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Small business incubators: An emerging phenomenon in South Africa's SMME economy

Mukovhe Masutha Christian M. Rogerson

Mukovhe Masutha, University of Johannesburg, Faculty of Science, School of Geography, Environmental Management & Energy Studies, South Africa (masutham@thusananifoundation.co.za)

Christian M. Rogerson, University of Johannesburg, Faculty of Management, School of Tourism & Hospitality, South Africa (crogerson@uj.ac.za)

Abstract

In South Africa much policy attention is focused on the potential of the small, medium and micro-enterprise (SMME) economy for job creation. Nevertheless, despite government support for the SMME economy, high mortality rates are experienced by start-up enterprises. In common with international experience South Africa has adopted business incubation as a strategic tool for assisting the survival as well as building the competitiveness of SMMEs. This article analyses the state of business incubation in South Africa drawing attention to marked differences between the groups of public sector business incubators as opposed to those business incubators which have been initiated by the private sector.

Keywords: small business development, SMMEs, South Africa, business incubators

Introduction

Two decades after the democratic transition South Africa remains one of the most unequal societies in the world (Ndungu & Frye, 2008). Some observers argue that poverty, unemployment and inequality levels have reached a state of crisis and threaten the social and economic stability of one of Africa's youngest democracies (Fakir, 2009). In a response to the triple challenge of poverty, unemployment and inequality the South African government has made substantial commitments to supporting Small, Medium and Micro Enterprises (SMMEs) as a critical policy vehicle for achieving sustainable economic growth, creating employment opportunities and alleviating poverty (Department of Trade and Industry [DTI], 1995, 2006; Rogerson, 2013). It is significant that the national government's New Growth Path (NGP) and the National Development Plan (NDP), South Africa's blueprint for future development, both identify the SMME sector as central to the realization of South Africa's Vision 2030. The National Development Plan Vision 2030 sets out a target of creating 11 million jobs by 2030, of which 90 percent is expected to come from SMMEs (Department of Economic Development, 2011; National Planning Commission, 2011). In addition, the promotion and growth of SMMEs is one of the cornerstones for the successful attainment of local economic development programming in South Africa (Rogerson, 2006, 2007, 2008a, 2010, 2011, 2012, 2014; Rogerson & Rogerson, 2010a, 2012). The establishment of a network of business incubators is an essential step for improving the local business environment and enhancing prospects for local development particularly in South Africa's urban areas (Rogerson & Rogerson, 2010b, 2011, 2012). Overall, the importance attached by national government to the role of small businesses is underlined by the establishment during 2014 of a separate dedicated Ministry of Small Businesses (Greve, 2014).

Despite the long-standing government commitment and increased support for the sector South African SMMEs have not reached their intended impact, anticipated or desired by policymakers (Rogerson, 2004, 2008b; Timm, 2012). Rather, the South African SMME economy continues to experience high mortality rates with SMMEs failing to grow sufficiently to create the expected employment opportunities (Herrington et al., 2008, 2009, 2010, 2011). The 2011 report produced by the Global Entrepreneurial Monitor (GEM) rated South Africa's total early-stage entrepreneurial activity at 9.1 percent. Arguably, this rating of South Africa's early-stage entrepreneurial activity remains far lower than that of comparable emerging economies such as Brazil, Chile or Malaysia (Herrington et al., 2011; Timm, 2012). The GEM report (2011) further notes that South Africa has one of the world's lowest SMME survival rates. Indeed, in 2012, the country's Small Enterprise Development Agency (SEDA) estimated that 80 percent of South Africa's SMMEs are failed businesses in their first year of existence (SEDA, 2012).

