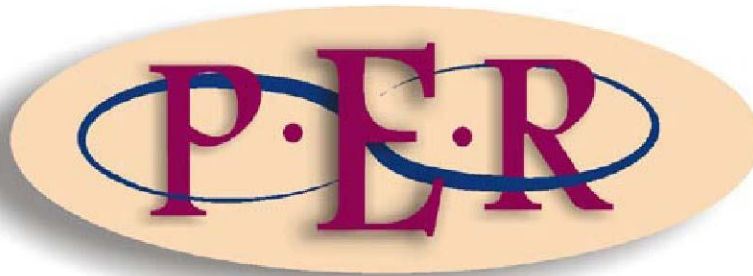


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PUBLIC-PRIVATE PARTNERSHIPS IN LOCAL DISASTER MANAGEMENT: A PANACEA TO ALL LOCAL DISASTER MANAGEMENT ILLS?

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1 Introduction

Since the dawn of their existence human beings have been affected by disasters.¹ It is trite that disasters¹ often result in the serious disruption of the functioning of a community or society, as they may involve human, material or environmental loss and damage which often exceeds the ability of an affected community to recover by using its own resources.² The last decades have seen the number of disasters increase, and they have become more intense.³ Worldwide, an estimated 217 million people were affected by disasters in the year 1990, and it is predicted that 375 million people will be affected by the end of the year 2015.⁴

Although South Africa is generally not regarded as a country at high risk of disaster, the country is struck from time to time by damaging runaway veld- or wildfires, severe weather events, droughts, floods, extreme hailstorms, gales, fires, earthquakes and the occurrence of sinkholes as a consequence of mining in dolomitic areas.⁵ Increasingly such disasters have an impact on the lives of South Africans as well as on their property, environment, infrastructure, economic and social development and day-to-day activities.⁶ Studies show that between the years 1981 and 2013 over 16

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¹ Coppola *Introduction to International Disaster Management* 1.

¹ Disasters arise from both natural and anthropogenic causes. Examples of natural disasters include, amongst others, droughts, floods and earthquakes. A natural disaster cannot be produced, influenced or prevented by man. Anthropogenic disasters, however, arise from human activities and are often categorised as "technological". Examples of human or technological disasters include, for instance, rail and air crashes, shipwrecks, and oil spills. Smith *Environmental Hazards* 3-7.

² This is the internationally accepted definition for "disaster". See UNISDR *Terminology* 9. This definition has also been adopted in South Africa in the *Disaster Management Act* 57 of 2002 (the *DMA*).

³ Hagelsteen and Becker 2013 *IJDRR* 4.

⁴ Guha-Sapir *et al Annual Disaster Statistical Review* 1-50.

⁵ Botha and Van Niekerk 2013 *Jamba* 2-3.

⁶ Louw and Van Wyk 2011 *Civil Engineering* 16.

million people in South Africa were affected by disasters and that in the years to follow these numbers could escalate significantly.⁷ The scope of the impact and the results of disasters emphasise the urgent need for improved disaster risk reduction and disaster management generally and in South Africa.

Section 24 of the *Constitution of the Republic of South Africa, 1996* (the *Constitution*) provides everyone with the right to an environment that is not harmful to a person's health and wellbeing.⁸ It may be argued that this right includes, *inter alia*, a person's sense of environmental security and safe keeping in relation to the potential risks and dangers of disaster.⁹ The responsibility to intervene for the protection of this right lies with the government of South Africa.¹⁰ While disaster management is a functional area of competence of national and provincial government,¹¹ local government is not exempted from disaster management and disaster risk reduction responsibilities.¹² Practice has shown that the actual implementation and planning of disaster management is focussed in the local government sphere.¹³ This thinking has also pervaded chapter five of the DMA, which establishes a number of responsibilities for municipalities both for the prevention and for the management of disasters.¹⁴

Recent studies indicate that municipalities in South Africa are severely under-resourced.¹⁵ In addition to capacity constraints regarding service delivery,¹⁶ municipalities are unable to adequately fulfil their local disaster management (LDM) responsibilities. In the past, municipalities have addressed their incapacities to deliver

⁷ Van der Berg, Du Plessis and Murphree "Local Disaster Risk Reduction" (forthcoming).

⁸ Section 24(a) and (b) of the *Constitution of the Republic of South Africa, 1996* (the *Constitution*).

⁹ See Du Plessis 2011 *SAJHR* 293; Van der Berg and Du Plessis 2013 *SAPL* 449-450.

¹⁰ Section 7(2) of the *Constitution* places an obligation on the entire government of South Africa to respect, promote, protect and fulfil the rights contained in the Bill of Rights. S 41 of the *Constitution* further requires all spheres of government to secure the well-being of the people.

¹¹ Schedule 4A of the *Constitution*.

¹² Section 152(1)(d) of the *Constitution* provides that the objects of local government include, *inter alia*, the promotion of a safe and healthy environment. Moreover, s 156(4) provides for the assignment to a municipality, by agreement and subject to any conditions, of the administration of any matter listed in schedule 4A (eg disaster management) that necessarily relates to local government, if that matter would most effectively be administered locally.

¹³ Disaster risk reduction and management is most adequately depicted, measured and monitored at the local level where government more directly interacts with the day-to-day lives of communities. SALGA 2011 <http://bit.ly/1bhyoPA>.

¹⁴ Section 54 of the DMA.

¹⁵ See section 2 paragraph 2.2 below.

¹⁶ See COGTA 2009 <http://bit.ly/Pd6evf>.

services by entering into public-private partnership (PPP)¹⁷ agreements with the private sector as a vehicle for the successful development and implementation of government (public sector) projects.¹⁸

Despite the support and successes of PPPs for service delivery purposes,¹⁹ the current legal framework for LDM and PPPs in general does not provide any guidelines on the use of PPPs specifically for disaster management purposes.²⁰ Also, currently no PPPs have been undertaken or planned for between municipalities and the private sector in South Africa for LDM purposes.²¹ It therefore appears that the potential and function of PPPs between local government (municipalities) and the private sector (industries etc.) in fulfilling the legally entrenched disaster management duties of municipalities has been largely underutilised in the disaster management arena. This situation contextualises the aim of this article, which is to critically discuss and describe the function of PPPs specifically in fulfilling the legally entrenched disaster management mandate of municipalities. The article is written from a legal perspective. Granted, some of the inadequacies in South Africa's disaster management are entrenched in issues of implementation, poor governance and management deficiencies,²² but due to length constraints these inadequacies cannot be dealt with at any length or in any detail.

¹⁷ A PPP is generally defined as a relationship established (by virtue of a contractual agreement) between the public sector and the private sector wherein the private sector delivers public services. See section 3 paragraph 3.1 below.

¹⁸ Metcalfe 2013 *Civil Engineering* 30.

¹⁹ See the waste water treatment project of the Sedibeng District Municipality at Sebideng District Municipality 2012 <http://bit.ly/1gdHPND> and the solid waste management project of the Greater Tubatse Local Municipality at Greater Tubatse Local Municipality 2009 <http://bit.ly/N5vbHT>.

²⁰ See section 2 paragraph 2.2 below.

²¹ In January 2000 the *Ukuvuka: Operation Firestop Campaign* initiative was launched by the South African National Parks, the South Peninsula Municipality and the Cape Metropolitan Council, among other institutions. This PPP was established to assist municipalities and other role-players to reduce the risk of disaster caused by wildfires in the Cape Peninsula and to contribute to poverty alleviation. See Kruger 2001 <http://bit.ly/1KbIcr>. The available literature does not indicate that this initiative was continued past 2004 or that it was further researched to determine the extent of the benefits of this PPP specifically for LDM purposes (own emphasis). As of March 2013 there are no PPPs officially in progress or registered for fire prevention or for the fulfilment of any other LDM responsibility. This is confirmed on the National Treasury's PPP webpage. For a list of national, provincial and municipal PPPs see National Treasury PPP Unit Date Unknown <http://bit.ly/PRI9fc>.

²² See Van Niekerk 2014 *Disasters* 858-877 for an in-depth discussion of the inadequacies of South Africa's disaster management legal framework as it pertains to issues of implementation of law and policy and the poor governance and management of institutional disaster management structures and functionaries etc.

2 The legally entrenched disaster management duties of municipalities in South Africa

2.1 The legal framework for local disaster management in South Africa

South Africa has a well-developed disaster management law and policy framework which establishes an array of disaster management duties for local government.²³ Together with the *Constitution*,²⁴ a suite of legislation exists that includes disaster management legislation,²⁵ legislation dealing with specific types of disaster,²⁶ and other laws which regulate some aspects of disaster management in specific sectors.²⁷ The main focus of this section falls upon the framework legislation for disaster management in South Africa.²⁸

²³ Humby *Analysis of Legislation* 25.

²⁴ See section 1 above. The *Constitution* further defines a number of specific functional areas of local government competency. The areas include, amongst others, building regulations, municipal planning, storm-water management systems, gas and electricity regulation, firefighting services, environmental health, and water and sanitation. Each of these areas directly ties in with disaster risk reduction and management. Notably local government holds administrative powers and the power to develop By-laws for each of these areas. Municipalities may therefore manage disasters by developing By-laws for any of these areas that directly relate to disaster management in their jurisdictions. See schedules 4B and 5B of the *Constitution*.

²⁵ Such as the DMA and *National Disaster Management Framework* (2005). Hereafter the NDMF.

²⁶ Such as the *Fire Brigade Services Act* 99 of 1987; the *National Veld and Forest Fire Act* 101 of 1998; and the *Safety at Sports and Recreational Events Act* 2 of 2010.

²⁷ These sectors include, amongst others, the environmental management sector, which is regulated by the *National Environmental Management Act* 107 of 1998; the agricultural resource sector, which is regulated by the *Conservation of Agricultural Resources Act* 43 of 1983; the mining sector, which is regulated by the *Mineral and Petroleum Resources Development Act* 28 of 2002; the energy sector, which is regulated by the *National Climate Change Response White Paper* (2011) among other instruments; the building construction sector, which is regulated by the *National Building Regulations and Building Standards Act* 103 of 1977; and the land use and planning sector, which is regulated amongst other legislation by the *Spatial Planning and Land Use Management Act* 16 of 2013.

