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Operationalising the RIAT Community of Practice

Concept paper

By

Sikhulumile Sinyolo

Siyanda Jonas

Bhekiwe Fakudze

Peter Jacobs

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**science
& technology**

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

Table of Contents

1 Introduction	2
2 Understanding communities of practice (CoPs): An overview	4
2.1 Definition of a CoP	4
2.2 Key elements of CoPs	6
2.3 Evolutionary stages of CoPs	7
2.4 Categories of CoP members and their participation levels	7
2.5 Benefits of CoPs	8
3 The RIAT community of practice (CoP)	10
3.1 Introducing the RIAT CoP	10
3.2 Main objectives of the RIAT CoP	10
3.4 The community of the RIAT CoP	11
3.5 Activities of the RIAT CoP	15
4 Summary	17
References	17

1 Introduction

The Rural Innovation Assessment Toolbox (RIAT) is a set of information and decision tools designed by the Human Sciences Research Council (HSRC) and funded by the Department of Science and Technology (DST), to assess and promote innovation in the rural and/or informal settings. The RIAT toolset aims to address the historical lack of reliable and locally-contextualised information on innovation that hinders the effective harnessing of innovation for social & economic development (LSED) in marginalised areas. The information gap is due to the fact that the traditional innovation surveys are focused on formal enterprises usually located in big cities/ towns, and neglect innovations occurring among rural and/or informal enterprises.

The three complementary tools in the toolbox can help local actors to: (a) take stock of local innovation activities, (b) engage in deeper conversations on how to promote local innovation, and (c) identify and implement innovative initiatives that have potential for far reaching and lasting developmental impact. The relevant and reliable local innovation information generated can be used to inform policy and guide interventions aimed at boosting local innovative and economic performance. The key issue here is not just about how to encourage more innovation in more places, but also knowing which kinds of innovation need to be encouraged in what places of these rural areas. The toolset moves beyond just mapping the status quo of innovation in the rural areas, but seeks to empower local actors to craft visions for innovation-driven development as well as identify concrete and practical ways of accomplishing these visions in their respective localities.

The RIAT focuses on empowering the local communities, especially the most often marginalised or excluded (the poor, women or disabled people), to successfully participate in co-creating local innovation and economic visions, knowledge co-production and co-learning. This is in line with literature on inclusive innovation^{1,2}, which is moving away from a focus on pro-poor innovation (innovation for the poor but without their participation in the process), to increased participation of the marginalised in the production of the innovations (that is, innovation *with* the poor and marginalised, not just *for* them). This is also in line with the broad government policies (e.g., National Development Plan (Vision 2030)), and DST's policies strategic programmes (e.g., Innovation for Local Economic Development (ILED)), which seek to ensure the participation of the communities in their development. Indeed, the RIAT enhances the local communities to move up the ladder of

participation³⁻⁵, from ‘tokenism’ (consultation, informing and placation) to ‘citizen control’ or transformative levels of participation.

The success of the RIAT intervention in fostering a stronger Science, Technology & Innovation (STI) orientation in the impoverished rural municipalities rests upon local actors adopting, adapting and utilising the user-friendly information and decision RIAT tools. For this to happen, the local actors should be aware of the existence of the tools, be convinced of the tools’ benefits, and be able to apply the tools correctly. The RIAT toolset has been popularised and is currently being transferred to 16 local municipalities across 8 rural district municipalities by the HSRC, with the help of locally-based universities. In these pilot districts, local RIAT consortiums have been formed to offer local actors a platform to collectively learn about and how to use the RIAT tools as well as discuss innovation opportunities that can be exploited to improve local economic development.

