Introduction

In an increasingly urbanizing world, formal as well as informal workers in cities are exposed to various vulnerabilities such as unemployment and rising costs of living, while small and medium enterprises (SMEs) that tend to be the main industrial and service sector actors and predominant employers in the industrialization process equally face a hostile and disenabling business environment. In African cities, many inhabitants of and migrants to urban areas are unable to find formal sector jobs while existing infrastructure is consistently inadequate in sustaining the unplanned for and burgeoning population. Many thus resort to creating their own jobs and subsisting on income from the informal sector. Using the case study of informal sector work in Lagos, Nigeria, Africa’s largest city with a population of 21 million (Kaplan 2014), I probe the extent to which industrial clustering helps to improve the living standards of informal sector workers? In particular, I question under what circumstances firms in productive industrial clusters pass on benefits to workers in ways that improve their living standards, in the absence of social policies that require them to do so? The study draws from original research data from the Otigba Information and Communications Technology cluster in Lagos; a cluster which lies on an informal to formal continuum.

For this work, several disciplinary approaches were implicitly and explicitly drawn upon. These include economics, political science, sociology, law, and geography, all within an urban planning frame. This multidisciplinary approach was appropriate for a paper within the planning discipline, which prides itself in drawing on knowledge, analyzing situations in a holistic manner and then taking action, or in this case providing policy recommendations. The economics discipline was particularly expedient in understanding the employment and labor market issues, while the focus on industrial clusters situated the case study within a specific geographical space.

1. Data and Methodology

In order to demonstrate if and under what conditions productive industrial clusters can help alleviate poverty and improve living standards, I use the case of the Otigba Information and
Communications Technology (ICT) Cluster in Lagos, Nigeria, also called Otigba or Computer Village. Preliminary investigations helped to corroborate the choice of the selected case study. As opposed to many African clusters characterized by low skill, and employing low technology manufacturing techniques, Otigba employed both low and high skilled labour, had high prospects of further upgrading, possessed necessary technological dynamism and seemingly held the potential for wealth generation and poverty alleviation.

Survey questionnaires, archival research, and formal and non-formal interviews were also used. Two types of questionnaires were constructed and administered – one targeted to employees and the other to owners/CEOs and managers of the companies. Following an initial site visit in August 2011, subsequent field research took place in March 2012, July/August 2012, and January to the beginning of March 2013. During these latter visits, data was collected from primary and secondary sources using interviews, survey questionnaires, and general observations of the cluster. Archival research to collect old, and relevant newspaper articles on the cluster and poverty in Nigeria was also carried out. Informants for this study included ICT and non-ICT business owners and employees within the cluster; business owners who had ICT businesses, but were not within the geographical location of the cluster; government officials; bank employees; and others who had information and knowledge on the topic. The cluster was categorized in terms of the different types of firms based on products and services rendered. Interviews were then sought with firms that fit into these different types, as well as some of the bigger players in the cluster and ICT industry.

In all, a total of about sixty formal interviews and informal conversations took place, generally face to face. The final surveys were distributed within Otigba, and as well to two big players in the industry who were located outside of the cluster. In addition, survey questionnaires were also disseminated via email to members of the Computer Society of Nigeria, and as well at the Lagos and Ijebu-Ode chapter meetings of the Society. The target number of questionnaires to be retrieved was between 150-200, but a total of 257 questionnaires – 101 CEO/Management and 156 employees – were retrieved and examined using basic descriptive analysis as well as Discriminant Analysis.2

2. The Otigba Information and Communications Technology Cluster

Otigba “is an example of self-starting and self-sustaining small enterprises that are in some cases family owned” (Oyelaran-Oyeyinka 2006, 20) providing employment for many including graduates. It originated in the early 1990s on two streets that were designated as residential by the local government, but now occupies eight streets, with Otigba being the largest (Ibid. 2006).

