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“To be a farmer is a thing of joy”: A Poetic Inquiry of Nigerian Secondary Agriculture Students’ Perceptions of Agriculture and their Career Intentions Within the Sector

Youth participation in Nigerian agriculture continues to decline despite the nation’s vastly youthful population. Existing research on barriers to youth participation in agriculture has largely relied on quantitative approaches that underrepresent student voices. To address this gap, we engaged 107 agriculture students across four Nigerian states with reflective writing prompts. The prompts elicited what students think about agriculture and if they could imagine working in the sector. Essays were thematically analyzed and transformed into portraiture poems that preserve participants’ language, affect, and cultural epistemologies. Findings reveal three overarching themes: descriptions of agriculture (textbook, real, and ideal), material and nonmaterial factors deflecting interest, and varying degrees of certainty regarding agricultural career intentions. While students demonstrated awareness of agriculture’s societal importance and technological possibilities, perceptions of drudgery, low social status, limited mentorship, and fear of missing out tempered enthusiasm, particularly among older students. Nevertheless, expressions of joy, pride, and optimism persisted, especially among younger students. Recommendations for enhancing youth participation in Nigerian agriculture were offered.

Introduction and Relevant Literature

Nigeria’s current population is 223.8 million and projected to double in a few decades. With a median age of 18.5, she is the fastest growing and most populous country on the continent (Galal, 2023). Nigeria is also one of the most youthful countries in the world (Sasu, 2023), as 60% of the population are youths (Osabohien et al., 2021). However, youth involvement in agriculture is notably low and projected to decline (Alliance for a Green Revolution in Africa, 2015), given the widespread unfavorable dispositions to agriculture in the region.

The Nigerian education system is divided into nine years of elementary education (ages 6-11), three years of middle school or junior secondary education (ages 12-14), three years of high school or senior secondary education (15-17 years) and four to six years of tertiary education (Dele-Ayaji, et al., 2021). Modebelu and Nwagpadolu (2013) describes the introduction of agricultural science in the Nigerian secondary school curriculum as a laudable effort towards empowering youths to contribute to the attainment of national food security. Prior to formal agricultural education, Fafunwa (1974) posits that the apprenticeship model was the major mode of agricultural education. Agriculture teachers are now saddled with a significant portion of the responsibility of training the next generation of farmers and agriculturists (Egun, 2010). Agricultural science is a core multidisciplinary, vocational curricular subject delivered in junior and senior secondary schools in Nigeria with the aim of re-orienting youths’ perceptions of agriculture as a noble means of livelihood (Afolabi et al., 2017; Egun, 2009).

In Nigeria, the nobility of agriculture careers gradually dwindled with the discovery of deposits of fossil fuels followed by the national shift from agriculture to oil as the economic backbone in the 1970s (Adama et al., 2016; Shaibu, 2023). Nigeria’s exponential population growth needs proportional increase of employment opportunities, stretching the oil sector too thin and necessitating economic diversification. Nigerian youth unemployment rates increase annually (Osabohien et al., 2021; Mac-Ikemenjima, 2019). According to Adesugba and Mavrotas (2016),

55.4% of the 60% of Nigerian population who are youths are either underemployed or unemployed, with 22% being university graduates (Mac-Ikemenjima, 2019). As the unemployment rate grows, scholars posit that agriculture can offer joy opportunities, if youth perceive it as noble and profitable.

With four out of every ten Nigerians living in poverty as per a 2019 report (NBS, n.d), the need for economy diversification models exploring non-oil revenue sources has never been more salient (Ekezie & Deebom, 2019). Ucha (2010) lists overdependency on oil revenues, unemployment, and a poor educational system as the causes of poverty, and there is empirical evidence that strengthening the agricultural sector can provide solutions to these problems (Innocent-Ene et al., 2021). Omonzieje and Omonzieje (2014) proposed a poverty alleviation strategy based on physiocratic principles (i.e., leveraging Nigeria's abundant land resources and her teeming youth population). This proposition is corroborated by Osabohien et al. (2021) who found that as a primary source of livelihood, youth participation in Nigerian agriculture can reduce poverty by 17% and significantly increase household per capita income.

Considering the economic benefits of youth participation in agriculture, measures taken beyond formal agricultural education to enhance youth involvement in agriculture include the development of programs such as the N-Power Agro Program (2016), Farm Settlement Scheme (1940-1960), Young Farmers Club (1960s), Youth Employment in Agriculture Program (YEAP) (2013), and National Directorate of Employment (NDE) (1980s) (Akpomedya, 2010; FAO, 2016; Mbanaso et al., 2013; Ogunmodede, 2020; Osabohien et al., 2021). However, the top-down approach in the design and implementation of these programs posed limitations to achieving enhanced youth participation in Nigerian agriculture (Ajani et al., 2015; te Lintelo, 2012). te Lintelo (2012) argues that such a paternalistic approach to program or policy design has lower chances of empowering youths. Hence, Mukembo et al. (2020) suggests Youth-Adult Partnerships (YAP) as an alternative strategy.

This study adopts principles of YAP to explore youth's perceptions of, and intent to pursue a career in agriculture to amplify youths' voices. This is because extant research on barriers to youth favorable disposition to agriculture careers is majorly quantitative, potentially driving programs designed based on adult assumptions of what youths need (Mac-Ikemenjima, 2019).

Theoretical Framework

The theoretical framework used in this study is the Social Cognitive Career Theory (SCCT) developed by Lent et al. (1994). SCCT posits that individuals are shaped by their environment, and their environments are in turn shaped by social interactions within it. It has been used in a variety of contexts to explore how individual career aspirations are shaped by social support, personal interests, self-efficacy and expected outcomes. In this study, SCCT provided the lens with which we interpreted how Nigerian agriculture students' sense of self-efficacy, social support from family and friends, their individual interests, and expected outcomes impact their perception of agriculture and career aspirations within the sector.

As a theoretical framework, SCCT was useful in exploring the environmental, cognitive, and affective factors shaping perceptions and determinative possibilities of agriculture-related career

prospects among Nigerian agriculture science students. SCCT has been used in agricultural education research to study the attrition rate of male students in agriculture teacher training programs (Tummons et al., 2024), students' transition from agriculture classrooms into careers in the agriculture industry (Shayo, 2020), among other studies.

