

BUSITEMA UNIVERSITY

FACULTY OF AGRICULTURE AND ANIMAL SCIENCES.

THE DETERMINANTS OF MARKET OUTLET CHOICE OF SMALLHOLDER VANILLA FARMERS IN KAWOLO SUB COUNTY BUIKWE DISTRICT.

BY NAJJENGO GODINAH

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SUPERVISOR: Miss. IRENE LYNETTE AKIDI.

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LIST OF ACRONYMS.

BAB: Bachelor of Agribusiness

FAO: Food and Agriculture Organization

SPSS: Statistical Package for Social Scientists

Mr.: Mister

Kg: Kilograms

Km: Kilometers

MPM: Multivariate probit Model.

FAO: Food and Agriculture Organization

ADB: African development bank

SHF: small holder farmer.

ABSTRACT.

The study aimed to investigate the various market outlets used by smallholder vanilla farmers, their profitability, and factors influencing market channel choice. The sample size was picked using simple random sampling. 100 respondents were selected, and the population of the farmers revealed the average age of farmers was 47 years. The study revealed most cultivate on an average of 1 acre with low formal education however most of these farmers had experience in vanilla production with a mean of 11.8 years. There were two primary market outlets got from the field which were middlemen and cooperative. In terms of price, middlemen offered an average of 13,000shs while cooperatives offered an average of 27,700shs per kilogram of vanilla. Results from a multivariate probit showed that 5 out of 10 variables were significant, including farmers' experience, education, proximity to market, price sold, plus family size. Results for profitability by channels show that cooperatives were more profitable with a 76% gross margin while middlemen as a channel resulted into 63%.

Recommendations were drawn from the study advising farmers to keep away from selling to middlemen since they take advantage of them. Farmers are also advised to join cooperatives since they provide significantly better profitability and other financial benefits like seminars, workshops and extension support.

CHAPTER ONE.

1.1 Background

Agriculture serves as the main source of food and income for the world and provides up to 60% of all jobs on the continent (Viana, 2022). Most people are still employed in the agricultural sector, with a lot of contribution arising from the crop-based enterprises. According to MAAIF and MFPED indicates growing of Vanilla among others cash crops in the central region has given much emphasis for agricultural commercialization and livelihood transformation of the small holder's farmers who engage in the growing of the crops especially in the central region of the country, (UBOS, 2021). However, additional to that Vanilla growing in Uganda mainly depends on rich ecological resources, high market demand, its profitability and increasing drivers of change to the small holder farmers and finally globalization and market opportunities, (Alconero, 1973). In Uganda small holder farmers dealing in the farming and marketing of Vanilla which is a high value cash crop has honestly contributed significantly to their well belling and livelihood, (UBOS, 2021). However, small farm households' market participation is limited by factors such as high transaction costs, limited access to resources (Dijkstra, 2001). Furthermore, production and marketing of vanilla cash crops are faced with marketing difficulties like limited bargaining power due to lack of other market channels, many middle men, unpredicted market forces, low price for the yields especially during the harvest along with poor infrastructure, inadquate handling and storage facilities and lack of market knowledge, (Dijkstra, 2001). Hence in this regard small holder farmers of vanilla are always in risks of inadequate market information and lack the understanding of a well - functioning market determinants and choices, therefore this research sought to assess what determines the type of market outlet by vanilla small holder farmers in Buikwe district, Central Uganda.

1.2 Problem statement

In Uganda small holder farmers dealing in the farming and marketing of Vanilla which is a high value cash crop has contributed significantly to their well belling and livelihood, (UBOS, 2021), this is because government of Uganda also wants to grow and enhance peoples ways of living using agriculture monetizing hubs with an aim of monetising of smallholders' produce and offering a chance for value addition to cash crops (Turyasingura et al., 2023). However according to studies

REFERENCES.

