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Improving Socio-Economic Conditions of Informal Sector Operators: A Study of Garage Operators at Suame, Kumasi

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Abstract

Macro-economic strategies for poverty reduction, such as the SAP and GPRSs were not adequately successful. A micro-economic focus is therefore proposed as a contemporary approach towards poverty reduction. The fact that the informal economy employs more than eighty percent of Ghana's working population suggests that improving the socio-economic conditions of informal operators would mean reducing poverty for the majority of the working population. This study aimed to examine how incomes generated in the informal garage economy reflect in the socio-economic well-being of informal garage operators and explore the strengths, weaknesses, opportunities, and threats of informal garage enterprises that can help improve the socio-economic conditions of the operators. A descriptive study design was adopted by the study. Interview schedule and interview guide were used to collect primary data. The study found that most informal garage operators contributed a greater portion of their household income. The opportunities available for the enterprises included high access to market and supplies. High competition, job insecurity, and inadequate support from local government were some identified threats. The study recommended garage operators to develop a common fund for infrastructural development within the cluster. It also recommended collaborative support of local government authorities and NGOs.

Keywords: informal economy, poverty reduction, SWOT, garage enterprises

Introduction

Historically, economic development models pursued by developing countries ignored the reality that a large section of the population was earning a daily living by participating in activities that fell outside the confines of the organised economy. Hart (1971) and ILO (1972) later discovered a traditional economic sector in African countries which they labelled as the informal sector. Embedded in the dualist theory, these studies termed the informal sector as survivalist, transient and comprising low-income earners in small scale firms that lacked modernity in their operations (Chen, 2007). Contrary to the expectations of much of the early development literature, the informal sector has persisted and grown in many developing countries, particularly in Africa where it dominates the economy both in terms of output and employment (Verick, 2006).

Greenspan (2005) cites increasing disposable income as a means for improving well-being. Therefore, in connection with the dualist theory, the growth of the informal economy in developing countries would mean an increase in the population of the poor in these countries. This conception is counter-argued by an opposing set of theorists (Chen, 2009; De Soto, 1989; Portes & Walton, 1981) who see the income-occupation relationship in the informal economy as more of a structural and legal association between larger formal firms and informal enterprises. The underlying assumption is that the structural and legal linkages influence disposable income which has a bearing on access to quality education, health, sanitation and other social factors that lead to improved living standards.

According to Chen, Jhabvala and Lund (2001), there is no simple relationship between working in the informal economy and being poor, but the socio-economic situations within the informal employment appear only when informal workers are classified by employment status. Chen, Vannek, Lund, Heintz, Jhabvala and Bonner (2005) add that average earnings or wages decrease as one moves down the employment status ladder: from being a micro-entrepreneur who hires others to working on one's own account, to working as a wage worker, and to being an industrial outworker. According to Nord and Brent (2002), improving the socio-economic conditions for informal workers is particularly important for Sub-Saharan African countries because the size of the informal economy is larger in is larger in Sub-Saharan Africa than in any other part of the world. The informal economy accounts for about 55 percent of the GDP of sub-Saharan African countries and also forms about 77.4 percent of the official labour force on the sub-continent (ILO, 2002). Excluding agriculture, statistics from ILO state that the share of informal economy as a percentage of GDP in Benin, Guinea Bissau, and Senegal is 72 percent, 59 percent, and 51 percent respectively.

In spite of the relevance of the informal economy to these countries, OECD (2011) found that informal workers are generally characterised by lesser incomes and lower living standards than their formal counterparts. Improving the socio-economic conditions of informal workers, would therefore mean a movement out of the poverty brackets for the majority of the working population, especially in sub-Saharan African countries. It may also translate into higher shares of GDP with rippling effects of increasing employment and a general rise in the national income.