Across both developed and developing countries small business incubators have been identified as strategic tools for helping to grow a country's entrepreneurial base while reducing the high mortality of SMMEs. Although the detailed definition of small business incubator is contested there is a general consensus among scholars that a business incubator provides various targeted business support and technical support services aimed at growing emerging and small start-up business enterprises into financially and operationally independent enterprises (Akcomak, 2009; InfoDev, 2010a). Business incubation has been adopted and supported for varying reasons in several countries (Akcomak, 2009; Monkman, 2010; Barbero et al., 2012). Governments across both developed and developing countries have adopted and supported business incubation within various developmental contexts and in response to different developmental challenges (InfoDev, 2010a; Monkman, 2010). Although the reasons behind the establishment of business incubators appear similar, often each nation has specific priorities which respond to locally-specific challenges (InfoDev, 2010a). This said, the most common motives for governments to give support for business incubator programmes relate to issues of employment creation, poverty alleviation, technology transfer, acceleration of business growth, reduction of the mortality rate of SMMEs, empowerment of specific groups of entrepreneurs, creating value for various stakeholders, urban/rural regeneration, and the revitalization of local economies (Colombo & Delmastro, 2002; Monkman, 2010). For Akcomak (2009: 1) incubators provide an attractive framework for government policymakers and "can be considered as a remedy for the disadvantages that small and new firms encounter by providing numerous business support services and they are useful in fostering technological innovation and industrial renewal".

Notwithstanding growing international interest for the application of small business incubators, research concerning business incubation is limited and remains in its infancy. In common with the international experience South Africa, through the Department of Trade and Industry (DTI), has identified business incubation as a viable tool to help SMMEs grow and become successful and globally competitive enterprises with the potential to create jobs, alleviate poverty, empower previously marginalized groups and contribute to the growth of local economies (InfoDev, 2010b; SEDA, 2010; Timm, 2012, DTI, 2013). The lead agency for galvanizing business incubation is the government's Small Enterprise Development Agency or SEDA. In South Africa only a small number of investigations have been undertaken on the role of business incubators as one of the ways in which the country might seek to energize its entrepreneurial base for developmental purposes (Wyeth, 2007; Buys & Mbewana, 2007; Ndabeni, 2008; InfoDev, 2010b; Sandheep & Thomas, 2011). Accordingly, there is a significant knowledge gap concerning business incubation in the country and in particular, little is known about the organization and operations of different kinds of business incubators (Masutha, 2014). The aim in this paper is to address this knowledge deficit about

the growing phenomenon of small business incubators in South Africa. More specifically, the discussion undertakes an analysis of the contemporary state of business incubators, their sectoral and institutional base, and character of entrepreneurs. The conclusion seeks to draw comparisons and differences between the groups of public and private incubators in South Africa.

The analysis is based upon a national audit that was undertaken of business incubator operations in South Africa during 2013. In addition, it draws upon findings from a national survey of business incubators, documentary sources in the form of SEDA Annual Reports and material gathered from semi-structured interviews conducted with the SEDA Technology Programme Executive Manager, former SEDA Technology Programme Executive Managers, SEDA Regional Manager (Gauteng) and telephonic interviews with incubator managers of both public and private sector business incubators. In total, responses were received from thirty-eight of the forty-two public incubators implying a response level of 90 percent. Information concerning the remaining four public sector incubators was received during an interview with the SEDA Regional manager responsible for incubation. In the private sector, responses were received from seven of the nine private sector business incubators in the country which is a 78 percent response rate.

National State of Business Incubators

In terms of numbers of incubators by 2013 the audit of national incubators reveals a total of 51 functioning incubators. This figure represents a marked growth in the numbers of South African business incubators from a total of only four in 2004, to 37 by 2011 to 51 by 2013. The majority of the 51 business incubators have been established by the public sector. Of the national total of incubators 42 or 82 percent are public sector driven through the activities of SEDA, South Africa's national small enterprise development agency. The remaining nine incubators or 18 percent are private sector operations. Overall, it was disclosed in interviews that the primary objective of public sector incubators is to broaden economic participation in South Africa by creating employment opportunities and the transference of skills, most importantly for disadvantaged communities. By contrast most private sector incubators focus upon growing small businesses into assets of value with specific emphasis on maximizing the profitability and annual turnover of the small business. In terms of the incubators' institutional environment, all public incubators report to the Department of Trade and Industry's Small Enterprise Development Agency, while private incubators are accountable to their parent companies. Within the international landscape of business incubators it is apparent that the public sector has been particularly strong in driving the growth trajectory of the business incubator movement in South Africa (SEDA, 2010, 2011a, 2011b; 2012). Indeed, it is only in recent years that a set of parallel private sector incubators have made their appearance.

