21–30yrs	38	29.23
	31–40yrs	23	17.69
	41–60yrs	4	3.08
	61+yrs	1	0.77
Seeking prior information	No	48	37.21
	Yes	81	62.79

When the respondents were asked about how long they had consumed the product, more than 34% said they had consumed it for between 1–10 years; 15% had consumed it for 11–20 years; 29% had consumed it for 21–30 years; while 22% had consumed the product for more than 31 years. Also, 91% of the respondents reported consuming the product regularly, while providing key attributes in

comparison with other products. Moreover, the respondents were asked on their awareness of the qualities of the product linking to the area of the product origin: 48% said they were aware; and 52% said they were unaware.

5. Results

5.1 Consumers' Awareness

Awareness of the official EU logos is very low among consumers in Tanzania. The respondents were asked if they could link known product quality with geographical characteristics as an alternative expression to GI definition. Approximately 62% of the respondents were 'aware' of the quality attributes of the products, and could provide such a link. However, when shown the GI EU labels and asked if they ever had a knowledge of such labelling, only 38% (N = 49) of the consumers said 'Yes'; and explained they had seen such labels from the Internet or television advertisements. They linked the GI label to organic labels, which they explained as an important aspect especially when purchasing products with medicinal properties, such as Aloe vera. This means consumers were aware of the characteristics of the products, and could link them with areas of production. However, it was a relatively small percentage of participants who were aware of the GI labels (Figure 1). This finding is consistent to Lee et al. (2020) who found that individuals were aware of product characteristic, but associated it less with information provided on product labels.

Figure 1: **Geographical Indication Labels.** (From left): **PDO (Protected Designation of Origin); PGI (Protected Geographical Indication); and Traditional Speciality Guaranteed (TSG)**

A further analysis was done to determine the different factors that determine the awareness of consumers who purchase GI products. A high level of awareness about product quality is believed to increase the traceability of a product, and being able to distinguish genuine from fake products. The regression results showed different factors determining consumer awareness. These include education, source of information, understanding of the GI concept, location, occupation, duration of product consumption, and product label—which either positively or negatively relate to the awareness of GI at different significant levels (Table 2). The marginal effects from the model indicated a higher and more significant marginal effects of education, occupation, label, and time of product consumption.

Table 2: Logit Regression for Factors Affecting GI Awareness

Variable	Coefficient	Standard Errors	P-value	Marginal Effects	Standard Errors	P-value
Age	0.8070	0.5296	0.7440	-0.0535	0.1637	0.7440
Occupation	4.9543**	3.7641	0.0350	0.3630**	0.1498	0.0150
Education	3.1582***	1.2435	0.0030	0.2868***	0.0981	0.0030
Location	0.2156*	0.1764	0.0610	-0.3573**	0.1707	0.0360
Years lived	0.9926	0.0076	0.3310	-0.0018	0.0019	0.3320
Source of information	0.4741***	0.0841	0.0000	-0.1861***	0.0444	0.0000
Understanding GI	0.5589***	0.1172	0.0060	-0.1451***	0.0523	0.0060
Label Information	2.8324	1.7984	0.1010	0.2545*	0.1481	0.0860
Prior information	1.4203	0.8070	0.5370	0.0870	0.1398	0.5340
Product consumption	4.1900*	3.1416	0.0560	0.3360**	0.1529	0.0280
Income	0.5134	0.2312	0.1390	-0.1662	0.11226	0.1390
Constant	2.7168	4.9299	0.5820			
Log-Likelihood -47.8295	Psuedo-R2 (%) 0.4640					
χ(ρ-value) 82.79 (0.0000)	N (respondents) 130					

Notes: Significance levels: *** 1%, ** 5%* 10%.

Source: Own compilation

A change in occupation and education increased the probability of awareness by 36% and 28%, respectively; suggesting that employed consumers and those with higher education were more likely to understand potential GI products. The effect of employment and education on awareness has also been found by many other studies, e.g., Aprile et al., (2012), and Čačić et al. (2011). The source of information had a probability of 0.19, showing that a change in the source decreased GI awareness for consumers. Information was also found to significantly impact the decisions for producers to adopt GI (John, Lokina & Egelyng, 2020). For consumers, the source of information had a negative impact on their awareness, which affected their decision to purchase. Similarly, a negative impact is observed from the location and understanding of the concept of GIs, which decreases the probability of GI awareness by 35% and 15%, respectively. Understanding of the GI label and duration of consuming a product had a positive and increasing impact on GI awareness, with a probability of 25% and 34%, respectively. Despite the awareness of the quality of these products, a majority of the consumers remained unaware of the existence of the GI labels and their specific meanings (Gangjee, 2017).

