



## Assessment of Small-Scale Private Nursery Establishments in Lagos State, Nigeria

<sup>1</sup>\*Folaranmi D. Babalola, <sup>1</sup>Titilayo D. Oyedele and <sup>2</sup>Abiodun Olusesi Oso

<sup>1</sup>Department of Forest Resources Management, University of Ilorin, Kwara State, Nigeria.

<sup>2</sup>Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria

\*Email: [babalola.fd@unilorin.edu.ng](mailto:babalola.fd@unilorin.edu.ng)

### Abstract

The study assessed small-scale private nursery establishments in Lagos State, Nigeria. Three locations in Lagos State (Magodo, Ikeja and Lekki Phase One) were selected for the study. All the nursery operators encountered in the study sites were purposively selected for this study. This translates to administration of questionnaire to 50 nursery operators. About 90.0% of all the nursery operators learnt about seedlings production before starting the business. The major reason why many of the sampled operators engaged in the business was for self-employment and profit generation. All the sampled nursery operators (100.0%) acquired their land from Lagos State government. About 88 plants were identified in the study areas and were dominated by ornamental plants. Auricularia tree (*Auricularia heterophylla*) came topmost among the highly-priced plants with selling price of ₦69,000. In addition to selling of ornamental plants, majority of the nursery operators also rendered services such as maintenance of private gardens (24.0%) landscaping (18.0%), seedlings supply (6.0%). The main constraint affecting the small-scale nursery enterprises in each of the study areas was inadequate funding. Another important constraint observed among the nursery operators was lack of proper record keeping. To further develop the enterprise, there should be the provision of funding by financial institutions. The operators need to learn how to keep proper and adequate records of their income and expenditures. Skill acquisition through training and orientation is also necessary for the development of the small-scale nursery enterprise.

Keywords: Private nursery, Self-employment, Ornamental plants, Nursery operators, Landscaping

### Introduction

In the recent time, recognition has been given to the contributions of small and medium scale enterprises (SMEs) in Nigeria (Emmanuel and Willie, 2020). In the analysis, SMEs was informed to have contributed about 61% to the country's GDP. Ayozie (2006) states that small-scale business, small industries and small-scale entrepreneurship are used interchangeably to mean a small-scale industry firm. Small-scale business has also been defined as a manufacturing establishment employing less than ten people, or whose investment in machinery and equipment does not exceed six hundred thousand naira (Adegbite, 1995).

According to Chu *et al.* (2010), between 45 and 60 percent of the urban labour force engage in small private enterprises which are believed to have contributed greatly to the reduction of unemployment. In the case of Nigeria, entrepreneurship has been beneficial because the private sector, which comprises of small and medium enterprises (SMEs), provides diverse employment opportunities for over 50 percent of the country's population and 50 percent of the industrial output (Ariyo, 2005; Oyelola *et al.*, 2013). Many other countries have been able to strengthen and transform the entrepreneurship sub-sector to such a

vibrant and exciting industry that they have been able to reduce considerably their unemployment and poverty level because of the huge and enormous contribution of the sub-sector to their economic growth and development (Onugu, 2005). The small scale businesses have the potentiality to reduce the rate of unemployment in Nigeria and thus to contribute to the Gross Domestic Product (GDP) and economic growth of the nation (Oshagbemi, 1983).

For this project, the small-scale nursery enterprise is defined as a form of self-employment opportunity that generates income with relatively low investment expenditure, thereby possesses the potential of enhancing the socio-economic aspects of the economy (Babalola, 2008; Ephraim and Abubakar, 2018). The social and economic potentials of small-scale nursery enterprise in forestry is gaining ground because these bring new dimension to the forestry profession which has been tagged with long gestation period of return investment (Eko, *et al.*, 2021). In another light, people are now showing more interests in creating greenspace around their building, couple with the current awareness of planting trees to mitigate impacts of climate change and curbing the process of desertification and land degradation. All these developments are bringing more recognition

and revenue to the business of small-scale nursery enterprise.

According to Roshetko *et al.* (2010), nurseries are designed to produce seedlings under favorable conditions until they are ready for final planting. They can also be informal, small-scaled arrangement or a large commercial enterprise. Nurseries vary in size, available facilities such as supplies, tools, equipment, etc, types of seedlings produced, and operations carried out in them. However, in addition to these distinctions, the authors also grouped nursery establishments into private and public depending on the ownership, size and ultimate goal of their establishments. Moreover, one major distinction that have been mentioned between the private and public nursery is the priority on profit maximization (Mailumo *et al.*, 2006).

Adejumola and Tayo-Olajubulu (2009) contended that unemployment has been identified as one of the major causes of social vices, including armed robbery, destitution, prostitution, political thuggery, kidnapping and many more. Musari (2009) corroborated this statement by reporting that about 4.5 million youths entered the labour market every year without any hope of getting employment for life sustenance. Nigeria as a country has encountered very serious unemployment problems. At the global level, different countries are faced with diverse economic, social and political problems. These problems have adversely affected the sustainable development of such countries, hence leading to high rate of unemployment (Williams and Michael, 2012). The Nigerian situation is further compounded by the recent global financial crisis that has crippled businesses and the prospect of securing jobs for young people (Fanimu and Olayinka, 2009). Plant seedling nurseries have the potential of providing some employment opportunity for the urban youths. The job including skilled-labour such as green-house and nursery managers and jobs for individuals involved in the cultivation and marketing of the ornamental plants (Fakayode *et al.*, 2008).