Purpose, Objectives, and Research Questions

Widespread negative perceptions of agriculture among African youths remain a leading barrier to their participation in the industry (Madende & Jordaan, 2023; Geza et al., 2021). Nigerian youths are not excluded as existing studies on their perceptions of agriculture reveal overwhelming negative results (Abdul-Raheem, 2022; Adebo & Sekumade, 2013; Agumagu et al., 2018; Osagie et al., 2021; Omotesho, 2017). Some metrics indicative of these negative perceptions are high attrition rates among first-year agriculture college students (Ifeanyieze et al., 2021); low enrollment in agriculture degrees (Adebo & Sekumade, 2013), and unfavorable dispositions to pursuing agriculture careers among agriculture college seniors (Abdul-Raheem, 2022). Additionally, agriculture is still perceived as a "poor man's job" and a "stepping-stone" career (Adebo & Sekumade, 2013; Badiru et al., 2019a) as high agrophobia continues to plague even agriculturally educated Nigerian youths (Ibrahim & Ibrahim, 2017).

The objectives of agricultural science as a subject area in secondary schools as outlined by the Federal Republic of Nigeria (FRN) are to stimulate students' interests in agriculture, expose students to opportunities in the field of agriculture, and to prepare students for occupations in agriculture (FRN, 1994). Given these objectives, it is important to explore how agricultural science in Nigerian secondary schools shape students' perceptions, abilities to identify career opportunities in the sector and ultimately informs their career intentions. Existing studies (Adejoh et al., 2016; Ango et al., 2020; Badiru et al., 2019a; Badiru et al., 2019b; Barau et al., 2016; Ige et al., 2016; Mulei et al., 2020; Uloh et al., 2022) at the intersection of secondary school students' perception of agriculture and their career interest and intentions within the sector have been predominantly quantitative with minimal representation of students' voices. This study seeks to fill this gap through constructivist lenses to uncover a deeper understanding of agriculture students' perceptions and their career interests.

This exclusion of youth voices in evidence generation has been identified as a major reason for the design of programs based on adult assumptions of what youths need (Mac-Ikemenjima, 2019). According to Sommers (2010), this is a major determinant of the success or failure of youth-targeted development programs. Corroborating Summers (2010), Ajani et al. (2015) opines that despite the potential of youths to revolutionize Nigerian agriculture, they have been long sidelined in agriculture development policies and programs. Noting that the failure of initiatives like the Young Farmers Club and Farm Settlement Schemes, can be attributed to the government's failure to facilitate active participation of youths in program design and implementation (Daudu et al., 2009). According to te Lintelo (2012), if youths are perceived as "passive clients of government services" (p.99), development initiatives will be counterproductive.

The purpose of this study is to amplify youth voices by qualitatively exploring Nigerian agriculture students' perceptions of agriculture, and their career intentions within the sector.

Methods and Procedures

This study was funded by the Patricia Reser Arts Center (PRAx) Student Fellowship aimed at promoting multidisciplinary research at Oregon State University. Specifically, this work was under the art and science track of the fellowship where the coauthor and accomplished poet, Dr. Hiram Larew, served as science and art mentor, respectively, to the lead author.

We employed poetic inquiry to explore Nigerian students' perception of agriculture and their career intentions within the sector. Guo (2022) describes poetic inquiry as an art-based qualitative research approach rooted in capturing human experiences to express the affective and emotional facets of evidence. Additionally, this method connects readers with the study participants because it centers their voices (Grbich, 2012) and facilitates an in-depth understanding of the study's findings (Duplantier & Lester, 2023). As a culturally responsive method, poetic inquiry offers a window into the world of the 'researched' without distorting their cultural epistemologies (Davis, 2021). According to Faulkner and Watson (2024), this method is particularly useful as it offers opportunities to preserve participants' voices through poetic transcription and portraiture. Sensitive details that could not have been assigned standard metric values for a quantitative study can be elicited to offer a deeper understanding of findings (Duplantier & Lester, 2023) on hard-to-convey affective details. These benefits of poetic inquiry made it suitable for this study, considering the objective of highlighting participants' voices.

Four schools across four states were purposefully selected to represent the North, South, East, and West of Nigeria participated in this study. The four states selected are Benue State (North), Rivers State (South), Imo State (East), and Oyo State (West). Working with five teachers (two from one school in the Western region and one from each of the other three regions), a total of 107 students from both Junior Secondary School (JSS) and Senior Secondary School (SSS) participated in this study. The data collection instrument was a writing prompt, and instructions for agriculture teachers to facilitate the reflective essay writing session were provided after retrieval of informed consents from the teachers. Teachers guided students through writing one to two pages of reflective essays describing what they think (perceptions) about agriculture and if they could imagine working in the sector (career intentions).

Participation was voluntary, and essays were completed outside of content delivery hours as homework. Student essays were anonymously submitted; however, age and grade level were provided by students who felt comfortable with doing so. Participants were within the age range of 10–17 years, and 20–30 essays were submitted per school. Teachers collected, scanned, and sent copies of the handwritten essays to the lead author. Participating teachers received small monetary compensation for their time. In addition to the reflective essays, we collected short written reflections from the teachers. Data were collected between September to November 2024. Our research design and methods received IRB approval (HE-2024-1094).

Data analysis began with familiarizing with the data by carefully reading the essays and writing initial thoughts. Essays were subjected to iterative coding and analyzed thematically in accordance with Barun & Clark's (2021) thematic analysis guidelines. Table 1 shows selected codes and exemplar associated quotes, labeled as region, followed by assigned numeric

participant ID. For example, a quote from participant #01 from Western Region is WR01. The emerging themes from this analysis informed 15 poems created in accordance with Miller’s (2019) poetry composition process. Aligned to Miller (2019), participants’ identities were protected as both identifying details and names of schools are not reported. The final poems are portraiture poems featuring direct quotes from student essays (Faulkner & Watson, 2024). Poem drafts were shared with teachers and students as a form of member-checking. Students’ reaction informed final versions of the poems. In addition to this, we kept an audit trail of methodological steps, memos, and reported our results in thick descriptions (Geertz, 1973).