In Ghana, the size of the informal economy is estimated at 88.6 percent of total employment (Ghana Statistical Service, 2008) with 38.4 percentage contribution to GDP (Sheperd & Gyimah-Boadi, 2004). According to the Ghana Trades Union Congress (1995) and Adeya (2006), the informal

economy is characterised by economic needs like inadequate access to credit and low wages, as well as social needs, such as lack of social security and lack of health benefits, which are differentiated among various groups of informal workers. With respect to informal garage operators in Suame cluster, Adu-Gyamfi, Alexander and Willcox (2010) estimate a daily average income of GH¢5.00 for each operator. Given that the average statutory income of the Ghanaian economy is GH¢4.48 (Boadi, 2012), it is necessary to improve the general incomes of informal garage operators by providing technical know-how, training, and infrastructural assistance to the cluster.

However, attempts made by local government and other private agencies have not made substantial improvements in the socio-economic status of the operators, because theoretically, the informal economy is proposed as a vicious cycle of poverty (Adeya, 2006; ILO, 1972). Lourdes and Floro (2006) emphasise that informal businesses lack potential for growth, trapping employees in menial jobs indefinitely. However, Garcia-Bolivar (2006) argues that the informal sector can allow a large proportion of the population to escape extreme poverty and earn income that is satisfactory for survival. Rogerson (1996) and Hart (2006) argue conversely that not only can the informal economy offer income for survival, but it also has the potential of moving workers therein up the income ladder, under favourable conditions (ESCAP, 2006). There are therefore alternatives within the larger economy structure than can be employed to improve the socio-economic status of informal operators.

This study therefore examines the income status of informal garage operators, as well as the strengths, weaknesses, opportunities, and threats of the garage enterprises at the Suame cluster in order to help in identifying strategies for improving the wellbeing of the operators. This is pursued under the assumption that improved incomes of informal garage operators can lead to better socio-economic wellbeing for the operators and their households. It can also lead to ripple effects of improved food security and access to health for the operators. On the national level, improved socio-economic status of informal operators would suggest a general improvement in the wellbeing of the majority of the working populace within the Ghanaian economy.

The subsequent section of the paper discusses the theories and concepts that underpinned the study. Next to this is the discussion of the methodology, comprising the description of the study area, the methods of sampling and the sampling procedure, as well as the methods used for analysing the field data. These are followed by discussion of the results or empirical evidence. The paper ends with conclusions and the policy implications.

Theoretical and conceptual issues

According to ILO (2002), theories which seek to explain the incidence of the informal economy and the socio-economic situation among workers of the sector conform to three main perspectives: dualist, structuralist, and legalist theories of the informal economy. While there may be overlaps in some of the propositions of these theories, they appear to lay emphasis on specific reasons for the incidence of informal employment, opportunities and drawbacks within and external to the informal economy, as well as the reasons for poverty in the informal economy and their associated anti-poverty measures (Swinnerton & Rogers, 2004).

The dualist theory is generally linked with the traditional-modern paradigm of the modernisation theory, which was propounded by writers such as Lewis (1956) and Rostow (1960). Proponents of the dualist theory assumed that, with the right mix of economic policies and resources, poor traditional economies could be transformed into dynamic modern economies. The prime concerns of dualists are with the type of employment and its scale of operation and they maintain that the primary weakness of informal employment stems from its scale of operation (Swaminathan, 1991). Chen, Vanek and Carr (2004) argue conversely that the scale of operation in the informal economy offers leverage over their formal counterparts, because it allows for production to be reorganised into small-scale, decentralised and more flexible economic units.

Dualists maintain that the relationship between informality and poverty is such that poverty precedes informality and informality reinforces poor socio-economic conditions (Murray, 1984). In order to improve the well-being of the informal workers, dualists propose the modernisation or formalisation of their economic activities (Swaminathan, 1991). This can be achieved by helping informal workers to attain the major interdependent elements of self-sufficiency, such as income and economic assets, education and skills, safe housing and sanitary surroundings, access to healthcare and other needed social services, close personal ties, as well as networks to others and personal resourcefulness as important elements of self-sufficiency (Miller, Mastuera, Chao & Sadowski, 2004).