²⁸ While all of the laws mentioned above establish specific LDM duties for municipalities, the scope of this article does not allow for a discussion for these laws. For additional information in this regard see Van der Berg, Du Plessis and Murphree "Local Disaster Risk Reduction" (forthcoming).

2.1.1 *The Disaster Management Act*

The DMA regulates all aspects of disaster management in South Africa.²⁹ Its provisions apply to any disaster situation in the country.³⁰ The Act places emphasis on disaster prevention, reduction and mitigation in addition to emergency preparedness, rapid and effective response and post-disaster recovery.³¹ Essentially, the DMA regulates disaster management by providing for the following: an extensive institutional framework for disaster management; various disaster management policy development mandates; and procedures for the management, classification and declaration of disasters.³² The following section briefly reviews these areas with a focus on the provisions applicable to local government.

2.1.1.1 Institutional arrangements for disaster management

The DMA establishes institutional structures that play both a supportive and a facilitative role in ensuring effective disaster management in South Africa.³³ The first and chief institutional structure is the Intergovernmental Committee on Disaster Management (ICDM). The ICDM comprises Cabinet Members involved in disaster management, Members of the Executive Council (MECs) of each province involved in disaster management, and members of municipal councils.³⁴ It is tasked, amongst other matters, with advising Cabinet on issues relating to disaster management.³⁵ In addition to the ICDM, the DMA calls for the establishment of disaster management centres in all spheres of government.³⁶ With respect to local government the DMA provides that each metropolitan and district municipality must establish a disaster management centre for its municipal area,³⁷ which must specialise in issues concerning disasters and disaster management.³⁸ Local municipalities are, however,

²⁹ Humby *Analysis of Legislation* 27.

³⁰ Van der Berg *Legal Perspectives* 28.

³¹ Preamble of the DMA.

³² Llosa and Zodrow 2011 <http://bit.ly/1cjwV6B>.

³³ See ch 2 of the DMA.

³⁴ Sections 4(1)(a)-(c) of the DMA.

³⁵ Section 4(3) of the DMA.

³⁶ See ss 29 of the DMA.

³⁷ Section 42(1)(a) of the DMA. See paras 7.4.2 and 7.4.1.1 of the NDMF.

³⁸ Section 44 (1)(a) of the DMA.

not required to establish disaster management centres but may operate a centre in partnership with a district municipality.³⁹ The start-up costs for municipal disaster management centres (MDMCs) must be funded by national government through a once-off conditional grant. Such conditional grants must be disbursed to district municipalities, while metropolitan municipalities may receive funding only to cover the additional costs required to establish their centres.⁴⁰

MDMCs may also act as advisory and consultative bodies on issues concerning disasters and disaster management in the municipal area for other organs of state and statutory functionaries.⁴¹ MDMCs have advocacy and awareness raising responsibilities, in that such centres must promote disaster management capacity building, training and education in their communities.⁴² These centres must further ensure a multi-actor approach to disaster management by integrating their disaster management responsibilities or functions with those of all other municipal entities within the area, including other potential role-players.⁴³

Further, when a disaster occurs or is threatening to occur in the area of a municipality, the MDMC of the municipality concerned must determine whether the event should be regarded as a disaster in terms of the DMA⁴⁴ and if so, must, amongst other things, immediately initiate efforts to assess the magnitude and severity or potential magnitude and severity of the disaster,⁴⁵ inform the national centre and relevant provincial disaster management centre of the disaster,⁴⁶ and initiate the implementation of any contingency plans and emergency procedures that may be applicable in the circumstances.⁴⁷ MDMCs are also required to submit annual reports to their relevant municipal councils on their activities during the year and the disasters that have occurred during the year of reporting.⁴⁸

³⁹ Section 43(2)(b) of the DMA.

⁴⁰ See ss 8, 29 of the DMA.

⁴¹ Section 44(1)(d)(i) of the DMA.

⁴² Section 44(1)(h) of the DMA.

⁴³ Sections 44(1)(b)(ii)-(iii) of the DMA.

⁴⁴ Section 49(1) of the DMA.

⁴⁵ Section 49(1)(a) of the DMA.

⁴⁶ Section 49(1)(b) of the DMA.

⁴⁷ Section 49(1)(D) of the DMA.

⁴⁸ Section 57(1)(a) and (c) of the DMA.

Other significant institutional structures include advisory forums. These forums serve as institutions for consultation and coordination between state officials in all three spheres of government and also for the same purpose between important disaster management role-players in civil society such as traditional leaders, medical, paramedical and hospital organisations, the disaster management profession, and relevant non-governmental organisations (NGOs).⁴⁹ While the establishment of a municipal advisory forum is not compulsory, the NDMF has indicated that it is difficult to envisage how, without such a forum, disaster management or disaster risk reduction could effectively be implemented at local government level.⁵⁰

2.1.1.2 Disaster management policy development and planning mandate

The DMA compels each sphere of government to engage in disaster management policy development through the preparation of disaster management frameworks and disaster management/disaster risk management plans. District and metropolitan municipalities are specifically required to establish municipal disaster management frameworks (MDMFs).⁵¹ MDMFs must specifically ensure an integrated, coordinated and uniform approach to disaster management in the municipality in question.⁵² The DMF may be regarded as a strategic policy for disaster management within the municipality and must, among other things: establish formal consultative processes that provide participative planning for disaster management and disaster risk management; define an appropriate vision of and approach to disaster management and disaster risk management for the area concerned; define the processes for undertaking disaster risk assessment for the area concerned; specify arrangements for disaster risk reduction planning, including response and recovery planning; identify processes for building public awareness; and define supportive funding arrangements for implementing disaster management and disaster risk management.⁵³

⁴⁹ Humby *Analysis of Legislation* 29.

⁵⁰ Para 1.3.1.3 of the NDMF.

⁵¹ Section 42 of the DMA.

⁵² Section 42(1) of the DMA.

⁵³ Para 3.1.1.1 of the NDMF.

In addition to disaster management frameworks, all municipalities (metropolitan, district and local) must prepare a disaster management plan.⁵⁴ The disaster management plan translates into an implementation strategy for disaster management and must include a disaster risk management plan.⁵⁵ The disaster management plan must be updated and reviewed on a regular basis and must, for instance, include: an assessment of the types of disasters that are likely to occur in the municipal area, and their effects;⁵⁶ a system of incentives that will promote disaster management in the municipality;⁵⁷ an identification of the areas of weakness in capacity to deal with possible disasters;⁵⁸ and emergency procedures in the event of disaster.⁵⁹ The disaster management plan must also promote disaster management research;⁶⁰ provide appropriate prevention and mitigation strategies;⁶¹ place emphasis on measures to reduce the vulnerability of disaster-prone areas;⁶² and include any other matter that may be prescribed.⁶³ It is further noteworthy that a disaster management plan must form part of a municipality's integrated development plan (IDP),⁶⁴ including all IDP projects, processes, programmes and structures.⁶⁵ Notably the *Local Government: Municipal Systems Act*⁶⁶ (*Systems Act*) makes provision for the alignment of the municipal IDP with a municipality's budget and performance management system. The DMA further determines that each municipality must consult the local community on the preparation of the disaster management plan.⁶⁷

The DMA also enables municipalities to develop by-laws for disaster management. Such by-laws may be adopted in the event of the declaration of a local state of disaster and may concern, amongst other matters: the release of municipal resources to assist

⁵⁴ See ss 52, 40, 25 of the DMA.

⁵⁵ See Humby *Analysis of Legislation* 29; para 3.1.1.2 of the NDMF.

⁵⁶ Section 53(2)(b) of the DMA.

⁵⁷ Section 53(2)(d) of the DMA.

⁵⁸ Section 53(2)(h) of the DMA.

⁵⁹ Section 53(2)(k) of the DMA.

⁶⁰ Section 53(2)(g) of the DMA.

⁶¹ Section 53(2)(i) of the DMA.

⁶² Section 53(2)(c) of the DMA.

⁶³ Section 53(2)(k) (vi) of the DMA.

⁶⁴ Section 53(2)(a) of the DMA. See s 26(g) of the *Local Government: Municipal Systems Act* 32 of 2000.

⁶⁵ Para 3.4.2 of the NDMF.

⁶⁶ *Local Government: Municipal Systems Act* 32 of 2000 (*Systems Act*).

⁶⁷ Section 53(2) of the DMA.

in managing the disaster; the control of the occupancy of premises in the disaster-stricken or threatened area; the dissemination of information required for dealing with disaster; the facilitation of response and post-disaster recovery and rehabilitation; other steps that may be necessary to prevent an escalation of disaster or to alleviate, contain and minimise the effects of disaster; and penalties for any contravention of the by-law.⁶⁸ Municipalities are further encouraged to assess existing by-laws in order to ensure that risk-promoting behaviour is discouraged and that the potential for loss in the event of disaster is minimised.⁶⁹ Notably, the same is encouraged for municipal land-use schemes and zoning regulations.⁷⁰ Municipalities may also introduce standards for "risk-proofing" lifeline services and critical facilities from known priority disaster risks.⁷¹

2.1.1.3 The management, classification and declaration of disaster

The DMA distinguishes between "national", "provincial" and "local" disasters and provides an array of responsibilities for the classification and declaration of such disasters for each relevant sphere of government.⁷² With respect to "local disasters" (thus a disaster affecting a single metropolitan, district or local municipality, which the relevant municipality is able to deal with it effectively)⁷³ the DMA provides the relevant MDMC with the authority to classify the event as a "disaster" and provides the council of the municipality with the responsibility to coordinate and manage the local disaster that has occurred in its area.⁷⁴ In addition, the DMA provides that the municipal council must coordinate and manage the disaster in terms of existing legislation, contingency plans and by-laws,⁷⁵ and stipulates further that if the existing legislation, contingency plans or by-laws do not adequately provide for measures allowing the municipality to deal effectively with the disaster, the municipality may declare a disastrous event as a local state of disaster.⁷⁶ The declaration of a local state of disaster allows the

⁶⁸ See ss 55(2)-(4) of the DMA.

⁶⁹ Para 3.4.3 of the NDMF.