5.2 Consumer Preference

Consumers value products by looking at different information provided on a product label, or the reputation of a product already built in the market. The ability of a consumer to process information about a product is likely to reduce counterfeit products in the market. In this study, consumers identified several key attributes when making a purchase. One of the key attributes was information: consumers with no prior information were keen on the information they obtained from labels.

Consumers with the preference of high-quality products were asked to determine different key factors when making a purchase. These factors include: regularity of

consumption, place of origin, quality, reputation, prior information, organic characteristics, price, and label information (Figure 2). Frequent consumption of a product determined its preferences: the more frequently consumers used a product, the more they preferred it. The quality of a product (88%) was the most important attribute used by consumers when deciding to purchase it. The findings suggested that perception on quality was associated with product reputation in the market. The place of origin (specific area of origin) of a product was used by consumers to decide if they would be loyal to the source of production. The area where a product is produced has been used by many sellers—who take the advantage that there are consumers who seek products from a specific area—to sell fake products. As stated by Aprile et al. (2012) consumers identified region/place of origin, specific site for at least one stage of the production process, reputation and label information as some of the key factors they considered when making a purchase. If consumers realised that a certain product has a reputation and comes from a certain region, they would be willing to purchase such a product even at a very high price.
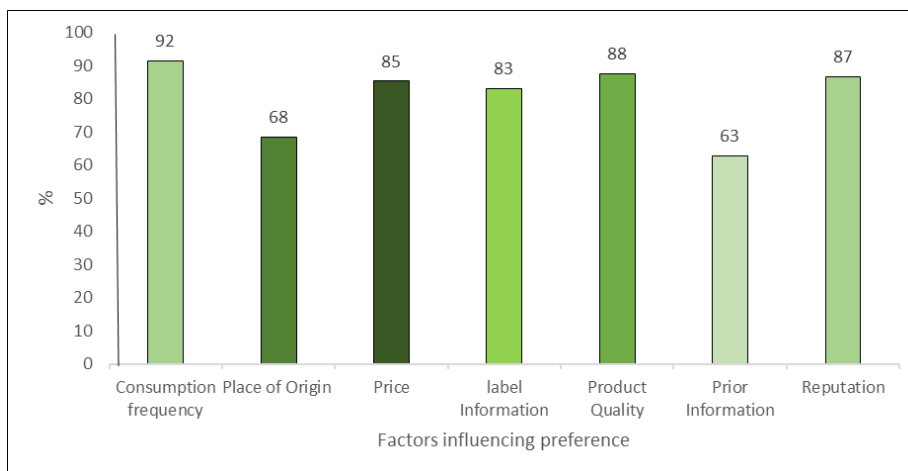

Figure 2: Consumer Preference
Source: Survey Data (2017).

As per by Aprile et al. (2012), consumers used labels with high price tags as an indicator of quality. Thus, product price was used to signal the quality of a product even before reading the information on its label. However, customers noted that high prices led to the emergence of some fake goods in the market as vendors abused the good name of high-quality goods (such as rice from Kyela in Mbeya) to promote rice from other regions, thereby misleading buyers. The consumer-participants said it was important to understand the quality of a product in comparison with other similar ones of the same category if they were unlabelled. According to Deselnicu et al. (2013), the place of origin of a product matters to consumers, who are biased toward local products. As observed by McCluskey and Loureiro (2003), it is important for consumers to value high quality products in

order to command a premium price in the market that can then be enjoyed by the producers of these products. Moreover, consumers with prior information were more likely to have a higher preference for high-quality products. This is driven by the increasing demand for high-quality products for health concerns and thus motivating consumers to value product information (John et al., 2020).

5.3 Consumer Perceptions

There are no known studies in Tanzania that have analysed consumer perceptions of potential GI products as regard their attributes. Even in the EAC, SADC, and SSA countries there are few such studies (e.g., Egelyng et al., 2017; Maina, 2018). This study captures consumer perceptions by looking at the factors that were scaled using a Likert scale that ranged from not very important (1) to very important (5). The results in Figure 3 show that, on average, the taste and flavour of a product were the most important factors used by consumers in determining a product's quality.
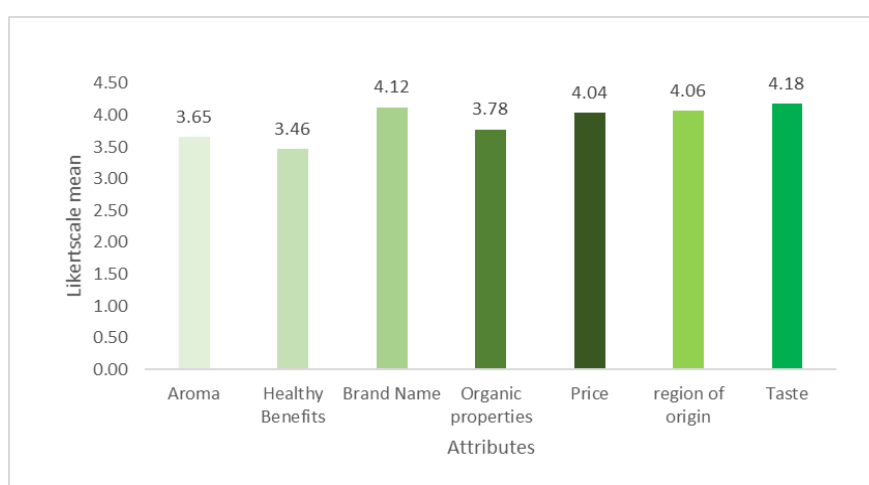