The structuralist theory, on the other hand, stresses that in order to reduce costs, privileged capitalists seek to subordinate petty producers and traders (Portes & Walton, 1981). For example, many formal enterprises hire wage workers under informal employment relations, because they offer lower labour costs (Castells & Portes, 1989). According to Tobin (1994), structuralists generally agree that the major drawbacks or support for informal firms are identified within the larger socio-economic structure, other than within the structure of the informal economy. From this

perspective, Chen et al. (2005) identify inadequate recognition of the informal economy in national accounts and the lack of economic and social support for informal operators as significant threats to informal employment. These factors are derivations from the structuring of the economic system in such a way that a wage problem results within the informal economy, which forces informal workers to fall behind regardless of how competent they may be.

Page and Simmons (2000) suggest that structural changes can be achieved through policy processes. According to them, the range of federal and social policies governing employment and wage relation within the sub-sectors of the informal economy, as well as between the informal and formal economy can be adjusted to accomplish poverty reduction. This may be achieved through providing better job security, safeguarding higher wages for informal employees, expanding safety nets and assuring access to social insurance (Unni & Rani, 2003). Alternatively, Rank (2004) encourages social movements to exert pressure, from a grassroots level, on vulnerable parts of the system to force desired change. For example, public pressure, including unionisation, can increase wages and employment, as well as better working conditions for a systematically excluded informal economy. The legalist view suggests that the major constraints to the informal economy are situated in conditions, which are external to and also within the informal economy. According to De Soto (1989), the lack of or inadequate regulation of informal activities translates into a situation where informal operators do not enjoy the benefits of wage or pension legislation and other social benefits, while informal firms suffer from little or no creditworthiness due to the perceived illegality of their operations (Gerxhani, 1992). However, the informal economy enjoys an important leverage over the formal economy, which results from the legal framework within which the informal economy operates. Chen et al. (2001) suggest that extra profits and incomes accumulate for informal workers because they, generally, do not file corporate and income tax returns.

According to legalists, informal employment is not necessarily a symptom of degraded quality of life or unemployment, but a consequence of burdensome regulation and/or official corruption associated with the formal economy, as well as tax policies, which are not congruent with optimal levels of tax enforcement (Swinerton & Rogers, 2004). Relaxing legislations and by-laws on taxes, as well as disencumbering bureaucratic registration procedures are proposed as the means of attracting informal businesses to formalisation (Ordonez, 2010). Ordonez acknowledged that through this, informal businesses can enjoy the benefits and protection of formalisation in order to maximise profits/incomes for better socio-economic living.

The theoretical perspectives depict that the nature of informality is a matter of controversy and this has attracted much debate with regards to the relationship between informality and socio-economic well-being (ILO, 2002). One of the most debated features of informality lies in the role that it can have in economic development, and within this debate, a primary place is occupied by establishing the relationship between informal jobs and poverty (World Bank, 2006).

According to Thomas (1995) and Charmes (2000), there are links between working informally and being poor, despite the heterogeneity within the informal economy and its contribution to growth. They further assert that average incomes are lower in the informal economy than in the formal economy. Some other empirical studies, for example Maloney (1999) for Mexico and Packard (2007) for Chile, have also attested that informal employment has a causal impact on household socio-economic statuses through low wages. Yet, other studies provide evidence to a reverse causality from poverty to informality, arising from a variety of constraints that poverty poses to job holders (Devicienti, Groisman & Poggi, 2009).

The fact that the head of a poor household faces a greater chance to engage in informal employment with respect to non-poor heads is suggestive of the relationship between poverty and informality (ILO, 2002). Modelling the interrelated dynamics between poverty and informality however, poses challenges, especially, because household poverty is related to the labour market choices and outcomes of each household member (Amuedo-Dorantes, 2004). Devicienti et al. (2009) explain that informality-poverty relationship can be easier inferred when household heads who are working informally contribute the greater fractions of household incomes.

According to Taiwo (2010), improving the internal conditions and providing enabling external working environment for workers can lead to long term improvement in their socio-economic well-being. Bertulfo (2011) also infers that an improvement in working conditions improves productivity, which leads to increased incomes, contributes to overall economic growth, and reduces poverty in the long term. This will require knowing the income status and working environment of informal operators and identifying areas that need to be improved.

In order to measure the degree of well-being among a certain populace, it is necessary to be able to distinguish the poor from the non-poor. White and Booth (2003), in that respect, identify the poor as those whose income or expenditure falls below a poverty line. The measures of well-being may include demographic measures (OECD, 1998), social/welfare measures (UNDP, 2009), and income measures (World Bank, 2011).