Table 1: Number of Incubators by Sector

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Sectoral Focus	Number of Incubators	
Manufacturing	13	
Mixed Use	8	
Agriculture/Agro-Processing	7	
Construction	5	
ICT	5	
Chemicals	4	
Jewellery	4	
Small-scale Mining	2	
Bio and Life Science	1	

Renewable Energy	1	
Automotive	1	

Table 1 shows the sectoral focus of business incubators in South Africa. A number of points can be observed. First, 84 percent of business incubators (43 in total) are sectorally specific and only 8 incubators can be described as mixed in terms of the business category of incubatees. Second, in terms of sectoral focus, currently the largest number of functioning incubators are linked to manufacturing with the largest individual sectors being those of furniture, agro-processing and chemicals. Other manufacturing activities in which sector specific incubators have been established include the production of jewellery, aluminum fabrication, and stainless steel. Three, beyond manufacturing-linked incubators there are several incubators which are dedicated to support other sectors such as ICT, construction and small-scale mining. Finally, in agriculture there are incubators which support enterprise development for both floriculture and the production of essential oils.

Table 2: Number of Incubators in Each Sector: Public vs Private Sector Driven

Sectoral Focus	Public Sector	Private Sector
Manufacturing	13	0
Mixed Use	2	6
Agriculture/Agro-Processing	7	0
Construction	5	0
ICT	3	2
Chemicals	3	1
Jewellery	4	0
Small-scale Mining	2	0
Bio and Life Science	1	0
Renewable Energy	1	0
Automotive	1	0

(Source: Authors)

Table 2 reveals the sectoral distribution or focus of respectively the groups of public sector versus private sector incubators. It is evident that significant differences between the focus of public sector as opposed to private sector operated business incubators in South Africa. Three points are of note. First, 95 percent of public sector incubators are sector-specific with only two of the 42 incubators functioning as mixed incubators. Second, by contrast, two-thirds of the private sector incubators are mixed and only three sector-dedicated incubators have been initiated by the private sector. Third, of the large group of public sector incubators initiated by SEDA, the majority are linked to manufacturing activities or agro-processing.

Table 3: Number of Incubators by Province

Province	Number of Incubators
Gauteng	17
KwaZulu-Natal	12
Eastern Cape	7
Western Cape	5
Mpumalanga	5
Limpopo	2
Free State	1

	l
Northern Cape 1	l

Finally, in terms of their geographical distribution across South Africa, a number of points can be observed. As is demonstrated on Table 3 at least one business incubator has been established in each of South Africa's nine provinces. However, the largest clusters of business incubators are currently located in the provinces of Gauteng and KwaZulu-Natal followed by Eastern Cape, Western Cape and Mpumalanga. Together these five provinces account for 90.2 percent of all business incubators. The provinces that are relatively underserved in terms of business incubators are Limpopo, North West, Free State and Northern Cape.

Table 4: Geographic Distribution of Business Incubators by Settlement Type

	Number of Business	% Share
	Incubators	
Urban Areas –	41	80
Cities/Small Towns/Cities		
Townships	5	10
Rural Areas	5	10

(Source: Authors)

Table 4 provides a more refined picture of the location of business incubators in terms of different types of settlement. This reveals that South African business incubators are unevenly distributed between urban and rural areas. Over half of the existing business incubators are located in South Africa's leading metropolitan centres with Johannesburg having the greatest individual number of incubators. It is observed that all the private sector business incubators are situated in metropolitan areas and that the private sector driven incubators are absent from secondary cities or small towns. The geography of public sector incubators reveals, however, an outreach into secondary cities and small towns. Importantly, however, there are few business incubators located in the underdeveloped rural areas or urban townships, the most disadvantaged areas of the South African space economy.

Survey Findings

The national survey of public and private incubators collected information on a number of different aspects of their operations. In particular, information was obtained on the evolution and size of incubators, nature of SMMEs, number of jobs created, and issues of recruitment and graduation of incubatees.

