

Women in the Informal Agricultural Sector in the Benue Valley

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Introduction

Women are the backbone of the informal agricultural economy in Africa. They constitute a labour force of about 60%; although there are statistical variations regarding this. World Bank¹ established that Ethiopia, Malawi, Niger, Nigeria, Tanzania, and Uganda have about 40% of women in the agricultural sector. In the Benue Valley area, women engage in the production of cereals, tubers, vegetables, and livestock production, but often on a crude basis. This is the more reason why Anikpo², argues that in Africa "agriculture is characterized by low production and productivity and

¹ World Bank, Available at: <https://www.worldbank.org/en/programs/africa-myths-and-facts/publication/women-agriculture-and-work-in-africa>. Accessed, 12-06-2023.

² Anikpo, M.(1985). Achieving Self-Sufficiency in African Agricultural Food Production: The Case of Nigeria. *Africa Today*, 32(4), 29–38. <http://www.jstor.org/stable/4186322>.

rudimentary agricultural techniques. This situation gives rise to insufficient agricultural growth, especially of food production, in the face of the rapid population growth and has resulted in serious food shortages and malnutrition in the continent". Sadly enough, Nigeria's agricultural sector is endowed with a huge expanse of fertile agricultural land, favourable climate, and a large active population that can sustain a highly productive and profitable agricultural production.³ Taking our study area, the Benue Valley, to buttress the above point is not out of place. This is because the area is dominated by plains and river valleys which have a significant effect on the fertility of the soil. There is a large deposit of alluvial soil from the numerous river tributaries.⁴ Added to favourable weather and climatic conditions, the Benue Valley is an area with a dense population largely dominated by minority ethnic nationalities.

This study therefore investigates women in the informal agricultural sector in the Benue Valley area. The study is a contribution to a few scholarly research works available on this subject matter. Agbu and Varvar⁵ look at the geographical terrain of the Benue Valley, and its centrality in the production of agricultural goods. Adekanye's⁶ work focuses on the role of women in agricultural development in Nigeria without giving any specific attention to the rich Benue Valley Area. Tumsume⁷ asserts that women play a predominant role in agriculture, which helps in bridging the gender gap in agriculture, promoting community development, resource management as well as sustainable development. Women are good in sustainable natural resource management as economic agents of change in agricultural systems. Their engagement in agriculture enables them to have

³ Sogo-Temi, J. S., & Olubiyo, S. O. (2004). The Role of Agricultural Credit in the Development of Agricultural Sector: The Nigerian Case. *African Review of Money Finance and Banking*, 101–116. <http://www.jstor.org/stable/23026295>.

⁴ Agbu, A.D. and Varvar, T.A. (2012). 'Geographical Impact of the History of the Lower Benue Valley in Pre-Colonial Period', *Maiduguri Journal of Historical Studies*, 1(1), 1-12.

⁵ Agbu, A.D. and Varvar, T.A. (2012). 'Geographical Impact of ...' pp. 1-12.

⁶ Adekanye, T.O., (1984). 'Women in Agriculture in Nigeria: Problems and Policies for Development', *Women's Studies International Forum*, Vol. 7. No. 6. pp. 423-431.

⁷ Tumsume (2014) The Role of Rural Women in Agriculture.

access to social protection, land, housing, productive resources, and financial services. Mehra⁸ reinforces the claim that agriculture employs women, who generate income for their livelihood and cater to the family. This serves to propel women out of the vicious cycle of poverty, promote healthy living and give women an opportunity and control over natural resources, educating their children and other associated benefits. Other benefits include exposure to occupational capacity building, social equity, improved access, ownership, and control of economic resources. Zukang⁹ on his part asserts that women in agriculture help mitigate financial and economic crises that retard the progress of the family and the nation at large. Women in agriculture also help to meet national development goals of poverty reduction, which have positive multiplier effects such as breaking discriminatory norms and practices and increasing women's rights in access, and control of economic and financial resources. Tinuke¹⁰; Farrel¹¹; Akintoye¹²; Haan¹³; Ojo¹⁴; and Kagbu¹⁵ in their various studies articulated the nature of the informal sector generally in Nigeria and demonstrated how women are affected negatively. From these studies, it is clear that research on women in informal agricultural production in the Benue Valley area is shrouded in relative obscurity, hence the need to bridge this gap. This study is divided into various parts. The first part is an introduction which is on-going. The second

⁸ Mehtra (1990) *Women in Agriculture: What Development Can Do*.

⁹ Zukang (2004) *Women's Control Over Economic Resources and Access to Financial Resources, including Microfinance*, United Nations. New York.

¹⁰ Tinuke, M.F. (2012). 'Women and the Informal Sector in Nigeria: Implications for Development', *British Journal of Arts and Social Sciences*, Vol. 1. <http://www.bjournal.co.uk/BJASS.aspx>.

¹¹ Farrel (2000) "Globalization and Employment Generation" Evaluating the impact of trade on Aggregate employment in Nigeria's In Industrial Sector" NES 2000 Annual Conference Nigeria.

¹² Akintoye, I.R. (2006) "Enhancing the Performance of the Informal Sector for the Economic Development of Nigeria: A Case Study of Lagos State" *International Journal of Social Sciences*, Vol. 5 No 1, pp 100-112.

¹³ Haan, A. (2006) "Unemployment Statistics and what they Mean". *Monthly Labour Bulletin*, Washington DC; US Department of Labour.

¹⁴ Ojo, F. (1981) "*Nigeria's Manpower Planning Experience*", in F. Ojo, A. Aderinto and. Fasoyin (eds.), *Manpower Development and Utilization in Nigeria: Problems and Policies*, Lagos University Press, Lagos.

¹⁵ Kagbu, J.H. (2017). 'Entrepreneurial Competency of Women Farmers in Nasarawa State, Nigeria', *Journal of Agriculture Extension*, Vol. 22, No. 1. <https://dx.doi.org/10.4314/jae.v22i1.85>.

part, we present a brief demography the study area in terms of its resource endowments. The third part examines the conceptual issues and theoretical orientation of the paper. The remaining part of this study looks at some of the challenges that militating against women in the informal agricultural sector on the basis of which we concluded with some policy recommendations.