⁷⁰ Para 3.4.3 of the NDMF.

⁷¹ Para 3.4 of the NDMF.

⁷² See ss 23, 35, 49 of the DMA.

⁷³ Section 23(4) of the DMA.

⁷⁴ Section 55(1) of the DMA.

⁷⁵ Section 54(3)(a) of the DMA.

⁷⁶ Section 54(3)(b) of the DMA.

municipal council to prescribe extraordinary measures for emergency responses and relief, such as the release of available resources (ie stores, equipment, vehicles and facilities);⁷⁷ the evacuation to temporary shelters of all or part of a population from the disaster stricken or threatened area;⁷⁸ the regulation of traffic to, from or within the disaster stricken or threatened area;⁷⁹ and emergency procurement procedures.⁸⁰

2.2 *Local disaster management in South Africa: status quo*

The DMA establishes a plethora of disaster management responsibilities for municipalities. These responsibilities range from establishing, managing and funding institutional structures for disaster management; to preparing adequate disaster management and disaster risk reduction plans and policies that aim to prevent or reduce the risk of disaster; and to responding to disasters once they have occurred.⁸¹

While the DMA does provide municipalities with options to assist municipalities in fulfilling this extensive mandate (ie the establishment of volunteer units and providing access to funding)⁸² practice has indicated that municipalities are often reluctant to establish volunteer units (given the fact that volunteers must be trained and that equipment for the volunteers must be purchased, maintained and updated) and that funding often only covers start-up costs for establishing institutional structures thereby rendering the management and functioning of the structures rather challenging.⁸³ Moreover, while the DMA does require: a) the inclusion of "other role-players" in terms of sharing and executing disaster management and risk reduction activities, and b) a "multi-actor approach to disaster management",⁸⁴ there is an absence of clear guidance to municipalities on whether "other role-players" and a "multi-actor approach to disaster management" enables municipalities to fulfil their disaster management mandate with the use of PPP agreements specifically.

⁷⁷ Section 55(2)(a) of the DMA.

⁷⁸ Section 55(2)(d) of the DMA.

⁷⁹ Section 55(2)(e) of the DMA.

⁸⁰ Section 55(2)(l) of the DMA.

⁸¹ See paragraph 2.1 above.

⁸² Section 58(1) of the DMA.

⁸³ SALGA 2011 <http://bit.ly/1bhyoPA>; SALGA 2013 <http://bit.ly/1hNj0gO>.

⁸⁴ See paragraph 2.1.1 above.

In addition to the pervasive silence and lack of guidelines and financial assistance in the current legal framework, the successful fulfilment of the LDM mandate further requires that municipalities have sufficient institutional,⁸⁵ human,⁸⁶ material⁸⁷ and financial resources.⁸⁸ However, many municipalities in South Africa are inadequately resourced to fulfil their disaster management responsibilities.⁸⁹ After conducting a disaster management status assessment of municipalities in South Africa, the South African Local Government Association (SALGA) confirmed that national government is slow in providing and releasing funds for disaster management in the local government sphere,⁹⁰ a situation which impairs municipal efforts to provide timely and adequate support to disaster victims.⁹¹ It was also found that municipalities often contravene the provisions in the DMA⁹² requiring the integration of disaster management plans into IDPs⁹³ or the establishment of MDMCs,⁹⁴ which contravention results in the slow allocation of disaster funding from national government.⁹⁵ In addition, SALGA has indicated that municipalities lack appropriate and adequate equipment,⁹⁶ adequately

⁸⁵ Institutional resources include facilities established for the purpose of coordinating and facilitating disaster management, such as MDMCs, for example. See SALGA 2011 <http://bit.ly/1bhYoPA>.

⁸⁶ Competent individuals are required to staff institutional resources, draft disaster management plans, and provide search and rescue services. NDMC Date Unknown <http://bit.ly/1kQu64T>.

⁸⁷ Material resources include equipment such as firefighting trucks, off-road vehicles, backup generators, and first-aid equipment, for example. Cutter *et al* "Managing the Risks from Climate Extremes" 299.

⁸⁸ See Van der Berg *Legal Perspectives* 35-36. A large amount of financial resources is essential to obtaining and funding the resources required to ensure the provision of effective LDM. Visser and Van Niekerk 2009 <http://bit.ly/1f8DX3V>; SALGA 2013 <http://bit.ly/1hNj0gO>.

⁸⁹ SALGA 2011 <http://bit.ly/1bhYoPA>.

⁹⁰ 60% of municipalities in South Africa have never received governmental grants for the establishment of disaster management centres. See SALGA 2011 <http://bit.ly/1bhYoPA>.

⁹¹ SALGA 2011 <http://bit.ly/1bhYoPA>.

⁹² Despite South Africa's comprehensive disaster management legislation, disaster management as a function of government is not carried out effectively due to a lack of will or capacity to implement and enforce such legislation. See SALGA 2011 <http://bit.ly/1bhYoPA>; SALGA 2013 <http://bit.ly/1hNj0gO>.

⁹³ Only 36% of district municipalities, 60% of metropolitan municipalities and 17% of local municipalities integrate their disaster management plans into their IDPs. See SALGA 2011 <http://bit.ly/1bhYoPA>.

⁹⁴ A revealing 40% of municipalities in South Africa do not have disaster management centres and merely 25% of existing municipal disaster management centres function well. See SALGA 2011 <http://bit.ly/1bhYoPA>.

⁹⁵ SALGA 2011 <http://bit.ly/1bhYoPA>.

⁹⁶ SALGA 2011 <http://bit.ly/1bhYoPA>.

trained personnel such as disaster risk management officials,⁹⁷ and the commitment of local government officials and politicians to disaster management.⁹⁸

It does not appear that the *status quo* will improve in the near future. The LDM function itself is particularly challenging as it goes beyond pure line-function responsibility and requires a variety of types of expertise from very different professions.⁹⁹ Such expertise includes, for example: governance expertise, to ensure that municipal disaster management plans and frameworks are aligned and coordinated with national and provincial disaster management plans and frameworks;¹⁰⁰ construction expertise in rebuilding damaged or fallen structures;¹⁰¹ medical expertise in dealing with death, disease or injury;¹⁰² emergency response expertise such as ambulance or fire response teams;¹⁰³ and staffing expertise such as appointing the correct persons needed to carry out all of the different disaster management duties.¹⁰⁴ LDM may subsequently be regarded as a dynamic process which involves many disciplines such as science, engineering, health, welfare, architecture, social sciences, management and law, as well as traditional emergency groups.¹⁰⁵ Municipalities cannot manage disasters in isolation and as single role players. LDM is a multi-faceted and multi-sectoral process which requires significant effort and dedication from municipalities as well as other role players.¹⁰⁶ This article is underpinned by the argument that one such role-player could be the private sector.¹⁰⁷

3 Public- private partnerships as local governance tools

As alluded to above, municipalities in South Africa face a number of impediments to successfully fulfilling their disaster management mandate. Some municipal areas also

⁹⁷ Most municipal disaster management centres function with between 1 and 10 employees. See SALGA 2011 <http://bit.ly/1bhyoPA>.

⁹⁸ SALGA 2011 <http://bit.ly/1bhyoPA>.

⁹⁹ SALGA 2013 <http://bit.ly/1hNj0gO>.

¹⁰⁰ NDMC Date Unknown <http://bit.ly/1kQu64T>.

¹⁰¹ Schwab and Brower "Increasing Resilience" 268.

¹⁰² Cutter *et al* "Managing the Risks from Climate Extremes" 299.

¹⁰³ Burnham "Disaster Definitions" 28. Also see SALGA 2013 <http://bit.ly/1hNj0gO>.

¹⁰⁴ Van Riet 2012 *Jamba* 22.

¹⁰⁵ Uys 2005 *JPA* 409.

¹⁰⁶ NDMC Date Unknown <http://bit.ly/1kQu64T>.

¹⁰⁷ UNISDR *From Shared Risk to Shared Value* 1-288.

face the visible effects of climate change and the growing demand for improved service delivery generally.¹⁰⁸ The *White Paper on Local Government*¹⁰⁹ recommends that municipalities look for innovative ways of addressing such challenges, and while there are several policy and legal tools available to do so,¹¹⁰ PPPs do seem to be an instrument of choice (albeit in the context of service delivery challenges).

3.1 Public-private partnerships in the South African legal context

PPPs are policy tools utilised by governments in the execution of their roles, duties, and functions.¹¹¹ Municipal PPPs in the South African context specifically are defined by the *Municipal Public Private Partnership Regulations*¹¹² to the *Local Government: Municipal Finance Management Act*.¹¹³ These regulations describe a PPP as a commercial transaction between a municipality and a private party¹¹⁴ in terms of which the private party: (a) performs a municipal function¹¹⁵ for or on behalf of the municipality or: (b) acquires the management or use of a municipal property for its own commercial purposes and: (c) assumes substantial financial, technical and operational risks in connection with the performance of the municipal function, the management or use of the municipal property, or both.¹¹⁶ The private party receives a benefit from performing the municipal function or from utilising the municipal property or from both, by way of: (i) a consideration to be paid or given by the municipality or a municipal entity under the sole or shared control of the municipality; (ii) charges or fees to be collected by the private party from users or customers of a service provided to them; (iii) or a combination of these benefits.¹¹⁷

¹⁰⁸ O'Brien *et al* "Local Government and Disaster" 639.

¹⁰⁹ *White Paper on Local Government* (1998). Hereafter the *White Paper*.

¹¹⁰ Examples of these include training and capacity building initiatives, traditional procurement, property taxation, and user charges. See Bekink *Principles of South African Local Government Law* 78; and ss F, G of the *White Paper*.

¹¹¹ Hodge, Greve and Boardman "Introduction" 4.

¹¹² See the MFMA regulations for municipal PPPs published as GNR 309 in GG 27431 of 1 April 2005.

¹¹³ *Local Government: Municipal Finance Management Act* 56 of 2003 (hereafter the MFMA).

¹¹⁴ A private party excludes a municipality, a municipal entity and an organ of state. See GNR 309 in GG 27431 of 1 April 2005.

¹¹⁵ Municipal function means a municipal service or any other activity within the legal competence of a municipality. See GNR 309 in GG 27431 of 1 April 2005.