Table 1: Showing codes and illustrative quotes

Codes	Illustrative quotes
Descriptions of agriculture	“...agriculture is huge... the oldest practice in the history of man...” WR11, Age 13 JS 2 “Most people perceive agriculture to be an old-fashion livelihood, which in my opinion is largely incorrect – NR1, Age 14, JSS 2 “If you were to ask some youth to draw a picture of someone in the agriculture sector, [you] would likely get the picture of a man or woman with a hoe or cutlass on the farmland- the picture reflects huge labour.”- NR19 Age 17 SS3
Importance of agriculture	“... [agriculture is an] essential and rewarding work... “there is something very satisfying about working with your hands...” ER4 “... of all the careers in the universe, none connects us to nature like agriculture.” ER14 “Agriculture is good and easy to learn with many career opportunities” WR28, SSS 2 “Without agriculture in our societies, I can 100% say no one will survive, no agriculture, no life” WR25, Age NA, SSS 2
Interest in agriculture	“If one gives proper thinking to the importance of agriculture, one cannot but develop interest in it” WR34, Age NA, SSS 3 “...for myself, I don’t like anything that has to do with agriculture. I don’t have interest or ambition, but I can learn without any plan to secure a job in it” WR28, SSS 2
Career intentions	“There is no doubt in my mind that I will pursue [agriculture]” WR11, Age 13, JSS 2 “I’m excited about working in this vital industry” WR12, Age 11, JSS2 “As a student in this part of the world [Benue], I don’t see myself as a farmer because it causes a lot of stress ..., resulting in many health challenges” NR1, Age 14, JSS 2

Text in [] added for easier readability. British English spelling used by participants.

Since the researcher is the research instrument (Creswell, 2013; Daly, 2007), we reflected on our identities and biases to acknowledge how these might tint our inquiry and interpretation of the data. I (Ogwiji) am a Nigerian, born in Lagos and raised in the country’s breadbasket. I obtained a Bachelor of Agriculture degree from the University of Ibadan and served as an agriculture educator. I am also a poet with works in Ake Review, Lolwe, Chestnut Review, Waccamaw, and elsewhere. Co-author, (Traini) is a North American professor with international agricultural experience in Ghana and Liberia. Additionally, we acknowledge the following limitations of our study. First, we intended to study states representative of the four regions (N, W, S, E), but our sample ended up not as spread out as intended. Although the aim of this study was not to generalize, we acknowledge that the NE/NW regions of the country were not represented in our

sample. Second, while the use of anonymized reflective essays was useful for data collection, we could not ask follow-up questions to participants as obtainable in semi-structured interviews.

Findings

Three major themes emerged, namely: *descriptions of agriculture, problems deflecting interests from agriculture, and degree of certainty as regards future career intentions in agriculture*. These themes are briefly highlighted below, accompanied by illustrative quotes, labeled as region, followed by assigned numeric ID. For instance, a quote from participant #01 from Western Region is WR01. Across the three major themes, five portraiture poems were created covering all subthemes. Tables 2-4 shows two poems per theme in which italicized lines are direct quotes from students' essays, and the Poet Muse (Thorp, 2003) acts as the adult in the collective meaning construction in alignment with YAP principles. Where applicable, names in the poems are fictitious.

Theme #1 Descriptions of agriculture: Under this theme, we found three subthemes; *textbook agriculture, real agriculture, and ideal agriculture*.

Subtheme #1: Textbook agriculture

Essays often started with a description of agriculture and its connection with various sectors of society. Students highlighted that agriculture is both “science and art” (SR05, SSS 2, 16 years) but focused more on the scientific dimension by emphasizing its role in the production of pharmaceuticals and clothing. For instance, WR05 (JSS 3, 13 years) wrote: “agriculture provides herbs to cure illnesses and diseases” and WR09 (JSS 1, 11 years) wrote: “most people don't know that even their designer [clothes] come from agriculture.” Rarely was the description of agriculture as art followed by any justifications or explanations but students alluded that agriculture offered “opportunities for creativity” (WR17, SS 2, 15 years) and that “agriculture needs the creativity of youths” (NR15, JSS 2, 13 years). Some students also described agriculture as a business, lauding its lucrative possibilities and entrepreneurial dimensions. A student from northern Nigeria wrote: “... it [agriculture] is very lucrative and there is no limit to how much one can make. There are millionaires and billionaires in agriculture” (NR05, SSS 2, 16 years). Beyond these, historical and cultural descriptions also reverberated in students' essays. Some common ones were agriculture “as a way of life” (WR12, 11 years, JSS 2), “a lifestyle” (WR07, JSS 2, 14 years), “oldest practice in the history of man” (WR12, JSS 2, 12 years), and “the backbone of human civilization” (WR37, SSS 1).

Subtheme #2: Real agriculture

Students described the practice of agriculture based on what they could see in their communities. Common descriptive terms and phrases included; “back-breaking” (WR09, JSS 2, 13 years), “low-tech and physically demanding” (WR04, JSS 3, 12 years), “old-fashioned [source of] livelihood” (NR01, JSS 2, 14 years), “old-fashioned and for old people” (NR21, JSS 3, 16 years) and “a poor man's job” (NR05, SSS 2, 16 years). Attempt was made to describe what others around them think about real agriculture: “...people see agriculture as farming and farming is a hard job, for illiterates who live in rural areas” (WR16, JSS 3, 13 years), “agriculture [is] considered a dirty job” (WR32, SSS 2), “people who engage in agriculture are seen as people who are suffering (ER01, SS1). Another student further elaborated on this: “If you were to ask

some youth to draw a picture of someone in the agriculture sector, [you] would likely get the picture of a man or woman with a hoe or cutlass on the farmland—the picture reflects huge labour” (NR19, SSS 3, 17 years).

Subtheme #3: Ideal agriculture

In students’ description of the *ideal* agriculture, they attempted to discredit stereotypes about the industry and displayed great optimism towards the possibilities of an imagined agriculture. For instance, NR01 wrote “most people perceive agriculture to be an old-fashioned livelihood, which in my opinion is largely incorrect” (JSS 2, 14 years). Another student wrote “people think the agriculture sector is a poor man’s job but that is far from the truth...” (NR05, SSS 2, 16 years). Ideal agriculture is described as “modern” and “reliant on technology like GPS and drones” (WR17, SSS 2, 15 years). One student writing on the technological integration into farming describes it as an intervention that brings “exciting possibilities to uncover” and goes on to say “if you’re a fan of drones, robots, AI, and GPS systems, then welcome to the new world of farming” (ER11, SSS 3). The melancholy associated with *real* agriculture dissipates slightly with the hope of this “new world of farming” and students began to visualize themselves in the field. One student wrote about this: “agriculture has evolved and there are ways youth can get involved without manual labor, such as marketing, blogging, and public relations (NR19, SS 3, 17 years). Another wrote: “Modern agriculture is high-tech and requires skilled professionals (WR38, SSS 1) negating the view of a student who wrote that “[people] don’t want to go to school for many years to graduate as a farmer” (WR16, JSS 3, 13 years). In *ideal* agriculture, students also want to see other young people participating. Two students wrote, “If I am able to work in agriculture, I will encourage others to do so” (WR23, SSS 2) and “I will like to convince others that agriculture is the way” (WR36, SSS 1).

