Gender Based Determinants Of Coffee Consumption For Management Of Coffee Production In Kenya

Article · February 2016

CITATIONS
0

READS
373

4 authors, including:

Javan Ngeywo

20 PUBLICATIONS **16** CITATIONS

SEE PROFILE

Omar Egesah

Moi University

40 PUBLICATIONS **514** CITATIONS

SEE PROFILE

IJISET - International Journal of Innovative Science, Engineering & Technology, Vol. 3 Issue 1, January 2016.
www.ijiset.com
ISSN 2348 – 7968

Gender Based Determinants Of Coffee Consumption For Management Of Coffee Production In Kenya.

Javan Ngeywo[1], Omar Egesah[2], Tecla Biwott[1] & Joseph Waliaula[1]

[1]Kisii University, Eldoret Campus, Kenya
[2]Moi university, Kenya

Abstract

Coffee is traded second to oil in the world, as it is the second drunk to water. Over six-million Kenyans derive livelihood in the coffee industry and is the fifth foreign exchange earner. There has been a slump from mid 1980s with production reducing from 130,000 MT to the current 47,000 MT. The rise of coffee drinking has been inevitable since its fast discovery in the early 15th century and is a key competitor of water and traditional drinks. Coffee drinking is embedded in curiosity, commerce, and civil society, it is also luxurious and relaxing with positive impact on reduction of several illnesses as it makes desert pleasant. Coffee intake differ between males and females; young and old, based on the reason of coffee consumption. Coffee business is either production or consumption with pride or disgrace. Coffee production and consumption has increased progressively yet the same is not being felt in Kenya. This study investigated the gender based factors that determine coffee consumption and production and utilized secondary data and information collected, assembled and summarized with peer review by the class team. Domestic consumption in Kenya ranges from 3-7%, which is associated with reduced production. There is a linkage between control of income, ownership of assets and decision-making in the home to the low domestic consumption of coffee hence low energy in production. Women face multiple challenges in the participation in the coffee business, which has influenced them to participate less in the consumption choices and subsequent motivation to increased production. Men need to support women to become landowners and encourage them to attend sensitization meetings through women groups or women only activities that offer confidence to take on leadership roles that will lead to decision on coffee drinking as part of the family menu.

***Key words**: Coffee, Coffee Intake, Production, Marketing, Gender*

Introduction

The value of Coffee is rated second in terms of it's trading in the world compared to oil (Ponte 2002). Over six- million Kenyans derive livelihood directly and indirectly in the coffee industry most of them being small scale farmers and is placed among top five agricultural exports (Coffee Directorate, 2015; Githae et al., 2011). The commodity is fourth foreign exchange earner representing a large share of national income and employment (Ponte, 2002). There has been a slump in the coffee sector from mid 1980s to date yet it contributes to 20% of hard currency (Mude, 2006; EPZA 2005; Gitu, 2004; Karanja & Nyoro 2002). Coffee drinking began with controversy but later became a competitor of water and traditional drinks such as beer, wine, and juice and its rise has become inevitable. The Social Life of Coffee is viewed in terms of consumer revolution. (Anderson et al., 2006; Cowan

1969; Giovannucci, 1998; Laberge, 2013; Cornelis et al., 2006). Coffee drinking is embedded in curiosity, commerce, and civil society, which began with virtuosity and quickly became an integral part of urban living basically for relaxation, stress reduction and disease risk reduction (Inoue 2005; Cowan 1969; Laberge 2013; Giovannucci et al 1998; Tverdal et al 2003; Yamaji et al 2004; Ruhl & Everhart, 2005; Inoue et al 2005; Andersen et al 2006; Iso et al 2006).

Preference of drinking coffee differs between male and female based on the reason of coffee consumption. Female have higher interest in the nutrients than male while Young male drink coffee than fellow young female; Furthermore female dislike the taste of coffee than male. Young people associate coffee with caffeine with little awareness of positive and negative effects on health. (Mirmiran *et al*. 2010; Du *et al*. 2010; Drewnoski, 2009; Rodenburg et al 2012; Pasquale et al., 2012; Demura et, al., 2013; Maruyama et al., 2010). Coffee is not only about agriculture, but it also has social dimensions of coffee drinking as part of everyday life culturally, economically, and addictive dimensions. Coffee production and consumption have increased progressively and is associated with economic growth (Izumi & Takaya 2008; Mayoux 2011; Mayoux & Mackie 2007; ICA, 2012; ICO, 2015).