¹¹⁶ GNR 309 in GG 27431 of 1 April 2005.

¹¹⁷ GNR 309 in GG 27431 of 1 April 2005.

It is possible to identify some key generic components of municipal PPPs. Firstly, an agreement (presumably a written contract) must be in place.¹¹⁸ Such a contractual agreement defines the project and includes the agreed objectives of the public (procuring) institution (ie the municipality) and the private party involved.¹¹⁹ Secondly, at least two entities are involved, one being the public institution (the municipality) and the other being the private entity (eg a company).¹²⁰ Each party plays a key role in each stage of the project.¹²¹ Thirdly, either the private party must perform a public institutional function for or on behalf of the public institution, or the private party acquires public/state land for its own commercial purposes.¹²² Either way, there must be the pursuit of a common goal and individual benefit to each contracting partner.¹²³ Fourthly, there is a substantial transfer of risk (financial,¹²⁴ technical and/or operational)¹²⁵ to the private party.¹²⁶ Not all risk is transferred to the private party; only the risks that the private party is best able to manage.¹²⁷ Finally, a return of benefit (in the form of financial remuneration) is essential.¹²⁸ The payment arrangements or benefits are based on outputs, related to the provision of services and/or infrastructure and services provided by the private party.¹²⁹

Municipal PPPs in South Africa are specifically aimed at expanding municipal infrastructure and service delivery capability by appointing a private party to perform

¹¹⁸ Minnie *Critical Success Factors* 16.

¹¹⁹ The contractual agreement may range from 5 to 30 years. National Treasury PPP Unit 2007 <http://bit.ly/1kRrm7o>.

¹²⁰ Minnie *Critical Success Factors* 58.

¹²¹ See National Treasury PPP Unit 2007 <http://bit.ly/1kRrm7o> for more information on the phases of PPP projects.

¹²² Minnie *Critical Success Factors* 16.

¹²³ Minnie *Critical Success Factors* 58. Also see National Treasury PPP Unit Date 2007 <http://bit.ly/O3yosy>.

¹²⁴ Financial risks arise if and when the private party is unable to obtain the funding needed for the project or when increased interest rates impact adversely on the financial viability of the project. See ASB 2008 <http://bit.ly/1e3PY4B>.

¹²⁵ Technical and operational risks include a broad range of risks involved in providing the service, ie price increases or shortages of input materials, and costs resulting from maintenance, for example. See ASB 2008 <http://bit.ly/1e3PY4B>.

¹²⁶ Minnie *Critical Success Factors* 16.

¹²⁷ National Treasury PPP Unit 2007 <http://bit.ly/1kRrm7o>. Also see OECD *Dedicated Public Private Partnership Units* 19.

¹²⁸ Minnie *Critical Success Factors* 58.

¹²⁹ National Treasury PPP Unit 2007 <http://bit.ly/1kRrm7o>.

a municipal function.¹³⁰ South Africa's *Systems Act* enables municipalities to exercise their executive and legislative authority by appointing external service providers or mechanisms to provide municipal services.¹³¹ In this context the relationship between a municipality and the external service provider is regulated by municipal service partnerships, or PPPs.¹³² An external mechanism includes, amongst other possible partners, a community-based organisation or other NGO legally competent to enter into a contractual agreement, or any other institution, entity or person legally competent to operate a business activity.¹³³ The reference to "any other institution, entity or person competent to operate a business activity" is understood to include members of the local community, existing providers of urban services and donors or external consultants, as the other typical partners in a PPP.¹³⁴ Each municipality may determine whether to provide the services itself (ie internally) or through an external mechanism.¹³⁵ Should a municipality decide to explore service provision by an external mechanism, it must also conduct a feasibility study.¹³⁶ The feasibility study is essential in determining if a proposed external mechanism, such as a PPP, would be in the best interest of the municipality.¹³⁷

In addition to the *Systems Act*, the Local Government: *Municipal Finance Management Act*¹³⁸ (MFMA) provides conditions under which a municipality may enter into a PPP agreement¹³⁹ and also requires that before entering into a PPP agreement the municipality must conduct a feasibility study.¹⁴⁰ Once the feasibility study has been

¹³⁰ See *White Paper on Municipal Service Partnerships* (2004); National Treasury PPP Unit 2007 <http://bit.ly/1kRrm7o>; National Treasury PPP Unit 2007 <http://bit.ly/O3yosy>.

¹³¹ Section 11(3)(f) of the *Systems Act*.

¹³² In general, see the *White Paper on Municipal Service Partnerships* (2004). Also see s 76 of the *Systems Act*.

¹³³ Sections 76(b)(iv) and (v) of the *Systems Act*.

¹³⁴ National Treasury PPP Unit Date 2007 <http://bit.ly/O3yosy>. Also see Plummer *Focussing Partnerships* 12.

¹³⁵ Section 78 of the *Systems Act*.

¹³⁶ Section 78(c) of the *Systems Act*. Also see s 80(3) of the *Systems Act*. The feasibility study explains the strategic and operational benefits of the PPP for the municipality and must determine whether the capacity of the municipality can effectively monitor, manage and enforce the agreement. See Van der Berg *Legal Perspectives* 49-53.

¹³⁷ GNR 1535 in GG 25605 of 24 October 2003.

¹³⁸ *Local Government: Municipal Finance Management Act* 56 of 2003.

¹³⁹ The conditions are a) that the agreement will offer value for money for the municipality; b) be affordable for the municipality; and c) transfer appropriate technical, operational and financial risk to the municipality. Ss 120(1)(a)-(c) of the MFMA.

¹⁴⁰ Section 120(4)(a) of the MFMA.

concluded and a decision has been made to enter into the PPP agreement, the performance of the service under the PPP agreement must be monitored on a monthly basis and the capacity within the municipal administration must be managed accordingly.¹⁴¹ With the above discussion in mind, it is submitted that municipalities in South Africa are, for the purposes of service delivery (and also disaster management services, for example) able to enter into PPP agreements.

4 Public-private partnerships as tools for local disaster management

4.1 Public-private partnerships in disaster management: relevance and function

PPPs can in general and in the LDM context be of significant value to municipalities. In general, PPPs have the potential to deliver better value for money than traditional procurement practices¹⁴² by: a) increasing a municipality's service delivery capacity and infrastructure expansion by utilising private sector capital and skills; b) by appropriately devolving risk to the party who is best able to manage it; and c) by improving the level and quality of service delivery by using private sector expertise to introduce innovative and cost-saving ways to organise and carry out services, for example.¹⁴³

With regard to PPPs for disaster management, several industries are well -positioned to leverage their relevant expertise, and many industries, such as engineering and construction-, information communication technology and telecommunication-, (ICT and Telecommunication) and the media and entertainment industry may be regarded as key role-players in assisting local government in disaster management activities.¹⁴⁴

¹⁴¹ Sections 116(2)(a)-(c) of the MFMA.

¹⁴² As Price Waterhouse Coopers (PWC) indicate: "The key contrast between PPPs and traditional procurement is that with PPPs the private sector returns are linked to service outcomes and performance of the asset over the contract life. The private sector service provider is responsible not just for asset delivery, but for overall project management and implementation, and successful operation for several years thereafter." Davies and Eustice 2005 <http://pwc.to/1gzIoUk>; National Treasury PPP Unit 2007 <http://bit.ly/1kRmo7o>.

¹⁴³ See Nzimakwe 2006 *Africanus* 55; Davies and Eustice 2005 <http://pwc.to/1gzIoUk>; and Seemela 2008 *JPA* 486.

¹⁴⁴ World Economic Forum *Building Resilience to Natural Disasters* 7. Also see Mitchell *et al* "National Systems" 347.

For example, it is widely known that many fatalities during disasters are caused by the collapse of buildings - therefore engineering and construction companies are essential to developing resilience to disaster, since they partake in a standard setting role in land-use planning and building design.¹⁴⁵ These companies also play an important role in directing newly proposed developments away from known hazardous locations, through choosing to develop in safer areas, for instance.¹⁴⁶ Disaster management initiatives can also benefit from ICT and telecommunication companies in that these companies can apply the newest communication technologies in the development of useful monitoring and communication systems, such as early warning systems, for example.¹⁴⁷ Media and entertainment companies also have an important role to play in disaster management. These companies can typically raise awareness of disasters and disaster risk management through news and social media.¹⁴⁸ Involving the private sector in disaster management may therefore be crucial to achieving resilient communities.¹⁴⁹ PPPs enable the public and private sector to collectively utilise each of their resources and capabilities to identify interdependencies, needs, and resources before disasters occur in an effort to be better prepared for the effects of the disaster.¹⁵⁰ Moreover, when disasters occur, the public and private sector can coordinate their resources in order to efficiently respond to and recover all disaster stricken areas as opposed to focusing on one specific area at a time.¹⁵¹

PPPs between municipalities and businesses in the private sector can also alter the strategic focus of municipalities.¹⁵² When a municipality views the involvement of a

¹⁴⁵ World Economic Forum *Building Resilience to Natural Disasters* 7-11. Also see Boshier and Dainty 2010 *Disasters* 1-18.

¹⁴⁶ Boshier *et al* 2007 *Build Res Info* 165.

¹⁴⁷ World Economic Forum *Building Resilience to Natural Disasters* 7-13; and Setola and Geretshuber "Emerging Information Infrastructures" 258-270.

¹⁴⁸ World Economic Forum *Building Resilience to Natural Disasters* 9. Also see Seid-Aliyeva "Role of Mass Media" 81.

¹⁴⁹ Bajracharya *et al* 2012 *Aust J Emerg Manage* 27. Resilience in a community is defined as the ability of a community or society exposed to hazards or disaster to resist, absorb, accommodate to and recover from the effects of a hazard or disaster in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions. UNISDR *Terminology* 24.

¹⁵⁰ National Research Council of the National Academies *Building Community Disaster Resilience* 5.

¹⁵¹ Chen *et al* 2013 *JCCM* 133.

