



A comparative analysis of urban agricultural enterprises in Lagos and Port Harcourt, Nigeria

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SUMMARY: This paper describes commercial vegetable production in Lagos and commercial floriculture in Port Harcourt. Commercial vegetable entrepreneurs are mainly poorly educated migrant farmers who engage in vegetable production as an off-season income-generating activity. By contrast, commercial floriculturists are well-educated urban residents who usually combine this with other well-paid occupations. Returns are also higher in floriculture. In order to attract consumers, location is essential and both categories of entrepreneurs prefer land sites close to major highways and roads. Both enterprises are profitable and rely on hired workers as an important production input. The problems associated with urban vegetable production include access to land, credit and technology. In floriculture, the lack of skilled labour and exotic plants are more important problems. The paper ends by stressing the advantages of integrating support for urban agriculture within urban policies.

I. INTRODUCTION

IN THE 50-year history of Nigeria's agricultural development planning, urban farming has not been recognized or promoted as a feasible means of improving urban food security and the urban environment, or of increasing employment opportunities in townships and cities. This is probably because town planning laws appear to have been derived entirely from the "work camp" or township pattern of colonial days where no provision was made for agro-residential planning for even a few stands of vegetables to enrich urban diets. This is so, in spite of the fact that the first generation of urban dwellers migrated directly to townships from the farms.

Many towns and cities in Nigeria grew out of farming and fishing communities where agriculture had, in the past, been the major occupation of the inhabitants. Rural-urban migration has remained largely one-way, leading to increases in urban food demands, but low production and inadequate handling, storage, transportation and distribution have resulted in temporary shortages.⁽¹⁾ However, at present, agricultural production in the rural areas covers all the food needs of the urban population despite having to rely on fewer people and on less productive land.

Nutritional deficiencies are beginning to show up more among the urban poor due to their greatly reduced purchasing powers arising from higher prices and falling incomes following economic structural adjust-

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ment after 1986. The average real incomes of both rural and urban households declined but this decline was more marked in the case of urban households.⁽²⁾ Urban agriculture is perhaps a last resort to enable the most vulnerable population groups to cope with household food insecurity and malnutrition.

Urban agriculture is gaining greater attention and has been expanding in many countries such as China and Singapore in Asia,⁽³⁾ Kenya⁽⁴⁾ and Uganda⁽⁵⁾ in East Africa,⁽⁶⁾ Togo,⁽⁷⁾ Sierra Leone and Nigeria⁽⁸⁾ in West Africa. Today, most available open spaces or proposed factory sites in Nigeria's major towns and cities are planted up by enthusiastic residents.

This paper compares two specialized urban agricultural activities, namely, commercial vegetable enterprises (CVE) and commercial floriculture enterprises (CFE) in Lagos and Port Harcourt, respectively. Both are usually carried out within city limits and are comparable because they are crop based and profit (market) oriented. They are the most important urban agricultural enterprises compared to other arable crops such as cassava, maize, yams, plantain and banana which have the same growing season as in rural areas (where most such crops are still produced) and do not usually appear on the market due to competition from rural production. In order to focus attention on urban agriculture and advocate for active policy intervention in Nigeria, there is a need to understand the characteristics of urban commercial floriculturists and vegetable entrepreneurs and their production systems. This is because these urban agricultural activities have the potential to improve income and enhance the urban environment. The purpose of this paper is to determine the profitability of farm resources in urban agricultural enterprises, and to discuss the similarities and differences in the production systems of both enterprises.

II. METHODOLOGY

DATA FOR THIS paper were collected simultaneously in Lagos and Port Harcourt between October 1995 and March 1996. Forty-five commercial vegetable entrepreneurs were randomly selected from a list of 220 farmers in Ojo local government area of Lagos state and 40 commercial floriculture entrepreneurs from a list of 200 entrepreneurs in Port Harcourt municipality. The list of farmers was compiled with the help of staff from the Agricultural Development Programme in Lagos state and by researchers from Port Harcourt municipality.