While there has been considerable success in the institutionalisation of RIAT within the participating local municipalities, there is a need for continued nurturing and monitoring of this embryonic process to reach sustainable levels. Institutionalisation is by nature a gradual process which takes several years to be completed⁶. This raises a number of practical questions. For example, should RIAT continue in its current form, or should it take a different form? There is evidence that the relationships between local change agents (universities) and LED champions (municipal officials), which are key in the current phase, remain weak, and would likely collapse by the end of the project phase of RIAT. The question then is, what can be done to ensure that the RIAT momentum is maintained in the participating municipalities beyond Phase 3. Also, while the relationships between RIAT players at the local level have been explained and are relatively clearer, at least during the project phase, it is fuzzy how actors from different localities should interact during and after the project phase. Other important questions that have not been adequately addressed are about the scaling out of RIAT to the non-participating municipalities. That is, how should the non-RIAT local municipalities in participating districts get involved in RIAT? How will RIAT spread to other districts? Furthermore, the question of how RIAT should be coordinated at the local, district and national levels after the project phase should also be addressed.

It has thus become evident that the chances of sustainability of RIAT beyond the project phase, which ends in April 2018, and the extension of RIAT to other municipalities would significantly increase if the relationships among the local, district and national RIAT actors are clearly articulated and operationalised in the form of a community of practice (CoP). This concept note is aimed at outlining

some suggestions on how the RIAT CoP should operate to increase the effectiveness, efficiency, outscaling and sustainability of the RIAT intervention. Before moving into the operationalisation of the RIAT CoP, the next section defines CoPs and outlines some of their benefits.

2 Understanding communities of practice (CoPs): An overview

2.1 Definition of a CoP

In simple terms, a community of practice (CoP) is a *community* of people who share a desire to learn and improve their *practice*^{7,8}. Lave and Wenger⁸, who first used the term ‘community of practice’, defined a CoP as a group of people who come together to share common interests and goals, with the aim of sharing information, developing knowledge and developing themselves both personally and professionally. A widely cited definition is that given by Wenger, McDermott *et al.*⁹, who defined communities of practice (CoPs) as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an on-going basis” (p.4). That is, a CoP is a group of people who, because of their shared concern or passion for something they do, collectively learn how to do it better through regular interactions¹⁰. In other words, CoP members share knowledge, learn together and create common practices¹¹. The CoP concept describes situated social practice (i.e., having a location in space and time as well as a social setting), learning, and knowing in action^{8,12,13}.

Whereas the coinage of the term ‘community of practice’ by Lave and Wenger⁸ is recent, CoPs have always and still do exist everywhere in every aspect of human and work life, both inside and outside organisational boundaries^{9,10,14}. For example, a tribe learning to collectively survive by sharing stories and experiences to improve their skills constitutes a CoP. The coinage by Lave and Wenger⁸, however, resulted in an increase in the interest on CoPs, which has grown exponentially in recent years^{12,15,16}. CoPs have become very popular among both academics and practitioners across different disciplines and sectors, such as economics, management, public administration, farming, health and education^{7,16-27}.

In particular, CoPs have been used as a mechanism to promote learning that yields innovation and intellectual capital within and between organisations, as well as in an extra-organisational context at the regional, national and international levels^{12,20,24,28,29}. CoPs have frequently been presented as an answer for knowledge sharing and creation, and a basis for innovation in organisations³⁰. Research on

the role of CoPs in fostering learning for innovation has mostly focused on private firms or organisations, with a few studies, e.g.,^{17,31,32} having investigated the potential of CoPs in stimulating an innovation culture in the context of the public sector.

The focus of CoPs is to share best practices and create new knowledge to advance a domain of professional practice³³. Interaction on an ongoing basis is an important part of this. While knowledge sharing and collective learning are key characteristics of CoPs, this does not imply that this is always the intention of these groups working together. In fact, learning can actually be an incidental outcome of members' interactions¹⁰. CoPs are mostly flexible, autonomous, self-organising and informal groups that promote the sharing of knowledge among members so as to advance practice^{7,10,34,35}. While CoPs have historically been viewed as fundamentally organic entities, developing on their own without external interventions, recent studies e.g.,^{10,22,30} highlight that CoPs can be deliberately designed and developed for a specific purpose.

CoPs are by no means homogenous, but differ in many ways. They are of different sizes, with some small while others are large^{10,20}. Whereas others are local, regional or national, others are international – covering the whole globe. Others can be geographically co-located while others are dispersed. While others meet face-to-face (i.e., traditional CoPs), which is how historically CoPs operated¹², the increasing use of the internet has meant that most of the CoPs now meet online (i.e., virtual CoPs)¹⁰. Some CoPs are within an organisation whereas some include members from various organisations. Some are formally recognised, often supported with a budget; while most are completely informal and even invisible¹⁰. Whereas some have participants with clear roles and boundaries, others choose a more fluid approach²⁰.