¹⁵² Quium *A Guidebook on Public Private Partnership* 1-4.

private company firstly as a true partner in its efforts to mitigate, respond to and recover from local disasters, and secondly as a source of strategies, resources and predetermined "plans of action" that are ready for implementation in times of disaster, the municipality itself can focus instead on implementing the said strategies and "plans of action" instead of attempting to develop them in the midst of a crisis.¹⁵³ By entering into a PPP with the private sector a municipality can be assured of the fact that the private company (by virtue of the contractual PPP agreement) has accepted a level of accountability and responsibility (towards the municipality and community) to deliver a certain service in times of disaster.¹⁵⁴ PPPs subsequently allow municipalities to broaden their approach to disaster management by providing them with access to more options to prepare for and respond to disasters.¹⁵⁵

4.2 PPPs in local disaster management

4.2.1 Existing PPPs for disaster management

As the number of partnerships between the public and private sector in the disaster management arena has increased, it has been found that these partnerships are highly beneficial, given that they contribute to the efficiency and effectiveness of disaster management and ensure multi-actor and integrated approaches to disaster management.¹⁵⁶ In the international disaster management arena specifically, three categories of PPPs for disaster management can be distinguished: awareness and advocacy partnerships, disaster preparedness partnerships, and social investment partnerships.¹⁵⁷ The functioning of these three categories can best be explained with reference to examples.¹⁵⁸

¹⁵³ Busch and Givens 2013 *Journal of Strategic Security* 5.

¹⁵⁴ Busch and Givens 2013 *JSS* 5; Chen *et al* 2013 *JCCM* 131-132.

¹⁵⁵ Chen *et al* 2013 *JCCM* 131-133. Examples of such options include collaborating with chain-stores to set up collection sites in each store to solicit cash donations for disaster relief, for example. Smith and Sutter 2013 *Independent Review* 170; Johnson, Connolly and Carter 2011 *CSR & EM* 359-362.

¹⁵⁶ Chowdhury "Bridging Public Private Partnership" 428.

¹⁵⁷ UNISDR *Private Sector Activities* 5.

¹⁵⁸ For a discussion on additional examples of each PPP category, see Van der Berg *Legal Perspectives* 67-74.

4.2.1.1 PPPs for awareness and advocacy

Awareness and advocacy partnerships provide a platform for the use and sharing of the available knowledge that can assist in identifying risks, in order to reduce the impacts of future disasters and to foster resilience in communities.¹⁵⁹ Such partnerships entail the private sector's partnering with the public sector and other relevant stakeholders, such as NGOs, for instance, to take a leadership role in advocating for and contributing to resolving different issues inherent in disaster management practice.¹⁶⁰ For example, in Japan a leading energy company, the Tokyo Gas Group, (Tokyo Gas) partnered with various municipalities and other relevant stakeholders to improve the disaster management capabilities of the local authorities and surrounding communities.¹⁶¹ In terms of the partnership, Tokyo Gas raises awareness of disaster risks related to the use of gas, including awareness related to frequently occurring disasters in Japan.¹⁶² The company also holds annual disaster drills for its employees and for the employees of various local authorities.¹⁶³ In addition, the company arranges disaster management "camps" which provide elementary school students from the third to sixth grade with an opportunity to experience a survival camp and to be exposed to the newest research findings in the field of disaster management.¹⁶⁴ In each of these initiatives Tokyo Gas involves fire departments, disaster management volunteer groups and individuals from the local community to educate participating citizens in household preparedness, disaster risks and the measures necessary to reduce such risk.¹⁶⁵ This partnership has proven to be beneficial for the entire community including the local authorities and has resulted in strengthened collaboration for disaster management amongst local authorities, members of communities and various companies.¹⁶⁶

¹⁵⁹ IFRC *Guide for Public Awareness* 12.

¹⁶⁰ UNISDR *Private Sector Activities* 1.

¹⁶¹ Asian Disaster Risk Reduction Centre *Total Disaster Risk Management* 7.

¹⁶² Asian Disaster Risk Reduction Centre *Total Disaster Risk Management* 7.

¹⁶³ UNISDR *Private Sector Activities* 26. Also see Aoki 2012 <http://bit.ly/1dXyXd4>.

¹⁶⁴ UNISDR *Private Sector Activities* 26. Also see Asian Disaster Risk Reduction Centre *Total Disaster Risk Management* 8.

¹⁶⁵ UNISDR *Private Sector Activities* 26. Also see Tokyo Gas Group Date Unknown <http://bit.ly/1lwtJNe>.

¹⁶⁶ Tokyo Gas Group 2007 <http://bit.ly/1hJgFQM>.

4.2.1.2 PPPs for disaster preparedness

PPPs established for the purposes of developing disaster preparedness aim to improve the "readiness" of local authorities and communities for the occurrence of disaster.¹⁶⁷ Standard preparedness activities usually include the stockpiling of equipment and supplies, coordination and standby arrangements, information management, personnel training, and the development of contingency or disaster management plans.¹⁶⁸ A partnership specifically established to assist local authorities to be prepared for disaster is the partnership between Deutsche Post DHL (DHL), the United Nations Development Programme (UNDP) and various local governments.¹⁶⁹ The PPP entails DHL's consulting with and training local authorities on preparing for the occurrence of disaster, and the UNDP coordinating with government authorities to organise the training.¹⁷⁰ During these training sessions DHL supplies the necessary training materials and assistance in the development of disaster management plans.¹⁷¹ In addition, in the event of a disaster DHL provides local authorities with specially trained DHL employees to help manage crucial logistics operations in airports close to disaster-stricken areas.¹⁷² The training and assistance provided by DHL has enabled the participating local authorities to draft effective disaster management plans and the assistance provided by DHL's employees has aided the authorities to improve the assistance they may offer to local airports in times of disaster.¹⁷³

4.2.1.3 PPPs for social investment

While local authorities are specifically included as partners in the two categories of PPPs already discussed, partnerships for social investment purposes do not necessarily include them.¹⁷⁴ In terms of PPPs established for social investment purposes, the

¹⁶⁷ CSR Asia *Business and Disaster Preparedness* 6.

¹⁶⁸ Lavell *et al* "Climate Change" 35.

¹⁶⁹ Deutsche Post DHL 2010 <http://bit.ly/1kASPup>.

¹⁷⁰ This PPP agreement is established between DHL, the UNDP and various local authorities in Nepal, Bangladesh, Indonesia, Lebanon, Turkey and El Salvador.

¹⁷¹ Becker-Birck *et al Resilience in Action* 21. Also see Deutsche Post DHL 2010 <http://bit.ly/1kASPup>.

¹⁷² APEC *Public Private Partnerships* 19.

¹⁷³ Becker-Birck *et al Resilience in Action* 22. Also see Deutsche Post DHL 2010 <http://bit.ly/1kASPup>.

¹⁷⁴ These PPPs are usually established between national government and the private sector. In this regard see Bailey *Humanitarian Crises* 14-16.

private sector provides communities with financial support, volunteers or expertise and product donations in order *inter alia* to improve the living conditions of those in disaster-stricken areas or to repair critical infrastructure damaged by disaster.¹⁷⁵ Such PPPs are often established by multi-national corporations as philanthropy or Corporate Social Responsibility (CSR) projects.¹⁷⁶

As part of their CSR responsibilities, Siemens partnered with the SkyJuice foundation to leverage their expertise and technical knowledge to assist local communities in the restoration of infrastructure damage to water systems in the aftermath of disaster.¹⁷⁷ Siemens and the SkyJuice foundation worked together to develop "SkyHydrant", a potable water filtration system which makes use of membrane filtration systems which provide up to 10 000 litres of safe and pure drinking water (without the use of electricity) per day.¹⁷⁸ While this particular partnership was not undertaken directly with local authorities as partners, the system does serve as a form of support in a time where local authorities' main focus is to repair the damaged infrastructure and to provide assistance to disaster victims.¹⁷⁹

In addition to the above international examples of PPPs for disaster management, it is likely that disaster situations will require the public and private sector to collaborate immediately in some situations.¹⁸⁰ Immediate collaborations often follow local authorities' responses to a specific disaster, but may later lead to the formation of one or more formal PPPs.¹⁸¹ The assistance provided by Walmart, a large retail company in the United States of America, in the aftermath of Hurricane Katrina in August 2005, is an example of such a spontaneous "partnership".¹⁸² Walmart provided disaster victims with staples such as food, water, toilet paper and fuel during a time where the

¹⁷⁵ UNISDR *Private Sector Activities* 39.

¹⁷⁶ Bailey *Humanitarian Crises* 14-16.

¹⁷⁷ UNISDR *Private Sector Activities* 42. Also see Pillay 2012 <http://bit.ly/1gdrCXw>.

¹⁷⁸ UNISDR *Private Sector Activities* 43. Also see SkyJuice Foundation 2010 <http://bit.ly/1cGrSHe>. Hereafter Siemens/SkyJuice PPP.

¹⁷⁹ See UNISDR *Private Sector Activities* 43; Pillay 2012 <http://bit.ly/1gdrCXw>; SkyJuice Foundation 2010 <http://bit.ly/1cGrSHe>.

¹⁸⁰ Busch and Givens 2013 *JSS* 10. Also see Abou-bakr *Managing Disasters* 7-8.

¹⁸¹ Busch and Givens 2013 *JSS* 10. Also see Stewart, Kolluru and Smith 2009 *IJPDLM* 345-346.

¹⁸² Horwitz 2009 *Independent Review* 1-32. Also see Sobel and Leeson 2007 *Independent Review* 519-532.

government authorities were completely overwhelmed by the destruction caused by the hurricane.¹⁸³

Bearing in mind the outcomes of each of these partnerships in different parts of the world in a variety of different contexts and where the specifics varied hugely, it is submitted that the private sector could be an invaluable partner for disaster management in the South African context as well. The following section briefly reflects on some findings and/or guidelines for PPPs for LDM purposes in the South African context.

