An innovative partnership framework for sustainable development of rural areas in South Africa

The role of project management firms

Ayman Ahmed Ezzat Othman

*School of Civil Engineering, Surveying and Construction,
University of KwaZulu-Natal, Durban, South Africa, and*

Neil Sirbadhoo

*School of Civil Engineering, Surveying and Construction,
University of KwaZulu-Natal, Durban, South Africa and
Singatha Afrika Management Services (Pty) Ltd,
Durban, South Africa*

Abstract

Purpose – The purpose of this paper is to investigate the role that South African Project Management Firms (SAPMF) can play towards supporting government initiatives for sustainable development of rural areas (RA).

Design/methodology/approach – A research methodology is designed to achieve three objectives. First, literature is used to review the concepts of public-private partnerships, sustainable development of RA, government legislations and the project management profession. Second, semi-structured interviews with government officials are used to identify the obstacles that hinder implementing the development plans for RA and investigate government's perception of creating a partnership with the private sector. Finally, survey questionnaires with SAPMF are used to identify the role that they can play in assisting government to achieve its plans for RA development and investigate SAPMF's perception of creating a partnership with the public sector.

Findings – Although there are government initiatives, RA still suffer from having inadequate development. Current legislation intended to address RA problems (Integrated Sustainable Rural Development Strategy) is not operational and needs to be updated on a regular basis. Government strategies and plans for RA development have to be supported by SAPMF through creating a partnership welcomed by Government and SAPMF, that utilises their knowledge and unique management skills. The RA development partnership framework is recommended to be used as an innovative tool to assist in overcoming the obstacles that hinders RA development.

Originality/value – This paper establishes a partnership between the public and private sectors which is put through the development of an innovative framework that portrays the relationship between government and SAPMF. Adopting the developed framework by both sectors will help the government utilise the unique expertise and skills of SAPMF towards sustainable development of RA. The developed framework represents a novel and creative synthesis that has not been previously done in the South African context.

Keywords Partnership, Rural areas, South Africa, Project management, Sustainable development

Paper type Research paper

1. Introduction

The evolution of South Africa from apartheid to a democratic state in 1994 witnessed an enormous number of strategic plans directed towards enhancing the denied development of rural areas (RA). However, despite the government initiatives to implement these plans, rural people still face real problems, particularly rural dwellers that were forced into taking refuge during the apartheid era. Among the main drivers behind these inadequacies is the lack of sustainable development in RA (South Africa Info, 2008).

Throughout South Africa, RA were formed and conditioned by past policies during the apartheid regime. These policies influenced settlement patterns and demographic profiles, access to services and facilities, as well as the location and character of economic activity. The clear understanding of the effect of past policies directed the new government to create configurations within which rural development strategies could be deployed (Hart, 1996).

A new piece of legislation entitled the Integrated Sustainable Rural Development Strategy (ISRDS) was launched by the South African government in 2000 to improve the development of RA. The document was designed to address the problematic issues that surround and plague the deprived development of RA (ISRDS, 2000). The approach outlined in the strategy is applicable and viable for the entire country, and looks toward the horison of 2010.

Although such legislation was created with the intention of supporting and improving RA, the reality is that it has been nine years since the launch of the ISRDS document, and with the horison of 2010 only one year away, RA development in South Africa has seen inadequate improvement. The endless problems in RA such as insufficient housing, services and poverty (Carter and May, 1999), poor infrastructure, lack of clinics and schools (Ardington and Lund, 1996) are still facing government.

Government cannot solve the problems of RA alone. It requires help, and the private sector has the capabilities to provide support. Kole (2004) stated that government has to involve local communities and private organisations with the public sector to improve sustainable development in RA. RICS (2004) indicated that despite the commitment of the private sector to sustainable development, it is clear that it is unlikely to be delivered without a partnership with government and the support of an appropriate fiscal and regulatory framework.

Through public-private partnerships (PPPs), partners attempt to create closer collaboration and commit themselves to improve performance (Wai, 2004). Owing to their unique and important role in the construction industry, this paper aims to investigate the role that South African Project Management Firms (SAPMF) can play towards supporting government initiatives for sustainable development of RA.

2. Research methodology

In order to achieve the above-mentioned aim, a research methodology, consisted of literature review, semi-structured interviews and survey questionnaires, is designed to achieve four objectives:

(1) Literature review is used to investigate the concepts of PPPs, sustainable development in RA, government legislation for developing RA, the project

management (PM) profession and the relationship between these four areas of
concern.

(2) Semi-structured interviews are conducted with government officials to identify
the obstacles that hinder implementing development plans for RA and to
investigate government's perception of creating a partnership with the private
sector. The semi-structured interview sample was selected from a list of local
government officials in Durban. They were selected on the basis of their direct
relation with sustainable development of RA and their capability to give insight
on their perception towards formulating a partnership with SAPMF. The
semi-structured interview sample was five government officials.

(3) Survey questionnaires are used to identify the role that SAMPF can play in
supporting government towards achieving sustainable development of RA and
to investigate SAPMF's perception of creating a partnership with the public
sector. The survey questionnaire sample was selected from a list of registered
professional PM firms in Durban (Professions and Projects Register, 2007). The
questionnaire sample was 17 firms.

(4) Based on the data collected from literature review, interviews and
questionnaires, a partnership framework between the government and
SAPMF towards sustainable development of RA is developed.

Owing to the nature of this research and the fact that it deals with public sector and
SAPMF, purposive sampling was employed to select the semi-structured interview and
survey questionnaire sample.

3. Literature review
3.1 Public-private partnerships
3.1.1 Definitions and objectives. The Association for Project Management (APM, 2003)
defined partnership as a commitment between two or more organisations to achieve
specific business objectives by maximising the effectiveness of each part's capability
through cooperation, trust, communication and sharing. The Canadian Council for
Public-Private Partnerships (CCPPP, 2009) defined a PPP as a cooperative venture
between the public and private sectors, built on the expertise of each partner that best
meets clearly defined public needs through the appropriate allocation of resources,
risks and rewards. Partnership aims to identify common goals, anticipate possible
obstacles potential and establish productive working relationships among all involved
parties. In addition, it attempts to create a collaborative environment where joint
problem solving helps preventing disputes and the development of hostile or
adversarial relations during the course of a contract. Furthermore, it allows parties to
work as a single team towards successful completion of projects and continuous
improvement (Carmack, 1993).

