

SMALL-SCALE PRODUCERS OF QUALITY PRODUCTS WITH POTENTIAL OF GEOGRAPHICAL INDICATION PROTECTION IN TANZANIA

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Abstract

Geographical Indication (GI) adds value through product differentiation based on quality, protection of consumers through provision of certified information regarding product attributes and enhances and preserves the identity and cultural heritage of people in the region where a product is produced. Studies on potential GI products in Tanzania are yet to (be done) to show how producers may capture above mentioned benefits. This study analyses quality traits, factors and conditions with potential to increase value of Agricultural products in Tanzania through GI protection. The hypothesis is that origin products exist in Tanzania whose unique characteristics are linked to rather well-defined geographical areas of production. Three Tanzanian origin products were studied, and investigated as product cases: Rice from Kyela, Coffee from Kilimanjaro and Cloves from Zanzibar.

Quantitative and qualitative case study analyses were done for each of the three selected Tanzanian origin products with plausible prospects for Tanzania to leapfrog into exports of Geographical Indications products. Findings shows the institutional structure of a country and how it may facilitate GI protection, the producer's perception of being a member of a cooperatives in marketing their products, producer's awareness of GI and the quality traits of their unique products. Finally, the paper provides policy options identifying opportunities for government in recognising unique origin products - whether agricultural or non-agricultural and the importance of potential GI's to producers and exports options for the country.

Keywords: *Coffee, Cloves, Geographical Indication, Producers, Rice.*

JEL Codes: *Q12, Q13, Q57,*

1. Introduction

Geographical Indication (GI) is best understood with the French concept 'terroir'¹ - implying a link between a product; and the geographical and human environment in which it is produced. GI identifies a product as originating in a certain region or country (African Union-European Union 2011). Geographical indication is recognized as a form of intellectual property right, by the World Trade Organization (WTO) in 1994 and it is

economically and legally inclusive. GI can lead to product value addition through product differentiation based on quality (Addor, et.al., 2003 and Nyanga, 2004). GI has been increasingly known and used for protection of wines and spirits in the European Union and it is extending to other products (like ham and cheese) (European commission 2012). Placing a product under GI protection reduces the likelihood of piracy, fraud and counterfeiting (WIPO 2004). It links the consumers and the producers, and this boosts farmers' incomes through improved price premiums and market access (Gerz et al., 2008).

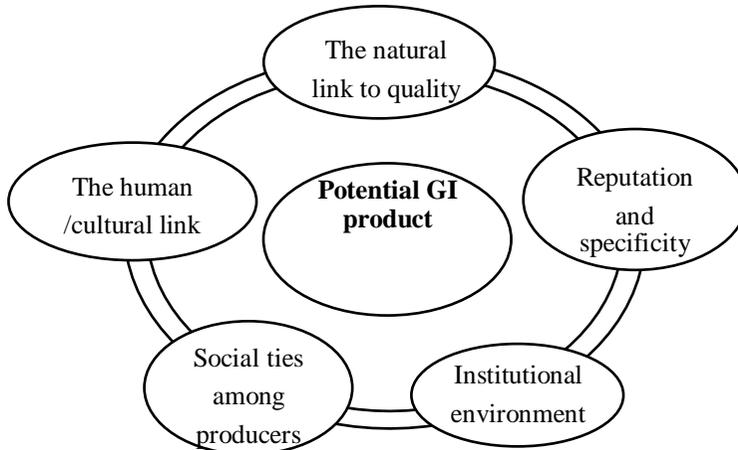
GI may help empower smallholders and small and medium enterprises (SMEs) to “resist” capture by global value chains. It may also channel bigger shares of the price premiums consumers pay to SMEs and smallholder producers of origin products (Egelyng 2013) thus, marketing products using GIs captures premiums in the marketplace (Babcock and Clemens, 2004). The European Union (EU) agricultural origin food and other products registered with ‘Protected Geographical Indications’ (PGIs) add 15 billion Euros per annum to European agriculture (European commission 2012).