CoPs are known under various names across different organisational and spatial settings, such as learning networks, communities of innovation, thematic groups, or tech clubs, etc.^{10,28}. Of concern for some studies e.g.,^{12,20,29}, however, is that the use of the term CoP has become imprecise, and that it has now been used in contexts that are distant from its original meaning. According to Cataldo²⁰, there has been some general confusion that has arisen among practitioners and researchers regarding how to define, identify, develop and support CoPs. The issue here is that the CoP concept has been loosely used as a proxy to describe, in a broad sense, the general recognition of the powers of learning and knowing in action through situated practice¹². This obscures the significant differences of dissimilar versions of situated practices (such as networks of practice, communities of interest, project teams, etc.)¹². This is to say that not all groups, communities or forms of situated practice should be called

CoPs unless they display certain characteristics. The next subsection describes some of the features of CoPs.

2.2 Key elements of CoPs

There are three important elements that differentiate CoPs from other groups: the *domain*, *community* and the *practice*⁹. The *domain* refers to the focus or topic of interest that creates a sense of common identity³⁶. This is what the group will address in its work, and should be something that motivates the members to participate^{18,37}. The domain creates a sense of accountability to a body of knowledge and therefore to the development of a practice⁷. The *community* are the members that care about the domain, and is built by the relationships and interactions of the members^{9,36}. Coming together to share similar and different experiences and problems helps create the *community*, which is the social fabric for learning^{7,37}. The *practice* is the common knowledge and set of frameworks, tools, information, styles, languages, stories, and documents shared by the members as they seek to solve problems or create new ideas together^{7,9,14,37}. That is, a practice is some kind of mini-culture that binds the community together⁹.

The three CoP elements should be developed simultaneously for group effectiveness³³. When these elements work together, they make a CoP an ideal knowledge structure, a social structure that can assume responsibility for developing and sharing knowledge^{7,9}. Wenger³⁸ further described some of the specific and detailed characteristics that are required for groups to qualify to be called CoPs and be considered to be dynamic learning environments. Some of the key characteristics, compiled by Amin and Roberts¹² from Wenger³⁸, are presented in Box 1.

Box 1. Key characteristics of a community of practice

- Sustained mutual relationships—harmonious or conflictual
- Shared ways of engaging in doing things together
- The rapid flow of information and propagation of innovation
- Absence of introductory preambles, as if conversations and interactions were merely the continuation of an ongoing process
- Very quick setup of a problem to be discussed
- Substantial overlap in participants' descriptions of who belongs
- Knowing what others know, what they can do, and how they can contribute to an enterprise
- Mutually defining identities
- The ability to assess the appropriateness of actions and products

- Specific tools, representations, and other artefacts
- Local lore, shared stories, inside jokes, knowing laughter
- Jargon and shortcuts to communication as well as the ease of producing new ones
- Certain styles recognised as displaying membership
- A shared discourse reflecting a certain perspective on the world

Sources: Wenger³⁸ and Amin and Roberts¹².

2.3 Evolutionary stages of CoPs

The establishment of a CoP goes through several evolutionary steps. Wenger, McDermott *et al.*⁹ identified five stages of CoP development, which are presented in Box 2. The first stage is about the actors realising their common interests. There is no basis to seek to form a CoP if there are no shared interests or concerns. The actors then begin interacting and sharing knowledge, without which the community is just a community of interest. As the relationships grow, the actors then seek to formalise the community, strengthening the relationships and interactions, otherwise they would remain just a loosely knit network of practice. The stewardship stage is when the community continuously has to refresh activities to remain relevant. At the fifth stage, the CoP has to change or face decline.