3.1.2 Development and application of partnership concept. Partnership is not a new
concept; it was found in the ancient Chinese culture (Wai, 2004) and has been used
throughout the globe successfully in many places. In the UK and Australian
construction industry, partnership is becoming the norm in civil contracts (Maxwell,
2004). In Hong Kong, the Hospital Authority and Mass Transit Railway Corporation
were probably the first clients to embrace the concept of partnering (Wai, 2004). PPP
projects in Italy and Spain are profitable, with some of them traded and quoted on the

local stock exchanges (Nyagwachi and Smallwood, 2007). Partnership is applicable to all projects, even those that are very straight forward and limited in scope. However, it is particularly appropriate when the project is complex and business requirements are difficult to specify. It is also recommended when project conditions are uncertain, solutions are difficult to foresee and joint problem solving is essential (Ismail *et al.*, 2004).

3.1.3 PPP and construction professionals in South Africa. PPPs are being used widely in South Africa to implement national and provincial government's infrastructure and service delivery commitments, RA should be no exception (SARDF, 1997). Nyagwachi and Smallwood (2007) stated that an effective, credible and sustainable legal and regulatory framework is essential for promoting, fostering and implementing successful PPP projects in South Africa.

Previous research has shown that there are many professionals in the construction industry that are adopting PPP as an avenue for supporting government initiatives towards reducing poverty and improving development for the rural people in South Africa. RICS (2004) highlight that the delivery of sustainable development requires the engagement of investors, developers and their principal advisors, architects, quantity surveyors, engineers and agents throughout the project life cycle. However, literature review revealed that little research has been conducted in South Africa on the role of SAPMF towards supporting government in achieving its objectives for sustainable development of RA. Therefore, creating a partnership between the government and SAPMF might be the ideal mechanism that enables the government to accomplish its objectives towards the development of RA.

3.2 Sustainable development of RA

3.2.1 Definitions and objectives. Sustainable development is a dynamic process, which enables all people to realise their potentials, and to improve their quality of life, in ways, which simultaneously protect and enhance the Earth's life support systems (Walton, 2000). RA development aims to help rural people set the priorities in their own communities through effective and democratic bodies, by providing the local capacity; investment in basic infrastructure and social services, justice, equity and security; dealing with the injustices of the past and ensuring safety and security of the rural population, especially that of women (SARDF, 1997).

3.2.2 RA development in South Africa. The legacy of colonial and apartheid policies was extreme, structured, and racially defined poverty and inequality in South Africa. During the apartheid era, RA were designed so that the majority of people lived away from cities in heavily populated places which were neglected to such an extent that not many programmes were adopted to bring about growth in these areas (South Africa Info, 2008). Over 70 per cent of the South Africa's poorest people reside in RA, and over 70 per cent of all rural people are poor (May and Roberts, 2000).

Although RA in South Africa share much in common with other countries, some features and development challenges are unique. Most of the constraints to rural development in South Africa stem from the long period of apartheid with its discriminatory policies and neglect of the vast black population. Forced removals led to over-population of the "reserves" and deprivation of basic needs. High population growth put pressure on family income, social services and on natural resources (Adams *et al.*, 1999).

The transition of South Africa to a democratic state generated a new beginning for the oppressed people of the country. Sustainable development plans aim to deliver basic environmental, social and economic services through saving the environment, preserving people, enhancing their standard of living and creating long-term income from even the most barren of surroundings (SARDF, 1997).

3.3 Government legislation

South Africa is faced with several rural development challenges. Numerous rural development initiatives have been undertaken. These included: policy developments (SARDF and Reconstruction and Development Programme, 1997), programmes (Land Reform Programme, 1997) and (Rural Development Strategy of 1995). These initiatives were not efficiently implemented, hence the development of the ISRDS in 2000, which is the current legislation intended to address RA in South Africa (Kole, 2004).

The ISRDS (2000) is designed to attain socially cohesive and stable rural communities with viable institutions, sustainable economies and universal access to social amenities, able to attract and retain skilled and knowledgeable people, who equipped to contribute to growth and development (ISRDS, 2000). A strategic objective of the ISRDS is to ensure that by the year 2010 the RA would attain the internal capacity for integrated and sustainable development. To achieve this vision, the ISRDS proposes that government leads in the consolidation, formulation, implementation, monitoring and evaluation of well coordinated programmes and projects, which will allow for participation of all spheres of government and civil society.

In spite of the government initiatives to implement these strategies, visual evidence indicates that rural people still face real problems (South Africa Info, 2008). Nine years since the creation of the ISRDS has seen partial if not little improvement in RA. Poverty levels in RA witnessed growth in terms of development, infrastructure and social amenities of 4.3 per cent from the year 1994 to 2000 (SA Report, 2007). Since the year 2001-2006 as reported in the Development Indicators Mid-Term Report (2006) poverty levels in RA have only achieved 6.9 per cent growth. Clearly the legislation is not effective in its application or government is not implementing it effectively. This highlights the government's need for assistance from the private sector to achieve its goals regarding the improvement of development in RA.

3.4 Project management profession

Traditionally the management of projects was considered more of an art than science, but with the growing number of PM institutions, associations and academic establishments, PM has become more of a science and discipline as accepted practices captured and formalised in the global body of knowledge and certificate programmes. The increasing competition in policy, economy, law and technology forced organisations to adopt PM as a tool to enable them remain in the market and compete for the future (Burke, 2003).

PM is the discipline of managing projects successfully (APM PMBOK, 2000). Because of their academic and professional acceptance worldwide, the PMBOK (2004) and the APM PMBOK (2000) are used as an approach to analyse management processes offered by project managers. Typically projects involve several professionals working together and the PM expertise is spread across this team.

The PMBOK (2004) highlights five processes which are applied to a project in the PM profession, they are:

(1) initiating;

(2) planning;

(3) executing;

(4) monitoring and controlling; and

(5) closing.