The Benue Valley: A Demography

The Benue Valley covers an area of over 22,000 square miles in Nigeria,¹⁶ located on Lat 6⁰ 7¹ to 9⁰ 30¹ N and Long 5⁰ 16¹ to 9⁰ 48¹ E¹⁷, and is made up of two physiographic divisions, the river, and its flood plains, and the lowland areas which lie above flood levels. The valley's source is River Benue which has its root in Adamawa Highlands in Western Cameroon (see Appendix 1). Benue Valley area is a consummation of six States of the Federal Republic of Nigeria including Kogi, Benue, Nasarawa, Taraba, Plateau, and Adamawa States. Collectively, this area is subdivided into three parts of Upper Benue Valley, Middle Benue Valley, and Lower Benue Valley. Shagba¹⁸ avers that Benue Valley has other nomenclatures like Benue Basin, Benue Trough, and Benue Aulacogen. It is on this note that Abba made a descriptive analysis of the Benue trough, thus:

The Benue Trough of Nigeria, located at a major re-entrant [sic] in the West African continental margin is about 80 to 150km wide and 800km long, and extends in a WE-SW direction from the Niger Delta in the Gulf of Guinea to the Chad Basin in the interior of the W. African Precambrian shield. Geologically, the Benue trough consists of a linear stretch of sedimentary basin running from about

¹⁶ Udo, Reuben K. (1970). "The Benue Valley". *Geographical Regions of Nigeria*, Berkeley: University of California Press, pp. 138-148. <https://doi.org/10.1525/9780520327108-019>.

¹⁷ Shagba, I. E, (2018). "Geolinguistic Survey of Minority Languages in the Benue Valley", Ph.D. Thesis in Sociology, Benue State University, Makurdi, p.12.

¹⁸ Shagba, I. E, (2018). "Geolinguistic Survey of Minority..." p.8.

the present confluence of the Niger and the Benue rivers to the North-East and bounded roughly by the Basement complex (6000m YA) areas in the north and South of the River Benue.¹⁹

Generally, the Benue Valley lies within the arid north and the humid south in the Guinea Savannah. Largely based on this, the area produces a variety of crops including staples such as yams, sorghum, millet, cassava, cowpea, and corn, with rice as an important crop in some places. The southern edge of the Benue Valley represents the lower limit of the northern grain-dominated economy.²⁰

A variety of agricultural activities preponderates the valley as a result of fertile land and the availability of abundant water even though there are numerous untapped mineral resources. Another peculiar characteristic of the Benue Valley area is the fact that the region is predominantly inhabited by minority ethnic nationalities. These groups are largely peasant agriculturalists relatively densely spread across the region. Specifically, Adamawa state produces mostly yams, melon, maize, beans, and other cereal crops. A handful of them are herders of animals.²¹ Benue State, produces tuber crops, tree crops, and cereal crops in larger quantities. Benue state is blessed with such fertile land that accommodates yams of all species, mangoes, and other fruits of all species from the state are said to be the best in the country. Nasarawa state has been known for such farm crops as yams and other tubers in large quantities. While the peoples of Plateau State cultivate Cereal crops such as maize, beans, millet, sorghum, and many others in large quantities. Prominent among the tuber crops found in this state are Irish potatoes besides, assorted vegetables such as cabbage, carrots, cucumber, lettuce, onions, tomatoes; and many others produced in large quantities. Finally, Taraba state is the second food basket of the nation whose peoples

¹⁹ Abaa, S. I. (2004). "Origin of the Benue trough and its Economic Significance to Nigeria." Presented at the 2nd Inaugural lecture of the Benue State University, Makurdi. (Unpublished).

²⁰ Gbehe, N. T. (2007). 'Geopolitical Perspectives on Resource Control in the Middle Belt Region of Nigeria: Periscoping Agriculture in the Benue Economy', in Okpeh, O.O. et al, the Middle Belt in the Shadow of Nigeria, Makurdi: Oracle Business Limited p. 134.

²¹ Shagba, I. E, (2018). 'Geolinguistic Survey of Minority...' p.13.

produce all sort of tubers and cereals. It should be noted that women constituted a significant agricultural production group in all the states in the Benue Valley.

Conceptual Clarifications and Theoretical Framework of Analysis

The informal economy encompasses a huge diversity of phenomena that vary in composition and size within economies and across regions.²² Although estimating the size of informality is challenging, there is a general consensus that the informal economy is the most important source of employment in developing countries and it also has a significant role in providing employment and income for marginalized people in developed economies.²³ However, defining informality in any economy is complex but easily recognisable. The international statistical standards adopted by the 15th International Conference of Labour Statisticians (ICLS), cited in Bonnet, Venek, and Chen²⁴ understand the informal sector as consisting of:

A subset of unincorporated enterprises (i.e. not constituted as separate legal entities independent of their owners) that are also not registered with a national government authority. Most informal enterprises are single-person operations or family firms/farms; very few are owned or operated by employers with hired workers. Typically, they operate at a low level of organization, on a small scale, and with little or no division between labour and capital as factors of production. Households with persons working in a farm or private business in which the destination of production is wholly for their final use are excluded from the scope of the informal sector but included as part of the household sector.

Similarly, the Organisation of Economic Co-operation and Development (OECD)²⁵, therefore, assert that:

People who work in the informal sector typically operate at a low level of organisation, with little or no division between labour and capital as factors of production and on a small scale. Labour relations- where they exist- are based mostly on casual employment, kinship, or personal and social relations rather than contractual arrangements with formal guarantees.

²² Dell'Anno, R. (2022). 'Theories and Definitions of Informal Economy: A Survey', Journal of Economic Surveys published by John Wiley & Sons Ltd.

²³ Dell'Anno, R. (2022). 'Theories and Definitions...'p. 2.

²⁴ Bonnet, F., Vanek, F., and Chen, M. (2019). Women and Men in ..., p.2.

²⁵ OECD data, <https://stats.oecd.org/>. 06-06-2023.

From the foregoing definitions, it is clear that the informal sector encompasses economic activities in all sectors of the economy that are operated outside the purview of government regulations. This sector may be invisible, irregular, parallel, non-structured, backyard, underground, subterranean, unobserved, or residual and agriculture is not any exception.

What is the Informal Agricultural sector? According to Ojo²⁶ informal agricultural sector belongs to a set of small and unorganised farmers and farming activities that occupied the largest category of labour force in Nigeria. Although the Nigerian agriculture is the largest sector that employs a significant number of Nigerians, it is predominated by peasant farmers whose incomes are not directly taxed nor regulated by the government. It is estimated that agriculture's share of informal-sector jobs is even higher, although data is largely unavailable. In rural areas, women occupied a significant working population in this category arising from the fact that they lack access to viable jobs in the formal sector. Generally, women form the bulk of marginalised persons in the informal sector of the African social settings. Based on this, the theory of Eco-feminism best explains the dynamic role and challenges of women in the sector in the Benue Valley.

Feminism as a theoretical current is diverse, competing, and often opposing collection of social theories, political movements, and moral philosophies. It is largely motivated by or concerning the experiences of women, especially in terms of their social, political, and economic inequalities.²⁷ The feminisation of agriculture generally seeks to examine the expansion of women's roles in agriculture relative to men's. Another interpretation of feminisation of agriculture in the body of literature is of 'women being left behind' when men disengage from agricultural work and move into non-agricultural employment.²⁸ In the agricultural sector, feminisation aligns with the Eco-feminism thesis coined by Françoise d'Eaubonne

²⁶ Personal interview with Ojo, Department of Political Science, KolaDaisi University, Ibadan, Oyo State. 06-06-2023.