4.3 Existing public-private partnerships for disaster management: some findings and guidelines

Considering the design, function and outcomes of the international examples of PPPs for disaster management, it appears that it would be useful for South Africa to consider the following in relation to its own PPPs for LDM:

- PPPs for LDM can directly assist municipalities in fulfilling their LDM duties to the extent that the PPPs (such as the Tokyo Gas PPP, for example) educate communities about disasters and disaster risks, raise awareness on key disaster management issues, and put adequate measures in place in order that the municipality should be better prepared for disasters.¹⁸⁴
- PPPs for LDM can also indirectly assist municipalities in fulfilling their LDM duties to the extent that the PPPs allow municipalities to restore critical infrastructure damage while the private sector deals with subsidiary issues that may arise from a disaster. The Siemens/SkyJuice PPP, for example, allowed local authorities to concentrate on repairing damaged infrastructure and assisting disaster victims after the occurrence of disaster whilst Siemens and SkyJuice provided clean drinking water to disaster victims.¹⁸⁵

¹⁸³ Abou-bakr *Managing Disasters* 22-23.

¹⁸⁴ See the Tokyo Gas PPP in section 4 paragraph 4.2.1.1 above.

¹⁸⁵ See the Siemens/SkyJuice PPP in section 4 paragraph 4.2.1.3 above.

- By entering into PPPs for LDM a broadened network for disaster management is established. The Tokyo Gas and DHL partnerships¹⁸⁶ specifically included their own specially trained staff, volunteer groups, members of the community and various large corporations in their disaster management initiatives.¹⁸⁷ Including these stakeholders provided a wide network within which disaster management activities could take place, instead of such activities being the effort of the local authorities and their PPP partners alone.
- PPPs that contribute to the provision of new or innovative approaches to disaster management (such as the arrangement of educational disaster management camps as indicated in the Tokyo Gas PPP)¹⁸⁸ may provide creative measures to fulfil disaster management duties. Such PPPs could prevent plans for disaster management from becoming stagnant or out-dated and ensure that new approaches to disaster management are continuously investigated.
- PPPs which include concerned and interested partners may last longer than partnerships where the private companies must be persuaded to enter into PPPs for LDM.¹⁸⁹ Both the Tokyo Gas and DHL partnerships were initiated by the private sector. The companies in these partnerships appeared to be genuinely concerned for the ability of the local authorities and communities to cope with the aftermath of disaster. The companies were thus willing to partner specifically for disaster management and many of these partnerships are still ongoing.¹⁹⁰
- The establishment of PPPs for disaster preparedness depends on whether or not there are existing companies within a municipality's community with the necessary skills, connections, resources and willingness required to assist local government in being prepared for disasters.¹⁹¹
- The capacity of municipalities in South Africa to collaborate for disaster management purposes by means of PPP agreements may differ from the

¹⁸⁶ See section 4 paragraph 4.2.1.1 and 4.2.1.2 above.

¹⁸⁷ See UNISDR *Private Sector Activities* 26; Tokyo Gas Group Date Unknown <http://bit.ly/1lwTJNe>.

¹⁸⁸ See the Tokyo Gas PPP in section 4 paragraph 4.2.1.1 above.

¹⁸⁹ Van der Berg *Legal Perspectives* 75.

¹⁹⁰ Tokyo Gas Group Date Unknown <http://bit.ly/1lwTJNe>; Deutsche Post DHL 2010 <http://bit.ly/1kASPup>.

¹⁹¹ Surjan and Shaw 2009 *Disaster Prev Manag* 430.

capacity of local authorities to do so in other countries. Municipalities in South Africa are under-resourced and subsequently struggle to fulfil the most basic disaster management responsibilities.¹⁹² Funding is generally limited to "start-up" costs for LDM initiatives and municipalities in South Africa may therefore also lack the funding required to establish and manage PPPs for LDM. It is generally accepted that local authorities in first-world countries, are better financially equipped to fulfil their disaster management mandate and to explore new means of fulfilling disaster management activities such as the establishment of PPPs, for example.¹⁹³

- The successful PPPs described above are context sensitive. It is likely that the nature of equivalent PPPs in South Africa may be different, given our unique disaster risk profile.¹⁹⁴
- The available literature on the examples of PPPs for disaster management in the international arena is silent on an array of issues pertaining to PPPs, such as the procedures followed for the establishment of each PPP; the contents of such PPP agreements in general; and guidelines or tips for other municipalities or institutions locally and or internationally on how to establish similar PPPs. Considering that the South African legal framework for disaster management is already silent on the use of PPPs for LDM¹⁹⁵ it may be challenging for municipalities to establish and manage successful PPPs for LDM generally.
- The PPP exemplars also neglect to provide information regarding the costs for municipalities in establishing and managing PPPs for disaster management or the implications in circumstances where either party in the PPP takes a unilateral decision.¹⁹⁶
- The examples furthermore do not elucidate issues of liability on the part of the municipality or any other party, nor do they provide guidance on the enforceability of the PPP agreements generally.

¹⁹² See section 2 paragraph 2.2 and 2.1.1.1 above.

¹⁹³ Ministry of Foreign Affairs *Public-Private Partnerships in Developing Countries* 13-15.

¹⁹⁴ For an overview of the disasters that occur in South Africa, see Botha and Van Niekerk 2013 *Jamba* 2-3.

¹⁹⁵ See section 2.2 above.

¹⁹⁶ In examining the available literature on the Tokyo Gas, DHL and Siemens/Skyjuice PPPs, it was noted that none of the exemplars provided information on these matters.

- Several scholars have indicated that meaningful partnerships between government and the private sector can take years to develop.¹⁹⁷ South African municipalities may therefore not be able to expect immediate successes in entering into PPPs for LDM. However, considering that the Tokyo Gas, Siemens/SkyJuice and DHL partnerships have been running for a number of years with considerable successes, PPPs for LDM in South Africa may be worth contemplating as an option in assisting municipalities fulfil their LDM responsibilities.

Whilst this article maintains that PPPs for disaster management may prove to be rather beneficial to local authorities, these partnerships should not be entered into without consideration of the guidelines or findings outlined above and a clear understanding of the resources, skills, and capacities that are required to fulfil a PPP's objectives.¹⁹⁸ It is imperative that each party to a PPP agreement strictly monitors and implements the PPP project in order to reap the optimum results of the efforts undertaken.¹⁹⁹ Nevertheless, an examination of the nature of existing PPPs gives rise to more questions than answers, as the examples of international PPPs for LDM fail to provide crucial information relevant to establishing and managing PPP agreements, for example. This lack of information creates uncertainty regarding the sustainability of PPPs for disaster management. Furthermore, it may be argued that some of the guidelines or findings are illustrative of challenges in the use of PPPs for LDM.

5 Conclusion

As the incidence of the occurrence of disasters in South Africa and their intensity are expected to continue to increase, local government as the first in line of response will continue to play a critical role in community preparedness and planning. Considering that many municipalities in South Africa are under-resourced and lack the sufficient knowledge and expertise to successfully fulfil their disaster management mandate, the private sector with its considerable amount of resources and expertise is deemed to

¹⁹⁷ Bailey *Humanitarian Crises* 13.

¹⁹⁸ See the PPPs in section 4 above and Medury "Building Disaster Resilient Communities" 441.

¹⁹⁹ Chowdhury "Bridging Public Private Partnership" 405.

be a key role-player in assisting local government fulfil its disaster management mandate.

The international examples of PPPs as discussed in this article illustrate that PPPs for LDM are particularly beneficial to local authorities and members of the community. However, a number of guidelines and findings were highlighted, which guidelines and findings should be taken into account by municipalities in South Africa when they consider entering into their own PPPs for LDM. Despite these cautions, the main findings of this article are that: a) PPPs are important tools for the promotion of integrated disaster management as they facilitate community involvement and provide multi-stakeholder participation;²⁰⁰ b) PPPs for LDM can instil innovative thinking between partners on new measures to educate communities on disasters;²⁰¹ c) PPPs for LDM may also assist local government in increasing community resilience to disaster, as such partnerships allow municipalities *inter alia* to prepare for potential disasters by improving their disaster management plans, to provide their staff and members of the community with disaster education and workshops, and to arrange standby personnel who are adequately trained to assist the municipality in responding to disasters;²⁰² and d) PPPs for LDM positively influence a municipality's ability to prepare for and respond to the occurrence of disaster.²⁰³ PPPs for LDM are therefore regarded as supplementary, legally binding tools used to assist local government in adequately fulfilling its disaster management mandate.

While this article recognises the benefits of PPPs for LDM and argues that PPPs are useful legal tools which play a supplementary role in assisting municipalities fulfil their disaster management mandate, PPPs should not be regarded as the panacea to all LDM ills. Municipalities may consider using PPPs to support and supplement their overall disaster management initiatives. The importance of sound municipal planning, budgeting and good local governance in disaster management should, however, never

²⁰⁰ See the PPPs in section 4 above and Medury "Building Disaster Resilient Communities" 430.

²⁰¹ See the Tokyo Gas PPP in section 4 paragraph 4.2.1.1 above and Medury "Building Disaster Resilient Communities" 429.

²⁰² See the DHL PPP in section 4 paragraph 4.2.1.2 above and Davies and Murshed *Critical Guidelines* 23.

²⁰³ See the PPPs in section 4 above and Stewart, Kolluru and Smith 2009 *IJPDLM* 352353.

be downplayed, while significant experimentation and research remain to be performed in this field. In the establishment of their own PPPs for LDM, municipalities in South Africa should familiarise themselves with the case studies of existing PPPs for disaster management elsewhere in the world and should draw from the guidelines and findings of those studies. For the moment all municipalities, entities in the private sector, and local communities are encouraged to unlock the capacity inherent in the use of the instruments provided for in law, such as PPPs, to facilitate disaster management, to increase resilience against disasters, and to minimise the risk to property, the environment, the infrastructure, health, and human life.