Many studies have examined the effects of coffee consumption. More so factors of coffee production have also been sufficiently investigated but low level investigation of what coffee consumption in relation to gender has to the management of sustainability of its production, in which case this study has tried to do.

Objective of the study

The objective of the study was to investigate the gender based factors that determine coffee consumption and establish gender based factors that determine coffee management and production

Methodology

Research utilized secondary data and information collected from journals, records, books and Internet sites upon which relevant information was assembled and summarized based on the objective of the study. The written summary was then peer reviewed and corrected by the team of four i.e the lecturer and the classmates to correct and shape it to a research acceptable in a conventional standard in a series of presentations with the peers.

Findings

Consumer Drinking Habits

Coffee can be drunk in regular or decaffeinated, and either roast and ground or soluble. Population change, taste blandness, and issues on quality affect per capita consumption, which has led to introduction of new coffee products to fill the gap. The new Products include gourmet coffee and many other flavours that are meant to fill the developed gap (Lewin, Giovannucci & Varangis, 2004).

Out-of-home sale points have been introduced to make it convenience for buyers and drinkers to easily access the drink without strain thus leading to an increased consumption. Furthermore, Technology has led to easy preparation methods and less expensive brands too. This has raised demand, increased markets, and increased availability of coffee with high shelf life. Social, economic and environmental sensitization coupled with food safety concerns has increased coffee consumption among younger and middle-aged consumers. There is flexibility in consumption of coffee at age below 35; thereafter it may be difficult to introduce coffee drinking (Lewin et al., 2004).

Consumption and production of Coffee

Countries that Produce coffee, consume an average of 25 of total demand. Brazil consumes 50 percent, Indonesia 8 percent, Colombia 5 percent, Ethiopia 5 percent, Mexico 5 percent, and India 3.5 percent. Brazil leads in promotion of the domestic consumption, which every country is trying to increase for production sustainability. Growth rate of consumption for most producing countries has increased than that of consuming countries (Lewin et al., 2004).

Kenya has had low domestic consumption ranging from 3-7% for the last half a century. This has also been complexed with reduced production from late 80’s when the peak production was 130, 000 MT of clean coffee to the current average production of 47,000 MT. Ethiopia produces more coffee than Kenya but also consumes about 50% of its coffee, resulting to a per capita consumption of 2.4 kg per person per year, while in Kenya consumes it is 70g per person per year. Despite several initiatives by the Coffee Directorate and the government, the coffee drinking culture is yet to penetrate into the culture of the average Kenyan consumer.

Tied to the low consumption is the fact that Kenya, like many African countries, exports the bulk of its production in products with low extra value added, leading to reduction in incomes

that accrue to the local economy. Coffee is one of the world's most consumed beverage to water. More so, it is the world's largest traded commodity, after oil. Yet the world talks of petro-dollars, but never coffee bucks or coffee-dollars. Coffee is much more expensive than petroleum with its impact not felt in Kenya. An average of 1.6 billion cups of coffee are consumed per day. It is estimated that more than 80 per cent of the people over age 18 have consumed coffee in their lifetime.

There is a linkage between control of income, ownership of assets and decision-making in the home (Campbell et al., 2003). Men are primary land owners and in most cases have the final say regarding agricultural decisions in terms of use of land, choice of crop, how to dispose off products and how to use the income (Doss & SOFA Team, 2007; UNDP, 1995; Mayoux & Mackie, 2007; WEMAN, 2013). Women face multiple barriers to owning land. Some women face cultural prejudice and opposition from their husbands, this prevents them from attending meetings where discussion on coffee brewing can be taught (Jennings 2000). They may also be too burdened with work at home and on the farm, or be inhibited by a lack of confidence or low literacy levels (Mayoux, 2011; Wiig, 2012; Quisumbing, Payongayong & Otsuka, 2004).