²⁷ Gbamwuan, A. and Agidi, P.A. (2022). 'A Stock-Taking on the Contribution of Women in Nigeria's National Assembly, 1999-2011', *Journal of African Politics* Vol. (1 &2).

²⁸ Farnworth, C.R. et al, (2021). *Methodologies for Researching Feminisation of Agriculture What Do They Tell Us*, IFPRI Discussion Paper 02077.

in book “*Le Féminisme ou la Mort*” (1974), where she illustrated the potentialities of women to lead ecological revolution.²⁹ Although, ecofeminism does not place women in the ruling position of power, it craves a collaborative and connecting society.³⁰ Ecofeminism has variants, including liberal ecofeminism, spiritual/cultural ecofeminism, and socialist ecofeminism.³¹ However, the attention of this study lies in the central argument of ecofeminism rather than its historical development. Ecofeminism explores the relationship between women and the environment which Brizioli³² argues rest on the principle that; “Nature herself is the experiment and women, as silviculturalists, agriculturists and water resource managers, the traditional natural scientists”. In line with this knowledge, Mies³³ calls women’s work in producing sustenance “the generation of life” which implies that women not only collect and consume what has grown in nature but they make things grow. Put differently, ecofeminism tries to explain the connections between women to earth and men to social life: a dualistic framework that reinforces the oppression of women and Nature and favours men's control.³⁴ Brizioli³⁵ emphasized that:

The main assumptions of *ecofeminism* are the central role of women as mothers or nurturers of life and their natural vocation to respect, protect and take care of the environment without claiming exclusive rights or imposing enclosures so that women do not consider themselves as owners of the earth but they co-operate with biological resources to let grow and make grow.

The strength of ecofeminism theory in the context of this work lies in its ability to question the logic of women's marginalisation in food production by their men counterparts. It also questions women's attitude as custodians of the ecological systems based on the biases the society held against them.

²⁹ Brizioli, S. ‘Framing Feminization of Agriculture: From Gender-Environmental Theories to International Environmental Law’, Ph.D. – Research Fellow University of Perugia – School of Law.

³⁰ Brizioli, S. ‘Framing Feminization of Agriculture ...’ p.13.

³¹ Brizioli, S. ‘Framing Feminization of Agriculture ...’ p.13.

³² Brizioli, S. ‘Framing Feminization of Agriculture ...’ p.13.

³³ Mies, M. (1986). *Patriarchy and Accumulation on a World Scale*, Zed Books, London, p. 16.

³⁴ Berman, T. (1994). “The Raper of Mother Nature? Women in the Language of Environmental discourse”, in *Trumpeter*, vol. 11, issue 14, p. 173-178.

³⁵ Brizioli, S. ‘Framing Feminization of Agriculture ...’ p.13.

Besides these posers, ecofeminism has illuminated the dynamics of new opportunities for women's empowerment arising from such changes in household arrangements or other agrarian, demographic, or economic changes.³⁶

Another theory that underscores the role of women in the informal sector is³⁷ the structuralism theory. Structuralism acknowledges the coexistence between the formal and informal sectors in the global economy. Structuralism theory was put forward by Manuel Castells and Alejandro Portes in 1989. The authors recognize the role of informal producers in the creation of economic value for a national competitive advantage. Castells and Portes³⁸ opines that there are individuals whose activities are unregulated by societal intuitions, heterogeneous, universal, and linked to formal organizations. In other words, though unregulated, such individuals contribute immensely to the performance of formal organizations. For example, organizations buy raw farm produce from middlemen who buy from informal farmers. The relationship that exists between these actors, informal producers, middlemen, and formal organizations is structural; and they depend on each other for performance. In the context of this study, women farmers in the Benue Valley area are informal producers who make the produce available to middlemen (wholesalers) that sell to formal organizations, thereby contributing to the overall economic development the entire Nigerian society.

The centrality of this theory to this study is therefore underpinned by the fact that there is always a preexisting structural relationship between the farmers, middlemen, and the formal organizations which enhances the availability of agricultural produce for consumption and the economic performance of Nigeria and the role of women in grid of relations cannot be overemphasised. Although this is a fact, it should also be pointed out that

³⁶ Farnworth, C.R. et al, (2021). Methodologies for Researching Feminisation of Agriculture What Do They Tell Us, IFPRI Discussion Paper 02077.

³⁷ Kalejaiye, P.O., Abosede, A.J., and Adisa, I. (2021). 'Informal Sector, Middlemen, and Poverty among Rural Farmers in Nigeria', R. Baikady et al. (eds.), The Palgrave Handbook of Global Social Problems, Springer Nature Switzerland AG; https://doi.org/10.1007/978-3-030-68127-2_170-1.

³⁸ ³⁸ Kalejaiye, P.O., Abosede, A.J., and Adisa, I. (2021). 'Informal Sector ...' p.8

the benefits emanating from the hard work of women largely goes to the middlemen who take advantage of the poor and or inadequate infrastructural preponderating the rural areas exploit the latter. In the final analysis, women who form a reasonable proportion of this category have continued to live in poverty and penury.

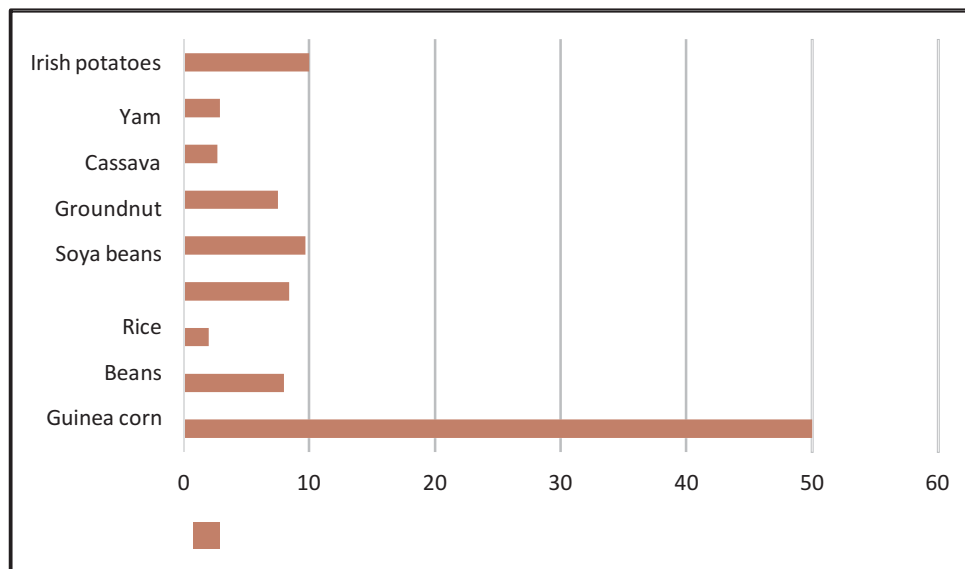
Women in Grains and Cereals Production in the Benue Valley