Table two shows two poems *Textbook agriculture* and *The tour*, highlighting *textbook* descriptions of agriculture and descriptions of *ideal* agriculture as captured in students’ essays.

Table 2: Showing poems on agricultural science students’ descriptions of agriculture

Textbook agriculture	The Tour
In textbooks, we see	<i>If you’re a fan of drones, robots, AI, and GPS then welcome to the new world of farming!</i>
A candler and an incubator	My name is Ciroma Chukwuma Adekunle.
A pen and paddocks	Today, I will be your tour guide.
Shoots and roots	We will make stops at greenhouses
Seeds and new breeds.	Smart chicken pens and cattle barns
Agriculture in school is cool	You will see precision agriculture in action
<i>[It] is good and easy to learn</i>	And fruit towers taller than our hunger
<i>with many career opportunities</i>	Here we negotiate our freedom from poverty
Textbooks are an album of adventures	Seal a deal with national development
We flip the pages, fanning our	And pay a ransom for our kidnapped economy
Curiosities into a big fire	<i>Agriculture is not just about growing crops</i>
But in real agriculture,	<i>it is about growing a better future for everyone.</i>
the green grin fades	
Into a wilting, sad plant, potted by problems	
starved of sunshine...	
dying of thirst	
Beside a brimful watering can	

Theme #2: Problems deflecting interests from agriculture: Students shared material and nonmaterial problems facing the agriculture industry while highlighting how these problems shaped their perceptions of, and interest in agriculture. The following sub-themes emerged; *material problems and nonmaterial problems*.

Subtheme #1: Material problems:


Students bemoaned low access to “startup funds” (NR27, JSS 3), “cost of purchase and maintenance of equipment, no social amenities in rural areas, poor transportation network for farm produce” (WR19 SSS 3), “inadequate storage facilities to reduce food wastage” (WR13, JSS 2, 11 years), “soil degradation” (NR27, JSS 3) and “climate change” (ER14, SSS 2). According to ER03, access to credit lies at the crux of the matter but loan terms are stiff, collaterals are required and often “in cases where farmers meet requirements, the location of the collateral (its value) discourages banks from issuing such loans since it is in the rural area” Adding that “the additional requirement of a signatory of high-ranking civil servants who do not reside in rural areas” also pose a barrier to bank credit access. Elaborating on this problem, ER02 writes to explain that even when there are funds for large scale farming, access to land remains a problem because “vast land is required for productive use of machinery in agriculture. However, vast land is owned by communities rather than individuals which complicates leasing for agricultural purposes. The land tenure system should be looked into in Eastern part of the country” they concluded.

Subtheme #2: Non-material problems:

Non-material problems identified included a lack of mentors, low technical competency, stereotypes, Fear of Missing Out (FOMO), pricing policies, poor media representation of farmers, low status and inferiority associated with agriculture. The following are exemplar quotes; “Youth feel inferiority complex when they imagine themselves in farming or agriculture (NR11, SSS 1, 16 years); “[Agriculture is] perceived as a lowly career due to poor media representation and the lack agricultural influencers makes it worse” (NR15, JSS 2, 13 years); “Socially alert youths don’t want to live in the countryside where they are no night clubs and popular music bands...” (NR1, JSS 2, 14 years). Students proposed mentorship as solutions to these problems thus: “when you have the right model and the right people around you, it is sure that you will do well in agriculture” (NR9, SSS 1, 15 years). They also proposed adoption of “modern practices like precision agriculture” (NR6, JSS 3, 16 years) because “youth of nowadays prefer brain intensive work and not muscle intensive work” (NR19, SSS 3, 17 years). They called for experiential learning in agriculture and social media campaigns showcasing tech advancements in agriculture (WR13 JSS 3, 12 years) and “better media representations” (WR38 SSS 1), tax holidays and other government incentives (NR42, SSS 2, 15 years; NR34, SSS 3, 16 years) such as scholarships, grants and subsidies to encourage interest (WR38, SSS 1).

Table three shows two poems *Recipe for change* and *A cloud*, highlighting the material and nonmaterial problems deflecting youth interests from Nigerian agriculture.

Table 3: Showing poems on problems deflecting students' interest from agriculture

A cloud	Recipe for change
 <p>The word cloud features the central word "Problems" in large black font. Surrounding it are various agricultural issues in different colors and sizes, including: "long hours", "poor perceptions", "no mentors", "Natural hazard", "Produce price fluctuations", "Inadequate irrigation facilities", "Delayed return on investment", "Inferiority complex", "Poor storage facilities", "Inadequate transport facilities", "No respect for farmers", "Manual and traditional farming methods", "Inadequate training", "Violent attack on farmers", "FOMO on social life", "cost of inputs", "Lack of information", and "Poor farming".</p>	<p>Throw in a spoon of <i>experiential learning</i> Add an ounce of quality mentorship Allow to simmer, then add a cup of <i>machinery</i> With a generous dash of <i>modern practices</i> Sprinkle in better <i>media representation</i> And allow to blend into our algorithm Strain for <i>easier market access</i> and price regulations Now add seasoning cubes of <i>government incentives</i> And spice mixture of <i>grants and subsidies</i>, Allow to cook until the aroma scales our resistance And invites us to the feast of agricultural careers</p>
<p>When shall the day break, if the sun has lost its way? How shall the stars fly, if their wings are broken?</p>	<p>Tell the policy chefs about this recipe, show them This page of the national development cookbook Change is a meal we crave, We'll respond to a tough duty We'd be brave in our fight against hunger But we cannot go to this war unarmed: <i>... manpower cannot compete with machine power</i></p>

Theme #3: Career intentions in agriculture: Students shared varied degrees of interest and willingness to pursue careers in agriculture. Some shared high certainty; others were not interested at all, and some students indicated conditional participation intent as seen below.