Gender is a critical factor that influences participation of male and female farmers in agricultural production. Food production activities are carried out more by female farmers while males are attracted to cash crops. Moreover women are involved in the weeding and other manual agricultural practices of cash crops (Oyugi et al., 2015; Van Heck, 2003)

Many coffee farmers are elderly, conservative and do not easily adjust to new technologies. They have a lot of attachment to their farms and are not easily willing to late go the ownership of coffee business and the coffee farms (Ngeywo et al, 2015)

Coffee Production Trend in Kenya

There has been sustained production average of between 40000 MT and 55000 MT for the last seven years compared to the peak of 130,000MT clean coffee in 1989. There is on the other hand a decline in the area under coffee production, which is closely associated with the reduced production as shown in Table 1 below.

Table 1: Area under coffee and production for the last 7 years

	2008	2009	2010	2011	2012	2013	2014
Area in Ha ('000^s)	162.72	160	160	160	109.795	109.8	110
Production (MT Clean Coffee in '000^s)	42	54.02	42	36.26	49	39.8	49.5

Source: AFFA Coffee Directorate (2015)

Table 2, show the leading consumer among the coffee exporting countries being Brazil with average consumption of 1.02 million MT of coffee with 95% of it being consumed at home. In Africa, Ethiopia leads in consumption with average consumed coffee being 0.17 million MT out of which 95% is consumed at home. Among the importing countries, European union leads with average of 2.05 Million MT out of which Germany leads within it with 0.45 Million MT. Germany consumes 88% of her coffee at home. USA leads as a country and is second in conglomeration of countries to European Union with a consumption volume of 1.12 million MT with 82% of it being consumed at home.

Table 2: World Coffee Consumption

Country	Total consumption ('000 kg)	At home consumption (%)	Total Consumption value ('000 USD)
Exporting Countries	2,191,596		25487353
Brazil	1,017,353	95	10,107,199
Colombia	72,575	95	1,003,389
Ethiopia	170,786	95	2,228,754
India	96,655	95	1,261,354
Indonesia	180,681	95	2,357,883
Mexico	118,689	95	1,548,892
Philippines	109,664	95	1,431,113
Venezuela	83,193	95	1,085,672
Vietnam	79,815	95	1,041,587
Others	262,185	95	3,421,509
Importing countries	**4,968,073**		**147,896,511**
E. U	2,049,180		70,192,237
Austria	63,984	88	1,967,696
Belgium	46,116	82	1,514,450
Bulgaria	18,955	95	222,024
Cyprus	4,306	95	68,019
Czech Republic	34,549	95	6,714,87
Denmark	40,457	78	1,524,474
Estonia	5,243	95	68,417
Finland	54,556	88	1,299,829
France	291,941	81	8,778,397
Germany	445,197	85	12,151,732
Greece	54,257	69	1,872,593

Country	Total consumption ('000 kg)	At home consumption (%)	Total Consumption value ('000 USD)
Hungary	12,718	95	218,911
Ireland	10,855	95	157,943
Italy	288,970	77	12,258,147
Latvia	5,102	95	109,298
Lithuania	9,307	95	180,025
Luxembourg	10,664	95	240,137
Malta	1,059	95	13,816
Netherlands	69,704	79	2,497,048
Poland	97,620	93	1,455,577
Portugal	42,156	47	2,933,139
Romania	42,818	95	558,775
Slovakia	10,138	95	188,086
Slovenia	9,327	95	129,431
Spain	173,205	57	9,976,793
Sweden	58,454	80	1,941,259
United kingdom	147,523	71	7,194,732
Japan	359,544	63	19,792,503
Norway	36,472	76	1,402,159
Switzerland	52,794	82	1,759,838
Tunisia	21,234	95	277,101
Turkey	34,234	65	1,432,309
USA	1,120,924	82	36,157,697
Others	1,293,691	95	16,882,667

Source: ICO

Discussion

Though the value of Coffee is rated second in terms of it's trading in the world compared to oil (Ponte 2002) it is not really felt by the farmers despite its importance in the livelihood of many rural folk. Even with low quantity of coffee produced, the same is not consumed to a substantive amount rendering high consumption level to importing countries as the USA and the European Union. There has been a sustained low production since mid 1980s to date, which has led to different strategies of improving its prowess in vain.