- Abera Negeri, M. (2017). Determinants of Market Outlet Choice of Coffee Producing Farmers in Lalo Assabi District, West Wollege Zone, Ethiopia: An Econometric Approach. *Journal of Economics and Development*. https://doi.org/10.33301/2017.19.02.03
- Akpan, S. B., & Ebong, V. O. (2021). Agricultural land use and population growth in Nigeria. The need for synergy for a sustainable agricultural production. *Journal of Agribusiness and Rural Development*. https://doi.org/10.17306/j.jard.2021.01424
- Akumu, J., Odongo, W., & Mugonola, B. (2020). Determinants of contract farming for smallholder sunflower producers in northern Uganda. *African Crop Science Journal*. https://doi.org/10.4314/acsj.v28i4.8
- Alconero, R., Stone, E. G., & Cairns, J. R. (1973). Intensive Cultivation of Vanilla in Uganda 1. *Agronomy Journal*. https://doi.org/10.2134/agronj1973.00021962006500010013x
- Andriamparany, J. N., Hänke, H., & Schlecht, E. (2021). Food security and food quality among vanilla farmers in Madagascar: the role of contract farming and livestock keeping. *Food Security*. https://doi.org/10.1007/s12571-021-01153-z
- Borbolla-Pérez, V., Iglesias-Andreu, L. G., Luna-Rodríguez, M., & Octavio-Aguilar, P. (2017). Perceptions regarding the challenges and constraints faced by smallholder farmers of vanilla in Mexico. *Environment, Development and Sustainability*. https://doi.org/10.1007/s10668-016-9863-y
- DAFM, Gabre-Madhin, E. Z., Vette, H. De, MAAIF, Salami, A., Kamara, A. B., Brixiova, Z., Evers, B., Amoding, F., Nations, U., Achterbosch, T., Allbritton, A., Quang, D. V., Eaton, D., De, A., Investment, C., & Programme, F. (2014). Agriculture Sector Development Strategy and Investment Plan: 2010/11-2014/15. *Working Paper No.105 African Development Bank*.
- Dijkstra, T. (2001). Export diversification in Uganda:\rdevelopments in non-traditional\ragricultural exports. In *ASC Working Paper 47/2001*.
- Ermias, D. (2021). Econometric analysis of factors affecting market outlet choice of mango fruit producers in Hadero Tunto Zuriya District, Southern Ethiopia. *Cogent Food and Agriculture*. https://doi.org/10.1080/23311932.2021.1891660
- Fermont, A., & Benson, T. (2011). Estimating yield of food crops grown by smallholder farmers: A Review in the Uganda Context. *IFPRI Discussion Paper 01097*.
- Gassner, A., Harris, D., Mausch, K., Terheggen, A., Lopes, C., Finlayson, R. F., & Dobie, P. (2019). Poverty eradication and food security through agriculture in Africa: Rethinking objectives and entry points. *Outlook on Agriculture*. https://doi.org/10.1177/0030727019888513
- Grisoni, M., & Nany, F. (2021). The beautiful hills: half a century of vanilla (Vanilla planifolia Jacks. ex Andrews) breeding in Madagascar. In *Genetic Resources and Crop Evolution*. https://doi.org/10.1007/s10722-021-01119-2
- Hailu, C., & Fana, C. (2017a). A Multinomial Logit Analysis of Market Outlet Choice for Major

- Vegetables Crop: Evidence from Smallholder Farmers' of Ambo. In *Journal of Economics* and Sustainable Development.
- Hailu, C., & Fana, C. (2017b). Determinants of Market outlet Choice for Major Vegetables Crop: Evidence from Smallholder Farmers' of Ambo and Toke-Kutaye Districts, West Shewa, Ethiopia. *International Journal of Agricultural Marketing*.
- Honja, T., Geta, E., & Mitiku, A. (2017). Determinants of Market Outlet Choice of the Smallholder Mango Producers: The Case of Boloso Bombe Woreda, Wolaita Zone, Southern Ethiopia: A Multivariate Probit Approach. *Type: Double Blind Peer Reviewed International Research Journal Publisher: Global Journals Inc*, 17(2), 23–30.
- Kaur, J., Prusty, A. K., Ravisankar, N., Panwar, A. S., Shamim, M., Walia, S. S., Chatterjee, S., Pasha, M. L., Babu, S., Jat, M. L., López-Ridaura, S., Groot, J. C. J., Toorop, R. A., Barba-Escoto, L., Noopur, K., & Kashyap, P. (2021). Farm typology for planning targeted farming systems interventions for smallholders in Indo-Gangetic Plains of India. *Scientific Reports*. https://doi.org/10.1038/s41598-021-00372-w
- Ketema, S., & Lika, T. (2023). Determinants of market outlet choice by smallholder wheat producers in Arsi Zone of Oromia National Regional State, Ethiopia. *Cogent Food and Agriculture*. https://doi.org/10.1080/23311932.2022.2163578
- Legesse, T., Ashebir, A., Ganewo, Z., Alemu, A., & Samuel, A. (2024). Determinants of market outlet choices by smallholder mango farmers in Aleta Chuko District, Sidama Region, Ethiopia: a multivariate probit approach. *Journal of Innovation and Entrepreneurship*. https://doi.org/10.1186/s13731-024-00375-7
- Mossie, H., Berhanie, Z., & Alemayehu, G. (2020). Factor affecting outlet choice of onion producers Northwest Ethiopia in multivariate probit approach. *Cogent Food and Agriculture*. https://doi.org/10.1080/23311932.2020.1722351
- Mubiru, D. N., Radeny, M., Kyazze, F. B., Zziwa, A., Lwasa, J., Kinyangi, J., & Mungai, C. (2018). Climate trends, risks and coping strategies in smallholder farming systems in Uganda. *Climate Risk Management*. https://doi.org/10.1016/j.crm.2018.08.004
- Mwesigwa, D., Oguta, J., & Acanga, A. (2023). Agricultural policy frameworks and the agricultural sector in Uganda: Analysis of the plan for modernisation of agriculture. *International Journal of Pure Agricultural Advances*. https://doi.org/10.55284/ijpaa.v7i1.893
- Nabuuma, D., Ekesa, B., Faber, M., & Mbhenyane, X. (2021). Food security and food sources linked to dietary diversity in rural smallholder farming households in central Uganda. *AIMS Agriculture and Food*. https://doi.org/10.3934/AGRFOOD.2021038
- Piemontese, L., Kamugisha, R. N., Barron, J., Tukahirwa, J. M. B., Harari, N., & Jaramillo, F. (2022). Investing in sustainable intensification for smallholders: Quantifying large-scale costs and benefits in Uganda. *Environmental Research Letters*. https://doi.org/10.1088/1748-9326/ac5ae0
- Qaim, M. (2010). The food system transformation in developing countries: opportunities and challenges for smallholder farmers in Thailand. *Uni Göttingen*.

