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Tracking Agriculture-Induced Fertility Among Yorùbá Farmers of Southwestern Nigeria

Abstract The dynamics of agricultural production in African peasant economies featured human fertility in no small measure. The role of increased fertility in agricultural productivity is explained by opposing ideologies, yet, African perspectives on increased fertility for agricultural production, in the current social climate, are seemingly deficient. Using a triangulation of qualitative methods, this work explores agriculture-induced fertility among Yorùbá farmers of Southwestern Nigeria. The findings clearly and dominantly indicate that the option of increasing fertility deliberately through polygyny, for improved agricultural production has tremendously diminished. Instead, concerns over optimum child development, which can hardly be guaranteed with continued agriculture-induced fertility, are stressed. This shows that Yorùbá farmers' disposition towards increasing fertility is dictated by pecuniary circumstances, thereby accentuating the rationality of Yorùbá culture and its people.

Key words: agriculture, fertility, Yorùbá, farmers, demographic transition

Introduction

Agriculture is essentially production, and having more children implied increased labour for greater productivity. This plausible 'fertility as means of subsistence' model is the crux of the Boserupian hypothesis, which contends that agricultural production increases with population growth due to greater investment of labour (Boserup 1965; 1970). Similarly, the more recent classical contributions of Tiffen *et al.* (1994) representing the 'more people, less erosion' hypothesis also indicated that population growth and agricultural intensification is beneficial rather than otherwise to soil and water resources. Agricultural production and human fertility have a very deep history in Africa and elsewhere. It is rational for farmers to seek material benefits for survival and beyond. By extension, farmers would seek increased fertility if this translates to increased

production of material and immaterial benefits. Besides, agricultural technology in developing countries is still labour intensive. All things being equal, the demand for increased fertility to improve the labour supply is immanent. Kamuzora (1984, 109) asserted that “one way to meet the demand for labour is by having many children because children can easily be controlled and their product expropriated”.

However, the dialectics of increasing population and agricultural production among subsistence farmers in developing countries like Nigeria can no longer be ignored. The notion of maximum population is an expression of the concern that population growth stresses food supply and non-renewable earth resources. The classical Malthusian concern, the concern of *Limits to Growth* (Meadows *et al.* 1972) and *Population Bomb* (Ehrlich 1969) is fundamental to the maximum population ideology. Further, the crux of the demographic transition theory centers on the notion that human welfare is directly predicated on human fertility. According to Dyson (2010, 5; bracket mine)

The falls in death rates and birth rates which in many ways define the phenomenon (fertility transition) are a key part – indeed, arguably they are the most important part – of whatever is meant by the term ‘development’.

Willy, Muyanga and Jayne (2019) studied Kisii county in Kenya using survey data of farming households and analyzed soil samples of their maize plots to test the Boserupian hypothesis. They found that sustainable agricultural intensification happens when population density is low. Once this density rises over 600 persons per km², indicators of weakening or failing soil capital occurred. These findings as well as the findings of Binswanger *et al.* (1998) and Pingali (2012) have failed to substantiate the Boserupian hypothesis but support the maximum population ideology. In an outright rejection of the Boserupian hypothesis, Van der Ploeg (2012) asserted that the nature of agriculture in sub-Saharan Africa whereby demographic growth positively affects agricultural growth ‘is now completely lacking’.

Indeed, the subject of agriculture and high fertility creates dialectics that call for exploration among culturally exclusive farmer-groups like Yorùbá farmers. As in many African sub-cultures, there’s a deep customary love for children among Yorùbá people, which is intrinsically tied to their traditional livelihood of farming. African emic demographic perspectives are still deficient even in contemporary times where concerns over Africa’s sustained population growth have become a mantra. It is argued that this lacuna in the literature serves to accentuate whatever challenges the population poses to regional and global stability. Caldwell’s (1976, 324) disillusionary work entitled ‘*Toward a Restatement of Demographic Transition Theory*’ expounded that the main precept of demographic transition theory is that fertility change in traditional societies will

occur with modernization or industrialization. While this may seem harmless, “it has elements and implications that are more complex or debatable and that have had an enormous effect on our way of looking at demographic change”. Caldwell continued:

The most fundamental issue is whether the theory actually deals with reactions and accommodations to material circumstances. There is a persistent strain in demographic transition theory writings that claims that rationality comes only with industrial, urban society, and a related strain that regards traditional agrarian societies as essentially brutish and superstitious (Caldwell 1976, 324).

In his extensive analysis, Caldwell (1976, 325) expounded that the demographic literature asserts religious and social institutions rather than people’s “behavior and reactions” preserve high fertility. The “demographic transition literature is full of references not to the behavior or reactions of such people (pre-demographic transition societies such as Africa) but to attitudes, beliefs, traditions and irrationality” (Caldwell 1976, 325, bracket mine). He further contended that “what demographic transition theory has always regarded as rational are primarily Western social ends with economically logical steps to maximize satisfactions” (Caldwell 1976, 326).