Subtheme #1: High interest, high certainty

Students who responded in the affirmative and justified their interest, often displayed high to medium certainty in their essays, such as; “There is no doubt in my mind that I will pursue agriculture...” (WR11, JSS 2, 13 years), “I see a strong future for myself [in agriculture] (WR12, JSS 2, 11 years), “I see myself having an opportunity in agriculture because my grandparents did not play with agriculture” (NR13, JSS 1, 10 years), “Yes, because it impacts global market trade, and supports job creation...” (ER05, SSS 3), and “I see a bright future for myself in agriculture because it will employ me” (WR16, JSS 3, 13 years). Students’ reason for participating in agriculture were mostly as a source of livelihood but other reasons included “passion for growing food” (WR20, SSS 3), to “reduce starvation and poverty” (NR42, SSS 2, 15 years) “to contribute to the development of [the] country” (WR29, SSS 2), “to create employment for youth” (NR07 SSS 1, 15 years), to “connect to nature and reduce screen time” (WR08, JSS 2, 12 years). The indispensable role of agriculture in society echoed across essays with students describing it as a “vital industry” (NR31, SSS 2, 14 years) and that “agriculture is just like water...” (WR07, JSS 2, 14 years), “without it [agriculture], [our economy] would fall apart” (NR39, SSS 2, 14 years), or “without agriculture in our society, I can 100% say no one will survive, no agriculture, no life.” (WR25, SSS 2).

The financial and personal fulfilment possibilities of working in the industry were also captured in students' responses. Multiple students wrote: "...one Yoruba adage says *Igbe ni owo wa*, [that is,] 'money is in the bush' (WR02, JSS 3, 13 years), "I would like to be an agriculturist because it can make a person rich..." WR18, SSS 3, "yes, because of high profits... people in this sector, especially livestock production, experience high sales... Livestock if managed properly can pay a month what some civil servants earn per annum" (ER06, SSS 2); "People think agriculture sector is a poor man's job but that is far from the truth. It is very lucrative..." (NR5, SSS 2, 16 years). Expounding on the potential for a career in agriculture to help make an impact, another student wrote: "I could create solutions to problems farmers face... I find it exciting to be part of something that can solve real world challenges" WR08, JSS 2, 12 years). WR18 (SSS 3) also described agriculture as a "life saver", as "working in agriculture is making a difference" (ER12, JSS 2), and it brings a "sense of fulfilment" (NR11, SSS 1, 16 years).

The joy and pride of working in agriculture was also captured. One student justified their intent to pursue a career in agriculture because it is "a work that we should be proud of, because of its great benefit to society" (WR30, SSS 2). Leaning on perceived status and prestige of engaging in the industry, one student wrote: "If I am privileged to work in the sector, I will feel so happy. To be a farmer is a thing of joy" (WR34, SSS 3), while another student wrote; "Agriculture is not just an ordinary job, but the king of all jobs (WR34, SSS 3).

Subtheme #2: Zero interest, high uncertainty

Some students were certain about having no interest in agriculture. Some students simply wrote "no" (ER01, SS1, ER02) without justifying their position but this often came after listing all the challenges facing the industry. One student wrote, "I can't work in the agriculture industry when I grow up because it contains too many problems" (WR26, SSS 2). A few students provided reasons for their decision such as NR01 (JSSS 2, 14 years): "As a student in this part of the world, I don't see myself as a farmer because it causes a lot of stress which tells on an individual at old age, resulting in many health challenges." Other students wrote, "I do not see myself participating in agriculture because of the ignorance of its value and its low return on value... [Also,] investment takes too long time to get returns" (NR17, SSS 1, 15 years); "for myself, I don't like anything that has to do with agriculture. I don't have the interest and ambition but I can learn without any plan to secure a job in agriculture" (WR28, SSS 2).

Subtheme #3: Interest and agriculture career intent, despite awareness of problems

Other students reported that they would work in agriculture regardless of the problems in the industry. Despite the "problems" (NR03, SSS 2, 17 years) or long list of "valid excuses" (NR05, SSS 2, 16 years), many choose to "look beyond the problems" and see "potentials" (NR03, SSS 2, 17 years) and "endless opportunities" (NR06, JSSS 3, 16 years). One student wrote, "In as much as society looks down on agriculture, it is worth the risk..." (NR11, SSS 1, 16 years). According to one student, pursuing a career in agriculture gives them an opportunity to "help reverse the stereotypes about the industry" (NR05, SSS 2, 16 years) while other students think that "the advantages are more significant than the problems (WR28, SSS 2), and "despite the possibilities of losses, [they] still want to work in agriculture" (WR24, SSS 2) because "in

agriculture, one loses and one gains (50, 50 case)... (WR27, SSS 2). Yet another student wrote, “If I did not want to be an agriculture man, how do I get food and money?” (NR13, JSS 1, 10 years). The impact of environmental and social factors shaped students’ ‘interest in agriculture, in spite of’ as WR35 shared: “Although people think there is no future in agriculture, I see a future for myself in agriculture. As a concerned individual, I see myself in agriculture because it is a vital industry and envision contributing to sustainable ag using technology.”

Subtheme #4: Interest, conditional agriculture career intention

A few students reported interest but expressed conditional intent to work in the sector. The following are exemplar quotes: “I may decide to work in the agriculture industry in the future... (WR25, SSS 2); “I would love to work in agriculture, if I had the opportunity” (WR27, SSS 2); “if I am opportune[d] to study agriculture, I will be glad (WR32 SSS 2); and “All things being equal... I will like to pursue a career in agriculture if... I get the capital to get the work done” (NR23, JSS 2, 14 years). Table four shows two poems *When I grow up* and *Jolly July*, highlighting students’ interests in agriculture and their career intentions.