These processes are uniform to the PM profession and are adapted in most projects. Figure 1 shows how the five processes overlap each other throughout the duration of a project.

However, within these five processes, the PMBOK (2004) further highlights nine areas of expertise offered by project managers:

(1) Project integration management (PIM).

(2) Project scope management (PSM).

(3) Project time management (PTM).

(4) Project cost management (PCM).

(5) Project quality management (PQM).

(6) Project human resources management (PHRM).

(7) Project communication management (PCOM).

(8) Project risk management (PRM).

(9) Project procurement management (PPM).
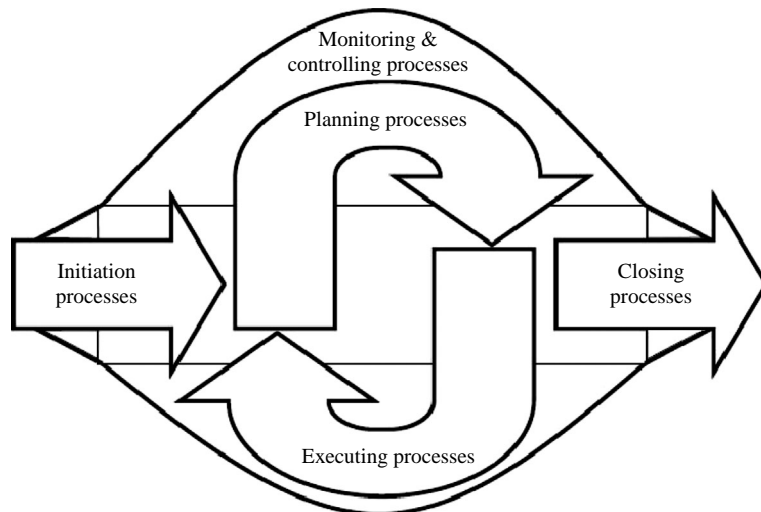
Figure 1.
Overlapping project management processes

Source: PMBOK (2004)

This broad spectrum of management skills offered puts the project manager in an opportune position to provide government with unique management techniques towards improving sustainable development of RA. Government is advised to allow the PM profession to influence rural development in a positive way by creating a partnership with SAPMF to alleviate the endless burdens that RA in South Africa are faced with.

3.5 The relationship between PPPs, sustainable development of RA and the PM profession

The inadequate development of RA in South Africa is a reality. Although the government has created various initiatives to tackle RA development, to date (2009, 15 years later) RA have seen partial improvement and still face real problems. RA need a sustainable development that saves the environment, improves society and prospers the economy. Being a major contributor to the country's growth, the construction industry and its professionals are already supporting government towards alleviating poverty in South Africa.

The PM profession has been highlighted as a key role player in the industry and that the success of the project ultimately depends on the unique management skills of the project manager. The South African government cannot cope with RA development alone, it requires help and the private sector can provide the support they need. This highlights the ability of SAMPF to provide government with the unique management skills required for improving the development of RA. This however can only be achieved through the formulation of a partnership as an initiative towards improving sustainable development for RA. Figure 2 shows and reinforces the relationship between PPP, RA, government (G) and PM profession.

4. Field study

4.1 Data collection

During this research different quantitative and qualitative techniques were used for collecting data from government officials and SAPMF. First, semi-structured interviews
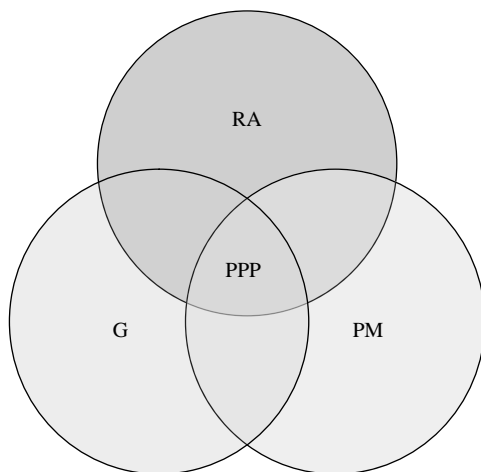
Figure 2.
Relationship between PPP, RA, G and PM

were conducted with a sample of government officials in order to identify the obstacles that hinder the implementation of RA development plans and to investigate government's perception of creating a partnership with the private sector. Different types of questions ranging from open-ended, close-ended, specific and problem questions were asked either face-to-face or over the telephone. To ensure data enrichment, the collected data collected were recorded using a digital recording device and by note-taking.

Second, self administered survey questionnaires were used to identify the role that SAMPF can play in supporting government towards achieving sustainable development of RA and to investigate SAPMF's perception of creating a partnership with the public sector. The questionnaires were delivered and collected on completion to those firms located within the eThekweni municipality and those firms located throughout KwaZulu Natal had the questionnaires e-mailed to them and all responses were returned via e-mail. Different types of questions ranging from open-ended, close-ended, dichotomous and declarative questions were asked to achieve the survey objectives.

4.2 Data analysis

Out of 17 professional PM firms surveyed, 15 firms responded to the survey questionnaires. This represents 88 per cent response rate that supports the research findings and recommendations. A total of five semi-structured interviews were planned to be achieved, but due to the limited time schedules of government officials and to the unwillingness of some officials to participate in the research, only three were conducted. Although this does not represent the intended sample, the interviews conducted still provide rich and valuable data to the research. Results of the semi-structured interviews showed that:

(1) The current legislation (ISRDS), as stated by government officials, is theoretically sufficient and provides guidance towards assisting in the development of RA rather than actual implementation of activities. In addition, officials added that ISRDS has a room for improvement and should be updated on a regular basis.

(2) Although senior members and leaders of rural communities were involved in the establishment of the ISRDS, the successful achievement of development objectives necessitates raising the awareness, educating and participating of RA dwellers.

(3) Key challenges that hinder the implementation of RA development in South Africa are:
   - Lack of provincial adequate economic growth strategies in place to tackle poverty.
   - Insufficient coordination between rural development strategies and national economic policy.
   - Decline in the level of professional employment and skilled labour as well as high-unemployment rate.