... underlying assumption... is that all societies are economically rational. The point is a simple one, but its acceptance is absolutely necessary if we are to arrive at an adequate theory of demographic transition, if we are to understand the contemporary population changes... (Caldwell 1976, 326–327)

The potential of an influx of interpretive studies to decipher the rationality (or otherwise) of demographic dynamics in African peoples (especially farmers, owing to the traditional linkage of agriculture and increased fertility) and cultures cannot be overestimated. Demographic motivations were therefore explored among Yorùbá farmers. This article is the report of a major theme regarding agriculture-induced fertility among Yorùbá farmers of Southwestern Nigeria.

Socio-Cultural Context of Agricultural Production in Yorùbáland

The cultural context of agricultural production in the Yorùbá society is of great significance in appreciating the dynamics of agriculture-induced fertility among them. The Yorùbá people are among the three largest ethnic groups in Nigeria’s multi-ethnic society consisting of more than 250 ethnic groups. The other two are Hausa/Fulani who predominate in northern Nigeria and the Igbo in the southeast. The Yorùbá people occupy the six states of southwestern Nigeria, though they are also found in some parts of the north-central and southern re-

gions of the country. Okolie (Okolie *et al.* 2018) asserted that the Yorùbá people constituted about 18% of Nigeria's population. This population is now 201 million (United Nations Population Fund 2019). Agricultural production dominated the socio-cultural life of Yorùbá people from time immemorial while it remains a major employer of labour even in recent times. The Yorùbá have also demonstrated love and respect for agriculture as reflected in many of their sayings. One of their popular sayings is *àgbèlòba* (this literally means that the farmer is king). Ibrahim (2019, 168) explored contemporary attitudes towards the concept of *àgbèlòba* among Yorùbá farmers and reported a "predominantly positive attitude" towards the ideology, signifying their sustained love for the farming occupation even in the currently globalizing world. Virtually all Yorùbá people are farmers (Bascom 1955), cultivating yam, maize, cassava and millet as staple foods while beans, plantains, fruits and vegetables are subsidiary crops. Yorùbá people also engage in blacksmithing, dyeing, wood-carving, bead working, basketry and other crafts. Trading is also predominant especially among women. The commercial economy of the Yorùbá people however, was principally based on the production and exportation of cocoa which was introduced to Yorùbáland in the nineteenth century (Oloidi 2013). The traditional Yorùbá society was therefore powerfully influenced by the production of cocoa. Apart from representing the larger Nigerian economy's major product, its production served as a major means of wealth amassment and self-empowerment among the Yorùbá, which also influenced other social dynamics like the award of chieftaincy titles, marriage, kinship matters, etc. — a manifestation of Karl Marx's 'sub-structure and superstructure' hypothesis. The following assertion of Bascom (1951a) succinctly describes the economic role of cocoa in the distant past:

The commercial economy of the Yorùbá is based on cocoa (koko, from English) *Theobroma cacao*, originally native to Central America, which has become the principal cash crop of the Yorùbá during the present century. Today Nigeria's major export, cocoa, is produced almost entirely by the Yorùbá. More than 99 percent of the total tonnage of Nigerian cocoa graded in 1940–1 was produced in Yorùbá territory, only 741 out of 97,862 tons coming from Benin and Warri provinces. First exported in the last decade of the nineteenth century, cocoa has increased in importance; in 1947 it ranked first among Nigeria's exports in terms of value. It is the principal cash crop in Oyo, Ondo, Ijebu-Ode and Abeokuta provinces and part of the Colony, all of which are inhabited by the Yorùbá. (Bascom, 1951a, 41)

Cocoa production accentuated agriculture-induced fertility among the people. This production was a principal means of self-empowerment. The Yorùbá people are exceedingly industrious. Cocoa has lost its importance as Nigeria's main foreign exchange earner given the discovery of oil after independence in 1960. And of course, its production is no longer central to economic enhancement among the Yorùbá. Striving to accumulate wealth and property is cultural-

ly endorsed among the Yorùbá. This is especially true for males but females are certainly not left out in the drive towards industry and economic enhancement. Bascom (1951b, 491) described the Yorùbá community as “a pecuniary society where economic differences are important”. He further asserted that individuals’ economic wherewithal is recognized and articulated using specialized terms including but not limited to “*oloro* (wealthy man), *olola* (rich man), *olowo* (man of money), *talaka* (the poor man), *olosi* (the destitute) and *alagbe* (beggars)”. Despite these distinctions and the importance of wealth among the Yorùbá, the culture strongly prescribes functional relationships between well-to-do individuals and the less privileged. The central thesis of Omobowale (2008) is that in the Yorùbá society, respect and importance accorded to wealthy individuals are dependent not just on the accumulation but also the sharing of wealth. The benevolence of wealthy persons is what guarantees their acknowledgment by the community. It is also interesting to note that the Yorùbá people use a wide variety of their oral knowledge and resources including proverbs to foster hope for better, economically rich life (Ajila 2004).