The cluster interestingly lies on a scale ranging between formal and informal. On the one hand, it is viewed as informal by the state government because it is located in a residential
zone turned to a business district by private individuals. On the other hand, it is recognized by the same state government, which relates with it through the umbrella association (Computer and Allied Products Dealers Association) and collects taxes from the firms. It is a spontaneous cluster, as opposed to a planned one; the latter being those “induced by public policies, or “constructed” from scratch, and “range from technopoles” and industrial parks to incubators and export processing zones (EPZs)” (Zeng 2008, 2). It also has a wide range of workers from casual day workers to those employed in more established firms.

The major activity of the cluster is the assembly and trade of computer hardware and software and it “has been variously described as …[the] ICT… hub of West Africa, potentially the biggest ICT market in Africa, and the Silicon Valley of West Africa” (Abiola 2008, 66). Survey results show that more than 50 percent of businesses are involved in the sale of new laptops and laptop accessories, retailing, installation, and cloning (i.e. assembling) of computers. A sizeable percentage (46.2 percent) of firms are also wholesalers; some selling in bulk to others within the cluster or to middle men and end users in other parts of the country and beyond.

The cluster has a large population of youth, with 68.7 percent of employees reportedly between 21 to 30 years of age. 7.8 percent are less than 20 while under a quarter (23.5 percent) are above 31. Survey results show a comparable mix of female (48.1 percent) and male (51.9 percent) employees. The cluster also has a large population of graduates, with close to 50 percent being university graduates and almost 30 percent with technical degrees.

According to the Small and Medium Enterprises Development Agency of Nigeria (2005), CAPDAN had about 3,500 registered enterprises, with about 8,000 to 10,000 employees excluding their employers. There are also about 1,500 street operators. These numbers have grown since then. The cluster has thus served to employ a lot of people, including graduates. The cluster has shown a consistent pattern of profitability over time. In surveying the present worth of the firms, 11.6 percent of respondents each fell into the N0 – N50,000 and N50,000 – N100,000 categories. The largest number of respondents (27.4 percent) indicated that their businesses were worth between N1,000,001 – N5,000,000, while 10.5 percent had businesses worth over a N100,000,000 (Author field survey, 2013).

The trade reach of the cluster extends beyond Lagos State, and even Nigeria. This is because the cluster has a large variety of customers including individual end-users, companies, and other retailers, nationals and foreigners for example Congo and South Africa, but most customers come from West Africa – Abidjan, Ghana, Sierra Leone, Togo. Furthermore, firms in the cluster obtain their inputs largely from within the cluster and ICT distribution centers, while others have established contacts with firms in countries of origin such as China, Malaysia, Dubai, the United Kingdom, the United States of America, Hungary, Mexico to purchase parts and intermediate products. One implication of this is that the price of the
goods are significantly influenced by the exchange rate regime; showing the importance of macroeconomic policies on firm profitability.

3. Presentation and Discussion of Core Findings

Findings reveal that while the cluster provides employment to a wide range of actors, within the same geographical space firms and workers range from informal to formal, and face different types and intensities of vulnerabilities. For example, within the same cluster and its environs, you find street hawkers, vendors in stalls and temporary structures, those in moveable/immoveable kiosks, more established firms in stores and shops, and those firms with their own brands called original equipment manufacturers. Some of these actors are susceptible to the weather, and continual stress by the state government who seek to sanitize the cluster and put some order there. Additionally, access to benefits including bank loans and the cluster’s health insurance scheme is limited to actors who have an established shop within the cluster.

Similarly, the study shows that workers in the cluster have recorded higher living standards since working in their firms. 70 percent of employees surveyed confirmed that working in their firms had increased their standard of living. Discriminant Analysis showed three variables to be significant at the 1 percent level in explaining the response of employees who responded affirmatively to the question “has working in this firm increased your standard of living?” These variables were the age of employee, experience in other firm and location of firm. The sex of the employee, educational attainment, firm size, and length of service in the firm were not significant in explaining those whose standard of living improved. In particular, employees that were older, and those who had previous experience in other firms, tended to have better standard of livings than those who were younger and didn’t have this experience.