In 2013 Africa officially had three GI protected products; Penja pepper and Oku white honey from Cameroon and Ziama-Macenta coffee from Guinea Conakry (Chabrol et al., 2015). However, these are very few products for a continent with so much untapped potential to register many more products with unique attributes and high reputation in the market. However, development of GIs in Africa is at infancy with farmers and administrators displaying limited awareness and technical capacity (African Union-European Union 2011). For the protection of the products a national law has to be in place to protect small scale producers against fraud, imitation and unfair competition. It’s in this regard producers could enjoy from having their products provided with full legal protection as GI products.

Tanzania acknowledges the importance of GIs and has identified some agricultural products (Rutabanzibwa, 2006) which have the potential for protection. However, there is no law in Tanzania, which deals explicitly with the protection of GIs. Realizing the potential of these products, a scoping study performed in 2015 identified a list of potential products with unique attributes. Some of these products were Coffee from Kilimanjaro, Rice from Kyela, clove from Zanzibar, tea from Iringa, sugar and Aloe vera from Kilimanjaro and wine from Dodoma, the products have a distinctive appellation and qualities. To realise the full benefit of a product registration in the Tanzania market, the study investigated the attributes of three potential products (coffee from Kilimanjaro, Cloves from Zanzibar and Rice from Kyela for GI registration. However, it is uncertain which key and unique qualities/characteristics, factors and conditions can facilitate these potential GI product labelling. This paper aimed to fill the knowledge gap by providing a detailed analysis of the Tanzania potential products in the country for which value may be added using GI labels. The paper investigates the producer’s experiences, perceptions and awareness of attributing territorial qualities to Original Products (OPs).

2. Potential GI products in Tanzania

Lessons from other countries that have implemented the GIs show that, many of the GI market successes are the result of mutually beneficial business relations whereby consistent market positioning and effective commercialization have led to a long-term market presence (Larson 2007). An effective legal protection, including a strong domestic GI system has to be carefully chosen for protection. It would permit effective monitoring and enforcement in relevant markets to reduce the likelihood of fraud that can compromise not only the GI’s reputation, but also its legal validity. For a potential GI product, it must fulfil the following criteria’s as shown in figure 1.



Source: Egelyng et al., (2015).

Figure 1. Criteria for Identifying the Potential Candidate Products for GI Registration

GI potential is made up of; *the natural link*, i.e. the natural setting, environmental and climatic conditions of the area of production which affects (or is believed to affect) the quality attributes of the product. *The human link*, i.e. the cultural environment, cultural heritage, traditions and history, and local know-how that affects the product, e.g. though certain production and processing activities; *social ties*, such as trust and cooperation among producers, and collective efforts found in cooperative or other types of producer associations and groups. *Reputation and specificity of the product*, linking consumer awareness of the product to its specific quality and characteristics, which is an important prerequisite for GI success. In addition, *Institutions*, which refer to formal and informal rules governing the production and marketing of the product, and is affected by the presence of local NGOs, state authorities issuing regulations, extension officers and research bodies (Egelyng et al., (2015). Some of the potentially identified products in Tanzania are suitable for GI protection are established using the FAO guidelines from the researcher's fieldwork analysis.

3. Methodology

3.1 Model Specification

A logit model is applied to model the farmer households' behaviour regarding their awareness in attributing territorial qualities to original products. Sampling weights are applied to the data during the data analysis with the purpose to correct for unequal probabilities of selection and finally to obtain unbiased estimates for the whole study. The dependent variable, GI certification awareness, is regressed on a set of independent variables from the factors; Gender is known to affect the decision making given the fact that males are more dominant, assertive, objective and realistic, while females are more affected by the environment, tend to rely more on information and dedicate more time to the decision process. Gender has a highly significant and positive impact on the decision to adopt new practices Mignouna et al., (2011) and Ouma et al., (2002). However, Doss and Morris (2000) and Chirwa, 2(005), found no significant difference in adapting new methods between the

men and women concluding that gender may have or may not have an influence on the household's decision making. Hence the expected sign of Gender on GI being ambiguous.