Table 5: Number of Public Sector Business Incubators by years of establishment

Year of	Number of Incubators
establishment	Established
2001	3
2002	2
2003	1
2004	5
2005	4
2006	4
2007	-
2008	3
2009	6

2010	2	
2011	1	
2012	11	
Total	42	

Table 6: Number of Private Sector Business Incubators by years of establishment

	Year of	Number of Incubators
	establishment	Established
	2000	2
	2001	1
	2002	-
	2003	-
	2004	1
	2005	1
	2006	-
	2007	-
	2008	1
	2009	1
	2010	1
	2011	1
	2012	-
•		

(Source: Authors)

Tables 5 and 6 provide a profile of the evolution of business incubators in South Africa, both private and public, by year of establishment. It is evident that South Africa's business incubation movement has evolved rapidly particularly over the past decade. In 2001 there existed only 3 public incubators in South Africa. Between 2001 and 2007 this number increased to 20 public incubators. During the past 5 years South Africa has expanded the number of public incubators from 20 in 2007 to reach a total of 42 by 2012. In 2012 SEDA established 11 public sector incubators. Tables 5 and 6 indicate that the category of public sector incubators has evolved more rapidly than private sector incubators in terms of number of incubators established each year.

Table 7: Number of SMMEs Currently Supported by Public Sector Incubators

Name of Public Business Incubator	Number of SMMEs	Incubation
	Currently Supported	Model
Chemin (3 Incubation Centers)	50	Physical
Downstream Aluminium Centre for Technology	76	Physical
(DACT)		
EgoliBio	13	Physical
Ekurhuleni Jewellery Incubator	New	Physical
Furntech (7 Incubation Centers)	93	Mixed
Global Jewellery Academy	6	Physical
Innovation Technology Business Incubator (Invo	33	Physical
Tech)		
Lepharo	6	Physical
Mapfura Makhura Incubator (MMI)	166	Virtual
Mpumalanga Agri-skills Development & Training	131	Virtual

(MASDT), Nelspruit		
Mpumalanga Stainless Steel Initiative (MSI)	34	Physical
Seda Agricultural & Mining Tooling Incubator	24	Physical
(SAMTI)		
Seda Alfred Nzo Agro Manufacturing Incubator	New	Physical
(SANAMI)		
Seda Atlantis Renewable Business Incubator	New	Physical
(SEREBI)		
Seda Automotive Technology Centre (SATEC)	45	Physical
Seda Construction Incubator (SCI)	215	Virtual
Seda Essential Oils Business Incubator (SEOBI)	68	Physical
(2 Incubation Centers)		
Seda Limpopo Jewellery Incubator (SLJI)	80	Physical
Seda Nelson Mandela Bay ICT Incubator	30	Physical
(SNMBICTI)		
Seda Northern Cape Diamond and Jewellery	New	Physical
Incubator		
Seda Platinum Incubator (SPI)	33	Physical
Seda Sugar Cane Incubator SESUCI)	105	Virtual
Seed Container Park (Secopa)	7	Physical
SmartExchange	47	Physical
SoftstartBTI (SBTI)	44	Mixed
Soshanguve Manufacturing Technology	60	Physical
Demonstration Centre (SMTDC)		
Timbali	118	Virtual
Zenzele Technology Demonstration Centre	30	Physical
Total	1514	

Table 8: Number of SMMEs Currently Supported by Private Sector Incubators

Name of Private Business Incubator	Number of SMMEs	Incubation Model
	Currently	
	Supported (2012)	
Raizcorp Business Incubator	300	Virtual
Aurik Business Incubator	200	Virtual
Bandwidth Barn ICT Incubator	70	Physical
Shanduka Black Umbrellas (JHB)	29	Mixed
Shanduka Black Umbrellas (CT)	17	Mixed
Shanduka Black Umbrellas (PTA)	18	Mixed
Shanduka Black Umbrellas (DBN)	24	Mixed
Sasol Chemcity Business Incubator	179	Virtual
Total	837	

(Source: Authors)