Given this cultural context, it is logical that the means to secure financial wherewithal, agriculture, is strengthened through another socially sanctioned norm of marriage – polygyny. The bond of marriage made it possible for men to appropriate the labour of their wives and their children. The Yorùbá society is patriarchal, women are strongly expected to be submissive to their husbands (Odebode 2004). Descent and inheritance are patrilineal. Hence, children belong exclusively to their fathers (Fadipe 1970) and wives do not inherit from their husbands (Sodiq 1996; Aluko 2015; McIntosh 2009). Basically, in Yorùbá custom a man’s property upon his death is passed to the oldest of his brothers, who then assumes responsibility for the welfare of the deceased’s children and widows. A woman is oft regarded as a property of the man, so she is to be inherited by any of the deceased husband’s brothers in levirate marriage (Sodiq 1996).

It must be quickly noted however, that gender dynamics among the Yorùbá are very fluid. Women can inherit from their parents and siblings (Aluko 2015). Women enjoy high autonomy in the culture because they can amass personal properties which are totally independent of their husband’s control (Fadipe 1970, McIntosh 2009; Aluko 2015). As noted earlier, women are not left out in the drive to be monetarily successful among the Yorùbá. Hence, although patriarchy is ideologically dominant, the culture also allows women’s relevance in the economic and even political and religious life of the community. So, normatively, fathers are held responsible for the upkeep of their children but in reality, mothers play huge roles in bearing the financial costs of having children. Men do not function as sole breadwinners thereby granting women substantial control in the domestic domain (Odebode 2004). The probability that women expend on children’s education, nutrition and health is even higher

than men's (Blumberg 2005). The gendered mentality expecting women to be homemakers therefore has no ground in Yorùbá society (Aluko 2015); whether the pre-colonial, colonial and post-colonial circumstances are considered (Renne 1993; Caldwell, Orubuloye and Caldwell 1991). The performance of household chores is normatively and strongly the domain of women though tremendous changes have been recorded. Essentially, polygyny benefited both genders in no small measure. While enabling men to grow large families for labour and consequent wealth expansion, it enabled especially older women to focus on their trade while leaving the substantial job of tending the home front to younger wives. The position of older senior wives further enabled them to even mobilize family services to "accumulate wealth and greater authority vis-à-vis their husbands and other relatives" (McIntosh 2009, 88). The Yorùbá society has definitely undergone tremendous changes owing primarily to western contact, polygyny is no longer as widespread as it used to be. For instance, a recent National General Household Survey indicates that in the southwestern geo-political zone of the Yorùbá people, 40.4 percent and 8.6 percent of females are married in monogamous and polygamous marriage respectively (National Bureau of Statistics 2019). Indeed, these changes to the character of marriage as an institution of society underlie the social dynamics of agriculture in the current Yorùbá society.

Methodology

The design of this work is ethnographic and descriptive. The Yorùbá people of Southwestern Nigeria constitute the study population. They currently inhabit six States in Nigeria. However, farmers were primarily targeted for this study population. Two states, Oyo and Osun, were randomly selected for the study. From each state, one rural community, Ìgbòho and Gbòngán were selected randomly from each respectively. The target population were reached at Gbòngán through the primary assistance of the reigning King of the town. He was supportive in reaching stakeholders amongst farmers. Farmers' associations were approached at Ìgbòho. They provided tremendous support in reaching and mobilizing potential participants for the study. These prospective participants were screened to confirm they met inclusion criteria, which included being a farmer and willingness to participate in the study. One hundred and twenty-eight participants ($n = 128$) took part in the study. Data saturation provided direction as to when to truncate data collection. Participants were offered small gifts as a gesture of appreciation of their participation.

The sex and age of prospective participants were factors that directed the process of data collection. This process featured:

1. Twelve focus-group discussions (FGDs). The FGDs were 6 male and 6 female, two each from younger, middle-age and older generations. An FGD consisted of 7 to 9 participants and the total number of people that participated in the FGDs were ninety-six (n of FGDs = 96). The mono-sex composition of FGDs was motivated by sensitivity to African gender norms generally and the Yorùbá norm of gender relations in particular. Normatively, women are hardly expected to interrupt men. Yet, successful FGDs require rich interaction among participants to generate consensus.
2. Twenty-four in-depth interviews (IDIs). The IDIs were 12 male and 12 female, 4 from each generation (n of IDIs = 24).
3. Eight key-informant interviews (KIIs) among heads of farmers' guilds, community heads and identified custodians of *Ifá* knowledge (Babaláwo [male] or Iyanifa [female]). The KIIs were 4 male and 4 females, 4 from middle-age and 4 from older generations (n of KIIs = 8).