Generally, economic measures of household poverty can be calculated, adopted from national statistics, or alternatively acquired from global comparative measures. The most common practice is to use 50 percent of GDP per capita, adjusted for household size and composition using equivalence scales (Buhman, Rainwater, Schmaus & Smeeding, 1988). Using the household as the recipient unit involves the conventional assumption that resources are shared within the household so as to equalise living standards (Chanfreau & Burchardt, 2008). For the purpose of this study, the OECD equivalence scale was adopted to measure the income status of garage operators at the Suame cluster.

Methodology

The study area was the Suame garage cluster, also known as Suame Magazine. The study adopted a mixed approach (Creswell, 2003) and adopted a descriptive design (Levin, 2006) to study all members of thematic garage associations within the cluster. The total study population was therefore 10,590 garage operators. Stratified random sampling was used to derive six strata comprising six thematic garage associations, namely mechanics with a population of 10,000, spare-parts dealers (200), welders and fabricators (150), metal workers (60), scrap dealers (80), and fuel pump technicians (100). The sample size for each stratum was calculated using Cochran's (1977) formula sample estimation formula. The study subsequently sampled a total of 343 garage operators made up of 143 units for mechanics and 40 units each for spare-parts dealers, welders and fabricators, metal workers, for scrap dealers, and fuel pump technicians. The chairmen of the 6 thematic garage associations were included in the study as key informants.

Interview schedules were used to collect data from garage operators, and interview guides were used to elicit data from key informants. Relationships, prevalence rates of the study variables in relation to the sample sub-groups were analysed with binary logistic regression model (Uni & Rani, 2002), Mann-Whitney U test and Wilcoxon Signed Ranks (Pallant, 2005). The OECD modified equivalence scale was adopted to measure the minimum income resource needs of households in order to make an objective comparison of household resource attainments to household resource needs. This was to enable the classification and identification of the severity of economic conditions in households. The strengths, weaknesses, opportunities and threats of Suame garage enterprises were analysed according to the Strength, Weaknesses, Opportunities and Threat (SWCT) principle (Berry, 2012).

Results and discussion

A total of 221 respondents were available for interviewing. This represented a response rate of 64.4 percent. Household size and composition of the operators' households were examined because these variables can have significant effects on the income sufficiency of households. For example, these variables are the major components of OECD's (1998) modified equivalence scale which was adopted to measure household income sufficiency of households in Bolivia, Brazil, Chile, and Mexico (Da Costa, de Laiglesia, Martinez & Melguizo, 2011).

Table 1 describes the size and composition of garage operators' households. One-hundred and seventy-three garage operators, corresponding to 78.2 percent of the respondents, had one to three additional adults in their households. Two hundred and seven garage operators, corresponding to 93.7 percent, had one to four children in their households. Overall, garage operators had an average of approximately two adult household members, two children, and one additional adult income earner in their households. The study also revealed that 14.5 percent of the operators had at least one non-working adult resident in their households.

According to Burniaux, Dand, Fore, Foster, D'Ercole and Oxley (1998), each additional income earner contributes to household income. The importance of additional income earners lies in the assumption that they contribute to the upkeep of households. Therefore, any additional income earner adds to the self sufficiency of the household. On the other hand, each additional non-working adult uses up more resources than an additional child. In economic sense, non-working adults contribute to household insufficiency, since they are seen as dependents.

Table 1: Household composition of garage operators

Composition	Freq.	Min.	Max.	Mean	Median	Mode	s.d.	Skewness	
								Stat.	Std. Error
Additional adults	173	1	3	1.63	1.00	1	0.722	0.696	0.140
Other adult income earners	145	1	3	1.26	1.00	1	0.521	2.012	0.143
Non-working adults	32	1	2	1.08	1	1	0.321	0.235	0.112
Number of children	207	1	4	2.07	2.00	2	0.706	0.331	0.128
Household size	221	2	7	4.19	4.00	4	1.307	0.042	0.124

Source: Field survey, 2012

The results show that within the households of garage operators, there is an average of one additional adult, one adult income earner, one non-working adult and two children. The household size for each respondent was calculated as the sum of the number of adults and children in the household of each respondent. The household size of garage operators varied from two to seven people per household. The skewness statistic of the distribution of household size was 0.042. According to Pallant (2005), normality can be assumed when a skewness of ± 0.5 is calculated for the distribution. Thus, it can be asserted that the distribution of household size of garage operators was normally distributed. The mean household size was therefore more representative of the distribution. Thus, the average household size of garage operators was 4.19.