Tables 7 and 8 reveal the numbers of SMMEs currently supported in respectively public incubators and private incubators. It is evident that there are considerable variations in the size of various incubators as measured by the number of SMMEs currently supported. In the case of public sector incubators, excluding newly established incubators (that currently have no occupants), the range in size is from six to 215 in total. The largest cluster of public sector

incubators is, however, in the range of 40 to 80 SMMEs. In examining Table 5 it is evident that the size of private incubators is considerably larger than public sector incubators. The survey revealed a range of sizes from 17 SMMEs in an incubator with the lowest number of SMMEs to 300 in the case of Raizcorp. Currently, the average incubator size for public incubators is calculated as 44 SMMEs, whereas the average size for private incubators is 97 SMMEs per incubator. With the growing demand of business incubation services, both groups of public and private sector incubators are progressively introducing programmes of virtual incubation as opposed to a physical incubator. The group of private sector incubators is already predominantly virtual in their operational model. A major advantage of virtual business incubation is that it increases incubators' capacity to accommodate more SMMEs. It is evident that marked size differences exist between the groups of physical as opposed to virtual incubators. Nationally, the largest physical incubator had 64 SMMEs. The largest incubator is a virtual rather than physical incubator (Raizcorp Business Incubator) with 300 SMMEs.

Table 9: Percentage of Women-Owned SMMEs by Business Incubator

Name of Business Incubator	% Women Owned
Chemin (3 Incubation Centers)	100
Downstream Aluminium Centre for Technology (DACT)	45
EgoliBio	58
Ekurhuleni Jewellery Incubator	0
Furntech (7 Incubation Centers)	39
Global Jewellery Academy	New
Innovation Technology Business Incubator (Invo Tech)	3
Lepharo	38
Mapfura Makhura Incubator (MMI)	22
Mpumalanga Agri-skills Development & Training (MASDT), Nelspruit	36
Mpumalanga Stainless Steel Initiative (MSI)	17
Seda Agricultural & Mining Tooling Incubator (SAMTI)	4
Seda Alfred Nzo Agro Manufacturing Incubator (SANAMI)	New
Seda Atlantis Renewable Business Incubator (SEREBI)	New
Seda Automotive Technology Centre (SATEC)	7
Seda Construction Incubator (SCI),	43
Seda DUT Technology Incubator (SDTI)	New
Seda Essential Oils Business Incubator (SEOBI) (2 Incubation	44
Centers)	_
Seda Limpopo Jewellery Incubator (SLJI)	57
Seda Nelson Mandela Bay ICT Incubator (SNMBICTI)	New
Seda Northern Cape Diamond and Jewellery Incubator	New
Seda Platinum Incubator (SPI)	37
Seda Sugar Cane Incubator SESUCI)	33
Seed Container Park (Secopa)	75
SmartExchange	23
SoftstartBTI (SBTI)	16
Soshanguve Manufacturing Technology Demonstration Centre (SMTDC)	33
Timbali	100

Zenzele Technology Demonstration Centre	24
Total	40

Table 10: Percentage of Black-Owned SMMEs by Business Incubator

Name of Business Incubator	% Black-Owned
Chemin (3 Incubation Centers)	100
Downstream Aluminium Centre for Technology (DACT)	36
EgoliBio	67
Ekurhuleni Jewellery Incubator	New
Furntech (7 Incubation Centers)	91
Global Jewellery Academy	100
Innovation Technology Business Incubator (Invo Tech)	95
Lepharo	100
Mapfura Makhura Incubator (MMI)	100
Mpumalanga Agri-skills Development & Training (MASDT), Nelspruit	100
Mpumalanga Stainless Steel Initiative (MSI)	48
Seda Agricultural & Mining Tooling Incubator (SAMTI)	88
Seda Alfred Nzo Agro Manufacturing Incubator (SANAMI)	New
Seda Atlantis Renewable Business Incubator (SEREBI)	New
Seda Automotive Technology Centre (SATEC)	100
Seda Construction Incubator (SCI),	100
Seda DUT Technology Incubator (SDTI)	New
Seda Essential Oils Business Incubator (SEOBI) (2 Incubation Centers)	100
Seda Limpopo Jewellery Incubator (SLJI)	100
Seda Nelson Mandela Bay ICT Incubator (SNMBICTI)	89
Seda Northern Cape Diamond and Jewellery Incubator	New
Seda Platinum Incubator (SPI)	92
Seda Sugar Cane Incubator SESUCI)	100
Seed Container Park (Secopa)	100
SmartExchange	100
SoftstartBTI (SBTI)	34
Soshanguve Manufacturing Technology Demonstration Centre (SMTDC)	100
Timbali	100
Zenzele Technology Demonstration Centre	100
Total	83

