GLOBAL CHANGE SOCIAL SCIENCES RESEARCH PROGRAMME (GCSSRP)

KNOWLEDGE ADVANCEMENT & SUPPORT (KAS)
Framework Document and Funding Guide

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SECTION 1 – GLOBAL CHANGE SOCIAL SCIENCES RESEARCH PROGRAMME: DESCRIPTION AND CONTEXT

1. Rationale

Humanity is facing a time of escalating and unprecedented challenges associated with rapid global change. Global warming, climate change, unsustainable patterns of production, consumption and distribution and the over-exploitation of natural resources are threatening humanity's survival on the planet. These unsustainable patterns exacerbate poverty and inequality, and especially impact on the third of the world's people who are directly dependent on natural resources for their wellbeing (Unmüßig et al., 2012; Falzon et al., 2018).

Inequality and unsustainability are not 'natural' processes. They are produced by social histories and systems, cultures, economic models, and forms of reasoning. These processes are fostering growth that is exacerbating environmental degradation and deepening social inequalities. Global change challenges and their resolution are intimately intertwined with people, their histories, actions, values, interactions, relations and cultures (Barry, 2007).

In South Africa, the consequences of persistent inequality and unsustainable models of development are visible. These challenges call for fundamental *transformations* in the ways in which society interacts with their natural environment, so as to achieve a sustainable and socially just future for all South Africans.

While there are many diverging views on what constitutes **transformation**, a general consensus is that it goes beyond marginal or incremental change, is non-linear, and challenges the status quo of existing unsustainable development structures (O'Brien 2012; Feola 2015). Transformation can also be an opportunity to reconfigure the trajectory of development (Pelling 2011). This includes questioning dominant economic and development discourses, the reconfiguration of knowledge and value systems, and the reorganisation of institutions and frameworks.

To address the complexity of the "wicked" problems of the Anthropocene (Steffen et al., 2018) and global change concerns as well as their manifestations in diverse places and socio-cultural contexts, a strong engagement with social sciences and the humanities is required. In this concept paper introducing the Global Change Social Science Research Programme (GCSSRP Version 2), we thus make a case for a GCSSRP that forefronts *social sciences and humanities* approaches, methods and methodologies, including the creative arts and humanities.

The GCCSSRP seeks to address societal transformations and sustainability challenges facing South Africa. In doing so, it responds to the South African National Development Plan (NPC, 2012), the African Union 2063 Agenda (AU, 2014), and the UN 2030 Agenda (UN, 2014) which all underscore the urgency for an approach of **sustainability with, in, and for societal Transformations (SWIFT**). These development plans, together with the Department of Science and Innovation's (DSI, 2019) White Paper on Science and Technology innovation, all emphasise the need for *actions* that will enable society to cope better with global challenges to move towards a more liveable, just, and ecologically sustainable future. Since no one perspective or approach can work on its own and both academic and non-academic actors need to co-produce transformative change, multidisciplinary, interdisciplinary, and transdisciplinary approaches are required. In this context, the SWIFT approach proposed here aims to *catalyse transformative research led by the social sciences and humanities*, while also working across disciplines and knowledge domains, enabling social innovation and progress towards social-ecological justice, transformed political ecologies, and well-being for society and their natural environment.

2. Strategic context and background

The SWIFT approach acknowledges that all forms of knowledge, and knowledge generation (including natural, social sciences and humanities), should be respected and included in the search for sustainable and equitable pathways into the future. The social science and humanities specifically can create links between more traditional global change research fields and social justice and sustainability praxis.

In addition to codified generalized knowledge, tacit knowledge and knowledge that is contextual and embedded (e.g. political and cultural) is needed.

The SWIFT approach in the GCSSRP will therefore promote an engaged process involving "***working with and for society***" (DSI, 2019), and will pay attention to the links between research and national and international goals such as the Sustainable Development Goals (SDGs) (UN, 2014) and the thematic areas of the National Development Plan (NDP) (NPC, 2012). Importantly, the SWIFT approach should contribute towards building an inclusive participatory democracy and development trajectory in South Africa.