Women in the Benue Valley work in the informal agricultural sector as farmers on their account, as unpaid workers on family farms, and as paid or unpaid labourers on other farms and agricultural enterprises.³⁹ They are involved in both crop and livestock production at subsistence and commercial levels. They produce food and cash crops and manage mixed agricultural operations often involving crops, livestock, and fish farming. In all these, women are considered a major part of the agricultural labour force. In terms of grains production, women are known for having small grains and cereals farms which put Nigeria on the competitive global grains production map. For instance, the International Grains Council (IGC) put Nigeria's total 2022 and 2023 grains production at 21.6 million tonnes. The breakdown of these statistics indicate that the country's maize crop is at 12.5 million tonnes, revised up from 12 million forecast a month earlier, but down on the previous year's 12.7 million. Production of sorghum is put at 7 million tonnes, an unrevised estimate, with the previous year at 6.7 million.⁴⁰ Evidence gleaned from the available literature indicates that grains are produced in significant tones by women.

Fig. 1: Cereals Produced by Women in Mangu Halle, Mangu LGA of Plateau State

³⁹ FOA, (2011) The State of Food and Agriculture, Women in Agriculture Closing the Gender Gap for Development, Available at: <https://www.fao.org/3/i2050e/i2050e.pdf>. Accessed, 16-06-2023.

⁴⁰ World Grains, Available at; <https://www.world-grain.com/articles/17302-focus-on-nigeria>. Accessed, 16-06-2023.



Source: Wuyep, S.Z., Daloeng H.M. and Williams, J. J. (2021). The Role of Women in Mangu Halle, Plateau State, Nigeria.' *NSUK-Journal of Environmental Science 2(1)*, 2021

Fig. 1 is a graphic representation of some of the cereals produced by women in Mangu LGA of Plateau State. An estimated 50% of women produced Guinea corn, about 9% produced Soya Beans, 8% produced Beans and groundnut and, 4% produce rice. The crop produced in low quantity was rice and this could be as a result of weather and soil fertility. Collaborating with these statistics, the Sahel Capital Field Research (SCFR), cited in FOA,⁴¹ asserts that "women were more involved in the production of food crops such as maize and soya beans".

⁴¹ FOA, (2011) The State of Food and Agriculture, Women in Agriculture Closing the Gender Gap for Development, Available at: <https://www.fao.org/3/i2050e/i2050e.pdf>. Accessed, 16-06-2023.

Additional evidence of women's involvement in the informal agricultural sector comes from the World Bank.⁴² It reported that about 60% of food production comes from rural women farmers who make up to 60 - 80% of the agricultural labour force in Nigeria, depending on the regions they operate. Corroborating the World Bank Report with field surveys, it should be noted that in Nasarawa State, just as it is the case with other states in the region, women are active in the production of different kinds of grains. Oral discussions with Godiya Illia⁴³ in Adudu Market, Obi LGA reveals that; although they do not have access to mechanized farming methods, some women are able to produce the average of 5-7 bags of soybeans, 4-6 bags of maize, 5 bags of beneseed and 3 bags of millet per season on an average. Women are also into processing of agricultural produce. For example, Hajjah Gwanati⁴⁴ with about 6-8 persons employed to assist her in the processing of grains and tubers. In her words, "having access to mechanized processing methods has made processing easier for me, and I have been able to process an average of 40 bags of corn and 12 bags of cassava per month". Zainab Ali⁴⁵ takes advantage of her storage facility to store grains that she usually gets from farmers during the harvest period at cheaper rates, and also produce a few bags of maize, rice, cassava, and groundnut. Table 1 shows of the extent of women's involvement in grains production, processing, and storage in Nasarawa State.

⁴² World Bank, Available at: <https://www.worldbank.org/en/programs/africa-myths-and-facts/publication/women-agriculture-and-work-in-africa>. Accessed, 12-06-2023.

⁴³ Oral interaction with Godiya Illia, age blanket between 30-39 years, interviewed in Adudu Market, Obi LGA of Nasarawa State.

⁴⁴ Oral interaction with Hajjah Gwanati, age blanket between 60-69 years, interviewed at Angwan Sariki Fada, Lafia Local Government, Nasarawa state.

⁴⁵ Zainab Alifor, Age Blanket 40-49 years, was Interviewed at Adudu Market, Obi local government of Nasarawa state.

Table 1: Nasarawa Women in Grains Production, Processing, and Storage

S/N	Name	Level of Edu.	Age	Type of Grains Farm	Yields per year (100kg)	Farm Storage and Processing
1	Zayanab Usman	Primary	30- 39	Rice	6-8 bags	Storage, processing
2	Bilikisu Mua'zu	Primary	20-39	Maize, Rice, Groundnut	18 bags of rice, 11 bags of groundnut, 19 bags of Maize	processing of groundnut, Rice, and maize
3	Aweyi Osewoyi	Non	69-70	Maize, Soya Beans, and Guinea Corn	5 bags of maize, 8 bags of guinea corn, 5 basins of soyabeans	Trading and Processing of grains
4	Farida Muhammad Oyigye	None	30-39	Maize, Rice, Melon, Guin-ea Corn	Nil	Trading and processing of agric. goods
5	Hajiya Ladi	None	50-59	Maize, Guin-ea Corn, Groundnut	5 bags of maize, 3 bags of guinea corn, 5 bags of rice, 7 basins of groundnut	Trading, and processing of maize, groundnut, and Guinea-corn
6	Farin Ruwa	Secondary	30-39	Maize, beans, and Rice	4 bags of maize, 4 bags of beans, and 3 bags of rice,	Processing for household consumption
7	Asheshe Adeka	Non	20-29	Melon, Guinea Corn, Maize	4 bags of melon, 5 bags of maize, 6 basins of guinea corn	Trading in agricultural goods
8	Zainab Ali	Primary	69	Maize, Rice, and groundnut	Nil	Storage and sale of agricultural produce
9	Atine Bala Rim Uku	Non	40-49	Small size agric. farms	Nil	Processing of agricultural produce
10	Christiana Moses	Non	50-59	Maize, millet, groundnut, and melon	4-5 bags of melon, 8-9 bags of groundnut, 3-4 bags of rice, and 10-11 bags of maize	Agriculture processing

11	Fibia Mukiala	Primary	40-49	maize, beans, and millet	4 bags of maize, 3 bags of beans, 2 bags of millet	Trading and processing	and agriculture
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Source: Fieldwork Survey by the Researchers, 2017.