Being of the younger, middle-age and older generation was defined as being chronologically aged less than 29 years, aged from 30 to 59 years and aged 60 and above respectively. Probing was constantly featured during data collection to prompt open-ended responses from participants and to elucidate their responses. Data were recorded on digital devices so as not to lose any information. The primary question that participants were asked was how agricultural production influenced their fertility. Secondary questions were mainly dependent on initial responses of participants. Hence, respondents' initial responses guided further discussions because they were asked to clarify, elaborate and recall lived experiences to buttress their submissions. Basic demographic information including educational achievement and marital status was collected.

Ethical protocols were observed. The rights of participants to self-determination were accorded utmost respect. Participants were offered an introductory/informed consent form which contained details about the study. Research assistants read the content of the form to each participant. Participants were informed that no risk of participation was anticipated. They were also told that their contributions would be used for the purpose of research only; and they could opt to refuse to continue participating anytime. Participants' anonymity was guaranteed with utmost certainty. They appended their signature or thumb print on the forms, to document their informed consent. The proposal of this study was submitted to the Faculty of Social Science, University of Ibadan Institutional Review Board for ethical approval and it was approved (assigned number UI/SSHREC/2018/0030).

Data analysis was commenced through data immersion. Reading and re-reading of transcripts was featured very early during data collection. Virtually all participants spoke in the Yorùbá language, so data were translated into the English language. Data were also transcribed. Data analysis followed the grounded theory approach and was entirely inductive because data content

determined code development. The Nvivo software was used to code data. The constant comparison strategy was employed in the coding process. Initial codes and topics were generated to make sense of data during reading and re-reading of transcripts. These initial codes/topics were compared and contrasted with new codes/topics as they were developed. With time, five themes became obvious, all touching on agriculture-induced fertility. These themes have provided structures for the numerous textual data that were obtained regarding agriculture-induced fertility. Verbatim quotes from participants were used to support the themes that emerged. Decontextualization of data was avoided by avoiding excessive fragmentation. Coding query and matrix coding query were conducted to observe the influence of sex and generation on the codes that were developed. However, this proved fruitless as themes were not influenced by the sex and age of participants.

Findings¹

Recollections of Agricultural-Labour Justification for Polygyny and Increased Child-Bearing

Participants generally expressed the view that farm work used to be a strong motivation for polygyny and increased child-bearing among the Yorùbá people. These children in turn benefitted by surviving on the proceeds of the farms. Some group discussants stated as follows:

In the olden days, our fathers bore many children so that they could help them on the farm. The farms and the children sustained each other (Males, middle-age generation)

An in-depth interviewee similarly responded as follows:

Yorùbá culture expects us to have plenty of children, because of work. The kinds of work we do like palm-fruit harvesting required children. It is children that our fathers relied on to do this work successfully (Female, younger generation)

A key-informant recounted his personal and lived experiences to buttress the idea that children were used as farm labour in the past:

¹ The demographic profile of participants shows that sex and age were evenly distributed as expected. Most participants (93%) were married as opposed to a minority (7%) that were single. No participant was widowed or divorced. Secondary School Certificate holders were most numerous at 35.2%. The percentage of participants with no formal education (27.3) and those with a primary school certificate (25.8) were close. A noticeable percentage (11.7) had tertiary education. This indicates that basic education is enviable among participants. Participants' mean age was 46.07±19.48.

My father had a very large family because he was a big farmer. In this town, there was no one who could match the size of his cocoa farm and business. In order to get women and children to work for him, he married more. Which woman would one marry that would not want to have children? Definitely once you marry a woman, she will bear additional children. As he had more children, they helped him and served as labour for his work. Eventually, he used the money to take care of us (Male, older generation)

Participants' generous recount of agricultural-labour justification for polygyny and increased fertility is not surprising because of how popular the practice used to be. Like in other climes, the use of child-labour in the production process was prevalent. This use has marred world economic history. Admassie (2002, 252) asserted that "historical evidence indicates that some of the worst forms of child labour occurred in the developed world particularly during the industrial revolution". The rationality of this practice is not in doubt. Some group discussants asserted that "the farms and the children sustained each other" (Males, middle-age generation). So, the agricultural-labour justification for polygyny and increased fertility is natural and understandable. In the report of their study among the Yorubá people, Caldwell, Orubuloye and Caldwell (1991) asserted as follows:

Among older men who could afford to marry, polygyny was an advantage. In conditions where there was no market for land, by far the best investment was in wives who worked in the household and on the land, and who in due course, would bear a large labor force that would not only grow more food, but even have the right to occupy more land. The wider area cultivated and the greater number of cultivators reduced famine and other risks. The investment in bridewealth and setting up a new wife was certainly the best possible economic investment and often the only productive one. ... A larger family with more widespread alliances, an impressive number of children sired, and more housing and farmed land all constituted the "big" man with great prestige.