Lagos is considered one of Africa's fastest growing cities and Nigeria's commercial nerve centre⁽⁹⁾ As of 1991, the population of the area was estimated at about 5.7 million, and the greatest concentration of manufacturing and service industries in Nigeria occurs in the Lagos area owing to the distinct advantages offered by a seaport and international airport - as well as to its former role as Nigeria's capital before the capital was moved to Abuja. This has resulted in vigorous suburban development and intense competition for sites between industry, housing, commerce and public utilities. In recent years, rapid economic development has brought about a shift in the spatial pattern of industrial location within metropolitan Lagos. Increasingly, factories have decentralized to peripheral industrial suburbs, to well-equipped industrial estates and to more extensive sites with lower land values and with access to motorways. It is within these various yet to be developed industrial sites that commercial vegetable entrepreneurs operate.

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12. See reference 11.

Ojo local council area has low land values, access to a major motorway (the Lagos-Badagry highway) and an abundance of urban vegetable producers. It is divided into four municipalities, namely, Amuwo-Odofin, Iba, Mile 2 and Ojo with a population of 1,011,808 and a density of 2,698 persons per square kilometre. The largest international (Alaba) market and the state's trade fair complex are located within the area where an earlier study was conducted between 1992 and 1993.⁽¹⁰⁾

Port Harcourt municipality is Nigeria's third largest commercial centre after Lagos and Kano, with a population of 406,738 and a density of 2,844 persons per square kilometre. At present, it is Nigeria's most significant city because of large crude oil and refined petroleum investments. Port Harcourt, which started flourishing as a colonial town in 1912, is often referred to as the 'garden city' because of dwellers' flair for nurturing flower gardens around their houses, a result of the influence of the early White settlers who decorated their homes and environment with ornamentals.⁽¹¹⁾ With rail, road, sea and airport facilities, there developed an industrial labour force, and the discovery of petroleum in the 1960s led to an influx of expatriate multi-nationals and oil companies which contributed to an increase in the demand for ornamentals for the decoration of offices, homes and parks. Because Port Harcourt has a large industrial wage labour force,⁽¹²⁾ purchasing power generally is relatively high and there is a strong demand for goods and services including ornamental plants.

Data for the study were collected with structured questionnaires administered to entrepreneurs with help from graduate students at the Department of Agricultural Economics, Federal University of Technology, Owerri and staff from the Agricultural Development Project in Lagos state. Information included socio-economic characteristics, production techniques, plot sizes and methods of acquisition, farm input sources including labour and costs, quantity of output and returns from sale of output, and production problems in both urban agricultural enterprises. Measuring tapes were used to estimate plot sizes while weighing scales were used to estimate crop output in commercial vegetable enterprises (CVEs). Prices for different crops/plants were obtained from entrepreneurs and buyers and used to estimate income.

III. SOCIO-ECONOMIC CHARACTERISTICS OF URBAN FARMERS

TABLE 1 INDICATES that commercial vegetable and floriculture enterprises are male dominated activities. The proportion of male involvement is, however, higher in CVE (98 per cent) than in CFE (73 per cent male). The mean age of commercial vegetable entrepreneurs is about 37, eight years younger than for floriculturists and, in both sets of enterprises, most are married. Floriculturists spend, on average, 16 years in school indicating that most are graduates of tertiary institutions. This contrasts with the commercial vegetable producers who spend, on average, six years in school indicating that most vegetable entrepreneurs are not educated beyond primary school level. The primary occupation of commercial vegetable producers is mainly farming whereas around 47 per cent of floriculturists have other primary occupations including the civil service, business and pastoral vocations. This suggests that the choice to invest in agricultural enterprises in urban areas in Nigeria is influenced by the level

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of education and income. The well-educated are more likely to engage in urban floriculture than the poorly educated, who tend to engage in vegetable production.

Table 1	Socio-economic Characteristics of Urban Agriculturalists, Nigeria	
	Characteristic	Urban Agriculture Enterprise
	CVE	CFE
Gender (male %)	98	73
Marital status (married %)	91	90
Age (years)	37	45
Education (years)	6	15
Primary occupation (farming %)	80	53
Farming experience (years)	9	7
Labour use (hired %)	78	82
Note: CVE = commercial vegetable enterprises CFE = commercial floriculture enterprise		

The commercial vegetable entrepreneurs have spent a greater number of years in farming than the floriculturists. An important observation, however, is that the former are mostly migrants who have left households in their home states. Seventy per cent of the farmers interviewed were migrants from the northern states of Benue, Borno, Jigawa, Katsina, Kebbi and Sokoto states, while 30 per cent came from the southern states of Akwa Ibom, Cross River, Osun, Oyo and Rivers. The socio-cultural implication is that farmers, especially those from the northern states, carried the agricultural and irrigation traditions from their home states to Lagos where the market potential for vegetable production is more promising. Commercial vegetable production is, however, considered a temporary, off-season employment opportunity that is used to maintain a constant flow of income during the dry season (October to March). This is also the time when vegetables are most needed, especially in urban areas, because of the decline in rural output.