Recent assessments of South Africa's progress towards meeting the SDGs for example shows that "more than one out of every five adults (25.2%) living below the food poverty line in 2015, a third (33.8%) were living below the lower-bound poverty line and approximately half (40%) were living below the upper-bound poverty line" (Dept. Stats SA, 2019). Challenges towards achieving the SDGs show that joined up approaches and research are needed to improve ways of dealing with complex problems, and to build capacity to implement inclusive approaches to sustainable development (amongst others) (StatsSA, 2019). More effective training, monitoring, evaluation and co-learning approaches are required, as are more innovative orientations to catalysing local sustainable development action and transformative agency.

The SWIFT approach aims to critically interrogate the status quo of development trajectories and build on successes and innovation trends that have potential for developmental outcomes that are just and sustainable. It seeks to promote socially situated and engaged research that enables better understanding of the complex indicators of sustainability and sustainable development in the country, and that helps to evaluate and embed the SDGs in local contexts.

SWIFT also aims to support a growing trend in strengthening research in the social sciences and humanities in South Africa. Mouton *et al*. (2019) observed that there has been steady growth in social science research in South Africa, which could be expanded by a GCSSRP focus. All South Africa's universities are engaged with global change related research in a diversity of ways, but contributions of social sciences and humanities to this research area are still limited.

Mouton *et a*l., (2019) also show that while local scientists are increasingly collaborating with scientists outside of the country, there has been a notable decline in the level of collaborations at the domestic level. It is hoped that the development of the SWIFT approach, underpinned by social sciences concepts, practices and norms, will facilitate co-operation among local social and natural scientists involved in Global Change Research (GCR). It is further anticipated that such partnerships will complement, draw on and extend international collaborations, and strengthen GCSSRP and GCR collaborative efforts on the African continent.

In considering the implications of a more relational, transformative, and innovation centred scientific project in the GGSSRP, there is need to link structure to agency, biology to culture, theory to practice, meaning to law, and fact to value in more complex relational terms. *Relational and emergent* interconnections are therefore an increasingly important focus in GCSSR, and include:

1) The **human ecological** cf. human biology, life support systems and the materiality of being (e.g. concerns such as the physiology and biology of human being and human health, how toxins impact on physical health etc.) as *related to, and influenced by,*
2) The **social-material** cf. how physical, biological and ecological factors shape and influence social arrangements and systems and *vice versa* (e.g. concerns such as production, consumption, care and settlement of groups or collectives of living human beings in their environment including rural and urban contexts, and human well-being, living with pollution etc.), as *related to, and influenced by,*
3) The **social-institutional** cf. influence of institutional forms on social formations and systems and *vice versa* (e.g. social / community structures, economic structures and systems, political forms, governance processes, developmental and innovation structures and systems, familial set ups, educational concerns, and linguistic forms and structures etc.) as *related to, and influenced by,*
4) The **social-cultural** cf. forms and aspects of human meaning making and human social practices which includes the scientific, artistic/cultural, ethics, discourses, and modes of expression, learning and interaction, as *related to, and influencing of the above.*

This iterative relationality shapes Global Change Social Science Research, and the emergence of more transdisciplinary approaches to transformation in GCR. It also recognizes the limitations of isolating areas of research within disciplinary boundaries (e.g. physiology, psychology, sociology, theology, education, politics, economics, post-colonial studies etc.), with each independently offering its own in-depth perspective, but ultimately being a limited perspective on human social life and its interconnectedness with the environment, biology and life support systems in a global change context.

Extending the social sciences beyond traditional disciplinary boundaries within a more relational approach, necessitates, at the very least, a **multi-disciplinary** approach. However, for innovation to occur via a research programme that foregrounds the relations between humans and their environments, there is also need for **trans-disciplinary** approaches, which require **inter-disciplinary** synthesis (Bhaskar, 2010).

Transdisciplinarity (TD) is to be differentiated from 'systems theory' in that it does not principally study the abstract organisation of phenomenon. TD brings together different approaches and societal actors. TD also requires deeper philosophical and ethical engagement with contemporary life producing potentially new epistemologies, concepts, values, activity and praxis for transforming social life under conditions of global change (Osborne, 2015).