Table 4: Showing poems on students’ career interests and intentions within agriculture

When I grow up	Jolly July
<i>I want to work in agriculture because I have a passion for growing food</i>	Humming harvesters, Spritzing sprayers, A tired tractor, The howling hero. Splashing splattering, Rhythmic rains Buzzing bees Bleating goats Hooting hens Crowing cocks Quaking ducks Such nectary noises!
Ade believes dreams are pollinators of change Like butterflies perching on hibiscus Or bees collecting pollen grains And transporting them to growth sites	Amid the pleasant scents And pungent smells, On a jolly July morning, We sip some green gladness and collect a crunchy bunch of crispy sun rays for lunch
In his dreams, he is driving a tractor A GPS strapped to his belt A robot is picking and sorting mangoes And sprinklers have just saved the day Since the rains did not arrive early	Give me a thousand jolly Julys, To be greeted by the crescent smile, of happy farmers and growers: <i>If I am privileged to work in [agriculture], I will feel so happy, To be a farmer is a thing of joy!</i>
Ade is a mobile museum of dreams But these dreams are like chickens* That would not return at dusk	
Call a search party for Ade’s dreams.	
If hunger will not wait Ade’s dreams should not.	
*Chickens in Nigerian villages roam the neighborhoods freely (finding their own food) and return to their coop at sundown.	

Recommendations/Discussion/Conclusions/Implications

Our findings contradict extant literature (Egun & Egun, 2015) on Nigerian students' lack of awareness about opportunities in agriculture and the idea that a career in agriculture is often narrowly perceived as farming. The clear descriptions of agriculture along with career possibilities in the sector seen in students' reflective essays attest to this. However, awareness in terms of head knowledge, without practical skills and mentorship to pursue these career opportunities, seems to magnify the problems in the sector. Some of the problems identified in students' essays are not unique to the areas where they live. For instance, problems like natural hazards, erosion, and other environmental problems associated with agriculture occur in other parts of the world with booming agricultural industries. But lack of technical competencies and mentorship makes students think that "as an individual from a [certain] part of the world," the problems in agriculture are insurmountable and therefore not worth pursuing (NR1). Also, the impact of environment on career goals is seen in how *textbook agriculture* fades into the background as students described the sharp contrast between what they learn about agriculture in schools compared to what they can see in their communities and the media.

Existing literature echoes the material problems around credit access and drudgery associated with Nigerian agriculture and how these tend to dissuade youths from working in the industry. However, we identified some crucial nonmaterial problems such as lack of respect for farmers, fear of missing out on the fun side of youthfulness due to the demands of working in agriculture compared to regular 9-5 jobs, and a lack of mentorship from experienced agriculturists. These problems are affective and psychological in nature and points to the need for social structures that emphasize the joy, pride, and nobility of working in agriculture which dominated public discourse prior to the discovery of crude oil in Nigeria. If youth involvement is to be enhanced, Nigeria cannot afford to be "a society that looks down on agriculture..." (NR11,SSS 1,16 years).

Furthermore, students captured varying levels of interest and low to high certainty about their intention to work in agriculture. Interestingly, we found that the degree of certainty seemed to diminish along the grades from JSS to SSS and students in WR were more optimistic than those in ER and NR. The NR students live in the country's breadbasket and their ER counterparts are in a rural school in Imo State, we wonder how such proximity to *real* agriculture in comparison with WR peers who live in more urban areas contributed to their low optimism about the industry. Regardless of students' placement in the spectrum of (dis)interest and career intent, the expected outcomes were perceived potential of the sector to (or not to) provide financial stability and a sense of fulfilment among other needs. There is a need to harness the optimism of students with high interest and high certainty of career aspirations in lower grades and make the psychological investments needed to meet nonmaterial needs. Also, pragmatic steps need to be taken to remove material deterrents like access to credit, land tenure system, and produce price fluctuations.

In alignment with the SCCT, this study revealed how a sense of self-efficacy (technical competencies), social support (e.g. respect for famers, parental involvement in agriculture), individual interests, and expected outcomes (financial and fulfilment prospects of agriculture) impacted students' perception of agriculture and career aspirations within the sector. We found a more nuanced understanding of agriculture apathy among Nigerian youths as this study uncovered affective dimensions such as concerns about status, self-esteem, and societal respect for people in the agriculture workforce. We also found that unfavorable perception of agriculture

increased through grade levels and probability of nurturing positive perceptions are likely higher in lower grades. The rest of the nine poems from this study are in the chapbook, *Growing the Future* along with educational activities to serve experiential learning purposes for agriculture teachers looking to utilize art-based pedagogy (Brelaz et al., 2019; Kanwar et al., 2015) to nurture affective learning outcomes.

References

- Abdu-Rahem, K. A. (2022). Preparedness for paid- and self-employment: Perceptions amongst Ekiti State University agricultural students, Nigeria. *Higher Education, Skills and Work-Based Learning*, 12(4), 719–731. DOI: <https://doi.org/10.1108/HESWBL-03-2021-0049>
- Adama, J. J., Ohwofasa, J. I., & Ogunjobi, J. O. (2016). Transformation of agricultural education in Nigeria: Implication for food security. *Journal of Economics and Sustainable Development*, 7(7), 1-8.
- Adebo, A. G. & Sekumade, A. B. (2013): Determinant of career choice of agricultural profession among the students of the Faculty of Agricultural Sciences in Ekiti State University, Nigeria. *Journal of Agricultural Extension JAERD*, 5(11), 249–255.
- Adejoh, S., Edoke, M., & Shaibu, M. (2016). Assessment of students' attitude towards agricultural science subject in secondary schools in Olamaboro Local Government Area of Kogi State, Nigeria. *International Journal of Agricultural and Veterinary Sciences*, 2(1), 18–26. DOI:10.18819/ijavs.2016.1548
- Adesugba, M., & Mavrotas, J. (2016). *Youth employment, agricultural transformation, and rural labor dynamics in Nigeria*; IFPRI Discussion Paper No. 01579; International Food Policy Research Institute: Washington, DC, USA, 2016.
- Afolabi, K. O., Oba, A. I. & Shuaib, S.B. (2017). Developing activity-based Young Farmers' Club projects for incorporation into the senior school curriculum in Nigeria. *Journal of Curriculum and Instruction*, 10(1), 12-22.
- Agumagu, A., Ifeanyi-obi, C., & Agu, C. (2018). Perception of agriculture students towards farming as a means of sustainable livelihood in Rivers State, Nigeria. *Journal of Agricultural Extension*, 22(1), 108–116. DOI: <https://doi.org/10.4314/jae.v22i1.12S>
- Ajani, E. N., Mgbenka, R. N., Onah, O. (2015). Empowerment of youths in rural areas through agricultural development programmes: Implications for poverty reduction in Nigeria. *International Journal of Research in Agriculture and Forestry*, 2 (2) 34-41
- Alliance for a Green Revolution in Africa (2015). *Africa agriculture status report: Youth in agriculture in sub-Saharan Africa*, AGRA, Nairobi.
- Ange, A., Mamman, M., & Abdullahi, Y. (2020). Analysis of the opinion of secondary school students on choice of agriculture as a professional career course in Zamfara State, Nigeria. *Journal of Agriculture and Environment*, 16(2), 1-12.
- Badiru, I., Aluko, B., & Adejumo, A. (2019a). Teachers' perception of the effects of the new education curriculum on the choice of agriculture as a career among secondary school students in Oyo State. *Journal of Agricultural & Food Information*, 20(1), 86–95. DOI: <https://doi.org/10.1080/10496505.2018.1531008>
- Badiru, I., Obabire, F., & Aina, A. (2019b). Educators' perception on the choice of agriculture as a career among youth in Oyo state, Nigeria. *The Nigerian Journal of Rural Extension and Development*, 13(1), 27–35.
- Bandura, A. (1999), Social Cognitive Theory: An agentic perspective. *Asian Journal of Social Psychology*, 2: 21-41. DOI: <https://doi.org/10.1111/1467-839X.00024>
- Barau, A., Yahaya, A., & Afrad, M. (2016). Willingness to pursue career in agriculture: A case study of secondary school students in Sokoto metropolis Nigeria. *Bangladesh Journal of Extension Education*, 28(1), 1-11.
- Brelaz, E. C. D. de O., Santos, R. S., Ramos, I. M., Ramos, D. B., Paulo, F. M. de, Melo, W. A. P. de, Viana, A. L. G., Pimentel, L. X., Franca, S. V. C. de, & Campos, M. dos S. (2019).