Education is a proxy to indicate the ability to acquire and process information. Education is hypothesized to positively affect new practices. Land size represents the total land size (hectare) owned by the household and used for agricultural production (Kebede et al., 1990; Rogers, 1995).

Member of cooperative is a binary variable measuring whether the household belongs to the cooperatives and takes on the value of **1** for membership of the household and **0** otherwise. Membership to an association or cooperative has been reported by previous studies to be an important factor in affecting the GI, most members are privileged in terms of receiving support (managerial and financial), are the source of skills, knowledge and information.

3.2 Data Collection and Analysis

Data utilized was sourced primarily from fieldwork visits made in August 2015 using semi-structured questionnaires on a sample of 150 coffee farmers of Kilimanjaro, 145 clove farmers of Zanzibar and 112 rice farmers of Kyela-Mbeya. In Kilimanjaro 3 districts i.e. Moshi rural (in the village of Uru, Kilema, Kibosho, Machame and Old Moshi), Hai and Marangu districts were visited. With five wards of Kyela district and five different districts i.e. Wete, Mkoani, Chakechake from Pemba and kaskazini A and of Unguja North Zanzibar having been visited.

Data were collected on a wide range of information on the households' social economic characteristics, producer awareness, producer perceptions, membership in farmers' organizations. More information was collected using in-depth interviews on the geographical characteristics and the different attributes of the product; Taste (flavour), texture, aroma, appearance (e.g. Colour, size), market information on price of product compared with other varieties and farmers perception on product reputation. Data was entered, analysed and transcribed using SPSS and transcriptions for quantitative and qualitative. The attributes (quality), were factors that influenced prices, and the

4. Results and Discussion

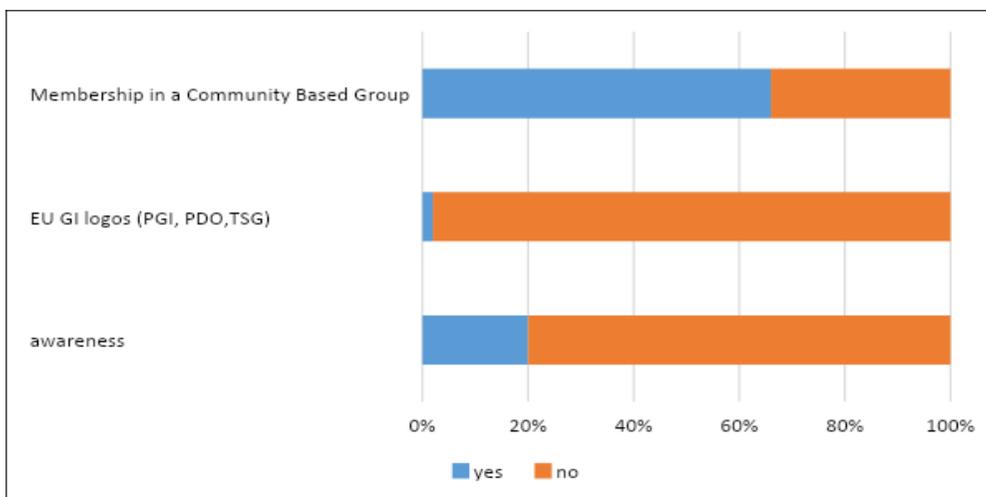
4.1 Kilimanjaro Coffee

4.1.1 Producers' Awareness of Unique Product Attributes

Producers were asked on their knowledge and awareness of GI, only 20% of the people had little knowledge of the concept of GIs or had heard of the term GI while 80% had little, if any/no awareness. When shown the EU logos and asked if they had ever seen the logos used to identify a GI product, only 2% of the interviews said they had seen such logo and the rest 98% had never seen the logo (Figure 2).