Agricultural-labour justification for polygyny and increased fertility underscores Yorubá culture's sanctioning of wealth accumulation. As discussed earlier, wealth amassment is applauded in the culture and polygyny cum subsequent increased fertility enabled it. Yorubá people are fervently determined to gather wealth and share it to assume the status of a patron. This is the central thesis of Barber (1981, 724) who expounded the concept of the "self-made man", signifying the culture's endorsement of self-improvements. Wealth amassment was traditionally achieved through the establishment of a large family, made possible by the popular practice of polygyny. Family members work on the farm to produce more. Further, greater opportunity for wealth amassment emerged with the planting and exporting of cocoa:

Cocoa, first planted in the early years of the present century, brought money; and ... the Yorubá developed strong material aspirations and money began to dominate in determining a person's importance (Bascom 1951b, 495).

Cocoa production brought wealth to the Yorùbá region (Lloyd 1953). The agricultural-labour justification for polygyny and increased fertility is natural and rational in Yorùbá social context; it also accentuates Yorùbá culture's sanctioning of wealth accumulation.

Limitations to The Agricultural-Labour Motive of Polygyny and Increased Child-Bearing Among Yorùbá People

In recollecting historical accounts of polygyny as a tool of increased child-bearing for farm labour, some participants stressed the idea that polygyny was widely practiced because of men's desire for additional wives, even though this also served the purpose of producing additional children for farm work. In other words, polygyny was practiced primarily for the access it granted to additional women. Some group discussants stated as follows:

Our fore-fathers gave birth to many children because they were not satisfied with one wife. Many of them had two or three wives probably because of their farming occupation, but also because they liked it like that. Fathers of young men even married wives for their sons. The young men could then decide to get married to women of their choices thereafter (Male, middle-age generation).

An in-depth interviewee made it clear that the desire for polygyny could be independent of the desire to bear children for farm work. She stated as follows:

If it was just for the purpose of farm work then no one should be marrying more wives and bearing plenty children today, since children are hardly used for farm work anymore. But there are still some people who have two or three wives even today (Female, younger generation).

A key-informant also buttresses the previous position as follows:

Even when men already have large families they still marry more. So, it was not just about farm work, men also enjoy having additional women and our culture allows it, except they do not have money to marry more (Male, older generation).

Participants' insistence on the idea that the practice of agricultural-labour justification for polygyny was born out of men's desire for additional wives is logical. Studies frequently show that people largely assume that men are naturally polygynous but this subject requires greater information (Orubuloye, Caldwell and Caldwell 1997). Moreover, being polygynous is pervasively accepted generally and more specifically in sub-saharan Africa, signifying that access to more women is facilitated by social norms and structures. Traditionally, being polygynous is applauded tremendously. Hence, the notion of agricultural-labour justification for polygyny and increased fertility is just an instance of the numerous social resources that stand in favour of polygyny.

Change in Agricultural-Labour Justification For Polygyny and Increased Child-Bearing Among the Yorùbá People

There is tremendous change in attitude towards, and in the practice of, agriculture-induced fertility. Participants' representation of this change was intense, widespread, and hinged generally on modern civilization. Some group discussants represented this change while noting people's desire for decreased fertility in order to educate their children properly:

In the olden days, it was too usual that when someone had many farmlands, he also had many children in order to have even more farmlands. Instead of hiring labourers, children were to work on the farm for their parents. But today, civilization has changed the game. People now give birth to the number of children they can afford to offer quality education to (Female, older generation).

An in-depth interviewee gave the following account:

There has been tremendous change in the way Yorùbá people bear children. The reason behind this change is that in the olden days, our fathers married many wives to assist them with their farm work. So, they have many children. I, as an example, my husband married thirteen wives and seven of us had children with him and we all used to work tirelessly on the farm (Female, older generation).

A key informant explained this change while recalling arrangements for schooling opportunities as follows:

Civilization has really changed the ways of many people. Back then, it was almost mandatory for our husbands to marry wives because children from each wife would work with their father on the farm. There were some opportunities for these children to go to school then but it had to be selective. For example, the eldest child of each wife would be allowed to attend school while other siblings would have to wait for their elder siblings to finish their primary school education before they were allowed to go to school. That was how things were done in the olden days (Female, older generation).