Generally, women in this area engaged in the production and processing of rice, beans, guinea-corn, maize, and millet even though they do not have access to mechanised system of farm production and processing. The table confirms the estimation of the FOA⁴⁶ that women's share of agriculture production in Nigeria in 1980 was 24.9%, 36.6% in 1995, and 39.7% in 2010 which reflects the agricultural productive output of women in the Benue Valley.

Women in Tuber and Root Crops Production

Tuber and root crops such as yam, cocoyam, cassava, and potatoes are staple for the nutritional consumption of many Nigerians in the Benue Valley. This is because these crops are rich in protein calories which are cheap sources of energy.⁴⁷ Some of these tubers found in Nigeria are indigenous because the peoples of Nigeria were root eaters in the earliest times. Other tubers like cassava found their way into Nigeria and the Benue Valley in the 19th century from South America.⁴⁸ Cocoyam originated from Asia and reached West Africa through North Africa. While sweet potatoes had their route in Nigeria from the Spaniards.⁴⁹ All these root crops do well in different parts of the Benue Valley. Iris potatoes for example are cultivated in larger quantities in Plateau state, while yam, cocoyam, cassava, and sweet potatoes are cultivated in Benue, Nasarawa, and Taraba states, and women principally play certain crucial roles in their production. About 70% of yam in the world is produced in Africa, and Nigeria accounts for

⁴⁶ FOA, (2011) The State of Food and Agriculture, Women in Agriculture Closing the Gender Gap for Development, Available at: <https://www.fao.org/3/i2050e/i2050e.pdf>. Accessed, 16-06-2023.

⁴⁷ Idusogie, E.O., and Olayide, S.O., Role of Roots and Tubers in Nigerian Nutrition and Agricultural Development,

⁴⁸ Idusogie, E.O., and Olayide, S.O., Role of Roots and Tubers in Nigerian ... p. 178.

⁴⁹ Idusogie, E.O., and Olayide, S.O., Role of Roots and Tubers in Nigerian ... p. 178.

half of this production.⁵⁰ In Nigeria, the largest traffic of yam production comes from the Benue Valley. Table 2 documents the estimated output of yam production in Benue State between 1985 and 1999.

Table 2: An Estimated Output of Yam in Production in Benue State, 1985-1999

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Benue State	208,400	637,411	183,355	478,160	662,062	675,303	695,574	402,285	300,000	290,264	229,864	856,320	1,324,024	1,600,741	1,784,096
LGA															
Ukum	187560	573669.9	165019.5	430344	595855.8	607772.7	626016.6	362056.5	270000	261237.6	206877.6	770688	1191621.6	1440666.9	1605686.4
Katsina Ala	166720	509928.8	146684	382528	529649.6	540242.4	556459.2	321828	240000	232211.2	183891.2	693619.2	1072459.4	1296600.21	1445117.8
Logo	156300	478058.25	137516.25	358620	496546.5	506477.3	521680.5	301713.8	225000	217698	172398	624257.3	965213.5	1166940.19	1300606
Konshisha	125040	382446.6	110013	286896	397237.2	405181.8	417344.4	241371	180000	174158.4	137918.4	561831.6	868692.15	1050246.17	1170545.4
Kwande	125040	382446.6	110013	286896	397237.2	405181.8	417344.4	241371	180000	174158.4	137918.4	505648.4	781822.93	945221.553	1053490.8
Vandeikya	62520	191223.3	55006.5	143448	198618.6	202590.9	208672.2	120685.5	90000	87079.2	68959.2	455083.6	703640.64	850699.398	948141.76
Ushongo	83360	254964.4	73342	191264	264824.8	270121.2	278229.6	160914	120000	116105.6	91945.6	409575.2	633276.57	765629.458	853327.59
Gboko	62520	191223.3	55006.5	143448	198618.6	202590.9	208672.2	120685.5	90000	87079.2	68959.2	368617.7	569948.92	689066.512	767994.83
Buruku	104200	318705.5	91677.5	239080	331031	337651.5	347787	201142.5	150000	145132	114932	331755.9	512954.03	620159.861	691195.34
Tarka	83360	254964.4	73342	191264	264824.8	270121.2	278229.6	160914	120000	116105.6	91945.6	298580.3	461658.62	558143.875	622075.81
Guma	41680	127482.2	36671	95632	132412.4	135060.6	139114.8	80457	60000	58052.8	45972.8	268722.3	415492.76	502329.487	559868.23
Makurdi	62520	191223.3	55006.5	143448	198618.6	202590.9	208672.2	120685.5	90000	87079.2	68959.2	241850.1	373943.48	452096.539	503881.41
Gwer-West	72940	223093.85	64174.25	167356	231721.7	236356.1	243450.9	140799.8	105000	101592.4	80452.4	217665.1	336549.14	406886.885	453493.27

⁵⁰ Idusogie, E.O., and Olayide, S.O., Role of Roots and Tubers in Nigerian ... p. 178.

Gwer-East	83360	254964.4	73342	191264	264824.8	270121.2	278229.6	160914	120000	116105.6	91945.6	195899	302894.2	366198.2	408143.9
Total	1,625520	4971806	1430169	3729648	5164084	5267363	5425477	3137823	2340000	2264059	1792939	6800114	10514192	12711626	14167665

Source: Gumh, J.I. (2019). A History of the Development of Yam Economy in the Tiv Area of Central Nigeria, 1960-2000', Ph.D. thesis, Department of History, Benue State University, Makurdi, p. 135.

The above table is an estimated quantity of yam production in the Tiv axis of Benue State of Nigeria. Although, the Tiv people of Benue State are not the only producers of yam in the state. The commodity is equally produced in some significant quantities by Idoma and Igede people, but the Tiv are the predominant producers. The table elucidates that the production of yam is on the increase from 1985 and 1999 in Benue State. From the production of yam and other tubers like water yam, and cassava the following process must be met. First, is the land clearing which is the collective effort of both men and women. Among the Tiv, Gumh⁵¹ noted that:

After the allocation of farm plots to each household unit, land clearing properly commenced. The land-clearing stage was a joint effort by both female and male adults of the household. All adults in each household converged every morning to weed off the glasses, bushes, and shrubs on their respective portions of land. During the land clearing stage for yam production, bare hands and cutlasses were used in pulling down tall grass, shrubs, and small trees.