(4) Government has established a regional development agency which provides a link between the district municipality and private business as an initiative regarding partnerships with private enterprise.

(5) No framework is currently prepared between government and SAPMF, hence formulating a partnership model will facilitate communication, enhance information sharing and exchange experience between both parties. Government officials indicated that PPP has to be a voluntary process.

Results of the survey questionnaires showed that:

- All SAPMF that responded to the survey questionnaires perceived the concept of partnership with varying degrees. On a scale of five (where 1 = poor and 5 = excellent), nine out of 15 respondents rated their perception as 5/5, where five firms rated their perception as 4/5 and one firm rated its perception of partnership as 3/5.
- Out of 15 firms responded to the survey questionnaires, only 13 firms indicated that they have been involved in a partnership with government. These firms believed that partnership with government is essential for achieving its objectives towards RA development and SAPMF have the knowledge and skills to support government initiatives.

5. The RA development partnership framework

5.1 Definitions and rationale

A framework is defined as a particular set of beliefs, ideas, or rules referred to in order to solve a problem (*Collins Essential English Dictionary*, 2006). It is the basic and logical structure for classifying and organising complex information (FEAF, 1999). The rural area development partnership framework (hereinafter referred to as "the framework" or the "RADPF") is an innovative tool, developed by the authors, to formulate a partnership protocol between the South African government and SAPMF as an approach for sustainable development for RA. It describes the functions and activities that the SAPMF can offer in order to support the government initiatives towards RA development.

The rationale of the framework stems from the necessity to assist the government in achieving its objectives for RA development. This could be achieved through creating a partnership with the private sector which has the capacity, professional knowledge and expertise to provide government with the assistance required (Vaughn, 1993). The ISRDS (2000) agreed with this view and highlighted the importance of private sectors involvement in RA development. In addition, this perspective is supported by Sirbadhoo and Othman (2008) who underlined the dominant role of SAPMF in the construction industry and the significance of utilising their unique management skills and expertise to help the government in accomplishing its initiatives for sustainable development for RA. Furthermore, results of the survey questionnaires and interviews reinforced the approach of formulating partnerships with SAPMF towards improving RA development in South Africa.

5.2 Description of the RADPF

5.2.1 The conceptual description of the RADPF. Within this paper, partnership is viewed as a project between government and SAPMF. Hence, the RADPF is based on the five PM processes of a project. These processes are:

(1) initiating;

(2) planning;

(3) executing;

(4) monitoring and controlling; and

(5) closing and evaluation.

These processes are accompanied with nine knowledgeable areas of expertise which are:

(1) PIM.

(2) PSM.

(3) PTM.

(4) PCM.

(5) PQM.

(6) PHRM.

(7) PCOM.

(8) PRM.

(9) PPM.

The RADPF establishes the roles that SAPMF can perform in each process with regard to the nine knowledgeable areas of expertise, towards creating a successful partnership between the two sectors (Figure 3 and Table I).

5.2.2 Partnership boundaries between SAPMF and government. Partnership requires the boundaries between the two partners to be broken as they amalgamate to work as one joint organisation. Boundaries are classified as flexible and permeable:

- Flexible boundaries are those which can be repositioned, allowing an organisation to decentralise, reorganise, or restructure its resources in keeping with specific objectives.

- Permeable organisational boundaries allow resources to actively communicate and interact through these boundaries to facilitate the exchange of ideas and information.

Boundary flexibility is central in a public-sector agency that is partnering with a private-sector organisation. Organisational boundaries within government agencies are typically rigid and impermeable. In these agencies, employees and their departments have well-defined jurisdictions, responsibilities and a hierarchy of authority (Crowley and Karim, 1995). In order to allow government to partner effectively with SAPMF, this traditional bureaucratic system of organising must be overcome. In contrast, private-sector organisations have boundaries that are more flexible and permeable. This corporate climate is ideal for the inter-organisational co-operation necessary in partnering (Crowley and Karim, 1995). This highlights that SAPMF boundary permeability along with a minimum of internal regulations allows for the open communication and exchange of ideas with government.

Figure 4a-c shows how the boundaries between SAPMF and government are merged during the formulation of a partnership. In Figure 4a, partnership participants SAPMF and government are shown with rigid and impermeable boundaries under a traditional business relationship. In order for these two sectors to develop confidence in
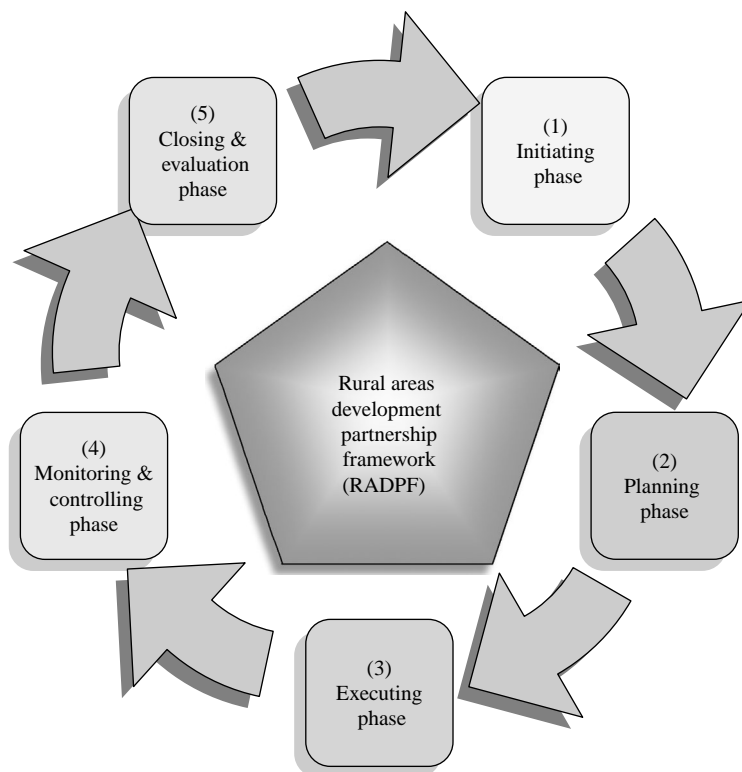
Source: Sirbadhoo and Othman (2008)