Repudiation in Agricultural-Induced Fertility

The majority of participants were critical as opposed to being sympathetic towards the notion of agriculture-induced fertility in current times. Some group discussants talked about childcare in a tone that made it sound burdensome. They stated as follows:

As it is nowadays, having children is something that entails great expenditure. The more children you have, the greater your expenditure. These days as we do our daily duties, we also work for our children. We take them to school, do assignments for them and so on. So, our livelihood has no direct bearing on the

number of children we choose to have. It costs us money to send them to school. No matter how much one loves to have plenty of children, one has to consider so many issues which tend to stand against having plenty of children these days. One can only expect to get poorer if one decides to have plenty of children now (Males, middle-age generation).

An in-depth interviewee suggested that bearing many children will eventually be regretted. He stated as follows:

Nowadays, if one should decide to have many children, he will regret the decision because no child will want to stay on the farm. Our fathers did it for a purpose which was farming but if anyone should try this now, the children will rebel against him (Male, older generation).

A key informant recounted the current social problem of child trafficking, to buttress her aversion towards high fertility. She stated as follows:

It is this very practice of bearing children for farm work that brought about modern-day slavery. When parents can no longer handle the excessive responsibilities that they created by having plenty of children, they will begin to send underage children to other countries to work, which is a consequence of bearing many children in this modern era. So, in my opinion, we have to be moderate in the number of children we give birth to and stop looking to them to work for us (Female, middle-age generation).

Participants' responses indicate that there is a tremendous change in the attitude towards, and in the practice of, agriculture-induced fertility. This was intensely communicated and the representation was pervasive. A participant asserted that "civilization has changed the game" (female, older generation). In addition to this change, several participants expressed a strong repudiation of agriculture-induced fertility in the context of the current social climate. Some of the bases of this repudiation include the following responses: "having children is something that entails great expenditure" (males, middle-age generation); "... no child will want stay on the farm... if anyone should try this now, the children will rebel against him" (male, older generation); "it is the very practice of bearing children for farm work that brought about modern-day slavery" (female, middle-age generation); "such children will become a nuisance to the society" (male, older generation); "one can only expect to get poorer if one decides to have plenty of children now" (female, older generation). Indeed, these and many more are rational accounts motivating the alteration of the desire for high fertility. This is certainly a vindication of Caldwell's (1976, 326) insistence that rationality is not a prerogative of "Western social ends with economically logical steps to maximize satisfactions". This study's focus on 'behavior and reactions' has explicated fertility change as a reaction to social circumstances—when high fertility is less 'profitable'.

Participants repudiation of the notion of agriculture-induced fertility is in support of the theme of change in agriculture-induced fertility. This is in favour of the maximum population ideology, epitomized by the classical Malthusian concern, the concern of *Limits to Growth* (Meadows *et al.* 1972), the *Population Bomb* (Ehrlich 1969) and the demographic transition theory. These theories typically raise concerns over food supply and non-renewable resources. Hence, this change reflects discontinuities in the traditional orientation towards fertility among Yorùbá farmers. It is a limitation to the notion of the African love for children; it exposes the pecuniary rationale behind African pro-natal philosophy.

Approbation of Agricultural-Labour Justification For Polygyny and Increased Child-Bearing Among Yorùbá People

It was notable that a few participants related their views and experiences with an intense sense of approval for the practice. These participants stressed the advantages of marrying several wives and having several children. For instance, some group discussants recounted the success story of a practitioner of this culture:

A man in the vicinity has eighteen children, fifteen are graduates. He brought them up with the produce from his farm by making them work on the farm. When these children started becoming successful in life, they began to take care of their younger siblings when their father had stopped working (Male, middle-age generation).

An in-depth interviewee also expressed an optimistic attitude towards agriculture-induced fertility:

Agriculture was the predominant occupation of our fathers and having many children played a significant role in the success of their work. Restricting the number of children that people have has negatively affected the productivity of agriculture in current times. In the northern part of the country where they still have many children, agriculture is still lucrative (Male, middle-age generation).

A key informant's views notably reflected the undesirability of the change in agriculture-induced fertility and saw this as a threat to Yorùbá culture occasioned by civilization:

The Yorùbá society embraces the culture of bearing plenty of children wholeheartedly, only civilization has ruined so many aspects of our culture. In the olden days, the Yorùbá perception on bearing many children was rooted in farming which is their major occupation. That was why they married many wives and gave birth to many children because they are the ones who cultivate the farm land but civilization has almost destroyed the culture. Having lots of children is good (Male, middle-age generation).

The approbation accorded to agriculture-induced fertility by a few participants is a reflection of some measure of cultural survival. It is instructive that approbators were concerned about the survival of traditional culture. Agriculture-induced fertility is still a protectively guarded cultural element among marginal Yorùbá farmers.