- Robert, T., & Mesharch, K. (2018). Public Sector Provision of Free Agricultural Inputs in Uganda: The Rationale and Challenges of Operation Wealth Creation Programme. *Journal of Public Administration and Governance*. https://doi.org/10.5296/jpag.v8i2.13196
- Sabo, Isah, S. D., Chamo, A. M., & Rabiu, M. A. (2017). Role of Smallholder Farmers in Nigeria's Food Security. *Scholarly Journal of Agricultural Science*.
- Salami, A., Kamara, A. B., & Brixiova, Z. (2010). Smallholder Agriculture in East Africa: Trends, Constraints and Opportunities. *Working Paper No.105 African Development Bank*. https://doi.org/10.1111/j.1467-937X.2007.00447.x
- Sebaggala, R., Kawuki, J., & Nantogo, M. (2019). Access to financial credit facilities by farming households in Uganda. *Business and Economic Management Review*.
- Shriver, J. (2020). Revitalizing Vanilla in Uganda a Case Study Analysis of CRS Vanilla Value Chain Programming in Uganda, 2015-2020. *Catholic Relief Services*.
- Staal, S. J., Baltenweck, I., Njoroge, L., Patil, B. R., Ibrahim, M. N. M., & Kariuki, E. (2006). Smallholder dairy farmer access to alternative milk market channels in Gujarat. *The 26th Conference of the International Association of Agricultural Economists*.
- Tamale, I., & Namuwoza, C. (2004). Addressing the challenge of providing technological options that respond to demands and market opportunities for vanilla in Uganda: The experience of Taimex (U) Ltd. 766–770.
- Tennhardt, L. M., Lambin, E. F., Curran, M., & Schader, C. (2023). Implementation of sustainable farming practices by cocoa farmers in Ecuador and Uganda: the influence of value chain factors. *Frontiers in Sustainable Food Systems*. https://doi.org/10.3389/fsufs.2023.1167683
- Tindiwensi, C. K., Abaho, E., Munene, J. C., Muhwezi, M., & Nkote, I. N. (2021). Entrepreneurial bricolage in smallholder commercial farming: a family business perspective. *Journal of Family Business Management*. https://doi.org/10.1108/JFBM-04-2020-0036
- Turyasingura, J. B., Agaba, M., & Kabagambe, J. D. (2023). The effect of participatory project design on project success in government funded project in Uganda: A case study of parish development in Kabale District. *African Journal of Business Management*. https://doi.org/10.5897/ajbm2022.9427
- UBOS-Abstract. (2021). Uganda bureau of statistics 2021 statistical abstract. *Uganda Bureau of Statistics*.
- UBOS. (2022). Uganda Bureau of Statistics: Key Economic Indicators. Ubos.
- Viana, C. M., Freire, D., Abrantes, P., Rocha, J., & Pereira, P. (2022). Agricultural land systems importance for supporting food security and sustainable development goals: A systematic review. In *Science of the Total Environment*. https://doi.org/10.1016/j.scitotenv.2021.150718
- Watteyn, C., Reubens, B., Bolaños, J. B. A., Campos, F. S., Silva, A. P., Karremans, A. P., & Muys, B. (2023). Cultivation potential of Vanilla crop wild relatives in two contrasting land

use systems. European Journal of Agronomy. https://doi.org/10.1016/j.eja.2023.126890

Worku, C., Adugna, M., & Chanie, E. (2021). Determinants of Market outlet choices by smallholder chickpea farmers in Estie district, Amhara Region, Ethiopia. *Research Square*.