Coffee drinking provides experience of different dimensions which include social, economic and habitual which all build a defined culture that is not easy to eradicate. It is seen as a class to drink coffee as it is of high class to carry coffee farming, a culture that was introduced and perpetuated by the Colonial era. The making of the women and children to be the ones carrying out the farm work makes it look a punishment venture especially when the final income is not equally enjoyed by the husband who only participate actively at an advance stages of the value chain. Most of the women and poor youth have no access to information on how to prepare coffee as well as on the benefits of coffee drinking, majority of which are in the rural areas where coffee farming occurs. This scenario has denied majority of the

Kenyan populace a privilege of drinking coffee and actively guarding the production that could see improved income and pride.

Increase in drinking coffee need to be a concern to everyone and need to be improved through trans gender participation because there is difference between male and female based preference of consumption depending on the reason of coffee consumption and taste as Mirmiran *et al*. 2010; Du *et al*. 2010; Drewnoski, 2009; Rodenburg et al 2012 indicated in there research. As was done in the USA the inculcation of coffee drinking in every home is key in increasing coffee production and triggering its increase in production. The attitude of farming should be worked on to include a high rate of pride in Coffee production as is in Columbia as indicated by Izumi & Takaya 2008.

Farmers need to be encouraged to practice diversified farming that will encourage increased income at different stages, that essentially cushion the dry spell of income. This encourages sustained income throughout the year and gives the farmer or participant high edge in the economic status that he may not devalue coffee farming nor avoid drinking it due to cost.

Conclusion

Gender involvement and participation is critical in increasing consumption and further increase in coffee production. Despite importance of gender sensitivity in consumption and production, there have been several barriers to female and youth being involved and whenever they are involved; it is always in the manual productive stages of the value chain and not the economic and social stages.

Barriers of land ownership can be overcome if men are willing to gift some at least as a temporary measure, and by supporting women to become land owners through credit schemes. Sensitization meetings need to be put at times and locations suited to women's needs, and offering practical support with transport. Women need to be encouraged to participate in women's groups or women only activities to offer confidence to take on leadership roles that will lead to decision on coffee drinking as part of the family menu. Activities and programs meant to sensitize youth and women on coffee preparation, consumption and its benefits is a trigger to coffee consumption and production. Farm workers need to be encouraged and be informed of the benefits of the crops so that they don't see the agricultural practices as a punishment. Female gender needs to participate actively in the coffee value chain in entirety to enhance coffee production and consumption

REFERENCES

Andersen, LF, Jacobs Jr.,DR, Carlsen MH & Blomhoff, R (2006) Consumption of Coffee Is Associated with Reduced Risk of Death Attributed to Inflammatory and Cardiovascular Diseases in the Iowa Women's Health Study: *American Journal of Clinical Nutrition*; 83 (5): 1039-1046.

Campbell, L., Vainio-Mattila, A. (2003). Participatory development and community- based conservation: opportunities missed for lessons learned? Human Ecology 31:417-436.

Coffee Directorate. (2015). History of Coffee. http://www.coffeeboardkenya.co.ke/ Retrieved on October, 5th ,2015

Cornelis MC, El-Sohemy A, Kabagambe EK & Campos H, (2006). Coffee, CYP1A2 Genotype, and Risk of Myocardial Infarction: *The Journal of the American Medical Association*; 295 (10); 1135-1141. doi:10.1001/jama.295.10.1135

Cowan, Brian William, 1969– The social life of coffee: the emergence of the British coffeehouse Development Policy Review 19, 437-448.

Demura Shinichi, Aoki Hiroki, Mizusawa Toshihide, Soukura Kei, Masahiro Noda, Toshiro Sato (2013), Gender Differences in Coffee Consumption and Its Effects in Young People: *Food and Nutrition Sciences*, 4, 748-757

Doss, C. and SOFA Team (2007), The Role of Women in Agriculture. FAO. Available at: www.fao.org/docrep/013/am307e/am307e00.pdf

Drewnowski A, Henderson SA, Levine A & Hann C, (2009). "Taste and Food Preferences as Predictors of Dietary Practices in Young Women," *Public Health Nutrition*; 2 (4); 513-519.