Urbanisation and infrastructural development are contributing to fast removal of vast majority of forests and trees (Defries *et al.*, 2010). This issue calls for exploration of opportunities that can contribute to planting of trees and at the same time generate employment to the populace. High-quality seedlings are fundamental to the successful establishment of orchards as well as plantations for timber production and reforestation of degraded landscape. Meanwhile, plant nurseries are key

success factor in many forestry and agricultural development programs (Roshetko *et al.*, 2010). Plant nurseries may often provide income generating opportunities for the operators and enhance the social capital, technical capacity and leadership skills of communities. Nurseries have the common goal of producing high quality and quantity of plant materials. In nurseries, seedlings are raised under favorable conditions before transplanting to the field for planting purpose. In addition, plant nurseries can be an informal, small-scaled arrangement or a large commercial enterprise that vary in size, facilities (supplies, tools, equipment, etc), types of seedlings produced, and operations (Larinde and Santus, 2014).

The importance of ornamental plants in human life cannot be over-emphasized. Ornamental plants are not only serve as environmental stimulants that trigger pleasant memories, but also provide medicinal herbs (Fakayode *et al.*, 2008). The production of both cut flowers and home plants has continued to increase steadily in most urban and metropolises. This is due to increase in the demand for ornamental plants for many reasons including beautification, landscaping, environmental protection, among others. People are increasingly realizing the need for planting trees, shrubs and grasses for these different purposes, especially in the urban and metropolises (Babalola, 2008). Most importantly, these plants also play crucial role in cooling the atmosphere through the evapotranspiration process on their leaves and other parts thereby preventing health hazards (Omokhua, *et al.*, 2002).

This project was carried out to assess the small scale private nursery enterprises in Lagos State. Lagos state was selected due to its high density in human population and fast development. Also, there have been various planting initiatives within the city. Lagos State Parks and Gardens Agency has been creating awareness and implementing projects on landscaping, beautification of contaminated sites and the establishment of parks and gardens in the state with the purpose of promoting healthy living in the society (Agwaibor, 2021). Babalola (2020) has highlighted some benefits of trees in cities as environmental (heat and carbon reduction, improve air quality, control erosion, etc), economic (increase value of building, reduction in cooling cost, ) and social (reduce stress, improve health, etc). precautions to observe when planting trees in cities, with specific focus on Lagos State.

Despite the foregoing, there is lack of adequate documentation on the small-scale private nursery enterprise in Lagos State, especially on the operations of the enterprises, plants raised by the operators and factors contributing to demand of the plants. Also, the constraints facing the small-scale private nursery enterprises in the city are not properly documented. Information provided by this study on the small-scale nursery establishments will be valuable to different stakeholders that are into tree planting campaign as well as those that want to go into the business of small-scale nursery enterprise.

### Methodology

The study was conducted in Lagos State in the year 2016. The city, with coordinates 6.5227° N, 3.6218° E, is bounded in the North and East by Ogun State of Nigeria, in the West by Republic of Benin, and stretches over 180 kilometers along the Guinea Coast of the Bight of Benin on the Atlantic Ocean (Lagos State, 2022). Lagos State was reported as the most populous in Nigeria (John, 2012). As reported by the World Population Review (2022), Lagos State currently exceeded 17 million residents and with a population density of around 6,871 residents per square kilometer ((17,800 per square mile). Also, the

state has a land area of 1,171.28 square kilometers (452.23 square miles) and dominated by Yourba people (originally *Iwori* group) but with more than other 250 ethnic groups including Hausa, Igbo and Fulani (World Population Review, 2022).

The State was created under the States (Creation and Transitional Provisions) (Amendment) Decree (1974) which restructured Nigeria Federation into 12 States. The State then took off as an administered entity on April 11, 1968 with Lagos Island serving the dual role of being the State and Federal Capital respectively. At the informed on the official website of Lagos State, the State was a municipality at the onset and was administered as a Federal Territory through the Federal Ministry of Lagos Affairs, under the Western Regional Government and governed by Lagos City Council (Lagos State, 2022).

The Nigerian Investment Promotion Commission (NIPC) reported that Lagos state is the “seventh fastest-growing city in the world, with the highest Gross Domestic Product (GDP) and Internally Generated Revenue (IGR) in Nigeria” (Premium Times, 2021).