Figure 3: Consumer Perceptions of Potential GI products
Source: Survey Data (2017).

Most of the consumers agreed how the taste of a product, which was mainly influenced by the geographical characteristics, was an important factor in determining a quality product. In addition, they mentioned price tag to signal the quality of a product: they believed that products with high prices were essentially of high quality. The findings show that, apart from taste, aroma was also an important attribute in defining the quality of a product when making purchases.

Results from the scoping study that was set to identify different products in Tanzania that were potential GIs, Kyela rice—known for its very high reputation in the domestic market as well as in the neighbouring countries—emerged as a potential crop for investigation (John et al., 2020). Rice in Kyela has been grown

for many years and is the main source of income for farmers in the district. The reputation of Kyela rice has been used as a marketing strategy by spurious sellers of other rice brands from Morogoro (Kilombero), Dar es Salaam and Songea to obtain high prices in the market for inferior rice.

6. Conclusion and Policy Implications

The study focused on consumers' perception, preferences and awareness of quality products based on information provided on product labels. The information known to consumers and which is provided from the market acts as a marketing tool that influences consumers' preference of quality products.

The study concludes that a majority of the consumers had limited knowledge on GI, with 62% of the consumers being aware of product qualities that was key when deciding to make purchases. About 38% of the consumer-participants were aware of the GI concept and labels' information, most of which they obtained through the Internet or the mass media. Awareness of potential GI products was positively influenced by the information of the labelled products; and consumers' occupation, education, and duration of the consumption of the products. When making choices of purchases, consumers' preferences were highly influenced by information on a products' place of origin, quality, reputation, price, and label information. With an increased awareness on the importance of quality products, consumers in Tanzania have increasingly paid attention to the products they consume, and the sources of these products. This study, contributes to the growing and literature on the potential of GI products that has been established (John, 2017; John et al., 2016, 2020).

Reference

Addor, F., Thumm, N. & Grazioli, A. (2003). Geographical indications: Important Issues for industrialized and developing countries. *Swiss Federal Insititute of Intellectual Property*.

Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3): 488–500. https: //doi.org/https: //doi.org/10.2307/1879431.

Andreu Mas-Colell, M. D. W. & Green, J. R. (2017). Microeconomic theory. *Microeconomic Theory*. https: //doi.org/10.4324/9781351265287.

Aprile, M. C., Caputo, V. & Nayga, R. M. (2012). Consumers' valuation of food quality labels: The case of the European geographic indication and organic farming labels. *International Journal of Consumer Studies*, 36(2): 158–165. https: //doi.org/10.1111/j.1470–6431.2011.01092.x.

Belletti, G.S.B., Barjolle, D. & Arfini, F. (1999). Origin labelled products, reputation, and heterogeneity of firms. *INRA, Serie Actes et Communications. The Socio-Economics of Origin Labelled Products in Agro-Food Supply Chains: Spatial, Institutional and Co-Ordination Aspects*, 239–260.

Bramley, C., Biénabe, E. & Kirsten, J. (2003). The Economics of geographical indications: Towards a conceptual framework for geographical indication research in developing countries. *The Economics of Intellectual Property*, 109–149.

Čačić, J., Tratnik, M., Kljusurić, J. G., Čačić, D. & Kovačević, D. (2011). Wine with geographical indication – Awareness of Croatian consumers. *British Food Journal*, 113(1): 66–77. https: //doi.org/10.1108/00070701111097349.

Chabrol, D., Mariani, M. & Sautier, D. (2017). Establishing geographical indications without state involvement? Learning from case studies in Central and West Africa. *World Development*, 98, 68–81. https: //doi.org/10.1016/j.worlddev.2015.11.023.

Egelyng, H., Bosselmann, A. S., Warui, M., Maina, F., Mburu, J. & Gyau, A. (2017). Origin products from African forests: A Kenyan pathway to prosperity and green inclusive growth? *Forest Policy and Economics*, 84, 38–46. https: //doi.org/10.1016/j. forpol. 2016.09.001.

Folkeson, C. (2005). *Geographical indications and rural development in the EU*. 120.