Du W, Fu J, Su C, Zhang Q, Zhai F & Zhang B (2010). "Surveys on the Nutrition Literacy of 802 Adults in Jiangxi Province: *Wei Sheng Yan Jiu*; 39 (6)

Export Processing Zones Authority. (2005). Coffee and Tea Industry in Kenya 2005 Export Processing Zones Authority Administration Building Athi River EPZ, Viwanda Road, Nairobi.

Giovannucci E (1998). Meta-Analysis of Coffee Consumption and Risk of Colorectal Cancer: *American Journal of Epidemiology*; 147 (11):1043-1052. doi:10.1093/oxfordjournals.aje.a009398

Githae, E., Gachene, C,. Odee, D.(2011). Implication for in situ Conservation of Indigenous Species with Special Refrence to Wild Coffea arabica L. Population in Mount Marsabit Forest Kenya. Department of Land Resource Management and Agricultural Technology, University of Nairobi, P. O. Box 29053-00625, Nairobi, Kenya,

Research Programme, Kenya Forestry Research Institute (KEFRI), P. O. Box 20412-00200, Nairobi, Kenya,

Gitu, K. (2004). Agricultural Development and Food Security in Kenya: Building a Case for More Support. 2004. Available: www.fao.org/tc/TCA/work05/Kenya.pdf . Retrieved on 5/10/2015.

ICO (2015), Coffee in China: International Coffee Council 115th Session 28 September October 2015 Milan, Italy.

Inoue M, Yoshimi, I, Sobue, T, Tsugane S & J.P.H.C. Study Group (2005). Influence of Coffee Drinking on Subsequent Risk of Hepatocellular of Coffee Drinking on Subsequent Risk of Hepatocellular Carcinoma: A Prospective Study in Japan: *Journal of the National Cancer Institute*; 97 (4); 293-300.

International Cooperative Alliance. (2012). http://www.ica.coop/coop/principles.html Retrieved on 5/10/2015

Iso, H, Date, C, Wakai, K, Fukui, M, Tamakoshi A & J.A.C.C. Study Group (2006). The Relationship between Green Tea and Total Caffeine Intake and Risk for Self-Reported Type 2 Diabetes among Japanese Adults: *Annals of Internal Medicine*; 144 (8); 554-562.

Izumi M & Takaya M (2008).” Influence of Various of Extraction Conditions and Amount of Chlorogenic Acid on the Taste of Coffee,” *Journal of Cookery Science of Japan*; 41 (4); 257-261.

Jennings, R. (2000) Participatory Development as New Paradigm: The Transition of Development Professionalism “Community Based Reintegration and Rehabilitation in Post-Conflict Settings” Conference Washington, DC

Karanja, A., Nyoro, K. (2002). Coffee prices and regulation and their impact on livelihoods of rural community in Kenya. Tegemeo Institute of Agricultural Policy and Development, Egerton University.

Laberge, Yves (2013), Review: Coffee Culture: Local Experiences, Global Connections by Catherine M. Tucker: Electronic Green Journal, 1(36) retrived form http://escholarship.org/uc/item/8ms0z8t2 on 5/10/15

Maruyama S, Koda T & Takahashi T (2010). Gender Differences among Junior High School Students Regarding Taste Preference of Dried Bonito Soup Stocks: *Japanese Journal of Adolescentology*; 28 (1); 170-176.

Mayoux, L. (2011), Facilitation for Leadership, Empowerment and Sustainability. Available at: www.wemanresources.info/documents/Page2_

GALS/Guidelines%20for%20GALS%20facilitation%20%20%20%20%20%20Linda%20mayoux%202011.pdf

Mayoux, L. and Mackie, G. (2007), Making the Mainstreaming Value Chain Analysis in Development. Geneva: International Labour Organization. Available at: www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/documents/instructionalmaterial/wcms_106538.pdf

Mirmiran P, Mohammadi-Nasrabadi F, Omidvar N, Hosseini-Esfahani F, Hamayeli-Mehrabani H, Mehrabi Y & Azizi F, (2010). Nutritional Knowledge, Attitude and Practice of Tehranian Adults and Their Relation to Serum Lipid and Lipoproteins: Tehran Lipid and Glucose Study: *Annals of Nutrition & Metabolism*; 56 (3); 233-240.