This implies that most respondents were not aware of the concept of GI neither the link of the product to the territory, or a region where a given quality, reputation or other characteristics of the product are exclusively or essentially attributable.

However, 80% of the respondents were aware of the unique attributes that coffee in Kilimanjaro as a potential GI product has, and it is traceability from the geographical area.



Source: Own analysis

Figure 2. GI Awareness

4.1.2 Product Unique Characteristics, Producer Perception of Quality and Geographical Link

From a careful discussion on their awareness and membership, the farmers were then asked if they could explain the uniqueness of Kilimanjaro coffee on the quality attributes it had.

The study found out that though most producers were unaware of the concept of GI, they recognised the unique characteristics that made their products unique, according to the FAO, (2012) criteria for a GI product.

First and foremost they were asked if at all, their products had any unique attributes, 82% of the respondents believed that coffee from Kilimanjaro is unique compared to coffee from other regions and only 18 percent were not aware of such product characteristics difference (see Table 1).

Table 1. Product Characteristics

Specific characteristics of the product produced in the region	Yes: 82%
	No: 18%
Respondents that said YES	Percent
High quality reputation	29
Produced in favourable climate and weather condition	11
Higher prices	5
Unique taste and sweet aroma	28
Organic	9
Respondents that said NO	Percent
Products are the same	11
Not aware of the product characteristics	7

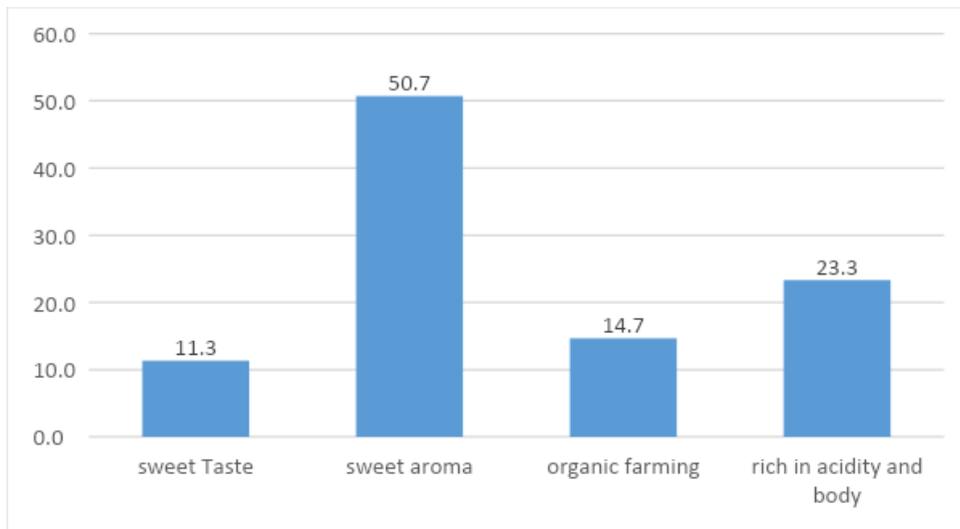
Source: Own analysis

Table 1 presents the results of the respondents explaining their understanding of the specific characteristics of the product. It shown that while 29% agree to the fact that the product is of high reputation, 28% the product has a unique taste and sweet aroma. 11% of the respondents said coffee in Kilimanjaro is produced in conducive and favourable climate. Coffee quality in Tanzania differs from location to location; the northern coffees tend to be pleasant in aroma, rich in acidity and body, sweet taste with balanced flavours due to mineral nutrients from volcanic soils that has most buyer's interest.

Southern coffees are characteristically medium body and fine acidity with good fruity and floral aromatic taste. Coffee beans are handpicked, then traditionally wet-processed, and finally sundried on patios. The refinement of this traditional method is often associated with the excellent cup results throughout the years.