Gangjee, D. S. (2017). Proving provenance? Geographical Indications certification and its ambiguities. *World Development*, 98, 12–24. https: //doi.org/10.1016/j. worlddev. 2015. 04.009.

Greene, W. H. (2002). *Econometric analysis*. 4th Ed.

Guine, R. P. F., Florença, S. G. & Jo, M. (2020). The Link between the consumer and the innovations in food product development. *Foods*, 9(1317): 3–5.

John, I. (2017). The potential of marketing Zanzibar cloves with geographical indication labelling. *African Journal of Intellectual Property*, 2(1): 71–86.

John, I., Egelyng, H., Lokina, A. & Lokina, R. (2016). Tanzanian food origins and protected geographical indications. *Journal on Food, Agriculture and Society*, 4(2): 6–12.

John, I., Lokina, R. & Egelyng, H. (2020). Small-scale Producers of quality products with Potential of geographical indication protection in Tanzania. *International Journal of Food and Agricultural Economics*, 8(2): 193–205.

Josling, T. (2006). The war on terroir: Geographical indications as a transatlantic trade conflict. *Journal of Agricultural Economics*, 57(3): 337–363. https: //doi.org/10.1111/j. 1477–9552.2006.00075.x.

Krystallis, A. & Ness, M. (2005). Consumer preferences for quality foods from a south European perspective: A conjoint analysis implementation on Greek olive oil. *International Food and Agribusiness Management Review*, 8(2): 62–91.

Lee, J. Y., Pavasopon, N., Napasintuwong, O. & Nayga, R. M. (2020). Consumers' Valuation of geographical indication-labeled food: The case of Hom Mali Rice in Bangkok. *Asian Economic Journal*, 34(1): 79–96. https: //doi.org/10.1111/asej.12196.

Maina, F. W. (2018). Producer perceptions, economic value and incentives for promotion of potential geographical indications in Kenya. PhD thesis in Agricultural and Applied Economics.

McCluskey, J. J. & Loureiro, M. L. (2003). Consumer preferences and willingness to pay for food labeling: A discussion of empirical studies. *Journal of Food Distribution Research*, 34(3): 95–102. https: //doi.org/10.1017/S000748530002229X.

Nabwire, E. J. C. (2016). *Economic analysis of consumers' awareness and willingness to pay for geographical indicators and other quality attributes of honey in Kenya*. (November).

Niederle, P. A. & Jhulia, G. (2013). Geographical indications in Brazilian food markets: quality conventions, institutionalization, and path dependence. *Journal of Rural Social Sciences*, 28(1): 26–53.

OECD. (2000). Appellations of origin and geographical indications in OECD member countries: Economic and legal implications. Retrieved from Working Party on Agricultural Policies and Markets of the Committee for Agriculture Joint.

Pacciani, A., Belletti, G., Marescotti, A. & Scaramuzzi, S. (2001). The role of typical products in fostering rural development and the effects of regulation (EEC) 2081/92. 73*rd Seminar of the European Association of Agricultural Economists, (June),* 1–17, (June), 28–30.

Rangnekar, B. D. (2004). The Socio-economics of geographical indications. *Regulation*, 8(8): 1–52. Retrieved from http: //ictsd.org/downloads/2008/07/a.pdf.

Seetisarn, P. & Chiaravutthi, Y. (2011). Thai consumers' willingness to pay for food products with geographical indications. *International Business Research*, 4(3): 161–170. https: //doi.org/10.5539/ibr.v4n3p161.

Shapiro, C. (1983). Premiums for high quality products as returns to reputations. *Quarterly Journal of Economics*, 98(4): 659. https: //doi.org/10.2307/1881782.

Sheth, J. N., Newman, B. I. & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2): 159–170. https: //doi.org/https: //doi.org/10.1016/0148–2963(91)90050 -8.

Supeková, S., Suhaj, M. & Pasiar, V. (2009). Evaluation of Slovak customers' attitudes to foodstuffs designated by protected geographical indication involving multivariate statistics. *Journal of Food and Nutrition Research*, 48(2): 109–114.

Tanrikulu, C. (2021). Theory of consumption values in consumer behaviour research: A review and future research agenda. *International Journal of Consumer Studies*, (March), 1–22. https: //doi.org/10.1111/ijcs.12687.

Teuber, R. (2010). Geographical indications of origin as a tool of product differentiation: The case of coffee. *Journal of International Food and Agribusiness Marketing*, 22(3): 277–298. https: //doi.org/10.1080/08974431003641612.

Török, Á., Gorton, M., Yeh, C. H., Czine, P. & Balogh, P. (2022). Understanding consumers' preferences for protected geographical indications: A choice experiment with Hungarian sausage consumers. *Foods*, 11(7). https: //doi.org/10.3390/foods11070997.