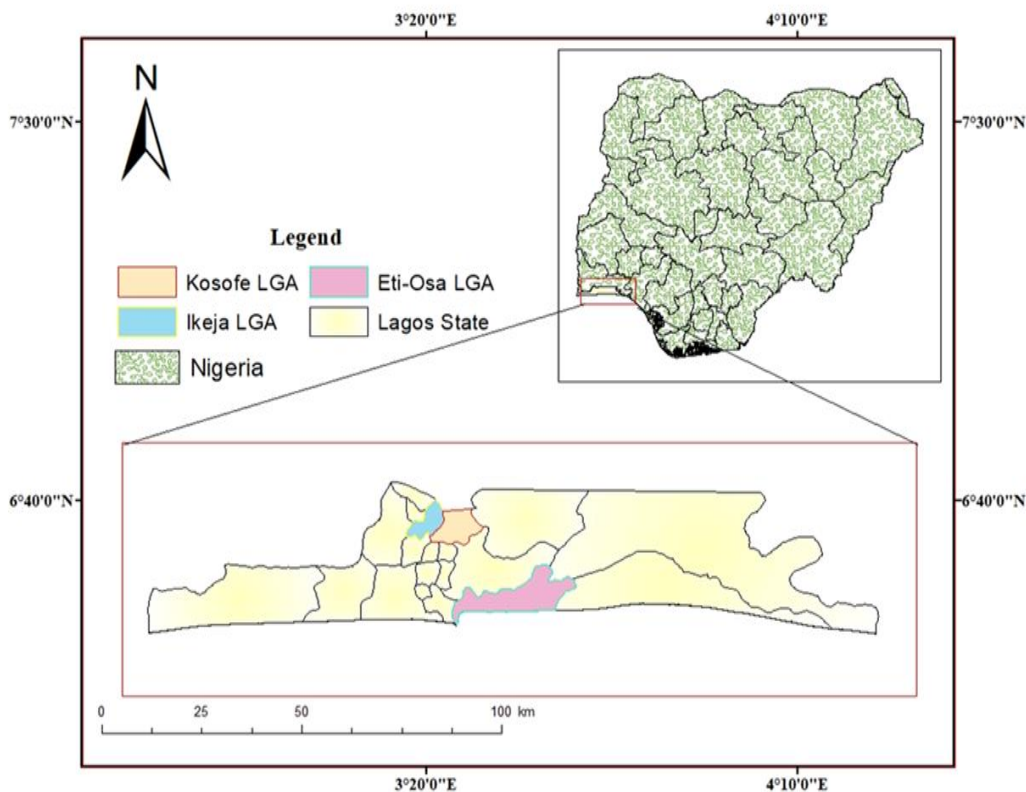


Fig 1: Map of Lagos State showing study locations

### Data collection and analysis

The study population comprised of the operators of small-scale nursery enterprise, specifically those that engage in commercial selling of different types of plant seedlings in Lagos State. Prior to the actual selection of location of the study, a reconnaissance survey was conducted in the state to identify locations as well as concentration of the commercial and small-scale nursery enterprise. From the survey, many of the small-scale nursery operators were found at Magodo market (located in Kosofe LGA), Ikeja GRA (Ikeja LGA) and Lekki Phase One (Eti-osa LGA) (Fig. 1). At these locations, 100% sampling technique was adopted to select the identified nursery enterprises. The approach is to interview all the nursery operators that engage in production and sales of different plants in their nurseries. This survey translates to sampling of 50 nurserymen (12 at Magodo, 16 at Lekki Phase One, and 22 at Ikeja).

Data was collected with the aid of semi-structured questionnaire. The questionnaire was designed to draw out relevant information on the operations of the enterprises, plants raised by the operators, factors contributing to demand of the plants, and the constraints facing the small-scale private nursery enterprises in the city. Due to the inability of some of the operators able to read the questionnaire, it was read to them by the investigator and the responses properly captured.

### Results and Discussions

#### Socio-economic characteristic of the nursery operators

The socio-economic attributes of the sampled nursery operators are presented in Table 1. The results show that most of the nursery operators (72.0%) were male (66.7% in Magodo; 68.2% in Ikeja; and 81.3% in Lekki). On age, majority (86.0%) of the operators were above the age of 30 years. About 96.0% were married with 100% recorded at Ikeja. Most of the operators had secondary education (32.0%) with 50.0% at Magodo and 36.4% at Ikeja; although about 41.7% of the operators at Ikeja had adult education. Only few of the operators had Bachelor degree with highest (12.5%) at Lekki and least at Magodo (4.5%).

No doubt, the business of seedlings production and sale require some level of education to operate. The

level of education of nurserymen is perceived to contribute to the development of the nursery establishment. It has been reported by Pantzios et al. (2002), that education acts as a strong complement in deciding the optimal combination of inputs in the production process. Also, Haq and Tariq (2020) discovered that the education of household head as measured in terms of years of schooling exhibits a positive and highly significant relationship on technical efficiency on farm. In the present study, it could be deduced that production of the output and quality of the seedlings produced by the nursery operators could be influenced by their educational status. In support of this, Babalola (2008) has reported that adequate educational background will enable the nursery operators to adopt new and modern innovation as well as increase the risk in their management ability.

#### Reason for engaging in the business by the small-scale nursery operators

Table 3 revealed that 40.0% of the operators in Lagos engaged in the business of seedling production and sale to gain self-employment. Base on location, 50.0% of the operators in Lekki, 41.7% in Magodo and 31.8% in Ikeja also engaged in the business as a means self-employment. As a follow-up to this, 30.0% of the operators engaged in the business for the profit reason (37.5% in Lekki; 33.3% in Magodo; 22.7% in Ikeja). The small-scale nursery enterprise is a very profitable business. It's a business that one can start with little amount of money. In other words, top on the reasons why many of the sampled nurserymen engaged in seedlings production were for self-employment followed by profit maximisation. This result is in accord with Larinde and Santus (2014), who also reported that small-scale private plant nursery enterprise is a self-employed business that can contribute to substantial employment, income generation and socio-economic development.

None of the operators engaged in the business for research and free-hand learning (Table 3). Although 14.0% of the total operators engaged in the business for personal interest. Also, 16.7% at Magodo and 9.1% at Ikeja engaged in the business as hobby, but only 13.6% of the operators at Ikeja engaged in the business because it is family business.

**Table 1.** Socio-economic characteristic of the nursery operators at Lagos State, Nigeria

Variables	Magodo (n=12)		Ikeja (n=22)		Lekki (n=16)		Total (N=50)	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
<b>Gender</b>								
Male	8	66.7	15	68.2	13	81.3	36	72.0
Female	4	33.3	7	31.8	3	18.8	14	28.0
<b>Age of the respondents in each study area</b>								
Less than 20	0	0	0	0	0	0	0	0
Between 20-25	1	8.3	1	4.5	0	0	2	4.0
Between 26-30	2	16.7	2	9.1	1	6.3	5	10.0
Above 30	9	75.0	19	86.4	15	93.8	43	86.0
<b>Marital status</b>								
Single	1	8.3	0	0	1	6.3	2	4.0
Married	11	91.7	22	100.0	15	93.7	48	96.0
<b>Educational qualification</b>								
No-formal education	0	0	0	0	1	6.3	1	2.0
Primary	0	0	6	27.3	4	25.0	10	20.0
Secondary	6	50.0	8	36.4	2	12.5	16	32.0
Adult education	5	41.7	4	18.2	4	25.0	13	26.0
Diploma cert	0	0	3	13.6	3	18.8	6	12.0
Bachelor Degree	1	8.3	1	4.5	2	12.5	4	8.0