When openly asking the producers what they thought made their product of a particular high quality, the most common answers were found to be the input for production (volcanic soil), production method (from harvesting to roasting of the beans), organic farming and climatic conditions, its unique aroma, and taste.

When producers were asked to rank the different attributes of coffee, according to which was known about Kilimanjaro coffee as the main attributes of coffee, they highly ranked the Aroma followed by its richness in acidity and it's pleasant sweet-bitter taste see figure 3.



Source: Own analysis

Figure 3. Specific Origin Product Attributes

The volcanic soil was perceived the most important source influencing quality, followed by the climatic conditions, most of the producers linked this to the water flowing from Mt. Kilimanjaro.

The majority of the respondents believe that geographical factors, such as climatic conditions, the level of nutrients in the soil, traditional production techniques, local knowledge, 'volcanic soil' rich in minerals and the water flowing from mountain Kilimanjaro significantly affect positively the quality of the coffee grown/produced. Similarly, other crops grown in slopes of Mt. Kilimanjaro are carrying unique attributes.

Such crops include aloe vera, sugar, plantains, beans, maize, rice and potatoes. Majority of the respondent indicated that the soil with minerals rich in Potassium allowed farmers to produce organically without the use of chemical fertilizers. Furthermore, it was also suggesting that the weather condition at the slopes of the mountain Kilimanjaro provided them favourable environment for coffee production.

The quality of Kilimanjaro coffee is mainly sourced from the weather condition of the place, volcanic soil and water from Kilimanjaro Mountain. People think they can grow the same coffee plant in other regions and get the same quality as ours, but the volcanic soil is unique in this case and one of the key geographical factors for Kilimanjaro

The processing methods of coffee also contributes to the quality of the product. Only the fully ripe red cherries were picked, and to avoid mixing the fruit with the green or overripe beans coffee is harvested by handpicking being the best method of harvesting. The bean is then taken through different processing stages before its sold to the buyer, once picked the coffee cherries are spread out in the fresh air on threshing floors to sun –dry for a few days before hulling the beans and the parchment to obtain “natural” green coffees.

Wet processing, when the fruit is pulped freeing the seed in their parchment from the hulls, fermented or “washed, (this operation triggers off a series of chemical reactions that enhance the coffee’s *aromatic and flavour* qualities). The beans are then sun dried, then polished and sorted to weed out defective beans and finally graded for size, form and colour, ready for selection and shipment.

“Production methods vary from one person to another depending on the knowledge one has. Planting on lines with appropriate spacing, planting on a nursery then moving to the farm for transplanting spraying insecticides modern farming methods are different methods one can use. The wet processing and drying of the coffee beans are the key factor that maintain coffee quality after harvesting”

Coffee is put through a continual series of quality control tests. Beyond the detection and elimination of defective beans, the *cupping and Grading (classification)* ultimately serve as basis for the final selection of green coffees that meets the *quality and taste* required specifications “This is Essential to Good Quality”.

4.1.3 Influence of the Geographical Link to The Product Attributes

Based on the different characteristics mentioned by the producers both of the product and the link to area, a test was done for independence between different characteristics/attributes such as aroma, acidity and body, taste, and organic of the coffee product and their dependence with the geographical characteristics of the area.

Table 2. Chi-Square Test, Dependence of Product Attributes and Geographical Characteristics

Variables	Pearson Chi-Square (df)
Climate	0.013 (9) **
Production Method	0.001 (6) ***
Rainfall	0.365(9)
Soil	0.025(9) **
Processing method	0.185(3)
Breed/ variety	0.034(6) **
Organic inputs	0.767(3)
Harvesting method.	0.998(3)

Note: *** 1% and **5% confidence interval

The rationale here is that the different attributes of the product are determined/link to the area where these products are produced like climate, soil, temperature, latitude, rainfall pattern, processing methods and production methods. In other words, the geographical (production area) characteristics are the key determinants of the product attributes. To test this, we apply the chi-square independence test. The null hypothesis is that the product attributes are independent of the geographical characteristics. Table 2 summarizes the key results.