(Source: Authors)

Tables 9 and 10 index the proportion of women owned SMMEs by business incubators and black owned SMMEs by incubators. The analyses relate only to public sector incubators, as private sector incubators could not provide this information. In terms of the proportion of women owned SMMEs, considerable variations exist. Table 9 reveals that on average women owned SMMEs represent 40 percent of the public sector incubatees. This said, in some cases the proportion is less than 10 percent and in other instances it reaches 100 percent as in the case of Timbali Floriculture business incubator and Chemin business incubator. Table 10 discloses that the vast majority of public sector incubators are supporting only black owned SMMEs. This is in line with the objectives of the business incubator programme as laid out

by the Department of Trade and Industry to give preference to disadvantaged groups. The emphasis upon black owned and women owned enterprises within the group of public incubators reflects the recruitment strategies for these incubators. The survey revealed that common recruitment strategies by the public sector include the hosting of networking events such as incubation days, advertisements including radio, television and lampposts, the hosting of roadshows, use of websites, social networks (Facebook), walk-ins and referrals. Overall, a key finding from the survey was that each incubator developed its own individual recruitment strategy to attract a particular group of aspiring entrepreneurs.

It is significant to observe that incubators have aligned their SMME recruitment strategies to their respective incubation models and objectives. For example, the private sector Shanduka Black Umbrellas Business Incubator (SBU) recruitment strategy targets enterprises that are 100 percent black owned. This is in line with the incubator's strategic objective to broaden economic participation in South Africa by empowering emerging black entrepreneurs and their SMMEs. The survey also reveals that most incubators have aligned their SMME recruitment strategies with specific sectors of the economy. For example, Softstart Business Technology incubator only recruits entrepreneurs in the Information and Communications (ICT) sector.

Table 11: Number of Jobs Created by Public Business Incubators (2012)

		of	Jobs
	Created		
Chemin (3 Incubation Centers)	68		
Downstream Aluminium Centre for Technology (DACT)	52		
EgoliBio	45		
Ekurhuleni Jewellery Incubator	New		
Furntech (7 Incubation Centers)	80		
Global Jewellery Academy	0		
Innovation Technology Business Incubator (Invo Tech)	57		
Lepharo	42		
Mapfura Makhura Incubator (MMI)	68		
Mpumalanga Agri-skills Development & Training (MASDT) Nelspruit	, 80		
Mpumalanga Stainless Steel Initiative (MSI)	11		
Seda Agricultural & Mining Tooling Incubator (SAMTI)	20		
Seda Alfred Nzo Agro Manufacturing Incubator (SANAMI)	New		
Seda Atlantis Renewable Business Incubator (SEREBI)	New		
Seda Automotive Technology Centre (SATEC)	12		
Seda Construction Incubator (SCI)	1050		
Seda Essential Oils Business Incubator (SEOBI) (2 Incubation Centers)	n 154		
Seda Limpopo Jewellery Incubator (SLJI)	17		
Seda Nelson Mandela Bay ICT Incubator (SNMBICTI)	35		
Seda Northern Cape Diamond and Jewellery Incubator	New		
Seda Platinum Incubator (SPI)	23		
Seda Sugar Cane Incubator SESUCI)	59		
Seed Container Park (Secopa)	47		
SmartExchange	55		
SoftstartBTI (SBTI)	29		

Soshanguve Manufacturing Technology Demonstration	Centre 25
(SMTDC)	
Timbali	90
Zenzele Technology Demonstration Centre	182
Total	2301