Figure 3.
The RADPF

Knowledge management areas	Partner	Partnership phase				
		Initiating phase	Planning phase	Executing phase	Monitoring and controlling phase	Closing and evaluation phase
1 PIM	SAPMF					
2 PSM	SAPMF					
3 PTM	SAPMF					
4 PCM	SAPMF					
5 PQM	SAPMF					
6 PHRM	SAPMF					
7 PCOM	SAPMF					
8 PRM	SAPMF					
9 PPM	SAPMF					

Source: Sirbadhoo and Othman (2008)

Table I.
The partnership matrix

each other, they need to acquire mutual trust through sharing the same vision, goals and objectives of improving sustainable development of RA in South Africa. By establishing trust these sectors can begin to develop confidence in each other, which will gradually influence them to merge their boundaries, as shown in Figure 4b.
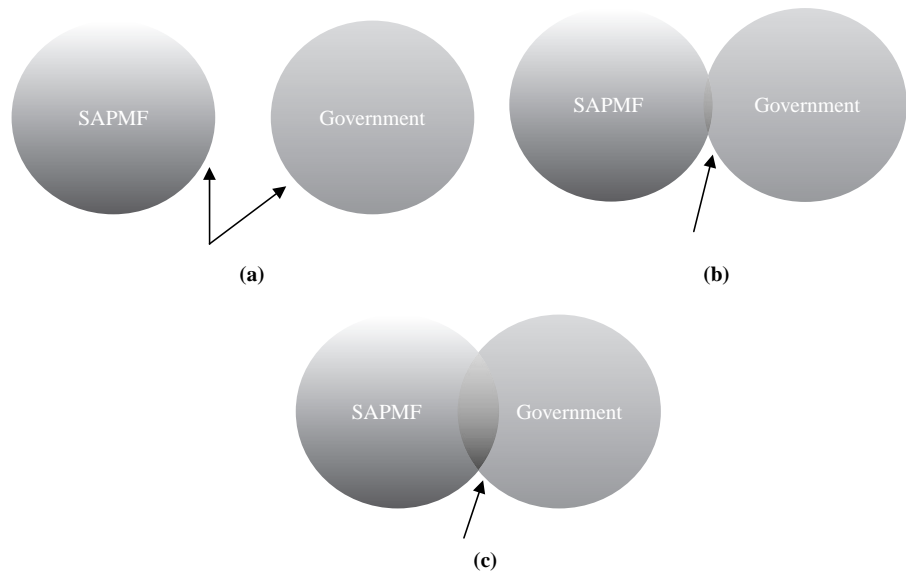
(a)

(b)

(c)

Notes: (a) Impermeable boundaries; (b) formative partnering stage; (c) permeable boundaries

This boundary groups resources of SAPMF and government into a collective partnership. Trust encourages these two sectors to make their merged boundary more permeable, allowing for the formation of a partnering organisation, as shown in Figure 4c. Over time this united boundary becomes even more permeable as a result of long-term commitment and shared vision.

The new partnering organisation formed between SAPMF and government must aim to implement a cooperative strategy towards RA development by modifying and supplementing the traditional boundaries that normally separate companies in a competitive climate. In this way, partnering binds SAPMF and government with a coalition that creates an interconnected atmosphere for the project team members to openly interact and perform (Figure 5).

This partnership now allows the participants to wrap their resources in a joint alliance and collectively define team working toward common goals, in this respect, towards the development of RA. Crowley and Karim (1995) highlight that this permeability of boundaries eases interaction, enhances communication, encourages trust, and permits each partner to directly interact with his or her counterpart in sharing operational-level ideas to resolve problems while working to accomplish common goals.

5.2.3 The contents of the RADPF. This section describes the five phases of partnership between SAPMF and explains the role that SAPMF can play to support the government initiatives for RA development.

5.2.3.1 Initiating phase. This phase defines and authorizes the partnership between government and SAPMF. It aims to establish grounds and draw the basis between the two parts of this relationship by agreeing and understanding the partnership vision, goals and objectives. The problems facing RA development should be identified.
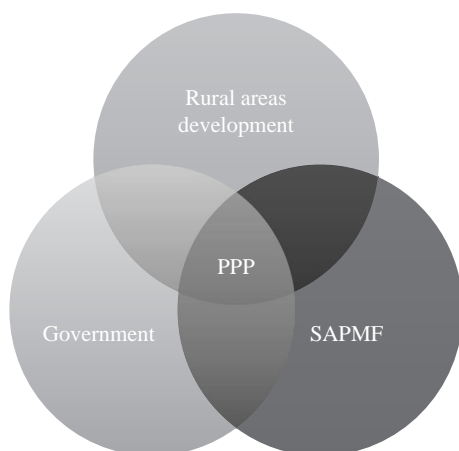
This will enable SAPMF to identify the roles that they can play within the nine knowledge areas towards supporting the government initiatives for RA development. Practical working relations, communication lines, decision-making process between partners have to be established. Table II provides an in depth description of SAPMF support in each area of expertise.

5.2.3.2 Planning phase. This phase defines and refines partnership objectives and plans the course of actions required to attain these objectives. The necessary resources required should be identified and secured. A needs analysis of the rural community in question must be undertaken prior to execution as the community is part of the project. SAMPF should apply the relevant planning tools required and identify and organise the tasks to be undertaken within the nine knowledgeable areas. Both parties should put the partnerships organisational arrangements in place as well as the arrangements for monitoring progress and future evaluation. Table III provides an in depth description of SAPMF support in each area of expertise.

5.2.3.3 Executing phase. This phase integrates people and other resources to undertake the tasks in accordance with the agreed plan. SAMPF play a major role by ensuring that they control the entire management of the project and to ensure the smooth execution of the project by applying their expertise in the nine knowledgeable areas. Both parties should maintain working arrangements and communications with each other. Table IV provides an in depth description of SAPMF support in each area of expertise.