The migrant status explains the high use of hired labour and the dominance of men in commercial vegetable enterprises. Men are more likely to migrate from their home states than women especially in the predominantly Muslim northern states of Nigeria. Hired labour is mostly used in floriculture for a different reason; since floriculturists have other primary occupations and are, on average, older, they usually hire labour for most farm operations in their flower gardens.

IV. PRODUCTION SYSTEMS IN THE COMMERCIAL VEGETABLE AND FLORICULTURE ENTERPRISES

a. Commercial Vegetable Enterprises

COMMERCIAL VEGETABLE PRODUCTION is intensive and is at its peak during the dry season months of November to March. Three factors discourage intensive production during the wet season. One is the high incidence of pests and diseases; another is that farm sites are located in low-lying areas that are flooded during the rainy season; and third, and

most important, is the decline in vegetable prices as a result of increased supply to the urban markets from the rural areas during the wet season.

Both leafy and non-leafy vegetables are grown in the study area. Leafy vegetables include green amaranths (*Amaranthus sp.*), cock's comb (*Celosia argentea*), Jew's mallow (*Cochorus oliterius*), water leaf (*Talinum sp.*), lettuce (*Lactuca sativa*), cabbage (*Brasica oleracea capitata*), spinach (*Spinacea oleracea*) and roselle (*Hibiscus sabdariffa*). Non-leafy vegetables include cucumber (*Cucumis sativus*), eggplant (*Solanum macrocarpon*), spring onion (*Allium cappa*) and radish (*Raphanus sativa*). These vegetables are grown on raised beds on plots of land ranging in size from 1,200-2,700 square metres, averaging about 1,391 square metres per farmer. Around two to three crops of leafy vegetables can be harvested from the same area during the production season. The majority of the farmers (91 per cent) claimed that they paid rent to the local government council at a rate of N 1 (\$0.12) per square metre. This rent is paid only for a six-month period as most of the farmers go back to the hinterlands to cultivate arable crops at the onset of the rainy season.

Hired labour is used for five major activities, namely, land preparation, (trans-) planting, weeding, watering (irrigation) and harvesting. Land preparation includes the construction of a shallow hand-dug well which is the primary source of water throughout the production season. Mean labour input ranges from 5.9 person/days for harvesting, 6.1 person/days for planting, 7.5 person/days for weeding, 8.3 person/days for land preparation to 8.8 person/days for watering. Watering and land preparation are the most labour intensive operations. Mean wage rates range from N 25 (US\$ 0.31) per day for harvesting to N 150 (US\$ 1.86) per day for watering. Some variations exist in the social organization of labour. Most farmers (90 per cent) employ labourers on a share-crop basis where 10 per cent of the crop output goes to the labourers at harvest. Labourers might also be hired on a contract basis especially for well construction. Again, depending on demand, crops might be sold before they are harvested, in which case the cost of labour for harvesting is transferred to the buyer. Other activities requiring labour are organic manure and pesticide application; brooms or leaves are used to apply pesticides.

The essential non-labour inputs in commercial vegetable production are organic manure, pesticides, seeds, tools and irrigation materials. Seeds include both improved (exotic) and local seed varieties. Tools are mostly simple hoes, cutlasses, sickles and watering cans. All inputs are purchased mostly from the local markets, and the major source of organic manure are poultry farms also located within city limits. The use of poultry manure indicates that urban vegetable production is adaptable to low external inputs and, from an economic perspective, both poultry and commercial vegetable production are complementary agricultural enterprises in urban centres.

b. Floriculture Enterprises

Floriculturists tend to acquire land alongside major streets and highways in Port Harcourt especially along Cewa Avenue, Oyigbo district, Diobu, Rumuokoro, Mile 5 to Mile 4 and Port Harcourt to Aba highway. Land acquisition is by rent (53 per cent), inheritance (32 per cent), government allocation (10 per cent), and borrowed and purchased (2.5 per cent, respectively). Land areas range from 1,000 to 4,000 square metres with a mean of 2,382 square metres per floriculturist.