The second stage is making mold which is done exclusively by men because of the skills and rigorous energy involved. The third stage is the planting of seedlings which is an exclusive duty of women although men as well are not restricted to planting yam seedlings. Stage four is weeding and is carried out by women with the use of small holes. Weeding is done two to three times a year. The last stage is harvesting and storing. Although, women started the pre-harvest in September by only opening one side of the mound to detach fresh tuber off the stem for food, while the opening in

⁵¹ Gumh, J.I. (2019). A History of the Development of Yam Economy in the Tiv Area of Central Nigeria, 1960-2000', Ph.D. thesis, Department of History, Benue State University, Makurdi, pp. 95-98.

the mound is covered back allowing the stem to reproduce new yam seeds.⁵² Harvesting proper starts in January with the breaking of the mold to harvest yam tubers and seedlings, while packing home is carried out by women. Therefore women are instrumental in all the stages of yam production among the Tiv people of Benue State. The selling of yam after harvest is also carried out basically by women.

For cassava production as well women facilitated its production process. After ranges are made by men, women take up the responsibility of planting. Cassava is grown from stem cuttings and cultivated both as a sole crop and mixed with other crops like maize and guinea corn and may mature for harvesting from 6 months to 2 years under the range of possible growing conditions.⁵³ Products from cassava come in the form of cassava chips, gari, alibo, akpu among others and women are arrowheads in the processing of these products in the Benue Valley. In the Plateau State, women contributed decisively to the planting and selling of potatoes. Irish potatoes for example required ground preparation, harrowing, ploughing rolling along with a little grace from the weather and a good source of water. While weeding and fertilizer application and the use of herbicides are required. Fertilizer rates of 100kg Nitrogen, 100kg phosphorous, 40kg potassium, and micro-nutrients are some of the requirements for Irish production and women actively participated in all these processes but majorly lack access to adequate fertilizers and this undermine their production.⁵⁴ Having produced iris potatoes, marketing is conducted basically by women with the assistance of their children. The products are sold wholesale to middlemen or retail to direct consumers. The Potato Value Chain Support Project of the African Development Bank (AfDB) pegs Plateau as accounting for 90% of the potato production in the country with countries like Chad, Ghana, Niger, and Benin among others receiving large supplies of potatoes from

⁵² Gumh, J.I. (2019). 'A History of the Development ...' p.98.

⁵³ Idusogie, E.O., and Olayide, S.O., Role of Roots and Tubers in Nigerian ... p. 179.

⁵⁴ Danwanka, H.A and Ggala, C.E. (2007). Analysis of Resource Efficiency in Irish Potato Production in Jos South L.G.A of Plateau State. **In:** Haruna, U., Jibril, S.A., Mancha, Y.P and Nasiru, M. (eds). Consolidation of Growth and Development Agricultural Sector. Proceedings of the 9th National Conference of the Nigeria Association of Agricultural Economists (NAAE) held at AbubakarTafawaBalewa University Bauchi, Bauchi State 5th-18th November 2007 pp 385-388.

Nigeria.⁵⁵ Although, Irish Potatoes production is not devoid of challenges in Plateau State. Martha Mamgup⁵⁶ was more forthcoming in this regard, when she posits thus; "inadequate water during the dry season affects potato farmers and leads to annual low yield. While the high cost of fertiliser prevents many farmers from improving the quantity and quality of yield. This is because insufficient fertiliser affects the crop's output. The cost also prevents many women from expanding their businesses. In the final analysis, women have low incomes and wallow in poverty".

Women in the Production of Domestic Animals in the Benue Valley

The terrain of Benue Valley is supportive of domestication of animals and this is carried out by both men and women. Women keep birds for consumption while sheep and goats are often for commercial purposes. Women are mainly involved in the production of ruminants (goat, sheep) and poultry keeping as individuals or jointly with their children and husbands. Their preference is the indigenous breeds (low external inputs, well adapted to local conditions, lesser health problems, good market demand), animals that they can easily handle, and manage, disease resistant, and that therefore do not increase their workload as captured in table 3.⁵⁷

Table 3: Livestock Production in Nigeria According to Geopolitical Zones

Women	Zone	Men	Zone
Small ruminants (goats, sheep)	All zones	Large ruminants (cattle, camel	North West, North East, and North Central

⁵⁵ <https://dailytrust.com/despite-challenges-plateau-targets-7m-metric-tons-of-irish-potato/>, Accessed, 17-06-2023.

⁵⁶ <https://dailytrust.com/despite-challenges-plateau-targets-7m-metric-tons-of-irish-potato/>, Accessed, 17-06-2023.

⁵⁷ Fao Northeast Nigeria Rapid Gender Analysis in Livestock, Fisheries and Apiculture o.f Affected Population in Borno, Adamawa, and Yobe States November 2018– December 2018

Poultry keeping	All zones	Poultry keeping	All zones
Pig, and rabbit production	South East, North Central, South West and North West	Horses and donkeys	North East and North West

Source: FAO Northeast Nigeria Rapid Gender Analysis in Livestock, Fisheries and Apiculture of Affected Population in Borno, Adamawa, and Yobe States November 2018– December 2018, p. 6.

The above table indicates that women in the Benue Valley keep small ruminants, poultry, pig, and rabbit. However, their roles in large ruminants production cannot be overemphasised. For example, in some states in the region, women milked and sold dairy products to generate income for the sustenance of the entire family. They also sweep livestock farms and look after café at home. Despite all these functions in livestock production, women lack the financial/capital base and material resources to increase livestock production. Besides, women are discriminated against and restricted from rearing certain types of animals as a result of sociocultural norms and religious practices. There is also the challenge of limited veterinary and animal husbandry extension services that could enable women to produce livestock on larger scales.

Some Challenges Women Contend with in the Informal Agricultural Sector in the Benue Valley

Many challenges prevent women from performing better in informal agricultural production in the Benue Valley. According to Ndzaruwa, Shuaibu, Amurtiy, and Bitrus⁵⁸ the leading challenges are the inability of most of these women to access the financial resources needed for enhanced productivity, considering the cost-intensive nature of farming activities in Nigeria. As a consequence of women's low capital base, production has

⁵⁸ Ndzaruwa, J.V., Shuaibu, I.M., Amurtiya, M., and Bitrus, H.J. (2022). "Analysis of women crop farmers' access and utilisation of agricultural credit in Yola South Local Government Area of Adamawa State, Nigeria", *Journal of Agriculture and Applied Biotechnology* 2022, 1(1): 1-6.

remained inefficient and has affected farm output. Women also face social exclusion, apart from being mostly small-scale farmers and having limited access to agricultural extension services, markets, and credit among others. For example, there is a lack of certified improved seedlings and this hampered the yields.⁵⁹ It is therefore estimated that about 5 to 10 percent of Nigerian farmers have access to improved seed while a large percentage of farmers do not. Corroborating this fact, it is further estimated that there was about 7.2 percent of certified maize, 4.8 percent of certified rice, 2 percent of certified cowpea, 1.8 percent of certified wheat, and 1.7 percent of certified sorghum planted in 2011 and 2012 in the entire country. This is grossly inadequate considering the number of farmers who need such seeds in the country. On this note, Onyekpere and Bako⁶⁰ lamented "that Nigerian farmers would require an estimated 1 million metric tons of improved seeds to cover each of these cereals and pulses, whereas the formal commercial seed industry currently supplies just 20,000 to 50,000 tons of seed annually covering all crops". Information gleaned from fieldwork reports in the Benue Valley reinforced the above fact. For example, Victoria Uchuman⁶¹ claims not to have access to either improved grains or extension services since she has been working on her farm for the past 26 years. This position was a general opinion held by most women interacted with in the course of this study in the Benue Valley.