The study found that the incomes of the majority (73.9%) of the sampled garage operators contributed more than 60 percent of their household income. This indicated that incomes of garage operators formed a substantial portion of total household incomes. The OECD demographic equivalence scale was used to calculate the income sufficiency of garage operators. The scale assigns a value of 1 to the household head, of 0.5 to each additional adult member and of 0.3 to each child (Da Costa et al., 2011). The formula used to calculate the minimum household requirements for garage operators was: $1 + (0.5 \times \text{number of adult household members other than the household head}) + (0.3 \times \text{the number of children})$. Depending on the household size and composition, a specific scale was derived and multiplied by 50 percent of the GDP per capita (GH¢2,700). The constant multiplier was therefore GH¢1,300.00. The final figure calculated represented the minimum household income need.

The household income sufficiency was calculated for all 223 garage operators. Table 2 shows that a little over 65.0 percent of garage operators were realising mean surplus annual income of GH¢4,531.43 (std. error = GH¢143.29) after meeting annual demographic household minimum needs. A little over 1.0 percent (1.4%) of the sampled garage operators was breaking even with their annual minimum household income needs. Income insufficient households were 33.4 percent.

Pagiola, Rios and Arcenas (2007) assert that a poor household refers to one in which the pooled resources of members cannot meet minimum needs. These findings suggest that most households of informal garage operators are not poor. The operators' incomes suggest that Suame garage enterprises could be categorised as dynamic informal operations, since the incomes of a substantial number of them could meet their minimum household needs and still realise surplus incomes.

Table 2: Household income sufficiency

Income status	Frequency (%)	Mean Surplus/deficit	Std. Error
Income sufficient	144 (65.2)	4531.42	143.29
Breakeven	3 (1.4)	0.00	000
Income deficient	76 (33.4)	-867.69	54.56
Total	221(100.0)	2673.03	256.22

Source: Field survey, 2012

The claim that surplus incomes and capital accumulation are not features of the informal economy (Swaminathan, 1991) is therefore not corroborated by the study. Generally, garage enterprises fit Rogerson's (1996) description of a dynamic informal economy where average incomes generated can create surpluses for re-investment and business expansion. Within garage vocations, however, the households of most upholstery and seat liners (86.7%), scrap dealers (82.4%), and sprayers (66.7%) were not income sufficient.

The study used binary logistic regression to determine the variables, which significantly influenced variations in household income sufficiency among garage operators. This examination was conducted to help identify the most significant factor which could influence household income sufficiency of garage operators. The predictors were number of children, number of adults, and annual income. The categories of the dependent variable were income sufficient household and income deficient household.

Pallant (2005) explains that expressing the pseudo R Squares (Cox and Snell and Nagelkerke) as percentages depict the extent to which the predictors explain the dependent variable. The pseudo R Squares for the predictors were 0.67 (Cox and Snell) and 0.97 (Nagelkerke). The number of children and adults in households, and household annual income, therefore explained between 67.0 percent and 97.0 percent of households' income sufficiency (Table 3). With a p-value of 0.331, the number of children in households was found not to be statistically significant in contributing to differences in meeting minimum household needs, at a default alpha of 0.05. Statistically, the number of adults (p-value = 0.000) and household income (p-value = 0.000) were significant predictors of household income sufficiency, at an alpha level of 0.05.

According to Hosmer and Lemeshow (2000), the likelihood ratio shows the odds with which the predictors explain the dependent variable. The likelihood ratio is therefore also known as the odds ratio (OR). Pallant (2005) adds that the odds ratio is the increase (or decrease if the ratio is less than one) in odds of being in one outcome category when the value of the predictor increases by one unit. The odds ratio for adults (0.364) and children (0.067), as shown in Table 3, indicate that the odds of households becoming income sufficient decrease with any additional child or adult to the household.