Based on the results (Table 2), we reject the null hypotheses that product attributes are independent of the geographical characteristics. Thus, the results suggest that indeed the product attributes are dependent on the geographical attributes, which provide more evidence of the quality attribute of Kilimanjaro Coffee.

5. Zanzibar Cloves

5.1 Link of Product Attributes and Geographical Characteristics

We test for a link between perceived attributes of the products and the related geographical characteristics, to assess if the attributes are dependent on the geographical characteristics. The rationale here is that GI products must link to the area in which they are produced. We therefore look at attributes mentioned by the producers and link to the named characteristics of the area of production. To do this we apply a chi-square independence test. The null hypothesis is that Zanzibar unique attributes are independent of the geographical characteristics. Results are presented in Table 3.

Table 3. Chi Square Test Between Product Attributes and Geographical Characteristics

Variable	Pearson chi-square	Pr
Product quality	8.6346 (2)	0.013
Specific product attributes	15.5601 (6)	0.016

Source: own compilation

Based on the results above, we reject all the null hypotheses that product attributes are independent of the geographical characteristics. Thus, we proceed with identifying the factors that may influence GI adoption and the marketing of cloves that mean higher returns to the producer.

5.2 Factors that determine the adoption of GI

Factors found to determine producers' attitude towards using GI labelling of Zanzibar cloves as a marketing strategy, were run in a logistic regression model for decisions on labelling to identify the relationship that exists. Table 4 shows the marginal effects where gender is positive and statistically significant at 5%, this would suggest that the probability of the decision for labelling increases if the household is male headed i.e. men are more likely to adopt GI labelling than female.

Occupation appears to influence the decision to adopt such that households who are not into agriculture as main and primary occupation are more likely to adopt the method, this is likely to be case given the long procedure one has to follow before getting his/her products registered as GI².

The increase in willingness to accept GI increases the probability of labelling their products by 0.83. One of the main issues in making GI function well is that people accept GI as a tool that can not only protect their products from imitation but also enable them to earn

more from labelling these products with a GI label³. On the other hand, having knowledge on how the existing institutions work and how one may obtain a GI label increases the probability of deciding to adopt a GI a label.

Table 4. Logistic Estimates Factors Determining the Decision to Adopt A GI Label (Marginal Effects)

Variable	dy/dx	Std. Err.	z	P>z
Age	0.0000	0.0000	-1.0800	0.2790
Gender	0.0507**	0.0259	1.9500	0.0510
Education	-0.0576	0.0507	-1.1400	0.2560
Off-farm employment	0.0120**	0.0076	1.5700	0.1150
On-farm employment	0.0572	0.0286	2.0000	0.0450
Access to Extension services	-0.0017	0.0208	-0.0800	0.9360
Willingness to Accept	0.8314***	0.1247	6.6700	0.0000
Importance of income from Cloves	-0.0534	0.0542	-0.9900	0.3240
Price Perception	-0.0285	0.0194	-1.4700	0.1420
Labour employed	-0.0016	0.0027	-0.6200	0.5350
Mode of Selling	-0.0562	0.0384	-1.4600	0.1430
Management	0.0434	0.0271	1.6000	0.1090
Knowledge on existing institutional (score)	0.0410*	0.0220	1.8600	0.0630

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

Source: own compilation

6. Kyela Rice

6.1 GI Awareness of Product Uniqueness

The study analysed producers' awareness of Geographical indications. The producers perceived their rice to have unique characteristics that are linked to the geographical region of production. 87 percent of the producers acknowledged that Kyela rice is unique compared to rice produced in other regions.

Producers were willing to participate and contribute towards protection of the products for better marketing and were aware of the product's unique attributes but unaware of the way GI would have been a good marketing strategy for their product. Upon explanation and how they would benefit from GI, they showed willingness to protect their product with GI labelling and willing to pay more to have such label.