Conclusions

Agricultural-labour justification for polygyny and increased fertility is natural and rational in the Yorùbá social context; it also accentuates Yorùbá culture's sanctioning of wealth accumulation and it represents an instance of the numerous social resources that stand in favour of polygyny. The maximum population ideology is favourably placed in the context of the change in agriculture-induced fertility. This change symbolizes discontinuity in the traditional orientation towards fertility among Yorùbá farmers. The change is also a limitation to the notion of the African love for children; it exposes the pecuniary rationale behind African pro-natal philosophy. However, the coexisting approval of agriculture-induced fertility among a fringe of participants showcases some degree of cultural survival. It is interesting and instructive that approbators were worried about a cultural renaissance.

References

- Admassie, Assefa. 2002. "Explaining the high incidence of child labour in Sub-Saharan Africa." *African development review* 14(2): 251–275.
- Ajila, C. O. 2004. "Hope Fostering Among the Yoruba Speaking People of Nigeria: The Use of Proverbs, Cognomen, Prayers and Names." *Anthropologist* 6(2): 141–146.
- Aluko, Yetunde A. 2015. "Patriarchy and Property Rights among Yoruba Women in Nigeria." *Feminist Economics*, 21(3): 56–81. DOI:10.1080/13545701.2015.1015591
- Barber, Karen. 1981. How man makes God in west Africa: Yorùbá attitudes towards the "Òrìsà". *Journal of the International African Institute* 51(3): 724–745.
- Bascom, W.R. 1951a. "Yorùbá food." *Journal of the International African Institute* 21(1): 41–53.
- Bascom, William R. 1951b. "Social status, wealth and individual differences among the Yoruba." *American Anthropologist* 53: 490–505.
- Bascom, William R. 1955. "Urbanization among the Yorùbá." *American Journal of Sociology* 60(5): 446–454.
- Binswanger, Hans P. and Pingali, Prabhulet *al.*1998. Population density and farming systems: the changing locus of innovations and technical change. In: Lee, R.D. (Ed.), *Population, Food and Rural Development*. Oxford University Press, Oxford, UK.
- Blumberg, Rae Lesser. 2005. "Women's Economic Empowerment as the 'Magic Potion' of Development?" Paper presented at the 100th Annual Meeting of the American Sociological Association, Philadelphia, August 13–16.

- Boserup, Ester. 1965. *The Conditions of Agricultural Growth the Economics of Agrarian Change Under Population Pressure*. Earthscan Publications Ltd, London.
- Boserup, Ester. 1970. *Evolution Agraire et Pression Demographique (Agrarian Evolution and Demographic Pressure)*. Paris: Flammarion.
- Caldwell, John C. 1976. "Toward A Restatement of Demographic Transition." *Population and Development Review* 2(3/4): 321–366.
- Caldwell, John C., Orubuloye, I.O. and Caldwell, Pat. 1991. "The destabilization of the traditional Yorubá sexual system." *Population and Development Review* 17(2): 229–262.
- Dyson, Tim. 2010. *Population and Development: The Demographic Transition*. London, UK: Zed Books.
- Ehrlich, Paul R. 1969. *The Population Bomb*. Ballantine.
- Fadipe, Nathaniel A. 1970. *The Sociology of the Yoruba*. Ibadan: Ibadan University press.
- Ibrahim, Fausat M. 2019. Àgbèlòba: Optimism in Livelihood Dynamics among Yorubá Farmers of Southwestern Nigeria." *Antropologija* 19(2): 155–175.
- Kamuzora, C. Lwechungura. 1984. "High fertility and the demand for labour in peasant economies: the case of Bukoba District, Tanzania." *Development and change* 15(1): 105–124.
- Lloyd, Peter. 1953. "Craft organization in Yorubá towns." *Journal of the International African Institute* 23(1): 30–44.
- McIntosh, Marjorie K. 2009. *Yorubá Women, Work, and Social Change*. USA: Indiana University Press.
- Meadows, Donella H.; Meadows, Dennis L.; Randers, Jorgen and Behrens, William W. 1972. *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*. New York: Universe Books.
- National Bureau of Statistics, 2019. *LSMS Integrated Surveys on Agriculture: Nigeria General Household Survey Panel, Wave 4*. Accessed 6th January 2020 from <https://www.nigerianstat.gov.ng/download/1030>
- Odebode, Olasunbo. 2004. "Husbands are Crowns: Livelihood Pathways of Low-Income Urban Yoruba Women in Ibadan, Nigeria." Maastricht: Shaker. PhD Dissertation, Institute of Social Studies and CERES Research School.
- Okolie, Victoria O., Cisana, Selena, Schanfield, Moses S., Adekoya, Khalid O., Oyediji, Olufemi A., & Podini, Daniele. 2018. "Population data of 21 autosomal STR loci in the Hausa, Igbo and Yoruba people of Nigeria." *International Journal of Legal Medicine* 132(3): 735–737.
- Oloidi, Jumoke 2013. "Staple Food and Livestock Production among the Yoruba of the Colonial Nigeria: The Ekiti Experience." *African Research Review* 7(4): 120–137. DOI: <http://dx.doi.org/10.4314/afrev.7i4.8>
- Omobowale, Ayokunle O. 2008. "Clientelism and Social Structure: An Analysis of Patronage in Yorubá Social Thought." *Afrika Spectrum* 43(2): 203–224.
- Orubuloye, I.O.; Caldwell, John C. and Caldwell, Pat. 1997. "Perceived Male Sexual Needs and Male Sexual Behaviour in Southwest Nigeria." *Social Science and Medicine* 44(8): 1195–1207.
- Pingali, Prabhu L. 2012. "Green revolution: impacts, limits and the path ahead." *Proceedings of National Academy of Science* 109(31): 12302–12308.