**Table 3.** Reason for engaging in the business by the small scale nursery operators at Lagos State, Nigeria

Reasons	Magodo		Ikeja		Lekki		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Self-employment	5	41.7	7	31.8	8	50.0	20	40.0
Profit	4	33.3	5	22.7	6	37.5	15	30.0
Hobby	2	16.7	2	9.1	0	0	4	8.0
Research	0	0	0	0	0	0	0	0
Personal interest	1	8.3	5	22.7	1	6.3	7	14.0
Family business	0	0	3	13.6	0	0	3	6.0
Free-hand learning	0	0	0	0	0	0	0	0
Total	12	100	22	100	16	100	50	100

**Mode of land acquisition**

Land acquisition is very crucial to nursery establishment in a city like Lagos. The result presented in Table 4 show that all the sampled nursery operators (100.0%) acquired their land from Lagos State government. It was obtained during further interview of the operators that nursery owners pay rent (or tax) on occupied land. Each nursery owners paid different amount of money

which is corresponding to the size of land they occupied. Also, one of the nursery owners in one of the locations revealed that additional mandatory payment on land was made to the community leaders on every plant sold in the nursery. The cost spent on land is therefore a major factor that could affect the over profit made by the small-scale nursery operators in a place like Lagos.

**Table 4.** Mode of land acquisition by the small-scale nursery operators in Lagos State, Nigeria

Mode	Magodo		Ikeja		Lekki		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Leased from Government	12	100.0	22	100.0	16	100.0	50	100.0
Purchased	0	0	0	0	0	0	0	0
Family land	0	0	0	0	0	0	0	0
Total	12	100	22	100	16	100	50	100

### **Marketing of the plants by the small-scale nursery enterprises**

About 88 plants were identified during the survey as the plants in the small-scale nursery establishments (Table 5). These plants were dominated by ornamental plants. Auricularia tree (*Auricularia heterophylla*) came topmost among the highly priced ornamental plant sold by the nursery operators with selling price of N69,000. This was followed by Ashoka tree (*Saraca asoca*) with ₦57,000 per plant, Snake plant (*Sansevieria trifasciata*) with ₦45,000, Bottle palm (*Hyophorbe lagenicaulis*) with ₦37,000, and Cica palm (*Cycas revoluta*) with ₦37,000. When the plants were arranged according to their selling prices, the top ten plants had prices that ranged from N69,000 to N15,600 per plant. Furthermore, some of the plants that were with highest patronage and sale include Green bush, Yellow bush, and Crown of tons. Also dominating the top ten of the plants sold by the nursery establishments with high prices were palm plants (Fig. 2).

Meanwhile, among the factors that determine demand and selling price of the plants include season

As a follow up to selling of the plants, it was deduced from interview of the nursery operators that most do not have proper marketing strategy. The issue with having proper marketing strategy start with carrying out of market analysis. As mentioned by Lintu (1986), forestry sector tends to be very much productive and product oriented. However, for it to get to the right customers, there is need for the application of marketing science. As explained by Oduol (2014), market analysis “enables producers to identify a set of customers with clearly defined preferences for a specific set of attributes and a marketing channel to deliver their products”. Furthermore, market analysis enables the producers, nurseryment in this case, to develop strategy for competitive advantage at the point of sale through improving quality, product differentiation, market segmentation and development of specific client niches (Oduol, 2014). There is a very huge market potentials for the small-scale nursery enterprise if more people are aware of the advantage of having plants in their homes. There is also the need for provision of information on different plant names, their scientific names, and unique or special services such plants could provide by having them in the immediate environment. In short, the nursery operator need to be strive to understand what market analysis is all about and adot it to generate the right information that could trigger more partronage.

of the year, location of the nursery, planting of the plants in plant pots, among others. According to the nursery operators, rainy season command more sales than dry season as more people carry out most of their planting during rainy season. As for location, when the nursery is located where people pass every day and they can easily sight the plants, there are chances that more sales will be made. Hence, prices of the plants are likely to also go higher during rainy season and in locations where more demands are made for the plants. During one of the interview, an operator also mentioned that prices of plants are likely to go higher in places dominated by rich people than places with low or middle-class people. Hence, it is possible to get plant at higher price in a place like Lekki than Ikeja, and Ikeja than Magodo. Plant prices are also affected with the type of plant pot they are planted in. Plant pots comes in various shapes, size and different materials. Concrete and ceramic pots are expnsive than the plastic pots. When plants are planted in plant pot, this add to their value, hence increase in the selling prices. Most of the indoor plants are planted in pots hence increasing their final seeling price.

### **Services rendered by the nursery operators**

In addition to raising and selling of the plants in the nurseries, Table 6 shows that majority of the nursery operators also rendered services such as maintenance of private gardens (24.0%), provided landscaping services (18.0%), and engaged in seedling supplies (6.0%). Most of the private home owners who did not employe gardeners for their homes engaged the services of the small-scale nursery operators in maintaining the ornamental plants around their homes. The nursery operators could base their charges on the number of times visited the homes or based on monthly payment. In some cases where private home owners had gardeners, services of the nursery operators could still be employed to take care or maintain some special ornamental plants. Consultation could also be made for control of any infestation and pest or disease attack in home flower gardens. As for the landscaping services, this is fast becoming a lucrative business with high income to the nursery operators. Contracts for landscaping could either be awarded by private clients or by the government. The nursery operators charge for consultancy fees, planting materials and implements, labours as well as for the plants which are either supply from personal nursery or sought for in colleagues' nurseries.