Table 12: Number of Jobs Created by Private Business Incubators

Name of Private Business Incubator	Number of Jobs Created
Raizcorp Business Incubator	No Records
Aurik Business Incubator	No Records
Shanduka Black Umbrellas (Johannesburg)	50
Shanduka Black Umbrellas (Cape Town)	30
Shanduka Black Umbrellas (Pretoria)	46
Shanduka Black Umbrellas (Durban)	40
Sasol Chemcity Incubator	3099
Total	Not available

(Source: Authors)

Tables 11 and 12 present data provided on the number of jobs which were created by each of the incubators respectively for the public sector incubators (Table 11) and the private sector incubators (Table 12). It should be noted that information for the private sector business incubators could not be obtained from two of the seven surveyed incubators. A key finding is the much greater impact for job creation of the group of private sector incubators. It is evident that the number of jobs created by several of the private sector incubators is in excess of all the jobs created in total by the group of public sector incubators. By the end of the 2012 financial year, in total the number of jobs created by public sector incubators stood at 2031 jobs, whereas the group of four private incubators from which information is available together created at least 3099 jobs. This finding points to the markedly different job creating impact of private sector business incubators as opposed to the group of public sector incubators.

Table 13: Number of Graduates from Public Sector Business Incubators

Name of Public	Founding	Number	of Graduation
Business Incubator	Year	Graduates Sin	ce Period
		Inception	
Chemin (3 Incubation Centers)	2002	30	3 Years
Downstream Aluminium Centre for	2002	20	3 Years
Technology (DACT)			
EgoliBio	2001	No Records	3 Years
Ekurhuleni Jewellery Incubator	2009	No Records	3 Years
Furntech (7 Incubation Centers)	2001	85	3 Years
Global Jewellery Academy	2009	No Records	3 Years
Innovation Technology Business	2009	5	3 Years
Incubator (Invo Tech)			
Lepharo	2009	No Records	3 Years
Mapfura Makhura Incubator (MMI)	2006	50	3 Years
Mpumalanga Agri-skills Development & Training (MASDT), Nelspruit	2005	51	3 Years

Mpumalanga Stainless Steel Initiative (MSI)	2001	12	3 Years
Seda Agricultural & Mining Tooling Incubator (SAMTI)	2010	New	3 Years
Seda Alfred Nzo Agro Manufacturing Incubator (SANAMI)	2012	New	3 Years
Seda Atlantis Renewable Business Incubator (SEREBI)	2012	New	3 Years
Seda Automotive Technology Centre (SATEC)	2011	New	3 Years
Seda Construction Incubator (SCI) (5 Incubation centers)	2006	56	3 Years
Seda DUT Technology Incubator (SDTI)	2009	No Records	3 Years
Seda Essential Oils Business Incubator (SEOBI) (2 Incubation Centers)	2006	No Records	3 Years
Seda Limpopo Jewellery Incubator (SLJI)	2009	2	3 Years
Seda Nelson Mandela Bay ICT Incubator (SNMBICTI)	2008	5	3 Years
Seda Northern Cape Diamond and Jewellery Incubator	2012	New	3 Years
Seda Platinum Incubator (SPI)	2006	10	3 Years
Seda Sugar Cane Incubator SESUCI)	2004	62	3 Years
Seed Container Park (Secopa)	2010	New	3 Years
Smart Exchange	2009	No Records	3 Years
SoftstartBTI (SBTI)	2006	No Records	3 Years
Soshanguve Manufacturing Technology	2010	New	3 Years
Demonstration Centre (SMTDC)			
Timbali	2004	140	3 Years
Zenzele Technology Demonstration Centre	2003	4	3 Years
Total		528	
/a			

Table 14: Number of Graduates from Private Sector Business Incubators

Name of Private	Founding	Number of	Graduation
Business Incubator	Year	Graduates since	Period
		Inception to 2012	
Raizcorp Business Incubator	2000	900	3 years
Aurik Business Incubator	2001	800	1 to 3 Years
Shanduka Black Umbrellas (JHB)	2009	3	3 years
Shanduka Black Umbrellas (CT)	2008	4	3 years
Shanduka Black Umbrellas (PTA)	2010	New	3 years
Shanduka Black Umbrellas (DBN)	2011	New	3 years
Sasol Chemcity Incubator	2004	652	3 years
Bandwidth Barn Incubator	2000	No Records	3 years
Maxum Business Incubator	2005	No Records	3 years
Total		2359	