Table 3: Predictors of income sufficiency

Predictors	B	S.E.	Wald	Sig.	Exp(B)
Adults	-2.70	0.699	14.95	0.000	0.067
Children	-1.01	0.475	4.52	0.331	0.364
Annual income	0.007	0.001	30.69	0.000	1.007
Constant	-12.54	2.46	25.98	0.000	0.000

Source: Field survey, 2012

Burniaux et al. (1998) assert that adult members of households may serve as additional income earners, thus aiding household self-sufficiency. However, unemployed adults use up more household resources than children and contributes more to household income deficiency. In the case of garage operators, the odds ratio for adults suggests that the proportion of unemployed adults in garage operators' households may be higher than employed adult household members. Lower incomes for some garage operators may be explained by the fact that the number of unemployed adults in their households may be more than those who are gainfully employed.

Given the assertion that the internal and external working environment can have specific influence on the incomes of workers, the characteristics of garage enterprises were examined based on the principle of SWOT analysis (Berry, 2012). The strengths and weaknesses were explored to identify the internal conditions which influence income generation, general garage operations and ultimately the socio-economic welfare of garage operators (Table 4). The opportunities and threats were examined to identify the external conditions which had implications for the socio-economic welfare of garage operators.

The major strengths of garage businesses were operational autonomy and retention of tax revenue. All the garage operators indicated that, in relation to pricing and service quality, their operations are not regulated by any kind of governing body. The quality of service and the prices charged are left to the discretion of the artisan. They also enjoyed flexibility in service provision and in the degree of experimentation, which was useful in technical adaptation for mechanical services.

It was expressed by key informants that some associations within the cluster, for example, the Spare-parts Dealers Association made the attempt to regulate prices of merchandise sold by their members. However, service charge controls for other garage vocations failed on the premises that it was difficult for associations to place a uniform monetary value on the varied time and energy put into diagnoses and repairs. The foregoing finding confirms Chen's (2007) assertion that informal firms enjoy relatively more flexibility in pursuing their business and in developing their creativity. Rigidities and associated drawbacks within a regulatory framework are therefore avoided by informality.

Table 4: Strengths, weaknesses, opportunities and threats of Suame garage enterprises

strengths	Opportunities
Operational autonomy	Profitable sub-contracts
Retention of tax revenue	High access to market supplies
Exchange of artisanal expertise	
Weaknesses	Threats
Non-uniformity in service provision	Weak regulatory institutions
High competition within the cluster	High cost associated with scale of operations
Job insecurity	Inadequate support from garage associations
Inadequate social security	Inadequate financial assistance from financial institutions
Unsatisfactory working environment	

Source: Field survey, 2012

Garage operators unanimously reported that they neither filed corporate tax returns nor paid taxes to the Internal Revenue Service, because their enterprises were not registered with the Registrar General's office. This conforms to Gerxhani's (2003) description of some informal firms as registered with the Local Assembly, but not registered with the national regulatory body. Within garage operations, there is retention and accrual of possible tax money as personal income or business profit.

The major weakness of the garage enterprises identified by the study was unsatisfactory working environment. The road network within the Suame cluster was mostly untarred. In addition to the deep gullies in the adjoining roads, significant sections of the roads were muddy, while other parts were too narrow or too rough to allow free vehicular movement. There were several drainages left open and choked within the cluster, and the haphazard construction of shops generally contributed to difficulty in vehicular movement within the cluster.

Key informants expressed that the poor conditions of roads within the cluster stalled services and trade because the nature of business within the cluster required vehicular movement of supplies, as well as out-going finished and semi-finished products. Poor roads had particularly stalled access to market for garage operators who had settled up-hill on the Tafo land. Unsuccessful attempts had been made at bettering roads and improving infrastructural development within the cluster. One key informant pointed to the fact that a fire station, a clinic and a toilet facility for the cluster, proposed by KMA in collaboration with the Ghana National Association of Garages, had not materialised. . Instead, the proposed site for the fire station has been sold off for the construction of a private clinic. However, the clinic has relocated to other premises outside the cluster.