Box 2. Evolutionary stages of a CoP

1. *Potential stage* - during this initial stage, a loose network of actors realise that they have a common interest
2. *Coalescing stage* - the actors recognise the value of knowledge sharing and develop relationships and trust
3. *Maturing stage* - the actors operationalise their community, clarifying its focus, role, and boundaries. There is a shift from sharing just tips to developing a body of knowledge
4. *Stewardship stage* – at this stage, the community must maintain its relevance and its voice, keeping the tone and focus lively and engaging, and also ensuring that it remains on the cutting edge.
5. *Dissolution or Transformation stage* – this is the stage when the CoP either transforms or dies. Sometimes communities split into new communities or they merge with other communities. Sometimes they lose relevance and die.

Source: Wenger, McDermott *et al.*⁹

2.4 Categories of CoP members and their participation levels

CoPs usually involve different groups of members with varying levels of participation in the CoP activities^{10,13,39,40}. The level of participation is influenced by the different perspectives, needs, and

ambitions that the different members have³⁹. The common categories of CoP members include the following:

- **Core group:** this is a small group of members who are responsible for leading, nurturing, coordinating and energising the CoP. These members share the internal leadership of a CoP, and their legitimacy is based on their recognition as organizers, experts and thought leaders^{9,13};
- **Active or inner circle participants:** members who are recognised as practitioners and define the community. These members are very active within the community, though the regularity and intensity of their participation is not to the level of the core group⁴⁰. The inner circle group gives a mandate and coordination goals to the core group;
- **Occasional participants:** members who only participate when the topic is of special interest, or when they have something specific to contribute;
- **Peripheral or outer circle participants:** people who have a sustained connection to the community, but with less engagement and authority, either because they are still newcomers or because they do not have as much personal commitment to the practice. They may experience the community as a network⁴⁰;
- **Transactional participants:** outsiders who interact with the community occasionally without being members themselves, to receive or provide a service or to gain access to knowledge produced by the community, such as its publications or its tools⁴⁰.

It should be noted, however, that these are not fixed groups, but people will move in and out of these categories over the life of a community^{39,40}. The peripheral members can move to become inner circle members, and eventual core members, as their needs and ambitions change³⁹. Also, the core members can decide to scale down on their commitment to the CoP, moving to become peripheral and eventual exiting the CoPs, for example.

2.5 Benefits of CoPs

Organisational and innovation literature agree on the importance of CoPs in helping organisations face the challenges of the knowledge economy era. Box 3 presents some of the benefits of CoPs as outlined by Cambridge, Kaplan *et al.*¹⁹. The CoPs are important within a variety of contexts including business, government, academia, and social services. As pointed by Wenger³⁸, the main objective of CoPs is to expand the learning potential of these organisations. CoPs can be strategically used to facilitate not

only learning, but also collaboration and knowledge generation¹⁹. CoPs add value to their members and organisations by generating and circulating knowledge, enhancing productive and learning capabilities, and fostering innovation^{7,27}. One of the important functions of CoPs, according to von Hippel²⁷, is that they facilitate information sharing, making innovation information conveniently accessible. CoP members pool their expertise, share their experiences, test new ideas, improve past processes and procedures, and find solutions that result in increased capabilities and improved performance^{7,27,33}.

Box 3. Benefits of CoPs

1. They connect people who may never come into contact otherwise
2. They provide a shared context for people to communicate and share information
3. They enable dialogue between people who have an interest in solving the same or similar problems
4. They stimulate learning by serving as a vehicle for communication, mentoring, coaching, or self-reflection
5. They capture and diffuse existing knowledge
6. They introduce collaborative processes and encourage the free flow of ideas and information. They help people organise around purposeful actions
7. They generate new knowledge

Source: Cambridge, Kaplan *et al.*¹⁹

As explained in Sánchez-Cardona, Sánchez-Lugo *et al.*⁷, CoPs act as social structures that connect diverse expertise, experiences, and knowledge, encouraging an understanding of new perspectives (or old perspectives viewed from a different angle) and stimulating individual and collective learning. CoPs are thus an efficient and low cost route to promote innovation performance, and have been suggested as a key strategy to close the research-to-practice gap by modifying the direct, top-down relationship between those who produce knowledge and those who use it³³. An important role of CoPs is the distribution of not only explicit knowledge but also tacit or experiential know-how (i.e., knowledge generated in practice and is embedded in people)^{15,28,33}. The interactions and the inter-connectedness of the cooperating actors in CoPs promotes an interplay between tacit and explicit knowledge that enhances the exploitation and exploration of knowledge in organisations³⁴.