**Table 5:** The categories of plants in each study area

S/N	Seedling categories	Plants	Scientific Names	Highest selling price (Naira)
1.	Ornamental	Araucaria	<i>Araucaria heterophylla</i>	69000
2.	Ornamental	Ashoka tree	<i>Saraca asoca</i>	57000
3.	Tree crop	Snake plant	<i>Sansevieria trifasciata</i>	45000
4.	Ornamental	Bottle palm	<i>Hyophorbe lagenicaulis</i>	37500
5.	Ornamental	Cica palm	<i>Cycas revoluta</i>	37000
6.	Ornamental	Golden palm	<i>Washingtonia robusta</i>	19500
7.	Ornamental	Kings palm	<i>Archontophoenix cunninghamiana</i>	19200
8.	Ornamental	Queens palm	<i>Syagrus romanzoffiana</i>	18100
9.	Tree crop	Thuja	<i>Thuja orientalis</i>	16300
10.	Ornamental	Royal palm	<i>Roystonea regia</i>	15600
11.	Tree crop	Iron plant	<i>Aspidistra elatior</i>	15540
12.	Ornamental	Lady palm	<i>Rhapis excelsa</i>	14500
13.	Tree crop	Coffee plant	<i>Coffea arabica</i>	13000
14.	Ornamental	Field horsetail	<i>Equisetum arvense</i>	12550
15.	Ornamental	Yucca	<i>Asparagaceae spp</i>	12500
16.	Ornamental	Ruboooster		12000
17.	Ornamental	Lili	<i>Lilium spp</i>	9950
18.	Ornamental	Lughana		9100
19.	Ornamental	Travellers palm	<i>Ravenala madagascariensis</i>	7300
20.	Ornamental	Cycas palm	<i>Cycas circinalis</i>	7000
21.	Ornamental	Fan palm	<i>Borassus aethiopum</i>	7000
22.	Ornamental	Triangular palm	<i>Dypsis decaryi</i>	7000
23.	Ornamental	Elephant ear	<i>Pennisetum purpureum</i>	6500
24.	Forest plant	Bamboo	<i>Bambusa vulgaris</i>	6000
25.	Ornamental	Agave plant	<i>Agave bitterii</i>	5500
26.	Ornamental	Angels wing	<i>Begonia aconitifolia</i>	5500
27.	Ornamental	Hibiscus	<i>Hibiscus rosa-sinensis</i>	5300
28.	Ornamental	Mother-in-law tong	<i>Sansevieria trifasciata-laurentii</i>	4700
29.	Ornamental	Thimbecia		4000
30.	Ornamental	Cordyline plant	<i>Cordyline fruticosa</i>	4000
31.	Ornamental	Aglaonema	<i>Araceae spp</i>	4000
32.	Ornamental	Don king	<i>Arabidopsis thaliana</i>	3700
33.	Ornamental	Masquarede plant	<i>Polyalthia longifolia</i>	3500
34.	Ornamental	Zebra plant	<i>Aphelandra squarrosa</i>	3500
35.	Forest plant	Fox stearl	<i>Tulipa foxtrot</i>	3500
36.	Ornamental	Rosette	<i>Rosa gallica</i>	3100
37.	Ornamental	Lipstick	<i>Aeschynanthus spp</i>	3000
38.	Ornamental	Dumb cane	<i>Dieffenbachia spp</i>	3000
39.	Ornamental	Croton	<i>Codiaeum variegatum</i>	2700
40.	Ornamental	Shave palm	<i>Emilia sandrifolia</i>	2500
41.	Tree crop	Yucca	<i>Yucca spp</i>	2200
42.	Ornamental	Lavender	<i>Lavandula angustifolia</i>	2200
43.	Ornamental	Fern	<i>Tracheophyta spp</i>	2100
44.	Tree crops	Coconut	<i>Cocus nucifera</i>	2000
45.	Tree crop	Rubber plant	<i>Ficus elastica</i>	2000
46.	Ornamental	Luowana		2000
47.	Forest plant	Pine	<i>Pinus caribaea</i>	2000
48.	Ornamental	Blubango		1950
49.	Ornamental	Double ixora	<i>Ixora spp</i>	1950
50.	Ornamental	Sweet heart	<i>Philodendron Scandens</i>	1500
51.	Ornamental	Golden pothos	<i>Devils ivy</i>	1500
52.	Ornamental	Marraya	<i>Murraya koenigii</i>	1440

S/N	Seedling categories	Plants	Scientific Names	Highest selling price (Naira)
53.	Ornamental	Acalypha plant	<i>Acalypha wilkesiana</i>	1350
54.	Ornamental	Bougainvillea	<i>Bougainvillea glabra</i>	1200
55.	Ornamental	Rio	<i>Ambrosia cheiranthifolia</i>	1150
56.	Ornamental	Crown of tongs	<i>Euphorbia milii</i>	1050
57.	Ornamental	Begonia	<i>Begonia haageana</i>	1000
58.	Ornamental	Maranta	<i>Marantacea spp</i>	1000
59.	Ornamental	Coleus	<i>Plectranthus barbatus</i>	1000
60.	Ornamental	London bells	<i>Tecoma stans</i>	1000
61.	Ornamental	Strowin	<i>Linum usitaligonum</i>	1000
62.	Medicinal	Moringa	<i>Moringa oleifera</i>	1000
63.	Tree crop	Yellow ficus	<i>Ficus benghalensis</i>	980
64.	Ornamental	West Indian jasmine / Ixora	<i>Ixora coccinea</i>	980
65.	Ornamental	West indes	<i>Pimenta racemosa</i>	950
66.	Ornamental	Aloe vera	<i>Aloe barbadensis</i>	900
67.	Ornamental	Butterfly	<i>Buddleja spp</i>	800
68.	Tree crop	White ficus	<i>Ficus Infectoria</i>	700
69.	Tree crop	Cameroon tree		600
70.	Tree crop	Lebanese apple	<i>Malus trilobata</i>	500
71.	Ornamental	Syngonium	<i>Syngonium spp</i>	500
72.	Ornamental	Dieffenbachia	<i>Dieffenbachia spp</i>	500
73.	Ornamental	Yaca palm	<i>Yucca brevifolia</i>	500
74.	Ornamental	Yellow bush	<i>Lupinus arboreus</i>	500
75.	Ornamental	Morning glory	<i>Ipomoea spp</i>	460
76.	Ornamental	Green bush	<i>Duranta repens</i>	410
77.	Ornamental	Cactus	<i>Cactaceae spp</i>	400
78.	Tree crop	Step tree	<i>Terminalia mentalis</i>	300
79.	Ornamental	Spider grass	<i>Liriope spp</i>	300
80.	Ornamental	Gardenia	<i>Gardenia jasminoides</i>	300
81.	Ornamental	Peltophorum / yellow-flamboyant	<i>Peltophorum pterocarpum</i>	300
82.	Ornamental	Lantana	<i>Lantana camara</i>	300
83.	Tree crop	African oil palm	<i>Elaeis guineensis</i>	200
84.	Ornamental	Crossandra	<i>Crossandra infundibuliformis</i>	200
85.	Ornamental	Duranta	<i>Duranta repens</i>	150
86.	Ornamental	Atlanta gold		130
87.	Ornamental	Phobia		100
88.	Ornamental	Fickles	<i>Rhopalostylis sapida</i>	80