5.2.3.4 Monitoring and controlling phase. Both parties have to ensure that the project objectives are met by monitoring and measuring processes regularly to identify variances from plan so that corrective actions can be taken when necessary. It is vital that government uses the professional expertise of SAPMF to manage the budget, quality and quantity control and other areas related to the nine knowledgeable areas. Table V provides an in depth description of SAPMF support in each area of expertise.

5.2.3.5 Closing and evaluation phase. This phase aims to formalise acceptance of the project or phase and bring it to a successful conclusion. SAPMF should ensure that the project is completed and handed over to the satisfaction of the client. They should also ensure that they have exercised all nine knowledgeable areas to the fullest extent in

Knowledge management area	Support provided by SAPMF
1. PIM	SAPMF to identify, define, unify, combine and coordinate the various processes and activities of a project
2. PSM	SAPMF provide support government by ensuring that the projects for RA development include all the work required, and only the work required to complete the project successfully
	Create a project scope definition which provides the outlines/ boundaries for the project
3. PTM	Activities are defined: identifying the activities that need to be performed to produce the required project deliverables
	Activities are sequenced: activities are deployed in a logical manner without conflict
	Activity durations are estimated
4. PCM	The costs of the project are planned, estimated and budgeted effectively and accurately so that the project can be completed within the approved budget
5. PQM	SAPMF to ensure that the project will satisfy the needs for which it was undertaken in terms of the desired quality finish
6. PHRM	SAPMF must ensure that team members are involved in much of the projects planning and decision making as early involvement of team members will add expertise during the planning of the project and strengthens commitment
7. PCOM	It is crucial for SAPMF to ensure that communication channels are opened and managed to facilitate information sharing between both parties
	SAPMF have the knowledge and expertise to ensure timely and appropriate generation, collection, distribution, storage, retrieval and ultimate disposition of project information
8. PRM	SAPMF have the expertise in conducting risk management planning, identification, analysis, responses, and monitoring and control on a project regarding RA development
9. PPM	SAPMF have the required expertise to provide government with professional assistance in procuring the products and services needed from outside the project team to perform the desired work

Table II.
Initiating phase

providing government with the professional assistance they required. Targeted aims and objectives of the government must have been met. A lesson learned document should be created to evaluate and measure what was achieved in the partnership exercise. This document should identify and define any issues that were incurred by either of the partners with the aim of allowing the partnering parties to learn from the evaluation and use this to develop and improve future partnerships. Table VI provides an in depth description of SAPMF support in each area of expertise.

5.3 Benefits of the RADPF
The RADPF benefits three targeted areas, namely, SAPMF, South African government and RA. At the SAPMF level, the framework is expected to:

- Improve the communication between SAPMF and the government through sharing the vision and objectives of RA development.

Knowledge management area	Support provided by SAPMF
1. PIM	SAPMF to make choices on where to concentrate resources, anticipate potential issues before they become critical and coordinate work for the overall success of the project
2. PSM	SAPMF provide support government by ensuring that the projects for RA development include all the work required, and only the work required to complete the project successfully
	Implement the project scope definition which provides the outlines/boundaries for the project
	SAPMF define and control what needs to be and what does not need to be included in the project
3. PTM	Activities are defined: identifying the activities that need to be performed to produce the required project deliverables
	Activities are sequenced: activities are deployed in a logical manner without conflict
	Activity resources are estimated: ensuring activities have the correctly estimated type and quantity of resources
	Activity durations are estimated accurately
	A schedule is developed to manage the above mentioned processes
4. PCM	SAPMF to estimate costs by developing an accurate approximation of the costs of resources needed to complete project activities
	Costs to be budgeted by summating the estimated costs of individual activities to establish a cost baseline
5. PQM	SAPMF to provide government with quality planning by identifying which quality standards are relevant to the project and how to meet them
6. PHRM	SAPMF need to implement human resource planning which involves identifying project roles and responsibilities and creating a staffing management plan
	SAPMF must help government acquire the project team needed to complete the project
	SAPMF need to develop the project team by improving the competencies and interactions of team members to enhance performance on the project
7. PCOM	Communication is planned by SAPMF determining the information and communications needs of government and other project participants
8. PRM	SAPMF must provide government with risk management planning which involves deciding how to approach, plan and execute the risk management activities of a project
	SAPMF can identify risks and determine which risks might affect the project and document these risks
	SAPMF can analyse risks by prioritising them and analysing their probability of occurrence and impact
	SAPMF must implement risk response planning which involves developing actions to reduce risks that threaten the project objectives
9. PPM	SAPMF must aid government with regard to planning purchases and acquisitions by determining what to purchase or acquire and determining when and how
	SAPMF must request seller responses by obtaining information, quotations, bids, offers and proposals as appropriate for the project
	SAPMF can select sellers for the project which involves reviewing offers, choosing among potential offers and negotiating a written contract with each seller

Table III.
Planning phase

Knowledge management area	Support provided by SAPMF
1. PIM	Provide government with unification, consolidation, articulation and integrative actions that are crucial to project completion
2. PSM	SAPMF to ensure that only the defined work is being executed
3. PTM	SAPMF ensuring that defined activities are sequenced and that they are deployed in a logical manner without conflict
	Activity durations that were estimated are being executed accurately
4. PCM	SAPMF must control costs by monitoring the factors that create cost variances and control changes to the project budget
5. PQM	SAPMF need to ensure that quality assurance is performed which includes applying the planned quality activities to ensure that the project employs all processes needed to meet the desired requirements
6. PHRM	SAPMF must manage the project team by tracking team members' performance, resolving issues, providing feedback and facilitating changes to enhance project performance
7. PCOM	SAPMF must ensure that information is distributed and that they make needed information available to government and other project participants in a timely manner
	SAPMF must keep information channels open with government at all times throughout the project duration
8. PRM	SAPMF must ensure risk response planning is adhered to which involves implementing actions to reduce risks that threaten the project objectives
	SAPMF must monitor and control risks by tracking identified risks, identifying new risks and executing risk response plans
9. PPM	SAPMF must manage the contracts between each buyer and seller during the execution of the project and record performances to provide a basis for future relationships with the seller

Table IV.
Execution phase

- Enhance the management skills and techniques of SAPMF through exchanging information with government and applying their skills for solving national problems.
- Contribute to the sustainable development of RA development.