Another serious challenge faced by women in the Benue Valley in the course of agricultural production is the lack of farm inputs like fertiliser. This particular challenge has been compounded as a result of unviable fertiliser blending companies in Nigeria. For instance, the Fertiliser Blending Plant, Lafia, the National Fertiliser Company of Nigeria (NAFCON), and the Federal Super Phosphate Fertiliser Company (FSFC) among others are

⁵⁹ Gbenga, O.E. (2007). 'Water Resources Development: Opportunities for Increased Agricultural Production in Nigeria', Master of Water Resources and Livelihood Security Department of Water and Environmental Studies Linkoping University, Sweden.

⁶⁰ Onyekpere, E. and Bako, A.B. (2020). Small Holders Women Farmers and the Budget in Nasarawa State, *Centre for Social Justice*.

⁶¹ Personal interaction with Victoria Uchuman, Age blanket of 50-59 yrs, interviewed at Tunga Market, Awe local government of Nasarawa state.

not functioning to cater to farmers needs.⁶² It is in light of this knowledge that the World Bank establishes that fertiliser consumption in Nigeria is as low as 600,000-700,000 tons annually compared to the potential market size of about 10-12 million tons. While the government tries to cushion the effects of fertiliser hikes by subsidizing the product but only 11-30% reaches the poor farmers nationwide. In Nasarawa State for instance, in 2021 Governor Abdullahi Sule bought and distributed 38 trailers of fertilizer to farmers at the cost of N4,500 per bag, and the fertilizers were distributed to all the 13 local governments and 18 development areas in the state.⁶³ In 2022 as well, the Governor inaugurated the sale of 1,035 metric tons of NPK fertilizer to farmers in the state at a subsidized rate of 10,000 Naira.⁶⁴ Despite these efforts, most women were unable to access this succour. The implication is that there is a low level of fertiliser application by women in the Benue Valley which stood at 13 kgs per ha, or just about 6 kgs per ha in terms of nutrient content.⁶⁵

Lack of farm mechanisation is another daunting challenge that confront women in the Benue Valley. This particular problem stems from the fact that the Nigerian government is not committed to mechanising agriculture generally across the country. For instance, the average of 1,000 tractors that Nigeria imports annually is less than adequate to mechanize Nigerian agriculture. While chemicals like herbicides, pesticides, insecticides, and so forth are not accessible. They are sold by retailers at exorbitant prices making it difficult for most women to afford. In a personal conversation with Magaji Mariam⁶⁶ who admitted not having access to mechanized farming since she has been working in the informal agricultural sector. However, on an average, she admitted to having been producing five large bags of Mellon at 100kg each, three large bags of maize, three pick-up vans of

⁶² Agribusiness Indicators: Nigeria, World Bank Group. Available at: www.worldbank.org accessed, 10-06-2023.

⁶³ Atthan, S. (2021). 'Nasarawa State Distribute 38 Trailers Loads of Fertiliser for Bumper Harvest, Food Security', Available at: <https://businessday.ng/news/article/nasarawa-distributes-38-trailer-loads-of-fertilizers-for-bumper-harvest-food-security/>. Accessed, 10-06-2023.

⁶⁴ <https://von.gov.ng/nasarawa-state-unveils-n10000-subsidized-fertilizers-for-farmers/>, accessed, 10-06-2023.

⁶⁵ Agribusiness Indicators: Nigeria, World Bank Group. Available at: www.worldbank.org accessed, 10-06-2023.

⁶⁶ Personal Interaction with Miriam Magaji, Age blankets of 50-59 years, Interviewed at Tunga Market, Awe local government of Nasarawa state, 2017.

cassava, and seven large bags of groundnut at 100kg each. Other women like Murjanatu Sabo⁶⁷ and Farin Ruwa⁶⁸ shared a similar experience. Tractor imports are themselves duty-free; however, high tariffs are charged on imported spare parts, leaving tractors with a short average life span of about six years – compared to other countries in which tractor life spans can be as long as 15 years. Tractors in Nigeria operate an estimated 507 to 682 hours per year, again very few compared to the 1,500 to 2,000 engine hours recorded in other countries.

Due to the illiteracy of the majority of women in the Benue Valley, they are usually unable to have access to loans provided by the government programmes like Agricultural Credit Guarantee Scheme Fund (ACGSF), and 'Anchor Borrowers Programme' (ABP), among others. For instance, women are expected to form farmers' associations that are viable to access such loans for enhanced agricultural production. Therefore, the lack of such viable women farmers associations has hindered this as illustrated in table 4 in Nasarawa State.

Table 4: Nasarawa State Beneficiaries of CBN Agricultural Credit Guarantee Scheme Fund (ACGSF) Disaggregated by Gender

Year	Male		Female		Total	
	Number of beneficiaries	Amount	Number of beneficiaries	Amount	Number of beneficiaries	Amount
2020(Jan - Dec)	102	16,930,000	37	6,360,000	139	23,290,000
2019	--	--	--	--	405	47,420,000
2018	360	39,610,000	112	11,290,000	472	50,900,000
2017	340	47,130,000	176	22,200,000	516	69,330,000
2016	592	85,480,000	232	29,740,000	824	115,220,000
2015	--	--	--	--	1,211	328,564,000
Total	1,394	189,150,000	557	69,590,000		

⁶⁷ Personal Interaction with Murjanatu Sabo, Age blanket of 40-50 years, Interviewed in Keana Market, Keana local government of Nasarawa state, 2017.

⁶⁸ Personal Interaction with Farin Ruwa, Age blankets of 30-39 years, Interviewed in Wamba local government area of Nasarawa state, 2017.

Source: CBN Website on Agriculture Credit Guarantee Scheme⁶⁹ and CBN Yearly Statistical Bulletin 2015-2019⁷⁰

From the above table, a few women totalling 557 have accessed agricultural loans through the ACGSF scheme within the span of six years (2015-2020), representing 28.5 percent, while men constituted the significant beneficiaries with 71.5 percent. The implication is that illiteracy accounts for this problem hence most women who found themselves in the informal agricultural sector in the Benue Valley are backward in terms of formal education, especially in Benue, Taraba, and Nasarawa states.