Thirdly, analysis showed that firms in the cluster provided non-income benefits – child care, pension, funding for further education, cars, housing, health insurance, company products, feeding allowance, transport allowance and training – to their workers that largely encompassed and surpassed benefits that might be expected by formal labour protection policies. Age of employee, firm size, length of service in the firm, and location of firm were found to be significant at the 5 percent level in explaining why firms passed on these non-income benefits. That is, older employees and those whose firms were located within the Computer Village tended to receive more non-income benefits than others. This is similar to the firms whose employees indicated receiving better standards of living. However, larger sized firms, measured by the number of employees, were more likely to be given non-income benefits to their workers, while the longer the individual had spent in the firm, the more likely the employee was to receive these benefits.

Fourthly, the study makes a strong case for firm agglomeration as firm clustering was seen
to promote not just firm-level productivity but also to raise the living standards of workers compared to non-cluster based firms. In particular, about 55.1 percent of employees who responded agreed that workers in Computer Village were faring better financially than those doing the same work outside of Computer Village. Although less than half (46.8 percent) admitted that workers in Computer Village are very satisfied, only 35.9 percent of respondents to the question indicated that most workers will go to work outside of Computer Village, given the opportunity.

Fifth, in the absence of formal social protection institutions, informal institutions based on social and kinship ties existed to fill this gap by helping to penetrate the labour market, providing employment, monetary, and non-monetary benefits like housing, transport allowance, feeding allowance and apprenticeships to workers, all of which helps to improve their living standards. Findings showed that within the cluster, employees and apprentices often depend on family and friends for accommodation, and job referrals; some working within firms owned by people they know and due to kinship relationships. Thus whereas only 3.5 percent of CEO and managerial staff stayed with relatives or friends, 19.1 percent of employees stayed with relatives or friends. 40.4 percent of the employees came to work in their firms because of a friend (18.4 percent), family member (9.6 percent) or kinsman (12.5 percent) while 28.7 percent and 22.8 percent came because of their employer and their own initiative respectively. Moreover more than half (57.9 percent) of employees worked in firms that were owned by a friend (21.8 percent), family member (15 percent) or kinsman (21.1 percent). 70.37 percent and 60 percent of employees whose companies were owned by kinsmen and family members respectively, also showed an increase in their standard of living.

**Conclusion and Policy Recommendations**

I propose that the State and its agencies acknowledge existing informal entrepreneurial workers and firms as contributors in reducing unemployment and poverty, incorporate them into national economic development agendas, and make considerable effort to understand their various vulnerabilities while supporting and enhancing their productivity. I also suggest that policy makers should find ways to better understand, boost the efficiency of and complement existing informal institutions which have currently been substituting for weak state institutions, but might not be sustainable in the long run especially in the context of rapid global changes, and innovation-based dynamic industrialization. Finally, I highlight the importance of analyzing this issue within a multidisciplinary frame as it provides a more holistic view of the complexity of the situation and allows policy makers to be better able to work towards a solution that improves the livelihoods of urban African workers.
Reference List

Notes
1 This paper was originally prepared for the 2014 Reducing Urban Poverty graduate student paper competition, sponsored by USAID, the World Bank, Cities Alliance, the Wilson Center, and the International Housing Coalition, and will appear in the edited volume published by the Wilson Center in 2015, title.
2 Discriminant function analysis (DA) is a statistical technique that enables the prediction of outcomes. DA, unlike multiple linear regression which is used when the dependent variable is an interval variable, can be used when the dependent variable is categorical (Chapter 25, Discriminant Analysis, http://www.uk.sagepub.com/burns/website%20material/Chapter%2025%20-%20Discriminant%20Analysis.pdf). Furthermore, it does not presuppose any causal relationships between the variables in the analysis and is therefore preferred over regression analysis where casual relationships among variables is not known or is immaterial.