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Flower production is a year-round activity. Labour is needed for soil preparation, planting/transplanting, mulching, weeding, irrigation, pest/disease control and marketing, and for skilled activities such as budding, grafting, soil sterilization and the application of rooting mediums. Labour requirements for these activities are evenly distributed throughout the year. Eighty-two per cent of the floriculture enterprises hired labour annually on a permanent basis with each entrepreneur hiring, on average, between two and three persons or 69.9 person/days per month. Labourers are required to work six days a week. It was observed that floriculturists hire more male (61 per cent) than female (39 per cent) labourers and that male labourers were paid higher monthly wages (about N 2,487 or US\$ 31.08 per labourer) compared to the mean monthly wages for hired female labourers (N 1,967 or US\$ 24.58). Even though female wage rates were cheaper (by 12 per cent), male labourers are preferred because floriculturists believe that they are better adapted to the strenuous production activities involved in commercial floriculture.

Planting materials (seeds, cuttings, suckers) come from private sources and fellow floriculturists, and from research institutes such as the National Institute for Horticultural Research (NIHORT) located at Ibadan and Okgwe; the National Institute for Oil Palm Research (NIFOR), Benin City; and the National Root Crops Research Institute, Umudike. Exotic plants are obtained from expatriates and itinerant international traders. The purchase of planting materials from research institutes suggests the use of improved technologies in CFE.

Weeding takes place as soon as weeds appear. Herbicides are not used but manure and pesticides are very important production inputs. Plants are watered intensively, especially during the dry season, and extra labour is often hired essentially for this purpose.

Most ornamental plants are sold as of three months of germination as potted plants, landscape nursery plants, cut flowers or turf or lawn grasses; they are sold on the spot, explaining the need for self-displaying locations on roadsides. Floriculturists also provide other ad hoc income-yielding services such as plant protection and home garden maintenance in private houses, landscaping contracts, and the production and sale of flowerpots.

V. FACTOR COSTS AND RETURNS IN URBAN AGRICULTURAL ENTERPRISES

THE RELATIVE IMPORTANCE of production factors in CVE and CFE is presented in Table 2. Seeds/seedlings constitute the most important factor cost in floriculture, accounting for about 95 per cent of the total cost of production. This is because the majority of florists travel long distances, sometimes outside the country, to obtain these seeds/seedlings and suckers; transportation and handling charges are usually built into the cost. Flower production is a profitable venture since entrepreneurs get a return of about 61 kobo on every naira invested or 61 per cent.

Factor shares are more evenly distributed in commercial vegetable enterprises. Labour costs contribute about 30 per cent to total production costs, followed by depreciation on tools (21 per cent), other costs (19 per cent), manure (12 per cent) and land rent (10 per cent). Even though the tools used are simple, they constitute an important cost because they have to be purchased at the start of every production season. The watering cans,

Table 2		Factor Shares in Urban Agricultural Enterprises, Nigeria		
ITEM	Value (N)	CVE % Contri- -bution	Value (N)	CFE % Contri- -bution
Fixed costs:				
Land rent	1,555	10.3	2,030	0.3
Equipments/tools	3,088	20.5	1,539	0.2
Total fixed costs	4,643	30.9	3,569	0.6
Variables costs:				
Labour costs	4,438	29.5	8,090	1.3
Seed/seedling costs	492	3.3	584,710	94.8
Manure costs	1,832	12.2	1,642	0.3
Pesticide/insecticide costs	723	4.8	3,296	0.5
Other costs	2,912	19.4	15,449	2.5
Total variable costs	10,396	69.1	613,188	99.4
Total cost	15,039	100	616,756	100
Net farm income	9,739	-	377,512	-
Returns per naira invested	0.65	-	0.61	-
Note: CVE = commercial vegetable enterprises CFE = commercial floriculture enterprises N 80 = US\$ 1				

for instance, are made of very cheap metal and get damaged easily with daily use so that farmers have to replace them once or twice each season.

Fixed costs in CVE exceed those for CFE by 13 per cent. This is because tools are owned for relatively longer periods of time (one to 20 years) by floriculturists, accounting for reduced depreciation in the value of their tools and equipment. While commercial flower producers purchase pesticides and insecticides in relatively large quantities, commercial vegetable entrepreneurs purchase them at the retail level in the open market. This explains the large (95 per cent) difference in the cost of pesticides and insecticides for the florists and the vegetable producers.