With respect to closing technological gaps, the key informant from the Scrap Dealers Association asserted that the Association in collaboration with SMIDO and a foreign metal processing firm, Ergon have established a metal recycling plant within the cluster. A metal bailing machine has been installed to reduce bailing costs and to ease transportation of scrap metal to sales point at Tema. Users pay small fees which are generally used for repairs of the machine. Key informants from garage associations interviewed reported that they had worked in collaboration with SMIDO to provide training for their members. Technical training covered mainly computer diagnostic training and computer spreadsheet literacy training. Others were engaged in general literacy training where they were taught to upgrade their reading, writing and book-keeping abilities.

It was however, reported among garage operators that neither themselves nor their apprentices could take full advantage of training given mainly because of time constraints (42.6%) and a general disinterest (4.1%). About 51 percent of responses asserted that garage operators did not have the funds to buy computer diagnostic equipments, in order to utilise their knowledge (Table 5).

Table 5: Factors hindering participation in training and literacy programmes for garage operators

Reasons	Frequency	Percent
Inadequate avenues to use knowledge	292	51.1
Time constraints	243	42.6
Not interested	24	4.1
Other	12	2.2
Total	571*	100.00

*Multiple responses; n=221

Source: Field survey, 2012

A little over two percent of responses indicated other factors, such as lack of perceived benefits of the programmes and low confidence in the sustainability of the programmes as factors hindering the sampled garage operators from participating in training and literacy programmes. The major external advantage identified for Suame garage enterprises was profitable sub-contracts. Income from subcontracts (skewness = 1.079) and earning from offering the same job to other private people (skewness = 1.121) were not normally distributed. Thus, as Pallant (2005) recommends, non-parametric statistical tools were used to compare differences in earnings for the two categories of service charges. Using Mann Whitney U- Test, it was found the differences between average earnings from subcontract were significantly higher than earnings from offering the same job to a private client (Table 6). This emphasised a mutually beneficial relationship between the informal and formal economies (Portes & Walton, 1981; Chen, 2009). It also established a structural linkage between both economies.

Table 6: Earnings for subcontracted and service to private individuals

Earnings	Mean (GH¢)	Median (GH¢)	Mode (GH¢)	s.d (GH¢)	Skewness	
					Stat.	Std. error
Subcontract	269.31	225.00	300	203.74	1.079	0.249
Private individuals	246.06	200.00	100	196.65	1.121	0.249

Source: Field survey, 2012

Using the Wilcoxon Signed Ranks, it was found that among the total of 128 garage operators who had ever been sub-contracted by larger firms, 82 always earned more in subcontracts than offering the same services to a private individual, while 24 always earned lesser in subcontracts than

offering the same service to private individuals. For 22 of the operators, their earnings from subcontracts and that from private services were the same. A z-statistic of -4.533 and a p-value of 0.000 (Table7) indicated that the differences in earnings for subcontracts from larger formal firms and earnings from offering the same service to private individuals was statistically significant at an alpha of 0.05.

Although garage operators may be earning higher on sub-contracts, such an approach may be a strategy for larger formal firms to reduce operational cost. This confirms assertions of the structural theory that informality is a deliberate attempt to keep a cheaper pool of labour for larger formal firms (Portes & Walton, 1981). Sub-contracts are therefore important source of additional income and a major advantage for garage enterprises.

Table 7: Differences on earnings from subcontracts and private services

Earnings	Frequency (%)	Mean Rank	Sum of Ranks
Subcontract>Private	82(64.1)	40.72	3339.04
Subcontract<Private	24(18.7)	35.42	850.08
Subcontract=Private	22(17.2)		

Z = -4.533; p-value = 0.000

Source: Field survey, 2012

The main external threat was low financial support for business investment. Interviews with key informants from garage associations revealed that financial assistance was not their major focus as required by their members because financial institutions are not willing to give loans to the groups of associations. One key informant expressed that financial institutions often had pre-conditions, which the garage associations or their members could not fulfil. For example, the garage operators were often asked to open bank accounts with the financial institutions and keep intact a premium, which cannot be withdrawn for some months as a precondition for loans. One other key informant added that some financial institutions required certain accounting records and records of cash flow, which were generally unavailable.