- Renne, Elisha P. 1993. "Gender ideology and fertility strategies in an Ekiti Yorùbá village." *Studies in Family Planning* 24(6): 343–353.
- Sodiq, Yushua. 1996. "An analysis of Yoruba and Islamic laws of inheritance." *The Muslim World* 86(3–4): 313–333.
- Tiffen, Mary, and Michael Mortimore. 1994. "Malthus controverted: The role of capital and technology in growth and environment recovery in Kenya." *World Development* 22(7): 997–1010.
- United Nations Population Fund, 2019. *World Population Prospects: The 2019 Revision*. Accessed 1st April, 2020 at: <http://data.un.org/Data.aspx?d=PopDiv&f=variable-ID%3A54>
- Van der Ploeg, Jan Douwe. 2012. Poverty Alleviation and Smallholder Agriculture: *The Rural Poverty Report 2011. Development and Change* 43(1): 439–448.
- Willy, Daniel Kyalo; Muyanga, Milu and Jayne, Thomas. 2019. "Can economic and environmental benefits associated with agricultural intensification be sustained at high population densities? A farm level empirical analysis." *Land Use Policy* 81: 100–110.

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*Praćenje fertiliteta u funkciji poljoprivredne proizvodnje
kod Joruba farmera u jugozapadnoj Nigeriji*

Ljudski fertilitet igra značajnu ulogu u dinamici poljoprivredne proizvodnje u afričkim seoskim privredama. Uloga povećane plodnosti u poljoprivrednoj produktivnosti objašnjava se suprotstavljenim ideologijama, pa ipak, afrička gledišta o povećanoj plodnosti u službi poljoprivredne proizvodnje u trenutnoj društvenoj klimi čine se nepotpunim. Triangulacijom kvalitativnih metoda, u radu se istražuje plodnost u funkciji poljoprivredne proizvodnje kod Joruba farmera u jugozapadnoj Nigeriji. Rezultati jasno i ubedljivo ukazuju da se opcija namernog povećavanja fertiliteta putem mnogoženstva u cilju povećanja poljoprivredne proizvodnje u znatnoj meri izgubila. Umesto toga, naglasak je na brizi o optimalnom dečijem razvoju, koji se ne može garantovati nastavkom fertiliteta u službi poljoprivredne proizvodnje. Ovi nalazi ukazuju na to da je sklonost Joruba farmera ka povećanju fertiliteta uslovljena materijalnim razlozima, čime se ističe racionalnost naroda Joruba i njegove kulture.

Ključne reči: poljoprivreda, fertilitet, Joruba, farmeri, demografska tranzicija

*Le suivi de la fertilité au service de la production agricole chez
les fermiers Yoruba du Nigéria du sud-ouest*

La fertilité humaine joue un rôle important dans la dynamique de la production agricole dans les économies africaines rurales. Le rôle de la fertilité accrue dans la productivité agricole s'explique par des idéologies opposées, et pourtant, les visions africaines sur la fertilité accrue au service de la production agricole dans le climat social actuel semblent déficientes. Par la triangulation des méthodes qualitatives, cette étude examine la fertilité au service de la production agricole chez les fermiers Yoruba du Nigéria du sud-ouest. Les résultats démontrent clairement et de manière convaincante que l'option de l'augmentation intentionnelle de la fertilité par le biais de la polygamie dans l'objectif d'accroître la production agricole a considérablement faibli. À la place, l'accent est mis sur le souci concernant le développement optimal des enfants, qui, lui, ne peut être garanti avec une poursuite de la fertilité au service de la production agricole. Cela démontre que les dispositions des fermiers Yoruba à augmenter la fertilité sont dictées par des raisons matérielles, accentuant ainsi la rationalité du peuple Yoruba et de sa culture.

Mots clés: agriculture, fertilité, Yoruba, fermiers, transition démographique

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