Marginal effects results are presented in Table 5 for producers' GI awareness. Its dependent variable has a binary outcome; a producer is either aware of GI labelling or not aware.

The results obtained show that experience in rice cultivation, gender, membership to a cooperative, mode of selling, origin characteristics, land size and access to credit are significant in explaining the GI producer awareness.

It was found that, all significant variables were negatively influencing GI awareness. This simply means that men are less likely to be aware of GI methods, neither being a member of a cooperative influences the awareness. As would be expected, experience in the cultivation of rice, has a positive influence on GI awareness. This is consistent with earlier studies Ngokkuen and Grote, (2012), who also found out that, the more time producers spend in the cultivation of rice the more are they likely to know of the different technologies in promoting

and protecting their crop. Producers' are aware of the uniqueness of rice grown in their area which is due to the geographical characteristics.

Being a member of a cooperative or producer association is an important source of information on prices and cost related aspect of registering the GI Product as well as an easy link for one to obtain or access credit. However, it doesn't increase the awareness of the uniqueness of the product but facilitates protection of such uniqueness from acquiring a group or an association label that may be used for marketing by setting prices and investing in protecting the product. This may be since the rice industry in Kyela-Mbeya has very few producer associations where information rarely reaches the producers in time or not at all to influence their decision in making any noticeable changes in the marketing of their produce.

Table 5. Logit Regression for GI Awareness (Marginal Effects)

Variable Definition	Coefficient	Standard Error	Marginal Effect	Standard Error
Age	0.154	0.232	0.014	0.023
Education	-0.365	0.289	-0.034	0.027
Gender	-0.977*	0.579	-0.069*	0.04
Marital status	0.857	0.73	0.128	0.146
Occupation	1.221*	0.688	0.242	0.208
Experience in rice Cultivation	0.030**	0.014	0.003**	0.001
Membership to cooperative	-1.120**	0.576	-0.109*	0.064
Mode of selling	-1.057**	0.442	-0.101**	0.053
Origin characteristic	-1.016*	0.557	-0.069*	0.038
Specific Quality	-0.915**	0.433	-0.098	0.061
Land Size	-0.649**	0.331	-0.061*	0.036
Access to credit	-1.118**	0.551	-0.09**	0.045
Log-Likelihood	-32.124126	$\chi^2(\rho\text{-value})$ 34.50 (0.0010)		
Pseudo-R2 (%)	0.3494	N (respondents) 112		

Notes: Standard errors in parentheses; Significance levels: *** 1%, ** 5%* 10%.

Source: Own compilation

6.2 Perception on GI Certification

Using a multinomial logit (Table 6), the study estimated the perception of producers on GI certification in adding value to their produce. The study found that the producers perceiving GI certification to add more value to their rice product was significantly positively influenced by their farming experience and one being a member of a cooperative. But, also the value may increase with GI, with a negative influence of monitoring costs and distance to the nearest market, this means with less cost and shorter distance to access the market, they believe it will improve more the value of their produce.

Furthermore, the marital status is perceived to be negative implying that GI certification less valuable in addition if the respondent is married. The same may be said for the means the producers use in selling their produce, though income of the producer is found to be statistically significant and positively influencing their perception on GI. Therefore, an increase in the experience and income are associated with positive valuation of the GI as important in adding value to the product. Further, social capital as should have been expected is found to be statistically significant and positive. Suggesting that regular meeting with other members in their cooperative society might be important sources of sharing information on GI to add value to their produces.