At the government level, the RADPF provides a stepping stone for government to be assisted by private enterprises in a systematic way as attempt towards supporting its initiatives regarding the development of RA.

At the RA level, rural dwellers are the targeted beneficiaries of the framework as the RADPF is an attempt towards achieving the plans designed for sustainable development of RA in South Africa.

5.4 Limitations of the framework
Although the above-mentioned benefits of the framework, it has some limitations. The framework may not suite every SAPMF with regard to formulating a partnership with government, as it depends on whether the respective firm perceives the concept of partnership and if the firm has partnered with government, before utilising other partnership frameworks. In addition, the adaptability and functionality of the

Knowledge management area	Support provided by SAPMF
1. PIM	Provide government with unification, consolidation, articulation and integrative actions that are crucial to project completion
2. PSM	SAPMF to ensure that only the defined work is being executed
3. PTM	SAPMF ensuring that defined activities are sequenced and that they are deployed in a logical manner without conflict Activity durations that were estimated are being executed accurately
4. PCM	SAPMF must control costs by monitoring the factors that create cost variances and control changes to the project budget
5. PQM	Quality control is performed by SAPMF which entails monitoring project results to determine if they comply with the planned quality standards and identifying ways to eliminate causes of inadequate performance
6. PHRM	SAPMF must manage the project team by tracking team members' performance, resolving issues, providing feedback and facilitating changes to enhance project performance
7. PCOM	SAPMF must ensure that performance reporting is coordinated and facilitated by ensuring status reporting, progress measurement and forecasting is being implemented SAPMF must ensure that government and other project participants are managed by managing communications to satisfy the requirements of and resolve any issues with government and project participants SAPMF must keep information channels open with government at all times throughout the project duration
8. PRM	SAPMF must monitor and control risks by tracking identified risks, identifying new risks and executing risk response plans
9. PPM	SAPMF must manage the contracts between each buyer and seller and record performances to provide a basis for future relationships with the seller

Table V.
Monitoring and
controlling phase

framework is limited in the sense that, it depends on the initiatives of SAPMF and government to make positive attempts in facilitating the use of the RADPF, towards the development of RA in South Africa. Furthermore, the application of the RADPF is a long-term strategy to improve the development of RA. This requires commitment from both partners over a long term and may not be perceived or adopted by some firms.

6. Research findings and recommendations
Having reviewed the concepts of PPPs, sustainable development of RA, government legislation, the PM profession and keeping in mind the results of the semi-structured interviews and survey questionnaires, the research may come to the following findings and recommendations.

6.1 Research findings
- Although the PPPs are a relatively new concept in South Africa and attracted limited investigation, it has been used widely for implementing national and provincial development projects. Hence RA should have no exception.

Knowledge management area	Support provided by SAPMF
1. PIM	Provide government with unification, consolidation, articulation and integrative actions that are crucial to project completion
2. PSM	SAPMF to ensure that the defined works were completed successfully
3. PTM	SAPMF ensuring that government projects are accomplished and successfully completed within the estimated time
4. PCM	SAPMF must ensure that the costs of the project that were planned, estimated, budgeted and controlled were done so effectively and accurately so that the project is completed within the approved budget
5. PQM	SAPMF to ensure that in supporting government achieve its objectives, RA development is executed and completed to quality
6. PHRM	By SAPMF tracking team members' performance throughout the duration of the project, rich and valuable data will be able to be gathered for the lessons learned document. This allows for a track record of performance to be documented which will aid in the facilitating of other partnerships for future RA development projects
7. PCOM	SAPMF must ensure that information distribution, performance reporting and all other means of communication were implemented effectively throughout the duration of the project. SAPMF must ensure that information sharing was not bias throughout the duration of the project
8. PRM	SAPMF must document all risks incurred during the project as this will form a basis for future projects towards RA development, with regard to working around the identified risks
9. PPM	SAPMF can close contracts by completing and settling each contract applicable to the project or project phase. SAPMF must record performances of each buyer and seller to provide a basis for future relationships with the seller

Table VI.
Closing and evaluation phase

- In spite the government initiatives for RA development, rural people still face real problems. This highlighted the need to assist the government in achieving its plans and strategies through creating a partnership with the private sector. Since no framework is presently adopted between government and SAPMF, creating a partnership between the two sectors is an ideal mechanism to enable the government utilise the unique management knowledge and expertise of SAPMF to accomplish its objectives towards delivering environmental, social and economic services to RA. The establishment of the framework will be facilitated through the perception of partnership concept and its importance as well as the willingness of both sides.

- The current legislation adopted for RA development is not operational and the government needs assistance to implement it effectively. Government officials emphasised the need for government to modify its legislation by implying a new set of goals and adopting a different approach (i.e. partnership framework) to facilitate accomplishing development objectives.

- In order to succeed the development strategies of RA, rural inhabitants have to be educated and recognised the value of their role towards supporting government initiatives.
- Inadequate economic growth strategies; insufficient coordination between rural development strategies and national economic policy and decline of professional employment, skilled labour and high unemployment rate are the main challenges that hinder the implementation of RA development in South Africa.

6.2 Research recommendations
The research recommendations are directed to three categories, namely: government, SAPMF and further research.

6.2.1 Recommendations to government

- Initiating a PPP with SAPMF through adopting the framework developed by this research to achieve the government objectives for sustainable development of RA in South Africa.
- Facilitating the creation of similar partnerships with other construction professionals towards RA development of RA in South Africa.
- Establishing economic growth strategies, creating more job opportunities and coordinating between rural development strategies and national economic policy to overcome the obstacles to RA development.

6.2.2 Recommendation to SAPMF

- Playing a pro-active role towards sustainable development of RA through adopting the developed framework and improving communication with government authorities.
- Enhance their management skills and techniques with regard to the formulation of a partnership with government.

6.2.3 Recommendations for further research

- Investigating the role that other construction professionals can play towards supporting the government in achieving its plans for sustainable development of RA.
- Conducting an evaluation study, after a fair time of implementation, to examine the effectiveness of developed partnership frameworks towards assisting the government in accomplishing its development objectives and identifying corrective actions needed for performance improvement.