One other key informant responded added that the fear that members would default on the payment of loans would mean transferring the payment of loans to the guarantors of such loans, which in this case would be the association executives. One major constraint identified for inadequate support from the garage associations was therefore the garage operators' failure to provide the adequate guarantees and accurate records of cash flow, as well as profit and loss accounts. Another constraint was parallelism in the focus of the garage associations and their members, as well as the lack of confidence in the garage operators to repay loans. These findings conform to studies by Unni and Rani (2002), which indicated similar constraints for informal operators in India.

Some associations were however, working within their means to provide some kind of support for their members. For example, the key informant from the Association of Welders and Fabricators reported that the association has been able to attain loans of about GH¢1,000.00 per head for 25 members and GH¢400.00 per head for 75 other members. These loans were accessed through a private banking firm named Garden City Saving and Loans. The loans were to be paid over a period of six months to twelve months, but more than half of the beneficiaries of the loans have not repaid their loans although the stipulated repayment date has elapsed.

In collaboration with some NGOs, the Ministry of Trade and Industry, Kumasi Metropolitan Assembly, selected financial institutions, garage associations, Suame artisans and SMIDO proposed a financial scheme for artisans in Suame. This was a planning response to the deficiencies in the existing collateral market-driven banking economy, which has created exclusion for the majority of businesses within Suame Magazine. This scheme, named Suame Magazine Industrial Financial Irrigation Scheme (SMIFIS), was to serve as an institutional mechanism to mobilise resources into a regenerative pool fund for about 100,000 artisans.

The scheme was also to provide a basis for the government to channel its micro-credit to Suame Magazine as an intermediary organ for onward support to artisans. The banking and non-banking financial institutions were expected to host the scheme in their respective institutions as investment, insurance and banking products, while SMIDO mobilises resources into the host institutions as Suame magazine incorporated.

Key informants revealed that the DANIDA-USAID-DFID BUSAC fund had provided the initial support for the advocacy component of the project. However, the SMIFIS had not been attended to as expected due to non-cooperation on the part of the government bodies and financial institutions. Similar findings were reported by SMIDO (2007) that the local government was mainly responsible for delays in infrastructural and development projects for the cluster.

The study established that incomes of garage operators formed a greater percentage of their household incomes. Moreover, the majority of informal garage operators were income sufficient and that increasing number of non-working adults and children were likely to reduce household income sufficiency. It was also found that garage operators enjoyed considerable operational autonomy and retention of tax revenue, which could be ploughed back into their businesses. They also benefited profitably from structural linkages between their firms and larger formal businesses. However, the poor infrastructure, in addition to failed attempts to better improve working conditions and low financial support were restricting business profits that were particularly important for improving the wellbeing of the operators' households.

Conclusions and policy implications

The study concludes that households of garage operators are highly dependent on the income generated from garage enterprises, thus any decrease in the incomes of garage operators would mean lowering standards of living for the operators' households. It was also concluded that informal garage enterprises at the Suame cluster are not survivalist firms. This is because the assumption that informal sector cannot earn income greater than the national minimum was not found to be true for the sampled garage operators. Profitable structural linkages existed between informal garage operators and their formal counterparts. The working environment of garage operators and their access to financial support were not adequate for business expansion and increased profitability. Attempts made at resolving internal constraints at the garage were also not adequate.

The study suggests that garage associations should encourage structural linkages between enterprises of association members and larger firms for sub-contracts to boost members' income. Garage

operators should give up some operational autonomy to support quality control and service charge determination attempts of garage associations. This can help maintain uniformity in service charges to counter the higher bargaining power of customers resulting from high competition within the cluster. Garage operators could also establish a common fund for the infrastructural development of the cluster. Advocacy for decongestion and improvement in infrastructural development should be emphasised through garage associations to relevant government institutions, such as the KMA and the Ministry of Trade and Industry. This should be done in support of the on-going attempts by SMIDO and the Asantehene to acquire and develop lands for the artisans.

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