BIBLIOGRAPHY

Literature

Abou-bakr *Managing Disasters*

Abou-bakr AI *Managing Disasters through Public Private Partnerships* (Georgetown University Press Washington DC 2013)

APEC *Public Private Partnerships and Disaster Resilience*

APEC *Public Private Partnerships and Disaster Resilience* (APEC Singapore 2011)

Asian Disaster Risk Reduction Centre *Total Disaster Risk Management*

Asian Disaster Risk Reduction Centre *Total Disaster Risk Management: Good Practices* (Asian Disaster Risk Reduction Centre Hyogo 2009)

Bailey *Humanitarian Crises*

Bailey S *Humanitarian Crises, Emergency Preparedness and Response: The Role of Business and the Private Sector: A Strategy and Options Analysis of Haiti* (Overseas Development Institute London 2014)

Bajracharya *et al* 2012 *Aust J Emerg Manage*

Bajracharya B *et al* "Public Private Partnership in Disaster Management: A Case Study of the Gold Coast" 2012 *Aust J Emerg Manage* 27-33

Becker-Birck *et al Resilience in Action*

Becker-Birck C *et al Resilience in Action: Lessons from Public Private Collaborations around the World* (Meister Consultants Group Boston 2013)

Bekink *Principles of South African Local Government Law*

Bekink B *Principles of South African Local Government Law* (LexisNexis Durban 2006)

Bosher and Dainty 2010 *Disasters*

Bosher L and Dainty A "Disaster Risk Reduction and 'Built-in' Resilience: Towards Overarching Principles for Construction Practice" 2010 *Disasters* 1-18

Bosher *et al* 2007 *Build Res Inf*

Bosher L *et al* "Integrating Disaster Risk Management into Construction: A UK Perspective" 2007 *Build Res Inf* 163-177

Botha and Van Niekerk 2013 *Jamba*

Botha D and Van Niekerk D "Views from the Frontline: A Critical Assessment of Local Risk Governance in South Africa" 2013 *Jamba: Journal of Disaster Risk Studies* 1-10

Burnham "Disaster Definitions"

Burnham G "Disaster Definitions" in Burnham G (ed) *Public Health Guide in Emergencies* 2nd ed (The John Hopkins Bloomberg School for Public Health and IFRC Geneva 2008)

Busch and Givens 2013 *JSS*

Busch NE and Givens AD "Achieving Resilience in Disaster Management: The Role of Public Private Partnerships" 2013 *JSS* 1-19

Chen *et al* 2013 *JCCM*

Chen J *et al* "Public Private Partnerships for the Development of Disaster Resilient Communities" 2013 *JCCM* 130-143

Chowdhury "Bridging Public Private Partnership"

Chowdhury MR "Bridging Public Private Partnership in Disaster Management in Bangladesh" in Miller DS and Rivera JD (eds) *Community Disaster Recovery and Resiliency: Exploring Global Opportunities and Challenges* (CRC Press Boca Raton 2011) ch 17

Coppola *Introduction to International Disaster Management*

Coppola DP *Introduction to International Disaster Management* 2nd ed (Butterworth-Heinemann Boston 2011)

CSR Asia *Business and Disaster Preparedness*

CSR Asia *Business and Disaster Preparedness: Helping Communities Prepare for Effective Response* (CSR Asia Hong Kong 2013)

Cutter *et al* "Managing the Risks from Climate Extremes"

Cutter S *et al* "Managing the Risks from Climate Extremes at the Local Level" in Field CB *et al* (eds) *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* (Cambridge University Press Cambridge 2012) ch 5

Davies and Murshed *Critical Guidelines*

Davies I and Murshed Z *Critical Guidelines for Community Based Disaster Risk Management* (Asian Disaster Preparedness Centre Thailand 2006)

Du Plessis 2011 *SAJHR*

Du Plessis AA "South Africa's Constitutional Environmental Right Generously Interpreted: What is in it for Poverty?" 2011 *SAJHR* 279-307

Guha-Sapir *et al* *Annual Disaster Statistical Review*

Guha-Sapir D *et al* *Annual Disaster Statistical Review 2012: The Numbers and Trends* (CRED Brussels 2012)

Hagelsteen and Becker 2013 *IJDRR*

Hagelsteen M and Becker P "Challenging Disparities in Capacity Development for Disaster Risk Reduction" 2013 *IJDRR* 4-13

Hodge, Greve and Boardman "Introduction"

Hodge GA, Greve C and Boardman AE "Introduction: The PPP Phenomenon and its Evaluation" in Hodge GA, Greve C and Boardman AE (eds) *International Handbook on Public Private Partnerships* (Edward Elgar Cheltenham 2010) ch 1

Horwitz 2009 *Independent Review*

Horwitz S "Walmart to the Rescue: Private Enterprise's Response to Hurricane Katrina" 2009 *Independent Review* 1-32

Humby *Analysis of Legislation*

Humby T *Analysis of Legislation Related to Disaster Risk Reduction in South Africa* (IFRC Geneva 2012)

IFRC Guide for Public Awareness

IFRC *A Guide for Public Awareness and Public Education for Disaster Risk Reduction* (IFRC Geneva 2011)

Johnson, Connolly and Carter 2011 CSR & EM

Johnson BR, Connolly E and Carter TS *"Corporate Social Responsibility: The Role of Fortune 100 Companies in Domestic and International Disasters"* 2011 *CSR & EM* 352-369

Lavell *et al* "Climate Change"

Lavell A *et al* "Climate Change: New Dimensions in Disaster Risk, Exposure, Vulnerability and Resilience" in Field CB *et al* (eds) *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* (Cambridge University Press Cambridge 2013) ch 1

Louw and Van Wyk 2011 *Civil Engineering*

Louw E and Van Wyk S "Disaster Risk Management" 2011 *Civil Engineering* 16-18

Medury "Building Disaster Resilient Communities"

Medury U "Building Disaster Resilient Communities: The Public Private Partnership Approach" in Miller DS and Rivera JD (eds) *Community Disaster Recovery and Resiliency: Exploring Global Opportunities and Challenges* (CRC Press Boca Raton 2011) ch 18

Metcalf 2013 *Civil Engineering*

Metcalf B "The Challenge for Government Parties in Assuring PPP Projects" 2013 *Civil Engineering* 30-34

Ministry of Foreign Affairs *Public-Private Partnerships in Developing Countries*

Ministry of Foreign Affairs *Public-Private Partnerships in Developing Countries* (Ministry of Foreign Affairs Netherlands 2013)

Minnie *Critical Success Factors*

Minnie JA *Critical Success Factors for Public Private Partnerships in South Africa* (PHD-thesis Stellenbosch University 2010)

Mitchell *et al* "National Systems"

Mitchell T *et al* "National Systems for Managing the Risks from Climate Extremes and Disasters" in IPC *Managing the Risks of Extreme Events and Disasters to advance Climate Change Adaptation* (Cambridge University Press New York 2012) ch 6

National Research Council of the National Academies *Building Community Disaster Resilience*

National Research Council of the National Academies *Building Community Disaster Resilience through Private Public Collaboration* (National Academies Press Washington DC 2012)

Nzimakwe 2006 *Africanus*

Nzimakwe TI "Public Private Partnerships: Implications for Development" 2006 *Africanus* 48-57

O'Brien *et al* "Local Government and Disaster"

O'Brien G *et al* "Local Government and Disaster" in Wisner B, Gaillard JC and Kelman I (eds) *The Routledge Handbook of Hazards and Disaster Risk Reduction* (Routledge New York 2012) 629-640

OECD *Dedicated Public Private Partnership Units*

OECD *Dedicated Public Private Partnership Units* (OECD Paris 2010)

Plummer *Focussing Partnerships*

Plummer J *Focussing Partnerships: A Sourcebook for Municipal Capacity Building in Public Private Partnerships* (Earthscan London 2002)

Quium *Guidebook on Public Private Partnership*

Quium A *A Guidebook on Public Private Partnership in Infrastructure* (UN Bangkok 2011)

Schwab and Brower "Increasing Resilience"

Schwab AK and Brower DJ "Increasing Resilience to Natural Hazards" in Nolon JR and Rodriguez DB (eds) *Losing Ground: A Nation on Edge* (Environmental Law Institute Washington DC 2007) ch 15

Seemela 2008 *JPA*

Seemela VVP "Public Private Partnership as a Tool for Development State" 2008 *JPA* 483-491

Seid-Aliyeva "Role of Mass Media"

Seid-Aliyeva DE "Role of Mass Media in the Disaster Preparedness and Sustainable Development of Society" in American Institute of Physics *Recent Geodynamics, Georisk and Sustainable Development in the Black Sea to Caspian Sea Region: Proceedings of the International Workshop* (3-6 July 2005 Baku, Azerbaijan) 79-83

Setola and Geretshuber "Emerging Information Infrastructures"

Setola R and Geretshuber S "Emerging Information Infrastructures: Cooperation in Disasters" in CRITIS *Third International Workshop* (13-15 October 2008 Rome, Italy) 258-270

Smith and Sutter 2013 *Independent Review*

Smith DJ and Sutter D "Response and Recovery after the Joplin Tornado: Lessons Applied and Lessons Learned" 2013 *Independent Review* 165-188

Smith *Environmental Hazards*

Smith K *Environmental Hazards: Assessing Risk and Reducing Disaster* 6th ed (Routledge New York 2013)

Sobel and Leeson 2007 *Independent Review*

Sobel RS and Leeson PT "The Use of Knowledge in Natural Disaster Relief Management" 2007 *Independent Review* 519-532

Stewart, Kolluru and Smith 2009 *IJPDLM*

Stewart GT, Kolluru R and Smith M "Leveraging Public-Private Partnerships to Improve Community Resilience in Times of Disaster" 2009 *IJPDLM* 343-364

Surjan and Shaw 2009 *Disaster Prev Manag*

Surjan A and Shaw R "Enhancing Disaster Resilience through Local Environment Management" 2009 *Disaster Prev Manag* 418-433

UNISDR *From Shared Risk to Shared Value*

UNISDR *From Shared Risk to Shared Value - The Business Case for Disaster Risk Reduction: Global Assessment Report on Disaster Risk Reduction* (UNISDR Geneva 2013)

UNISDR *Private Sector Activities*

UNISDR *Private Sector Activities in Disaster Risk Reduction: Good Practices and Lessons Learned* (UNISDR Geneva 2008)

UNISDR *Terminology*

UNISDR *Terminology on Disaster Risk Reduction* (UNISDR Geneva 2009)

Uys 2005 *JPA*

Uys F "Disaster Management: An Overview" 2005 *JPA* 404-417

Van der Berg *Legal Perspectives*

Van der Berg A *Legal Perspectives on the Function of Public-Private Partnerships in Local Disaster Management in South Africa* (LLM mini-dissertation North West University 2014)