- Gamification of the Fazenda 3D: A playful alternative to learning in agriculture and livestock. *Technical Education*. 290- 294. DOI: <https://doi.org/10.1109/LACLO49268.2019.00056>
- Brinkmann, S. (2018). The interview. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (5 ed., pp. 576-599). SAGE Publications.
- Checkoway, B. (2011). What is youth participation? *Children and Youth Services Review* 33(2) 340– 345.
- Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3d ed.). SAGE
- Daly, K. J. (2007). *Qualitative methods for family studies and human development*, SAGE Publications
- Daudu, A. K., Abdoulaye, T., Bamba, Z., Shuaib, S. B., & Awotide, B. A. (2023). Does youth participation in the farming program impact farm productivity and household welfare? Evidence from Nigeria. *Heliyon*, 9(4), e15313. <https://doi.org/10.1016/j.heliyon.2023.e15313>
- Davis, C. (2021). Sampling poetry, pedagogy, and protest to build methodology: Critical poetic inquiry as culturally relevant method. *Qualitative Inquiry*, 27(1), 114-124. DOI: <https://doi.org/10.1177/1077800419884978>
- Dele-Ajayi, O., Fasae O.D., Okoli, A. (2021). Teachers’ concerns about integrating information and communication technologies in the classrooms. *PLoS ONE* 16(5): 1-19 e0249703. DOI: <https://doi.org/10.1371/journal.pone.0249703>
- Duplantier, S., & Lester, J. N. (2023). A mile in their shoes: Poetic inquiry for qualitative caregiver research. *Qualitative Inquiry*. 30(8-9), 734-738. DOI: <https://doi.org/10.1177/10778004231196187>
- Egun, A. C. (2010). The changing face of agricultural education in Nigeria: challenges and prospects. *Education*, 131(2), 342+.
- Egun, A. C. (2009) Educational Futurism: A case for the teaching of agricultural educational to youths in Nigeria. *International Journal of Educational Studies*. 1(1), 53-60.
- Egun A. C., & Egun, N. K. (2015). Re-engineering agricultural education for sustainable development in Nigeria. *International Research Journal of Curriculum and Pedagogy*, 1(1): 002-005.
- Ekezie, A., & Deebom, M. (2019). Relevance of vocational agriculture education on the reduction unemployment among Nigerian graduates in Rivers State. *International Journal of Innovative Education Research* 7(2): 75-84.
- Fafunwa A. B. (1974). *History of Education in Nigeria*. London, George and Allen ltd.
- Faulkner, S. L., & Watson, W. K. (2024). Composing Poems. Using poems as qualitative data analysis. In Wolgemuth, J. R., Guyotte, K. W., & Shelton, S. A. (eds.), *Expanding approaches to thematic analysis* (pp. 171- 185). Routledge. DOI: <https://doi.org/10.4324/9781003389149-12>
- Federal Republic of Nigeria FRN (1994). *Blueprint on Family Support Programme*. Lagos: NERDC
- Galal, S. (2023, December 14). Population in Africa, by country 2023. Statista. <https://www.statista.com/statistics/1121246/population-in-africa-by-country/#:~:text=Nigeria%20has%20the%20largest%20population,second%2C%20has%20115%20million%20inhabitants>