Members of CoP produce and exchange knowledge by means of specific activities such as learning by doing, learning by using and learning by interacting²⁸. A CoP thus offers both experienced and non-experienced practitioners an opportunity to learn from observing, asking questions, and actually participating alongside others with more or different levels of experience⁴¹. Learning is facilitated when practitioners organise their work in ways that allow all participants the opportunity to see, discuss, and engage in shared practices⁴¹. Since CoP members share a common practice, they also

share an understanding of this practice and use a common language that enables the sharing of experiential knowledge³³.

While the benefits of CoPs are many, they may not accrue when CoPs are dysfunctional. Typical dysfunctions of communities are knowledge monopolies, elitism, arrogance, jealousy or behaviour that directly leads against the interest of members⁴². Also, while a certain level of leadership and management control is required to enhance the potential of CoPs, it is important not to stifle social relationships at the heart of the network by the imposition of too strong a managerial imperative⁴³. The CoPs should therefore be designed in such a manner that these potential sources of dysfunctions are neutralised. The next section describes the operationalisation of the RIAT CoP in a manner that ensures that it benefits the members and outsiders (general community).

3 The RIAT community of practice (CoP)

3.1 Introducing the RIAT CoP

The RIAT CoP is a network of local, district and national actors who are passionate about promoting innovation in the rural and/or informal settings to stimulate LSED. Because of this shared passion and interest, these actors seek to collectively learn how to use the RIAT user-friendly information and decision tools, among other techniques, to produce reliable and contextualised innovation information that can assist in harnessing innovation for better welfare outcomes in the marginalised settings. The RIAT CoP will operate at three levels; the local, district and national levels. The lower level CoPs are important building blocks for both the district and national levels CoPs. The national level aspect of the CoP takes a broader national focus instead of the local focus of the lower level CoPs. Thus, the local RIAT consortiums are an important component of the RIAT CoP, and their role is to coordinate innovation activities at the specific districts, while the broader CoP offers the overall coordination at the national level. The success of the overall RIAT CoP is predicated upon ensuring that the local CoPs function properly.

3.2 Main objectives of the RIAT CoP

The RIAT CoP's aim is to foster a stronger STI orientation in the practice of LSED by promoting cooperation in idea creation, knowledge generation and learning, facilitating the generation of new knowledge and innovations that are suited for the rural municipalities. A key activity of this knowledge creating community is to share innovation information, and collectively learn how to assess and promote innovation potential using among others, the RIAT tools. The rationale of the assessment tools is to show the status quo in terms of innovation activities happening in the marginalised areas, and then after mapping the innovation activities and highlighting their current levels, identify what needs to be done to increase innovation levels.

The uniqueness of the RIAT CoP is that its interest is not just in uncovering novel innovations, but ensuring that the innovations uncovered are harnessed to improve the welfare of the habitants of the distressed municipalities. The emphasis on the problem solving functions of innovations, instead of just novelty. The RIAT CoP is not limited to one sector, as is the case with some agricultural innovation forums found in the rural areas. It seek to coordinate innovation-driven LSED across the different sectors, public and private enterprises, high tech and low tech firms, profit and non-profit organisations, goods and service industries, etc.

The RIAT CoP aims to close the gap between local research institutions (particularly universities) and the local communities. Bringing the research institutions closer to the communities by fostering stronger local innovation networks is expected to result in future research that will be informed by the local needs. Building on the local capabilities, the innovations developed by these research institutions would then uplift the innovation and development levels of these localities. The RIAT CoP puts researchers, innovators, LED practitioners, and other key actors in one platform so that they learn and share information together. In fact, the value of the CoP for all stakeholders is that it allows them to have direct contact with one another, giving them access to information that they may not find otherwise. In terms of the CoP stages (*see Box 2*), the RIAT CoP is at the maturity stage, a stage when the actors who are already interacting (especially at the local level) seek to operationalise their community so that they collectively develop and share a body of rural innovation knowledge.