(Source: Author)

Tables 13 and 14 provide valuable information on the graduation performances of SMMEs from incubators. It is evident by comparing the two tables that the performance of private sector incubators is much more impressive as compared to the group of public sector incubators. For the group of public sector incubators from which information could be obtained, in total the number of graduates was 528 by the end of the 2012 financial year, with the largest numbers generated from the Timbali Floriculture incubator, Furntech and SEDA sugar cane incubators. By contrast, the seven surveyed private sector incubators have graduated a total of 2359 SMMEs. This means that in terms of the business incubation movement in South Africa, the small group of private sector incubators records a much greater impact than their public counterparts as indexed by graduation of SMMEs. In explaining this different performance, it should be noted, however, that private sector incubators tend to target for recruitment the group of high growth and high impact enterprises while public incubators predominately focus on small and micro enterprises. For example, SEDA incubators target SMMEs with an annual turnover around R250 000 (In 2013 \$1 = R10 South African Rand approximately). By contrast, the group of private incubators target the recruitment of enterprises with a much higher annual turnover often from R5 million and above.

Graduation is mandatory in all South African incubators. However, in most cases this rule is not strictly applied. The majority of incubators emphasize that they will only graduate an SMME once the product or service being rendered is ready for the market. Both public and private incubators stipulate three years as a generally accepted incubation period. In some cases it is possible for an SMME to exit the incubator earlier or later than the agreed three years incubation period depending on the readiness of the product or the service being rendered. The graduation of incubatees into the mainstream business environment is one of the major key performance indicators used by incubators to measure and evaluate their performance and economic impact globally (Ravjee, 2010). Nevertheless, with a few exceptions, Table 14 reveals that several public sector incubators surveyed do not maintain accurate records of the state of SMMEs that have graduated from their incubators since inception. Furntech is one of the few exceptions, having graduated 85 SMMEs since 2001. More alarming is the admission by SEDA Technology Programme (STP), the entity responsible for managing all public sector incubators in South Africa, that they do not have records about SMME graduation from their incubators. The STP is a division of SEDA which is responsible for, amongst other things, monitoring and evaluation of the performance of all public incubators. By contrast, all private business incubators kept accurate records of their graduates since inception.

Conclusion

For promoting small business development there is a growing international interest in the use of business incubation as one strategy to tackle the high mortality rates which are prevalent amongst start-up enterprises. With the critical role identified for SMMEs in South Africa for creating new employment opportunities, particularly over the next two decades, the promotion of business incubation is an issue of mounting policy concern. The expanding network of business incubators can contribute to support the SMME economy and thus be part of place-based local economic development programming (Rogerson & Rogerson, 2010a, 2010b, 2011; Rogerson, 2014). This paper addresses the knowledge gap about business incubators in South Africa. It highlights the burst of new incubator expansion in the past decade which has been driven mainly by the activities of the country's small enterprise development agency. In addition, in common with the international experience, there has been

a growth in South Africa of private sector involvement in the development of business incubators.

The national survey undertaken in this study reveals that in terms of the incubators, important variations exist in the landscape of private as opposed to public sector funded business incubators. It is observed that the private sector incubators are mainly mixed in focus and spatially highly concentrated in the major metropolitan centres and market areas of the country. By contrast, the pattern of public sector incubators is that mainly they are sectorally focused and geographically less concentrated in major metropolitan areas as there has been a deliberate attempt by government to locate public sector incubators in poorer provinces and secondary cities or small towns. However, the results from the survey interviews point to critical differences in the operations and impacts of the groups of public and private sector incubators as indexed by the size of incubators, recruitment strategies, graduation performance and jobs created. Overall, given their rising policy significance, further investigations are merited into the unfolding landscape and performance of small business incubators in South Africa.

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