- Geertz, C. (1973). *Deep Play: Notes on the Balinese Cockfight*. In *The Interpretation of Cultures*, New York, NY: Basic Books.
- Geza, W., Ngidi, M., Ojo, T., Adetoro, A., Slotow, R., & Mabhaudhi, T. (2021). Youth participation in agriculture: A scoping review. *Sustainability*, 13(16), 9120 – 9135. DOI: <https://doi.org/10.3390/su13169120>
- Grbich, C. (2012). *Qualitative data analysis: An introduction* (2nd ed.). UK: Sage.
- Guo, S. (2022). *Poetic inquiry and/as theatre audience research* (pp. 189–202). Routledge eBooks. DOI: <https://doi.org/10.4324/9781032214146-16>
- Ibrahim, B., & Ibrahim, F. (2017). Youth agrophobia: The roles of gender and general self-efficacy in a Nigerian agriculture-affiliated-undergraduate sample. *Journal of Agricultural Research and Development*, 15(2), 65–74. DOI:10.4314/jard.v15i2.7
- Ifeanyieze, F., Ede, M., Ejiofor, T., Ekenta, L., Onah, O., Okechukwu, F., Isiwu, E., Ogbonna, E., Azunku, F., Nwankwo, C., Ezebuoro, F., Onah, F., Mezieobi, D., Ede, K., Onyeansi, O., Asogwa, V., Omeje, B., Abubakar, I., & Samuel, M. (2021). Irrational career beliefs in agricultural education students, demographics, impacts, and rational career education intervention. *MEDICINE*, 100(22). DOI: <https://doi.org/10.1097/MD.0000000000002616>
- Ige, T. A., Busari, L. A., & Ojo, A. T. (2016). Agricultural experiences as correlates of secondary school students' achievement and career decisions in agricultural science. *African Research Review*, 10(3), 21–38. DOI:10.4314/afrev.v10i3.2
- Kanwar, A., Balasubramanian, K., & Balaji, V. (2015). *Agricultural Higher Education in the 21st Century: Non-traditional educational models*. DOI: <http://oasis.col.org/handle/11599/884>
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45:79-122.
- Mac-Ikemenjima, D. (2019). Youth in Sub-Saharan Africa. In: *Measuring youth quality of life in Sub-Saharan Africa*. Springer Briefs in Well-Being and Quality of Life Research. Springer, Cham. DOI: https://doi.org/10.1007/978-3-030-14241-4_2
- Madende, P., Henning, J., & Jordaan, H. (2023). Tailor-made development pathways: A framework to enhance active participation of youth in agriculture, *Social Sciences*, 12(11), 630. DOI: <https://doi.org/10.3390/socsci12110630>
- Miller, E. (2019). Creating research poetry: A nursing home example, how qualitative data analysis happens in Humble, Á. M. & Radina, M. E. (eds), pp.18-33, New York, Taylor and Francis
- Modebelu, M. N. & Nwakpadolu, G.M. (2013). Effective teaching and learning of agricultural science for food security and national sustainability. *Journal of Educational and Social Research*, 3(4): 161-170. DOI:10.5901/jesr.2013.v3n4p161
- Morse J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qual Health Res*. 25(9):1212-22. DOI: 10.1177/1049732315588501.
- Mukembo, S., Edwards, M. & Watters, C. (2020). Development of livelihood skills through school-based, agripreneurship projects integrating youth-adult partnerships: The experiences of youth partners in Uganda. *Journal of International Agricultural and Extension Education*. 27. 111-127. DOI: 10.5191/jiaee.2020.274111.
- Mulei, W., Larinde, B., Adefioye, A., Bobo, P., & Woome, P. (2020). Understanding the perceptions of secondary school youth toward agricultural careers in Democratic

- Republic of Congo, Kenya and Nigeria. *Journal of International Agricultural and Extension Education*, 24(7), 62-78. DOI: <https://doi.org/10.5191/jiaee.2020.27462>
- NBS. (n.d.). Poverty and Inequality in Nigeria 2019. Reports: National Bureau of Statistics. <https://nigerianstat.gov.ng/elibrary/read/1092>
- Ogheneovo, O., Ovoh, E. E., Okeoghene, E. S., & Nwachuckwu, N. C. (2023). Assessment of youth perception and participation in agriculture in Delta State, Nigeria; *International Journal of Biosciences*, 23(3), 96-107. DOI: <http://dx.doi.org/10.12692/ijb/23.3.96-107>
- Omonzejie, P. I., & Omonzejie, E. E. (2014). Attaining poverty alleviation through physiocratic principles: Nigeria in focus. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)* 19 (12), 11-17
- Omotesho, K. (2017). Analysis of university students' perception on agricultural entrepreneurship. *Journal of the Agricultural Faculty of Gaziosmanpasa University*, 34, 172–181. DOI: <https://doi.org/10.13002/JAFAG4324>
- Osabohien R., Wiredu, A. N., Nguetzet, P.M.D., Mignouna, D. B., Abdoulaye, T., Manyong, V., Bamba, Z., Awotide, B.A. (2021). Youth participation in agriculture and poverty reduction in Nigeria. *Sustainability*. 13(14): 7795. DOI: <https://doi.org/10.3390/su13147795>
- Osagie, O., Onemolease, E. A., & Osabuohien, J. I. (2020). Choice of agriculture as a course of study in tertiary institutions among secondary school students in Edo State, Nigeria. *Agriculture and food sciences education, FUTA Journals*, 25(2), 1
- Sasu, D. D. (2023, December 21). Topic: Demographics of Nigeria. Statista. <https://www.statista.com/topics/6477/demographics-of-nigeria/#topicOverview>
- Shaibu, U. M. (2023). Agricultural sector policy periods and growth pattern in Nigeria (1960–2020): Implications on agricultural performance. *IntechOpen*. DOI: 10.5772/intechopen.111382
- Shayo, A. H. (2020). The role of education system in preparing youth for agricultural career decisions and aspirations: Exploring ways to attract more youth to engage in agriculture and agricultural entrepreneurship in Tanzania. Doctoral dissertation retrieved from Virginia Tech library
- Sommers, M. (2010). Urban youth in Africa. *Environment and Urbanization*, 22(6), 317–332.
- te Lintelo, D. J. H. (2012). Young people in African (agricultural) policy processes? What national youth policies can tell us. *Institute of development studies* 43 (6) 90-103
- Thorp, L. (2003). Voices from the garden: A performance ethnography. *Qualitative Inquiry*, 9(2), 312-324. DOI: 10.1177/1077800402250969 312-324
- Tummons, J., Mott, R., & Bagnell, R. (2024). "The Lost Boys": A case study of male agricultural education teacher certification students who changed their career trajectories. *Journal of Agricultural Education*, 65(3), 276- 291. <https://doi.org/10.5032/jae.v65i3.2499>
- Ucha, C. (2010). Poverty in Nigeria: Some dimensions and contributing factors. *Global Majority E-Journal*, 1(1), 46-56
- Uloh, E., Ede, A., Bar-Anyam, M., Okocha, O., & Onyeke, A. (2022). Gender assessment of choosing a career in agricultural science among secondary school students in Nsukka Local Government Area (LGA) of Enugu State, Nigeria. *African Journal of Educational Management, Teaching and Entrepreneurship Studies*, 7(1), 52–61.

van Rooyen, H. (2024). A poetic inquiry: The role of the social sciences and humanities in revitalising AIDS. *AIDS care*, 36(sup1), 223-227. DOI: <https://doi.org/10.1080/09540121.2024.2319840>