Conclusion and Policy Options

The study is a documentation of women in informal agricultural production in the Benue Valley area. Benue Valley's terrain is rich with fertile soil and abundant water resources that stimulate the production of various agricultural goods. Given the population of women in the Benue Valley, they occupied a central position in the production of grains and cereals, tubers and roots, as well as the rearing of animals. Besides, women participated in the processing and sale of agricultural outputs for sustenance. However, women faced certain challenges that thwarted their efforts in the production process. One is the lack of finance to produce on a large scale. Women also lack farm inputs like fertiliser, seeds, herbicides, pesticides, and insecticides to enhance their production. From evidence gleaned from oral interviews in these various states women have not gotten adequate access to credits/loans from the government to burst production; while the idea of mechanised system of agriculture is not known to a good number of them. Women also survive to cultivate their farms from family farmlands owned by their men counterparts. While a good number of them survive by borrowing or hiring

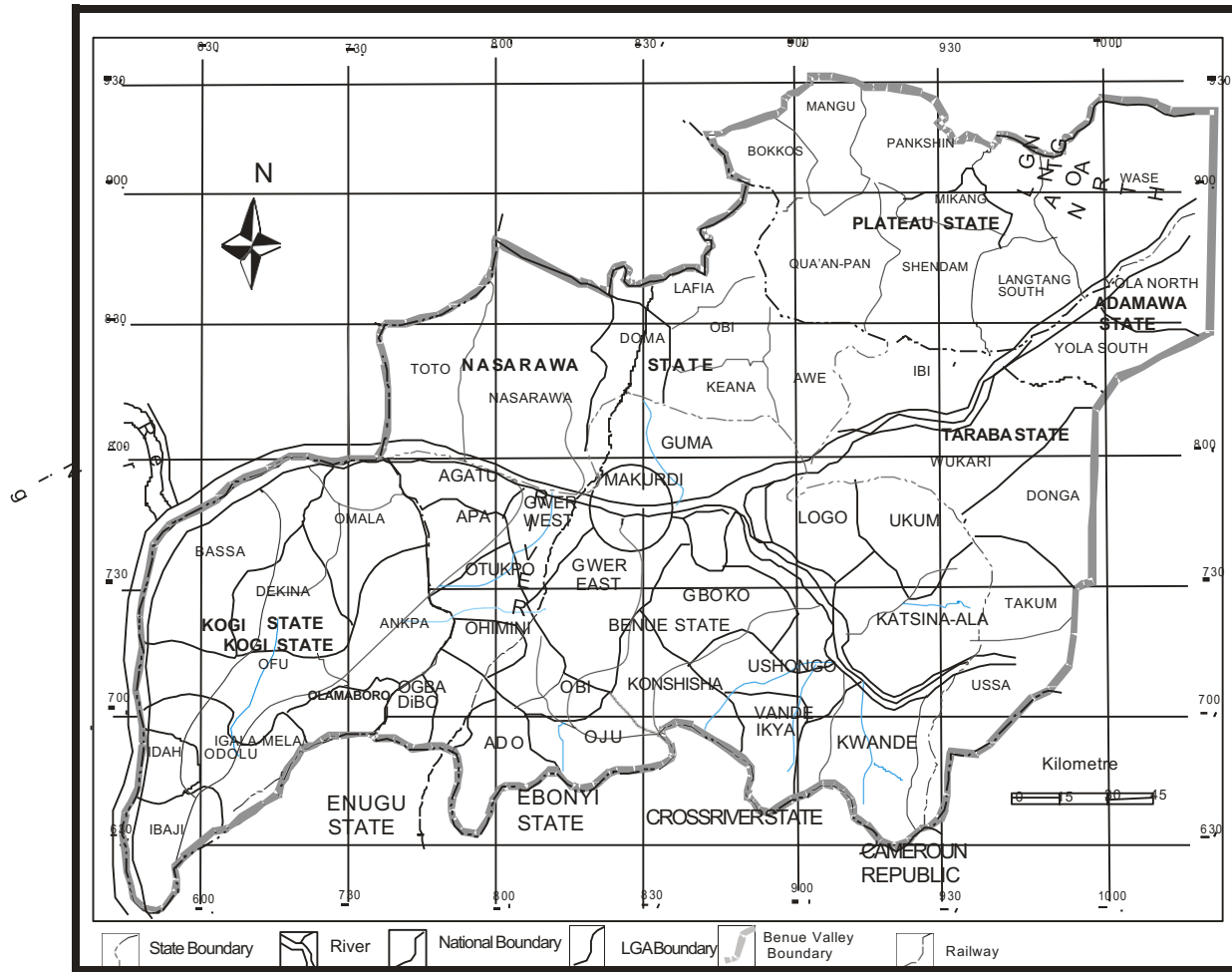
⁶⁹ <https://www.cbn.gov.ng/Documents/acgsf.asp>, accessed, 09-06-2023.

⁷⁰ <https://www.cbn.gov.ng/documents/Statbulletin.asp>, Accessed, 09-06-2023.

land which does not augur well given their precarious economic situation. Evidence gleaned from Nasarawa State for instance indicated that women are marginalised in terms of landholding and inheritance and this has constituted a serious challenge in agricultural production. The marginalisation of womenfolk has been compounded by a high level of illiteracy that sapped their vitality rendering them at the mercy of their men folk.

Against this backdrop, the following policy options are prescribed. First, the government should put an inclusive customary landholding law that guarantees women ownership and inheritance of family lands. This is because a significant number of women found in the informal agricultural sector sustain on land but have access to none and this hinders their productivity and income viability. In this way, the dream of actualising sustainable development by 2030 with a particular emphasis on women's empowerment would become a reality. Second, government should redirect its attention to eliminating illiteracy among women in the Benue Valley hence education is the key to empowerment. Without requisite formal education, women cannot be empowered even when government policies and programmes in agricultural sectors are available. This has been seen in Table 4 in this study where only a few women accessed the CBN Agricultural Credit Guarantee Scheme Fund from 2015 and 2020 in Nasarawa state. Third, there is a need for the government to put in place viable mechanisms for actualising agricultural programmes like farmers' extension services, and timely provision of farm inputs like fertiliser, herbicides, and pesticides for women as a way of encouraging them. Fourth, the government should re-direct its attention to the area of agricultural mechanisation with special attention on bursting the economic power of women in the Benue Valley. These collective measures would go a long way in reducing women's vulnerability in the Benue Valley.

Map 1: The Benue Valley



Source: Shagba, I. E, (2018).Geolinguistic Survey of Minority LanguagesIn the Benue Valley, Ph.D. Thesis in Sociology, Benue State University, Makurdi, p.10

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