Commercial vegetable producers return about 65 kobo on every naira invested compared to 61 kobo for the floriculturists. However, commercial floriculture requires a larger capital outlay than commercial vegetable production where capital outlay is relatively small because of its temporary nature. Also, the total cost of inputs for CFE is 41 times that for CVE because flower production requires more elaborate and imported inputs; for instance, rooting powder and some types of flowers (such as roses of rare colours) are imported. Tools used in flower production are more elaborate than those used in commercial vegetable production and include manure forks, spades/shovels, rakes, hand forks, trowels, secateurs, shears, water pumps, wheelbarrows, knapsack sprayers, hoses and sprinklers; they are also quite expensive and some are imported. Labour costs are higher in CFE than in CVE because labourers are hired for longer (one year) compared to CVE, whose production season lasts just six months. Other inputs, such as flowerpots, require custom production, and all these factors give rise to higher total production costs in CFE.

Table 3 indicates that, in CFE, plants such as cyca palm attract higher prices even though they are produced in relatively smaller quantities. This is because they are vulnerable in the early stages of growth. Flowers such as ixora, gardenia and ferns are easier to germinate and are produced in

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very large quantities but attract lower unit prices.

Similar observations can be made with respect to CVE output (see Table 4). For instance, exotic vegetables such as lettuces, green peppers, radishes, parsley, spring onions and cucumbers attract higher unit prices whilst traditional vegetables such as green amaranths, water leaf and Jew's mallow are produced in relatively large quantities to meet local market demand but attract lower unit prices.

Plant name/service	Number of plants /quantity	Price (naira)	Total value (naira)
Pink rose	221	168	37,194
White rose	223	121	26,954
Yellow bush	215	228	49,014
Queen of Philippines (white)	254	329	83,553
Queen of Philippines (pink)	251	153	38,403
Queen of the night	255	173	44,217
Dieffenbachia	230	158	36,363
Ixzora (double)	430	139	59,868
Ixzora (single)	382	69	26,301
Black prince	226	196	44,375
Ferns	335	84	28,190
Oleander	263	150	39,434
Cyca palm	149	441	65,731
Asoka tree	230	138	31,671
Philadendron	241	127	30,607
Acalipher	234	150	35,086
Dryseley	233	121	28,163
Pride of Barbados	253	98	24,903
Hibiscus (double)	293	85	24,805
Gardenia	232	98	22,717
Marigold	245	119	29,238
Flower pots	81	230	18,590
Home garden maintenance	-	-	27,893
Landscape contracts	-	-	140,996
TOTAL			994,268

Note: N 80 = US\$ 1

VI. PROBLEMS ASSOCIATED WITH URBAN AGRICULTURAL PRODUCTION

PROBLEMS ASSOCIATED WITH commercial vegetable production include lack of access to land, to credit and appropriate technologies. Entrepreneurs do not have usufruct rights to the land they cultivate; usually, such areas are empty sites proposed for industrial/factory development by corporate organizations and government parastatals. Farmers can therefore be ejected without notice. Their insecure status discourages investment in permanent structures such as fencing, wells with concrete walls and perennial crop production. The absence of concrete wall wells implies that labour is used to excavate the existing hand-dug wells several times during the production season in order to improve water yield. Also, the absence of perimeter fencing encourages the theft of produce and the dumping of refuse and waste. Theft is a particularly irksome problem to

Table 4		Estimated Gross Income by Crop Type in Commercial Vegetable Enterprises, Lagos, Nigeria	
Vegetable type	Kilogrammes	Price (naira)	Total value (naira)
Lettuce	6.1	65	400
Cocks comb	85.0	68	5,774
Cabbage	2.0	33	67
Cucumber	2.0	142	283
Green pepper	9.8	82	799
Jew's mallow	110.9	30	5,120
Water leaf	59.6	32	1,886
Green amaranth	148.8	24	3,643
Radish	24.1	53	1,275
Parsley	7.6	231	1,748
Spring onion	55.9	56	3,144
Eggplant	14.1	45	628
Total			24,778

Note: N 80 = US\$ 1

vegetable farmers because crops are often stolen when they are mature. Dumping of waste is illegal in the area and poses a hazard to crop output.

Lack of access to credit is also linked to the problem of usufructory rights to land, since land is the only meaningful collateral accepted by agricultural banks. Banks' confidence in such agricultural ventures is further eroded by the low educational levels and migrant status of the farmers and competition for loans from other less risky small enterprises in the city.