### Major customer to the nursery operators

The highest customer that patronise the small-scale nursery operators as presented in Table 7 was individuals (66.0%). This was followed by contractors (24.0%) who were given contracts for various landscaping works in the state. The government constituted only 6.0% of the customers. Most of the nursery operators sold the plants at retail level. This means that majority of the operators sold directly to final customers with no middlemen

involved. Lintu (1986) found that the type and number of people participating in marketing function vary depending on the level of the chain of actions, the type of product or service, type of marketing approach and the location of markets. Furthermore, the channel of marketing selected determines whether there are any middlemen between the seller and the buyer. In the present study, there are no middlemen, hence the operators enjoy direct sale to their end-users.













 <p>Araucaria (<i>Araucaria heterophylla</i>)</p>	 <p>Snake plant (<i>Sansevieria trifasciata</i>)</p>	 <p>Cica palm (<i>Cycas revoluta</i>)</p>	 <p>Kings palm (<i>Archontophoenix cunninghamiana</i>)</p>	 <p>Thuja (<i>Thuja orientalis</i>)</p>	 <p>Traveller Palm (<i>Ravenala madagascariensis</i>)</p>
 <p>Ashoka tree (<i>Saraca asoca</i>)</p>	 <p>Golden palm (<i>Washingtonia robusta</i>)</p>	 <p>Bottle palm (<i>Hyophorbe lagenicaulis</i>)</p>	 <p>Queens palm (<i>Syagrus romanzoffiana</i>)</p>	 <p>Royal Palm (<i>Roystonea regia</i>)</p>	 <p>Cycas palm (<i>Cycas circinalis</i>)</p>

Fig 2: Selected among the plants with high prices sold by the nurserymen in Lagos State, Nigeria

**Table 6:** Services rendered by the nursery operators in addition to selling of seedlings

Services rendered	Magodo		Ikeja		Lekki		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Landscaping	3	25.0	1	4.5	5	31.3	9	18.0
Seedling supply	3	25.0	1	4.5	1	6.3	3	6.0
Maintenance of private garden	3	25.0	6	27.3	3	18.8	12	24.0
All of the above	2	16.7	5	22.7	7	43.8	14	28.0
None of the above	3	25.0	9	40.9	0	0	12	24.0
Total	12	100	22	100	16	100	50	100

**Table 7:** Major customer that patronize the small-scale nursery enterprise

Variables	Magodo		Ikeja		Lekki		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	percent
Individual	7	58.3	15	68.2	11	68.8	33	66.0
Government	1	8.3	2	9.1	0	0	3	6.0
Contractors	3	25.0	5	22.7	4	25.0	12	24.0
Others	1	8.3	0	0	1	6.3	2	4.0
Total	12	100	16	100	22	100	50	100

### Learning of the practice of seedlings production

The results in Table 8 show that 90.0% of all the nursery operators learnt about seedlings production before starting the business (95.5% of the operators at Ikeja, 87.5% at Lekki and 83.3% at Magodo). In overall, almost half of the nursery operators (48.0%) learnt the practice of the nursery operation in other nurseries; with highest of the operators in Lekki (56.3%). About 16.0% of the operators also learnt about nursery operations from friends and families or relatives. Interestingly, only 6.3% of the nursery operators from Lekki learnt about the production and business in educational institutions. On the number of years spent in learning about seedling production before the establishment of their own, the results showed that almost half of the operators (46.0%) learnt about the nursery operations in one year or less. Specifically, majority of the operators in Magodo (33.3%), as well as 27.3% at Ikeja and 18.8% at Lekki, learnt the business for a year. In addition, quite a number of the operators learnt about nursery operations in two years (22.7% at Ikeja, 12.5% at Lekki and 8.3 at Magodo) and three years (18.8% at Lekki, 9.1 at Ikeja and 8.3 at Magodo). Starting a nursery establishment require skills and knowledge on how to raise and propagate different plants, taking care of the plants in nursery, knowing

the common names of plants (some operators move a step further by knowing some plants' scientific names), and how to relate with customers and clients. Another vital knowledge necessary for the business, as well as any other business, is record keeping of income and expenditures for the business. Unfortunately, this last knowledge is lacking among quite a number of the nursery operators.

### Constraints faced by the small-scale nursery enterprise

The main constraint affecting small-scale nursery enterprise in each of the study areas was inadequate funding with 33.3% indicated by operators in Magodo, 40.9% in Ikeja, 31.3% in Lekki and 36.0% for the Total. This result is in accord with findings of Fakayode *et al.*, (2008) who pointed that the most prevalent limitation to plants nursery business was the inability of the operators to access adequate funds necessary to capitalize their farms. In addition to funding, other constraints were peculiar to different locations. For instance, 41.7% and 13.6% of operators in Magodo and Ikeja respectively indicated water shortage as a major constraint. Those at Ikeja also mentioned transportation (18.2%) as a constraint. At Lekki, water erosion (31.3%) was indicated a serious constraint.