3.4 The community of the RIAT CoP

At the local level, the CoP will build on the existing local RIAT consortiums, encouraging increased interactions among the local actors to build viable local innovation production systems. The membership of the local RIAT CoP should continue to be open to a wide spectrum of actors, which include local municipality officials (especially the LED and MM's offices), local universities (and with time, other local research institutions should become involved), government departments, political and community leaders, entrepreneurs, NGOs, community members, etc. What qualifies one to be a member of the RIAT CoP is their interest in rural innovation, as well as how rural innovation can be harnessed to stimulate LSED. Furthermore, one should be committed to collective learning and sharing of ideas that will increase innovation and economic performance in the distressed municipalities. Learning and sharing of innovations is not incidental, but the intention of the RIAT CoP.

Local universities, as knowledge producing agents, are tasked with the responsibility of leading the process of research and producing knowledge, as well as demonstrating how the RIAT sets of information tools can be used to inform decisions and policy interventions for local innovation. The universities should also continue to assist with the coordination of RIAT Consortium activities across specific local municipalities, forging linkages with relevant local or regional forums and exploring diffusion opportunities. The municipal offices should continue their innovation brokerage role, acting as the key linkage between the universities and communities. The local municipal offices are best placed to support integrated development and promoting local economic development as part of their efforts to enhance inclusive development and social inclusion. The interactions among local actors, especially universities and municipal officials, are considered crucial in the adoption of the tools to create local innovation knowledge economies for innovation-driven LSED.

Box 4 presents one example of a local consortium, the Bushbuckridge RIAT Consortium to highlight some salient features of these consortiums. As Box 4 implies, the local consortiums already operate as a local version of a CoP, where a community of local actors interact regularly to learn about how to increase the innovative potential of the local municipality. A key activity of the next phase should be to strengthen and streamline the relationships that have been forged among the different local actors in the participating local municipalities, and then introduce RIAT to other local municipalities not currently participating.

At the district level, the CoP should encourage networking among the different local consortiums in a particular district, improving the coordination of innovation related activities at the district level. In addition to the actors identified in the local level CoP, the district municipal officials should play a key

role in coordinating the activities of the RIAT. The district municipality will have to also coordinate the out-scaling of RIAT to the non-participating local municipalities. The district municipalities have already shown that they have the potential of championing this process. The presentation of RIAT related activities in district level forums, where non-participating municipalities also attend, has seen some of the non-participating municipalities indicating their interest.

Box 4. The Bushbuckridge RIAT Consortium

The Bushbuckridge (BBR) RIAT Consortium was established by the stakeholders who attended a PERL/SHE workshop that was held in BBR in April 2017. The consortium was formed to function as a local steering committee for innovation and RIAT in BBR, creating a platform for local actors to meet and discuss progress in RIAT customisation, adoption and institutionalisation, as well as how to promote innovation in the area. The aim is to ensure that local actors, especially the local municipality, prioritise initiatives that demonstrate innovation for support, or if no innovation already exist, there should be plans to implement innovations in those initiatives targeted for support. The consortium also coordinates efforts in collective customisation of the RIAT tools so that they can be used by many actors to produce information, as well as the sharing of innovation information.

A team of 10 people was chosen to manage the activities of the consortium. The members of this management structure were selected from a wide range of public and private actors that are part of the consortium. The members are as follows: Miyelani Ndaba (BBR LM), Norman Nkuna (BBR LM), Joseph Francis (UNIVEN), Ronald Mudimeli (UNIVEN), Selby Mashabane (FARMGRO), Caroline Manana (Women Development Bank), Lebone Ngomane (DARDLEA), Siphakamise Ngobhane (LIMA), Sizile Ndlovu (Bushbuckridge Tourism Organisation), Brian Kajengo (Bvunza Mutupo), Bhekiwe (HSRC). The members of the consortium management structure meet at least once in three months to coordinate the RIAT activities in BBR. To influence LED practice, the consortium participates in the LED forum, where issues of local economic development are discussed. The role of the consortium was clarified in the LED forum, and they are expected to continue to contribute during the forum discussions.