7. Conclusion
Sustainable development of RA is one of the greatest challenges facing the South African government. Despite government initiatives, rural people still face real problems of inadequate development. The research presented in this paper has provided great insight and profundity to a topic that had previously received scarce attention in construction literature. Using the broad spectrum of unique management skills of SAPMF as an approach to support government in achieving its objectives

towards sustainable development for RA is a new idea that has not previously researched.

Therefore, the concept of formulating a PPP between SAPMF and government as an attempt to aid government towards improving sustainable development for RA is an innovative and beneficial concept in the South African context. This research is imperative as it deals with a severe issue that has haunted South Africa for many decades to date. The research conducted in this paper proposes that SAPMF play a powerful role in the construction industry and government is advised to utilise SAPMF unique management skills to formulate a partnership that aid the in alleviating a serious development burden that has gripped the poverty stricken RA of South Africa for decades.

References

Adams, M., Cousins, B. and Manona, S. (1999), *Land Tenure and Economic Development in Rural South Africa: Constraints and Opportunities*, Overseas Development Institute, London.

APM (2003), *Partnering Guidelines for Construction Projects in Hong Kong*, Association for Project Management, Hong Kong.

APM PMBOK (2000), *Association for Project Management – Project Management Body of Knowledge*, 4th ed., Association for Project Management, Peterborough.

Ardington, E.M. and Lund, F. (1996), "Questioning rural livelihoods", in Lipton, M., Ellis, F. and Lipton, M. (Eds), *Land, Labour and Livelihoods in Rural South Africa*, Vol. 2, University of Natal Indicator Press, Durban, pp. 31-58.

Burke, R. (2003), *Project Management Planning & Control Techniques*, 4th ed., Burke Publishing, Cape Town.

Carmack, W. (1993), *Partnering Agreement Guideline*, Consulting Network, Cincinnati, OH.

Carter, M.R. and May, J. (1999), "Poverty, livelihood and class in rural South Africa, abstract", University of Wisconsin, Madison, WI (accessed 3 March 1999).

CCPPP (2009), *Definitions: The Canadian Council for Public-Private Partnerships*, available at: www.pppcouncil.ca/aboutPPP_definition.asp (accessed 7 May 2009).

Collins Essential English Dictionary (2006), 2nd ed. 2006, HarperCollins Publishers 2004, available at: www.thefreedictionary.com/framework (accessed 4 May 2009).

Crowley, L.G. and Karim, A. (1995), "Conceptual model of partnering", *Journal of Management in Engineering*, Vol. 11 No. 5, pp. 33-9.

Development Indicators (2006), Poverty and Inequality, Mid-Term Report, The Presidency Republic of South Africa, Cape Town.

FEAF (1999), *Federal Enterprise Architecture Framework*, available at: www.cio.gov/Documents/fedarch1.pdf (accessed 23 April 2007).

Hart, G. (1996), "The agrarian question and industrial dispersal in South Africa: agro-industrial linkages through Asian lenses", *Journal of Peasant Studies*, Vol. 23 No. 2, pp. 245-77.

Ismail, S., Abdul-Rahman, H., Akmal, H., Danuri, M.M.S. and Rahim, M.A.F. (2004), "Success criteria of a private joint venture: a case study on the construction of the Bahrain international circuit", *CII – HK Conference 2004, Construction Partnering, Faculty of Built Environment and Engineering, University of Malaya, Kuala Lumpur*, pp. 125-35.

ISRDS (2000), *Integrated Sustainable Rural Development Strategy*, 17 November 2000, South Africa, pp. iv-1.

Kole, N.M. (2004), "An evaluation of the integrated sustainable rural development programme highlighting stakeholder mobilisation and engagement", unpublished BSc dissertation, University of Pretoria, Pretoria.

Maxwell, D.A. (2004), "Alliancing – the future: a case study of a uk utility on its journey through partnering to alliancing", *Proceedings of the CII – HK Conference 2004, Construction Partnering*, JCP Consulting, Blades Enterprise Centre, Sheffield.

May, J. and Roberts, B. (2000), "Monitoring and evaluating the quality of life of land reform beneficiaries 1998/99", unpublished report, Department of Land Affairs, Pretoria.

Nyagwachi, J. and Smallwood, J. (2007), *South African Public Private Partnerships* (*PPP*) *Projects*, Department of Construction Management, Nelson Mandela Metropolitan University, Port Elizabeth.

PMBOK (2004), *A Guide to the Project Management Book of Knowledge*, 3rd ed., Project Management Institute, Newton Square, PA.

Professions and Projects Register (2007), Johncom Media Investments Limited, Saxonwold.

RICS (2004), "Sustainability and the built environment – an agenda for action", RICS, London.

SARDF (1997), South African Rural Development Framework, available at: www.anc.org.za/rdp/rdevframe.html (accessed 21 January).

SA Report (2007), *Country Review Report Republic of South Africa*, APRM Country Review Report No. 4, African Peer Review Mechanism, Midrand.

Sirbadhoo, N. and Othman, A.A.E. (2008), "Public-private partnerships for sustainable development of rural areas: investigating the role of South African project management firms", *Proceedings of the SACQSP Quantity Surveying Conference 2008, Midrand*, pp. 207-18.

South Africa Info (2008), available at: www.southafrica.info/doing_business/investment/oppurtunities/public-private.htm (accessed 13 February 2008).

Vaughn, A. (1993), *An Integrated Rural Development Strategy for KwaZulu Natal Towards the Formulation of an Effective Policy*, KwaZulu Natal Department of Local Government and Housing, Pietermaritzburg.

Wai, C.S. (2004), "Adoption of partnering in public works", *Proceedings of the CII – HK Conference 2004 on Construction Partnering*, Deputy Sectary for the Environment, Transport and Works Bureau, Hong Kong.

Walton, J. (2000), "Sustainable development", Forum for the Future Annual Report.

Corresponding author
Ayman Ahmed Ezzat Othman can be contacted at: aaeothman@gmail.com; Othman@ukzn.ac.za