**Table 8.** The learning of the practice of seedling production by the small-scale operators at Lagos State, Nigeria

Variables	Magodo (n=12)		Ikeja (n=22)		Lekki (n=16)		Total (N=50)	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
<i>Learning about seedling production before starting the business</i>								
Yes	10	83.3	21	95.5	14	87.5	45	90.0
No	2	16.7	1	4.5	2	12.5	5	10.0
<i>From whom the nurserymen learnt the business</i>								
Parents	0	0	2	9.1	0	0	2	4.0
Educational institutions	0	0	0	0	1	6.3	1	2.0
Other nursery enterprises	5	41.7	10	45.5	9	56.3	24	48.0
Friends	3	25.0	3	13.6	2	12.5	8	16.0
Families or relatives	2	16.7	5	22.7	1	6.3	8	16.0
Others	0	0	1	4.5	1	6.3	2	4.0
Did not go to learn the business	2	16.7	1	4.5	2	12.5	5	10.0
<i>How long did you learn the business</i>								
Less than a year	2	16.7	4	18.2	4	25.0	10	20.0
A year	4	33.3	6	27.3	3	18.8	13	26.0
Two years	1	8.3	5	22.7	2	12.5	8	16.0
Three years	1	8.3	2	9.1	3	18.8	6	12.0
Four years	1	8.3	0	0	1	6.3	2	4.0
Five years	1	8.3	1	4.5	0	0	2	4.0
Six years	0	0	1	4.5	0	0	1	2.0
Ten years	0	0	2	9.1	0	0	2	4.0
Twenty-two years	0	0	0	0	1	6.3	1	2.0
Did not learn from anywhere	2	16.7	1	4.5	2	12.5	5	10.0

Moreover, other important constraints faced by the nursery operators were inadequate labour and lack of proper record keeping. Most of the operators do not have adequate or permanent labour. Majority of the nurseries depend on personal or family labour. Also, most of the operators did not keep record of their sales; hence, not easy to monitor or evaluate the sales over time. Water is one of the most essential input require to keep a nursery business going. The major source of water in the study area was public water. However, some operators had to depend on commercial water when they did not get a supply of the public water or during the dry season. Meanwhile, some of the well established nurseries had been able to procure permanent sources of water such as borehole and well. Other nurseries depended on flowing river and commercial water source. Those that patronise commercial water paid about N100 per 25 litter gallon, making some of the operators to spend as much as N7,000 per month on water supply. Generally, nursery owners in Ikeja resolve to the use of water flowing in drainage to meet up their water demand, whereas these in Lekki used well water in their nurseries. Notwithstanding, most of the nurseries always make plan for water provision so as to keep their plants alive.

### **Conclusion and recommendation**

The study was carried out to assess the small-scale private nursery enterprises in Lagos State. All the sampled nursery operators acquired their land from Lagos State government. Most of the nursery operators in Lagos engaged in the business of seedling production and sale to gain self-employment, followed by profit reason. Findings of

this study revealed that most of the nursery operators produced ornamental plants. This could be due to market demand and beautification project in private homes and government contracts. Majority of the nursery operators rendered services such as maintenance of private gardens, landscaping and engaged in seedling supplies.

The major challenge of most of the small-scale nursery operators was inadequate funding of the enterprise, therefore it is recommended that the government and other financial institutions need to assist the operators with a soft loan to boost the business. Also, the new start-up should be assisted financially so as to make it possible for the unemployed and poor to establish a business. It was discovered that majority of the operators did not keep adequate record of their income and sales. Hence these constitute a constraint in getting actual expenditure which could have been used to determine profit maximisation by this important small-scale business enterprise. There is therefore the need for training of the nursery operators on record-keeping for proper monitoring of production and sales.

Finally, there is need for proper orientation and training of the nursery operators for appropriate skill acquisition in plant production and marketing. This should be organized from time to time to update their experience. Finally, young individuals should be encouraged and exposed to small-scale plant nursery operations to create more opportunity for employment generation.

### **References**

- Adegbite, E.O. (1995): Effective Growth and Survival of Small and Medium Scale Enterprise in the 1990s and Beyond. The Role of Policy. In: Ade T. Ojo (ed), Management of SMEs in Nigeria. Punmark Nig. Ltd, Lagos.
- Adejumola, A.S. and Tayo-Olajubutu, T.O. (2009): Spinning off an entrepreneurship culture among Nigerian university studies: Prospect and challenges. African Journal of Business Management 3(3): 80 – 88.
- Agwaibor, S. (2021). Landscaping, tree planting will protect environment – LASPARK. Punch Newspaper. 24 May, 2021. Accessed 19/05/2022 at <https://punchng.com/landscaping-tree-planting-will-protect-environment-laspark/>
- Ajayi, O. and Ojutiku, R.O. (2008): Economic evaluation of artisan fishermen among rural folkskin Katcha Local Government Area of Niger State, Nigeria. Journal of Agriculture Research and Policies 3(1):102 -106
- Aribasala OA (1993): Raw material revolution and impact on industrialization in Nigeria, mednet publication Ltd, ISBN 978-024-000-4.
- Ariyo, D. (2005): Small firms are the backbone of the Nigerian economy. Retrieved Nov. 8, 2005, from <http://www.africaeconomicanalysis.org>
- Ayozie, D. O. (2006): The Role of Small Scale Industrial in National Development in Nigeria. Association For Small Business And Entrepreneurship. 32nd Annual Conference.pp 1-20