Table 6. MNL

Variable	GI on average will add value		GI will add more value		GI will not add value	
	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error
Gender	-0.177	0.14	0.197	0.194	0.041	0.156
Age	0.038	0.069	0.045	0.082	-0.082	0.07
Education	0.097	0.178	-0.345	0.233	0.045	0.085
Marital Status	-0.745***	0.226	0.545*	0.287	0.229	0.218
Occupation	-0.14	0.129	0.206	0.185	-0.051	0.158
Experience	-0.012**	0.006	0.003	0.006	0.008***	0.005
Membership	-0.623***	0.166	0.621***	0.195	0.018	0.153
Mode of selling	0.175	0.13	-0.325**	0.154	0.117	0.134
GI and better marketing	0.689***	0.194	-0.127	0.187	-0.564	0.149
Government support	0.329**	0.132	-0.308**	0.146	-0.012	0.128
Land size	0.01	0.022	0.011	0.02	-0.019**	0.015
Region influence on rice Price	-0.185	0.127	0.055	0.143	0.179*	0.124
Access to credit	0.495**	0.194	-0.323*	0.181	-0.187	0.159
Soil Quality	-0.059	0.126	0.035	0.147	-0.003	0.134
Access to information	0.779***	0.206	-0.208	0.227	-0.612	0.229
GI awareness	0.155	0.172	-0.056	0.204	-0.111	0.175
Change Future	0.047	0.142	0.141	0.166	-0.141	0.144
Management	-0.134	0.157	0.176	0.158	-0.024	0.14

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

Source: own compilation (data 2015)

Being married and being a member of a cooperative is likely to increase the producer's perception of GI labelling adding more value, if the multinomial log-odds for more value relative to average value would be expected to increase by 0.545 and 0.621 respectively. Mode of selling, government support and access to credit is likely to decrease the producers' perception of GI labelling adding more value, if the multinomial log-odds for more value relative to average value would be expected to decrease by 0.325, 0.308 and 0.323 respectively.

The results show that producers' perceptions on GI certification is not strongly associated to experience, land size and regional influence on the price. This emphasises the impact of different entities on producers' perceptions and acceptance of geographical indications to market their produce.

7. Conclusion

The paper's broader objective was to analyse quality traits, factors and conditions with potential to increase value of Agricultural products in Tanzania through GI protection by recognizing territory specific (origin) products stewarded by smallholders.

In marketing of agricultural crops cooperative (crop boards) or farmer's association group are important for marketing and with the government wanting to protect its origin products as GI, since issues like inadequate government support and poor functioning of the institutions, poor managerial skills are areas that would affect the changing policy environment required to enable an environment for a system in Tanzania to bring producer benefit through GI protection.

Marketing coffee with GI showed that coffee farmers are closely affected by the information available in the market, the low prices faced by most of the farmers is due to unequal distribution of income from top-down. Hence the management of the crop, has a positive effect on the coffee sales. With asymmetric information between the farmer and the auctioneer results into facing low prices in the name of high management and shipping costs.

However, Kilimanjaro coffee farmers commonly possess a low educational level, on average 62% of the small-scale farmers have only primary education (highest standard 7) while farmers coffee farmers found in Arusha have a more higher-level education. A key area where policies can improve producer welfare is in the equal distribution of coffee sales or income that could help encourage coffee farmers to produce more.

For the case of Zanzibar, they operate under ZSTC. The study concludes that membership to farmer groups is necessary in the adoption of GI; producers with common interest in a certain geographical area can more easily enjoy the benefits at a lower cost. Also, GI is likely to benefit the rice producers of Kyela if cooperatives are formed and producers are made more aware of the concept, costs, knowledge and the prices they are likely to obtain with GI.

Through awareness building and encouraging producers to form farmer groups they can they cooperate in obtaining a GI certification. With GI certification producers' will have the potential to negotiate a better price and added value of a PGI label may not be realised without investment in a campaign of increasing public awareness and understanding of these products. Therefore, GIs can open market opportunities for producers to access specialised markets where competition can be on aspects other than simply price.

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¹ The essential link between the location in which a food or beverage is produced and its quality or other consumer attributes (Josling 2006).

² See Mcdave, 2012, stated that SME's are able to brand, label and package better which may be a result of the reputation of The GI product.

³ The GI label visualizes the availability of information on quality.