The national level RIAT CoP's role should include identifying common areas of collaboration and lessons to be shared among different district level CoPs. It should also coordinate the spread of RIAT to new districts that are not yet participating in RIAT. The inclusion of additional districts should also proceed in a sequential fashion, with the districts added in batches. Including all the non-participating districts at once is less likely to succeed, as setting up and coordinating the CoP activities in these many districts will be too cumbersome. The national level CoP should set up a criteria and prioritise the introduction of districts accordingly.

The RIAT CoP's should have three types of members: the core, the inner circle and the peripheral members. The difference between these groups is essentially in terms of coordination responsibilities and participation levels, not in terms of importance. The inner circle group will operate as a steering committee that monitors progress and provide overall leadership and coordination functions to the CoP. The members of the inner circle group should include the DST (funded the development of the

RIAT tools and is mandated to promote and coordinate innovation development), the HSRC (developed the tools and should continue to monitor and assist in their correct application), the local universities (knowledge producers located in these rural districts and coordinators of local consortiums), district and local municipal officials, some provincial actors, the innovators (key players in the innovation value chain), as well as COGTA and SALGA (coordinate municipal activities)^a. While this leadership structure should remain informal and its governance flexible, efforts should be made to have at least three meetings per year involving the majority of these inner circle actors.

The core group, a subgroup of the inner circle, will form an administrative and management structure of say about 12-15 representatives from the inner circle members. Ideally, these should be representatives each of the core group, including chairpersons of the local and district RIAT CoPs. The core group's main role will be to manage the CoP as per the agreed upon coordination goals. This management structure should also be responsible for organising national events as well as coordinate the sharing of knowledge across the different CoP members. These facilitators should keep the CoP running smoothly, keeping people updated of what other actors are doing and by developing opportunities for individuals to share their knowledge. Their responsibility is to give energy, to keep the CoPs alive and to focus on key issues. This should be accomplished without disrupting the informality, collegiality, self-managing, and informal nature of the CoP, suggesting a need for a balancing act.

A RIAT CoP coordinator or champion or cultivator, should be selected from the core group. This is an individual with the technical and interpersonal competence to provide leadership to the CoP, and should be able to dedicate a relatively huge portion of their time (up to 50%) to keep the CoP activities going. As suggested by these authors^{9,31,44}, this ideally should be someone with connections, and with access to decision makers. The peripheral group will involve the other players, such as other government departments, community leaders, etc. The peripheral members participate and contribute to all the activities of the CoP, even though they are not very involved in the coordination of the CoP.

^a Most of these stakeholders participate in the existing RIAT steering committee, and would only have to shift focus from steering the RIAT project to steering the RIAT CoP. While the project phase of RIAT is set to end by mid-2018, the CoP should continue operating for several years until the goal of promoting an innovation mind-set in LSED practice is achieved.

3.5 Activities of the RIAT CoP

Knowledge diffusion will occur through regular workshops, seminars or informal discussions, where COP members share their innovation knowledge and experiences. These meetings should be mostly face-to-face, as the rural districts generally have inadequate access to information and technology (IT) infrastructure that would facilitate online meetings. When possible, the members should also engage in online or telephonic or video conferencing conversations to complement the face-to-face interactions. The interactions at the local level should be more frequent, as is currently happening in the local consortiums, with meetings happening at least once every month. The consortium leaders should continue organising these meetings.

At the district level, the members should meet at least once in three months, while meetings at the national level should be done at least once in six months. The leadership structure of the CoPs should play a role in the securing support (funding or otherwise) to conduct such meetings. The national events could also be used to honour or reward the outstanding innovators and members of the CoPs. Such recognition will go a long way in incentivising members to put an effort into the voluntary activities of the RIAT CoP. These events can also potential be done at the local level. The LED office in King Sebata Dalindyebo is already piloting organising such events as part of RIAT.