Mude, G. (2006). Institutional Incompatibility and Deregulation: Explaining the Dismal Performance of Kenya's Coffee Cooperatives. *Agricultural Finance Review*, 66 (2) :267-281.

Ngeywo, JC, Shitandi AA, Basweti EA, Makone SM & Nyangena DN (2015). Family Attachment to Coffee Farms, a Case of Coffee Farming in Kisii County, Kenya: International Journal of Recent Research in Interdisciplinary Sciences (IJRRIS); 2 (1): (1-9)

Oyugi M, Nandi, OMJ, Amudavi D & Palapala V,(2015). Influence of Gender on Farmers' level of Involvement in Bambara Production Activities in Western Kenya: Asi*an Journal of Agricultural Extension, Economics & Sociology 4(3); 231- 248*

Pasquale LR, Wiggs JL, Willett WC & Kang, JH (2012). The Relationship between Caffeine and Coffee Consumption and Exfoliation Glaucoma or Glaucoma Suspect: A Prospective Study in Two Cohorts: *Investigative Ophthalmology & Visual Science*; 53 (10); 6427-6433.

Ponte, S. (2002) 'Brewing a Bitter Cup? Deregulation, Quality and the Re-organization of Coffee Marketing in East Africa,' *Journal of Agrarian Change*, 2 (2): 248-272.

Quisumbing, A. Payongayong, E. and Otsuka, K. (2004), Are Wealth Transfers Biased Against Girls? Gender Differences in Land Inheritance and Schooling Investment in Ghana's Western Region, Washington DC, International Food

Rodenburg EM, Eijgelsheim M, Geleijnse JM, Amin N, van Duijn CM, Hofman A, Uitterlinden AG, Stricker BH & Visser LE, (2012). CYP1A2 and Coffee Intake and the Modifying Effect of Sex, Age, and Smoking," *American Journal of Clinical Nutrition*; 96 (1); 182-187.

Ruhl C.E & Everhart J.E (2005). Coffee and Tea Consumption Are Associated with a Lower Incidence of Chronic Liver Disease in the United States: *Gastroenterology*; 129 (6); 1928-1936.

Tverdal A & Skurtveit S (2003). Coffee Intake and Mortality from Liver Cirrhosis," *Annals of Epidemiology*; 13 (6); 419-423. doi:10.1016/S1047-2797(02)00462-3

UNDP (1995), Human Development Report. Available at: http://hdr.undp.org/en/reports/global/hdr1995/

Van Heck, B. (2003). Participatory Development: Guidelines on Beneficiary Participation in Agricultural and Rural Development. Rome, Italy. Rural Institutions and Participation Service, Rural Development Division Food and Agriculture Organization of the United Nations, .

WEMAN Global Resources (2013), Gender Action Learning. Available at: www.wemanresources. info/2_GenderActionLearning/2_0_ GenderActionLearning.html

Wiig, H. (2012), Do land titles induce Peruvian women to take part in decision-making? Available at: http://perulandgender.nibrinternational.no/

Yamaji T, Mizoue T, Tabata S, Ogawa S, Yamagu- chi K, Shimizu E, Mineshita M & Kono S (2004). Coffee Consumption and Glucose Tolerance Status in Middle- Aged Japanese Men: *Diabetologia*; 47 (12);2145-2151.

Yamato T, Aomine M, Koga T & Ohta H (2005). Relationship between Coffee Drinking and Reduction of Mental Stress in Young Women," *Food Science and Technology Research*; 11 (4); 395-399.

Yamato T, Kino M, Obata T, Ohta H & Aomine M (2002). Modulatory Effect of Coffee on Restrained Stress-Induced Release of Neurotransmitters in Rat: *Journal of Japanese Society of Nutrition and Food Science*; 55 (2):85-91.

Yamazawa, K, Hirokawa K & Shimizu, H (2007). Sex Differences in Preferences for Coffee Sweetness among Japanese Students: *Perceptual and Motor Skills*; 105 (2); 403-404.

Lewin Bryan, Giovannucci Daniele & Varangis Panos (2004). Coffee Markets: New Paradigms in Global Supply and Demand: Agriculture and Rural Development world bank Discussion Paper 3 pp 39- 55