Van der Berg and Du Plessis 2013 *SAPL*

Van der Berg A and Du Plessis AA "Some Perspectives on Constitutional Conflict in Local Disaster Management through the Lens of *Pheko and Others v Ekurhuleni Metropolitan Municipality* 2012 (2) SA 598 (CC)" 2013 *SAPL* 448-468

Van der Berg, Du Plessis and Murphree "Local Disaster Risk Reduction"

Van der Berg A, Du Plessis AA and Murphree M "Local Disaster Risk Reduction and Management in South Africa's Response to Climate Change" in Kotzé LJ *et al* (eds) *Climate Law and Governance for Low Carbon Development in South Africa* (Juta Cape Town 2014) (forthcoming)

Van Niekerk 2014 *Disasters*

Van Niekerk D "A Critical Analysis of the Disaster Management Act and Policy Framework" 2014 *Disasters* 858-877

Van Riet 2012 *Jamba*

Van Riet R "Recurrent Drought in the Dr Ruth Segomotsi Mompati District Municipality of the North West Province in South Africa: An Environmental Justice Perspective" 2012 *Jamba: Journal of Disaster Risk Studies* 1 – 9

World Economic Forum *Building Resilience to Natural Disasters*

World Economic Forum *Building Resilience to Natural Disasters: A Framework for Private Sector Engagement* (World Economic Forum Geneva 2008)

Legislation

Conservation of Agricultural Resources Act 43 of 1983

Constitution of the Republic of South Arica, 1996

Disaster Management Act 57 of 2002

Fire Brigade Services Act 99 of 1987

Local Government: Municipal Finance Management Act 56 of 2003

Local Government: Municipal Systems Act 32 of 2000

Mineral and Petroleum Resources Development Act 28 of 2002

National Environmental Management Act 107 of 1998

National Building Regulations Building Standards Act 103 of 1977

National Veld and Forest Fire Act 101 of 1998

Safety at Sports and Recreational Events Act 2 of 2010

Spatial Planning and Land Use Management Act 16 of 2013

Government publications

GN R309 in GG 27431 of 1 April 2005

GN R1535 in GG 25605 of 24 October 2003

National Climate Change Response White Paper (2011)

National Disaster Management Framework (2005)

White Paper on Local Government (1998)

White Paper on Municipal Service Partnerships (2004)

Internet sources

Aoki 2012 <http://bit.ly/1dXyXd4>

Aoki M 2012 *Tokyo Foreigners get Disaster Drill* <http://bit.ly/1dXyXd4> accessed 4 March 2014

ASB 2008 <http://bit.ly/1e3PY4B>

ASB 2008 *Guideline on Accounting for Public Private Partnerships* <http://bit.ly/1e3PY4B> accessed 21 January 2014

COGTA 2009 <http://bit.ly/Pd6evf>

COGTA 2009 *State of Local Government in South Africa* <http://bit.ly/Pd6evf> accessed 1 April 2014

Davies and Eustice 2005 <http://pwc.to/1gzIoUk>

Davies P and Eustice K 2005 *Delivering the PPP promise: A review of PPP issues and activity* <http://pwc.to/1gzIoUk> accessed 25 February 2014

Deutsche Post DHL 2010 <http://bit.ly/1kASPup>

Deutsche Post DHL 2010 *Disaster Relief Needs Efficiency* <http://bit.ly/1kASPup> accessed 6 March 2014

Greater Tubatse Local Municipality 2009 <http://bit.ly/N5vbHT>

Greater Tubatse Local Municipality 2009 *Greater Tubatse Municipality Waste Management Project* <http://bit.ly/N5vbHT> accessed 13 January 2013

Kruger 2001 <http://bit.ly/1IKbIcr>

Kruger T 2001 *Santam / Cape Argus Ukuvuka Operation Firestop*
<http://bit.ly/1IKbIcr> accessed 14 January 2014

Llosa and Zodrow 2011 <http://bit.ly/1cjwV6B>

Llosa S and Zodrow I 2011 *Disaster Risk Reduction Legislation as a Basis for Effective Adaptation* <http://bit.ly/1cjwV6B> accessed 13 January 2013

National Treasury PPP Unit Date Unknown <http://bit.ly/PRI9fc>

National Treasury PPP Unit Date Unknown *Public Private Partnership Project List: National* <http://bit.ly/PRI9fc> accessed 14 January 2014

National Treasury PPP Unit 2007 <http://bit.ly/1kRrm7o>

National Treasury PPP Unit 2007 *Introducing Public Private Partnerships in South Africa* <http://bit.ly/1kRrm7o> accessed 13 January 2014

National Treasury PPP Unit 2007 <http://bit.ly/O3yosy>

National Treasury PPP Unit 2007 *Municipal Service Delivery and PPP Guidelines* <http://bit.ly/O3yosy> accessed 15 January 2014

NDMC Date Unknown <http://bit.ly/1kQu64T>

NDMC Date Unknown *Foreword for the National Education Training and Research Needs and Resources Analysis* <http://bit.ly/1kQu64T> accessed 11 November 2013

Pillay 2012 <http://bit.ly/1gdrCXw>

Pillay K 2012 *Clean Drinking Water with SkyHydrant* <http://bit.ly/1gdrCXw> accessed 7 March 2014

SALGA 2011 <http://bit.ly/1bhyoPA>

SALGA 2011 *Disaster Risk Management Status Assessment at Municipalities in South Africa* <http://bit.ly/1bhyoPA> accessed 8 August 2013

SALGA 2013 <http://bit.ly/1hNj0gO>

SALGA 2013 *Disaster Risk Reduction: A Multi-Stakeholder Approach to Targeted Intervention in Selected Municipalities* <http://bit.ly/1hNj0gO> accessed 15 January 2014

Sebideng District Municipality 2012 <http://bit.ly/1gdHPND>

Sebideng District Municipality 2012 *Annual Report* <http://bit.ly/1gdHPND> accessed 13 January 2014

SkyJuice Foundation 2010 <http://bit.ly/1cGrsHe>

SkyJuice Foundation 2010 *Sustainable Water Solutions for Humanitarian and Disaster Relief* <http://bit.ly/1cGrsHe> accessed 7 March 2014

Tokyo Gas Group Date Unknown <http://bit.ly/1lwtJNe>

Tokyo Gas Group Date Unknown *Risks of Business* <http://bit.ly/1lwtJNe> accessed 4 March 2014

Tokyo Gas Group 2007 <http://bit.ly/1hJgFQM>

Tokyo Gas Group 2007 *Fulfilling our Commitment to Corporate Social Responsibility* <http://bit.ly/1hJgFQM> accessed 4 March 2014

Visser and Van Niekerk 2009 <http://bit.ly/1f8DX3V>

Visser R and Van Niekerk D 2009 *A Funding Model for the Disaster Risk Management Function of Municipalities* <http://bit.ly/1f8DX3V> accessed 8 January 2014

LIST OF ABBREVIATIONS

APEC	Asia-Pacific Economic Cooperation
ASB	Accounting Standards Board
Aust J Emerg Manage	Australian Journal of Emergency Management
Build Res Inf	Building Research and Information
COGTA	Department of Cooperative Governance and Traditional Affairs

CRED	Centre for Research on the Epidemiology of Disasters
CSR	Corporate Social Responsibility
CSR & EM	Corporate Social Responsibility and Environmental Management
Disaster Prev Manag	Disaster Prevention and Management
DMA	Disaster Management Act 57 of 2002
ICDM	Intergovernmental Committee on Disaster Management
ICT	Information communication technology
IDP	Integrated Development Plan
IFRC	International Federation of Red Cross and Red Crescent Societies
IJCIP	International Journal of Critical Infrastructure Protection
IJDRR	International Journal of Disaster Risk Reduction
IJPDLM	International Journal of Physical Distribution and Logistics Management
JCCM	Journal of Contingencies and Crisis Management
JPA	Journal of Public Administration
JSS	Journal of Strategic Security
LDM	Local Disaster Management
MDMCs	Municipal Disaster Management Centres
MFMA	Local Government: Municipal Finance Management Act 56 of 2003
NBI	National Business Initiative
NDMC	National Disaster Management Centre
NDMF	National Disaster Management Framework of 2005
NGOs	Non-governmental organisations
OECD	Organisation for Economic Co-operation and Development
PPP(s)	Public-private partnership(s)

PWC	Price Waterhouse and Coopers
SAJHR	South African Journal of Human Rights
SALGA	South African Local Government Association
SAPL	SA Public Law
UNDP	United Nations Development Programme
UNISDR	United Nations International Strategy for Disaster Reduction

PUBLIC-PRIVATE PARTNERSHIPS IN LOCAL DISASTER MANAGEMENT: A PANACEA TO ALL LOCAL DISASTER MANAGEMENT ILLS?

A van der Berg*

SUMMARY

It is anticipated that the occurrence and intensity of disasters will increase globally and in South Africa where typical disasters include droughts, floods, extreme hailstorms, gales, fires and earthquakes, as well as sinkholes arising from mining activity in dolomitic areas. Disasters such as these result in human suffering and damage to the resources and infrastructure on which South Africans rely for their survival and the maintenance of their quality of life. Section 24 of the *Constitution of the Republic of South Africa*, 1996 affords to everyone the right to an environment that is not harmful to his or her health and well-being. It may be argued that a person's sense of environmental security in relation to the potential risks and dangers of disaster falls within the scope of the protection provided by section 24. The responsibility to intervene for the protection of the interests inherent in the constitutional environmental right lies with the government of South Africa. Disaster management specifically is a functional area of competence of national and provincial government, but practice has shown that the actual implementation of and planning for disaster management happens in the local government sphere. Against the backdrop of these introductory discussions and, given the fact that several municipalities in South Africa are under-resourced, this article very specifically aims to critically discuss and describe from a legal perspective the potential and function of public-private partnerships (PPPs) between local government (municipalities) and the private sector (such as industries) in fulfilling the legally entrenched disaster management mandate of municipalities. Through a critical evaluation of some existing PPPs, this article illustrates that the private sector has a key role to play in assisting municipalities to fulfil their legally entrenched disaster management mandate.

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KEYWORDS: local government; local disaster management; disaster management; public-private partnerships.