The production of knowledge products should be mostly the responsibility of the universities as well as the HSRC, as these are the institutions with the capacity and mandate to produce knowledge for societal benefits. With time, the list of knowledge producers should increase to include other research players at the local levels, such as private and NGO based researchers. However, research institutions have no monopoly over the production of new knowledge and inventions for societal benefits, as other local actors can be originators of innovative thinking. In fact, the CoP approach grew as an alternative approach to the traditional linear model that takes away innovation agency from other actors with only the research and development professionals producing new ways of doing things. While appreciating the innovation agency of the local actors in the marginalised contexts, the local universities should assist in documenting, distilling, further researching and packaging some of the innovative ideas from these actors into formats that can be shared and understood by other actors.

This allows the knowledge producers an opportunity to produce the innovations *with* the local actors, not just *for* them.

The HSRC webpage link dedicated to RIAT can be used to submit and share virtual publications, in the short term. This link already exists, and would need to be revitalised and updated information uploaded. Different CoP members should be encouraged to freely access and browse the site as a convenient way to find such information. The long term goal, however, should be to develop a standalone website dedicated to RIAT to act as an information repository. Further to the sharing of knowledge products (such as briefing notes, policy briefs, etc.), printed versions should also be produced and shared within the community. The university experts would be encouraged not only to conduct relevant research, but also to always convert their academic/ journal papers into more accessible forms such as policy briefs or briefing notes. These knowledge products can then be deposited in municipal offices and other public places to be accessible to the wider communities.

To raise funds for innovation related research, the universities should be encouraged to develop joint proposals^b and submit to funding institutions such as the NRF. The other interested actors can also be included in these joint proposals, which should enhance the proposals. During the initial stages, it may be beneficial for the DST to act as the overall sponsor for the CoP activities that result in the production and sharing of information. The process of developing joint proposals will obviously take time, and there are no guarantees that the funding will be secured in the first, second or third attempts. The participating university experts should also be encouraged to co-supervise postgraduate students who will be interested in conducting innovation research in rural areas. Some of the municipal officials should also be encouraged to pursue postgraduate studies with a research focus on innovation-related topics. The interest among municipal and other government officials to do this is available. These students then become members of the CoP, ensuring growth and continuity. With time, the stakeholder base should also be expanded to include institutions such as TVET/ FETs, Living Labs and local schools as potential knowledge producers.

The effectiveness and relevance of the RIAT COP should be evaluated by seeking regular feedback from members and evaluating outcomes periodically (say, every two or three years). Such evaluation

^b There is currently a draft joint proposal involving these five universities, which is being finalised to be submitted to potential funders.

will also facilitate identification of emerging issues. Evaluation will be timed to feed into planning cycles to ensure relevance to members' needs and university priorities.

4 Summary

This concept note's aim has been to give a brief outline of how the RIAT CoP should be operationalised. Before discussing the specifics of the proposed RIAT CoP, the note has provided an overview of some of the conceptual and practical issues pertaining to CoPs, such as its definition, elements, evolutionary stages as well as benefits. It has highlighted the increase in the interest among researchers and practitioners in CoPs as a viable mechanism to support and facilitate learning, innovation and development across disciplines and sectors. These voluntary, informal and organic entities have potential to stimulate individual and collective knowledge sharing and learning, leading to improved innovation and economic & social outcomes. The RIAT CoP's *domain* is rural innovation for LSED, its *community* are all the local, district and national actors with an interest in promoting innovation-oriented LSED in the rural contexts, and its *practice*, among others, are all the RIAT frameworks, tools and language (including RIAT's many abbreviations) that are useful in assessing and promoting innovation in rural areas.

It can be argued that the success of the RIAT intervention in infusing an innovation mind-set in the rural and/ or informal settings is to a large extent dependent upon the success of the RIAT CoP. The success of the RIAT CoP, in turn, is dependent upon many factors, such as the members' incentives, interest and participation levels of the actors, availability of effective leadership & adequate coordination, and support (finance or otherwise) from external and internal actors. It is clear that the DST, as a department with a mandate to promote innovation, will have to play a more active and involved (direct and indirectly) role (either as the CoP's cultivator or sponsor, or both) during the initial stages of this CoP for it to develop roots and make a difference in the lives of many.

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