The absence of appropriate technologies also affects production. For instance, the potential for cheap manual irrigation pumps (e.g. treadle pumps) which could cut irrigation labour costs by 40 per cent has been investigated.⁽¹³⁾ Such pumps, however, are not available locally.

The problems encountered by commercial floriculture entrepreneurs are of a slightly different nature. They include the lack of skilled labourers and of appropriate land sites and the rising costs of farm inputs. Skill is required to successfully operate a floral garden. Skilled personnel are scarce and expensive, and entrepreneurs reduce these costs by using family labour and by employing and training unskilled labour. However, due to the lack of job security, trained labour often move to other businesses which yield quicker returns. Land scarcity for commercial floriculturists means a lack of sites alongside major access roads and streets where they can display their flowers to potential consumers. Where such sites are available they are either exorbitantly expensive or their use is discouraged by law or the town planning authority.

Finally, farm inputs such as seeds/seedlings, flower cuttings and, especially, exotic plants are not easily obtained. Entrepreneurs sometimes travel long distances to acquire specific plants and flowers. The cost of inputs such as farm implements, cement (used for casting flowerpots) and water charges are affected by ever-rising inflation and, hence, are constantly fluctuating. Because the floriculturists are educated, they often obtain loans from commercial banks; but these take a long time to process so that by the time they are disbursed their value would have been eroded by inflation.

13. Njoku, J.E. and C.I. Ezedinma (1992), *Potentials For Small-scale Irrigation in Nigeria: An Agronomic and Economic Report*, submitted to Appropriate Technology International, Washington DC as part of the Treadle Pump Dissemination Project in Nigeria, June 30.

VII. CONCLUSIONS AND POLICY RECOMMENDATIONS

THIS PAPER COMPARES the activities of two kinds of urban agricultural enterprises, namely, commercial vegetable enterprises (CVEs) in Lagos and commercial floriculture enterprises (CFEs) in Port Harcourt. The study indicates that there are both similarities and differences in the socio-economic characteristics of the urban farmers. With respect to similarities, entrepreneurs are mostly married men and waged labour is used intensively in both enterprises. However, floriculturists are more educated than commercial vegetable producers, suggesting that the practice of urban agriculture in general cuts across class, income and educational barriers. Commercial vegetable production is a temporary venture operated by migrants from the hinterlands as a means of maintaining income for their households during the off-farm season whilst floriculture is a perennial venture by established urban residents.

Factor costs are more evenly distributed in CVE than in CFE although both activities were found to be profitable. Total production costs in CFE are 41 times higher than in CVE. Seeds/seedlings are the most expensive input in CFE because of imputed costs for transportation and handling. Labour costs are the most important input in CVE although they are almost twice as high in CFE. Labour in CFE is employed on a relatively permanent basis unlike in CVE where labour is employed on an ad hoc or share-crop basis over a six-month period.

In CFE, plants that are difficult to produce or germinate in the early stages attract higher prices because they are grown in relatively smaller quantities. In CVE, exotic vegetables attract higher unit prices while traditional vegetables attract lower unit prices. Returns in CFE are 39 times higher than in CVE. Thus, much more human capital is required in flower production and returns from the enterprise are much higher than in CVE.

Problems associated with CVE include lack of access to land, credit and appropriate technologies. These problems are compounded by the migrant status of vegetable farmers. On the other hand, problems associated with CFE are lack of skilled labour, appropriate land sites and the rising cost of farm inputs.

It is not too late to integrate urban agriculture into the town planning practices of Nigerian cities. This is because the Nigerians of tomorrow will be largely urban once the first generation of rural-urban migrants have passed on. The nutritional and health problems attributable to deficient food and vegetable intake and environmental degradation may grow. There is a need to modify the present agricultural extension system to include urban farmers and improve the productive base, credit, technology and equity issues for the benefit of urban farmers. Specifically, there is a need to improve access to land by incorporating agro-residential planning and development and the provision of leasing agreements. Urban farmers, especially commercial vegetable entrepreneurs, should be encouraged to constitute cooperative groups. This will encourage agricultural credit institutions to extend credit to commercial vegetable producers and boost vegetable production in urban areas. Similarly, an enabling socio-political and macro-economic environment in Nigeria will go a long way towards improving incomes, employment and the urban environment.