- Babalola, F.D. (2008): Assessment of Small Scale Private Nursery Enterprise in Ibadan, Oyo State Nigeria. *Small Scale Forestry* 7:263-273. DOI:10.1007/s11842-008-9054-2
- Babalola, F.D. (2020). What to consider before mass planting of trees in Nigeria's Lagos State. *The Conversation*. Published online June 2, 2020. <https://theconversation.com/what-to-consider-before-mass-planting-of-trees-in-nigerias-lagos-state-137634>
- Chu, Hung M. and Kara, Orhanand B.C. (2010): An empirical study of Nigerian entrepreneurs: success, motivations, problems, and stress. *International Journal of Business Research* 8(2):103-116
- Defries, R., Rudel, T., Uriarte, M. and Hansen, M. (2010): Deforestation Drive by Urban Population Growth and Agricultural Trade in the Twenty-First Century. *Nature Geoscience* 3:178-181.
- Eko, O.D., Adedokun, M.O., Soaga, J.A., Okojie, L.O., Atanda, T.A., Abisoye, T.R. (2021). Socio-Economic Importance of Tree Nursery Enterprises in Lagos State, Nigeria. *Journal of Applied Science and Environmental Management* 25 (1):21-28
- Emmanuel I.J. and Willie, E.E. (2020); Small and Medium Scale Enterprises (SMEs) and Economic Growth in Nigeria. *IAR Journal of Business Management*, 2(1):38-43.
- Ephraim, K. R., and Abubakar, E. M. (2018). Economic Analysis of Seedlings Plant Productions in Nurseries within Bauchi Metropolis in Nigeria. *International Journal of Forestry and Horticulture* 4:(3):8-15. DOI: <http://dx.doi.org/10.20431/2454-9487.0403002>
- Fakayode, B.S, Adewumi, M.O, Rahji, M.A.Y and Jolaiya J.A. (2008): Viability and Resource Use in Ornamental Plants Nursery Business in Nigeria. *European Journal of Social Sciences* 6 (4):19-28.
- Fanimu, D. and Olayinka, C. (2009): Tackling unemployment challenge in Nigeria. *Guardian Newspapers*, April 28.
- Haq, I. and Tariq, A. (2020). Technical Efficiency of Saffron Cultivating Farms in Kashmir Valley: Post National Saffron Mission Implementation. *Indian Journal of Agricultural Economics* 75(3);273-289
- John Campbell (2012): This is Africa new biggest city: Lagos, Nigeria, population 21 million. *The Atlantic* Washington DC. Retrieved 23 September 2012.
- John Hartley; Jason Potts; Terry Flew; Stuart Cunningham; Michael Keane; John Banks (2012). *Key concepts in creative industries* SAGE. p47.
- Lagos State (2022). About Lagos. Lagos State Official Website. <https://lagosstate.gov.ng/about-lagos/>
- Larinde, S.L. and Santus R. (2014): Assessment of small scale private plant nursery enterprise in Port Harcourt, Rivers Statute. *Global Journal Of Bioscience and Biotechnology*. 3(3):301-311
- Lintu, L, (1986): Marketing in the forestry sector. *Unasylva*, 153(38): 10-19
- Mailumo, S.S., Okonkwo, M.C., and Afrika, B.M. (2006): Socio-economic analysis of tree seedlings production in nurseries: evidence from municipal area council, Abuja, FCT. Nigeria. In: Popoola L (ed) *Forestry at Cross roads in Nigeria*. Proceeding of the 31st annual conference of forestry Association of Nigeria (FAN), held in Makurdi, Benue state, Nigeria, 20-23 Nov. Forestry Association of Nigeria, pp492-499.
- Musari, A. (2009). Youth and the National Youth Employment Action Plan, Abuja, *Guardian Newspapers*, 19 March 2009.
- Oduol, Judith Beatrice Auma; Franzel, Steven (2014). *Assessing Market Potential of Agroforestry Tree Seedlings in Western Kenya*. *Small-scale Forestry*, 13(3), 281–298. doi:10.1007/s11842-013-9254-2
- Omokhua, G., Idumah, F.O and Abu, H.E (2002): The Prospects of Fruits Trees Crops to the Nigeria Economy. A Paper Presented at the 20th Annual Conference of Horticultural society of Nigeria.
- Onugu basil (2005), small and medium enterprises in Nigeria (SME) problem and prospect .a discretion submitted to st clement university in particalfulfilment of the award of the degree of doctors of philosophy in management.
- Oshagbemi, T.A. (1983). *Small Business Management in Nigeria*. London: Longman.
- Pantziros, C.; S. Rozakis, and V. Tzouvelekas (2002), "Assessing the Perspectives of EU Cotton Farming: Technical and Scale Efficiencies of Greek Cotton Growers", paper prepared for presentation at the Xth EAAE Congress 'Exploring Diversity in the European Agri-Food System', Zaragoza (Spain).
- Premium Times (2021). Lagos, 7th fastest growing city globally, Nigeria's highest IGR – NIPC.

- Agency Report. Premium Times 13 April, 2021. Accessed online 18/05/2022 at <https://www.premiumtimesng.com/regional/ssouth-west/454818-lagos-7th-fastest-growing-city-globally-nigerias-highest-igr-nipc.html>
- Roshetko, J.M., E.L. Tolentino, Jr., W.M.Carandang, M. Bertomeu, A. Tabbada, G.E.S. Manurung, and C.E. Yao. 2010. Tree Nursery Sourcebook - Options in Support of Sustainable Development. World Agroforestry Center-ICRAF and Winrock International. Bogor, Indonesia. 52 p.
- States (Creation and Transitional Provisions) (Amendment) Decree (1974). Decree of Federal Military Government with effect from 27 May, 1967. Accessed 18/05/2022 at <https://gazettes.africa/archive/ng/1967/ng-government-gazette-supplement-dated-1967-05-27-no-21-part-a.pdf>
- Williams JU, Michael E (2012): Developing Entrepreneurial skills through Business Education Programme to Curb Youth Restiveness for Sustainable Niger delta Development, *Eur. J. Bus. Manage*, 2012.
- World Population Review, (2022). Lagos Population 2022. World Population Review. Accessed 19/05/2022. <https://worldpopulationreview.com/world-cities/lagos-population>