TD is therefore not a technical 'solution seeking' practice. By thinking with care and 'care-fully' (Stiegler, 2018), a relational, transdisciplinary approach to research can potentially assist us to not only embrace and 'socialise' all disciplines in an inter-disciplinary manner, but to also identify complexities and contexts beyond the reach of discipline-specific abilities, connecting fact to value, reflection to action, theory to practice.

We need the collective imperatives of science, culture, politics, history, creative arts, humanities and economics to promote an integration of approaches to resolve societal concerns and pro-actively engage with sustainability and the common good. TD is thus deeply embedded in reconstituting a politics of knowledge in service of approaches that can rebuild a society disrupted by structural inequality and histories of marginalisation and exclusion (Gordon, 2013; du Plessis et al., 2013).

3. Some emerging areas of applied Global Change Social Sciences

The Science, Technology and Innovation (STI) White Paper (DSI, 2019) promotes innovation to serve as driver for the country's economy, industry and sustainability. Here innovation is considered to embody some of the best qualities of humanity, such as curiosity, creativity, and aspirational thinking. The creative processes associated with relational, TD approaches to research, when imbued critically with ethical praxis orientated towards social justice, inclusivity and the common good can contribute to this intention in the South African context.

The SWIFT approach to GCSSRP also need to consider the immanent transformations of society emerging from rapid technology development (popularly referred to as 'fourth industrial revolution' technologies). Horizontally networked technical systems and shifts from exo-technologies to endo-technologies (biotechnologies, nanotechnologies and information technologies), including aspects of Artificial Intelligence, are exposing the complexity and vulnerability of life and networks, with crucial 'humanising' elements of reflection, values and ethics either absent or inadequate (Nowotny, 2006; Etzioni & Etzioni, 2017).

The two concepts of *'just transitions'* and *'transformation'* also guide applied GCSSRP research, and help to articulate actions that are required. They point to the ethics of ensuring sustainability particularly when dealing with global environmental change (Schmidt et al., 2016).

Transitions can include energy system pathways, economic assessments (including cost-benefit assessments) and rate and kinds of emissions (e.g. Thomson et al., 2011; Swilling, 2019). The transitions research of Geels (2011), for example, examines some of the deep structural changes that may be required in a range of systems (e.g. transport, energy and agriculture), and also articulates the need for social system changes (Loorbach, 2007; Leichenko and O'Brien, 2019). In a South African context, transitions research is being articulated in terms of the social justice implications associated with energy, transport, agricultural, banking etc. sector transitions (Swilling and Anneke, 2012; Swilling, 2019; Mohammed, 2019), introducing the notion of *'just transitions'*. The focus on *'just transitions'* asks critical questions on the directionality of sustainability transitions, especially for inclusive sustainable development, rather than technological advantage only.

A growing body of research is focusing on '*transformations*' in society, cultures, politics and human behavior for transitions and transformations towards global sustainability (O'Brien and Sygna, 2013). This research seeks to outline potential pathways for transformations, and also emphasises agency for change (individual and collective). In the South African context, it can be extended to consider cultural features of transformations as majority cultures and languages have been subjugated and excluded from transformation deliberations for too long (Landau, 2010; Odora-Hoppers, 2002). This raises issues such as the politics of knowledge and multi-dimensional values and meanings in transformations (Santos, 2014). Psychology can also be employed to understand climate change responses (Kahan, 2012).

Research into understanding the role of social learning and human agency in transformation processes (including understanding the role that values, worldviews, beliefs, and ecological citizenship plays in such processes) is also progressing both globally and locally (e.g. review in O'Brien and Wolf, 2010; Hedlund-de Witt, 2012; Naess and Price, 2016; Price & Lotz-Sisitka, 2016; Lotz-Sisitka *et al*., 2017; Leichenko and O'Brien, 2019), and needs to be extended for wider inclusion in global change transformations.

Given the aforementioned background, the GCSSRP, with its commitment to SWIFT, seeks to consolidate the gains made in the implementation of GCSSRP V1. Its focus on intersectionality, inclusion and exclusion,

diverse knowledges and experiences, history, social justice, human learning, behavior and agency for change, and issues such as political ecology, race, class and gender all contribute to deepening the social dynamics of GCR.

4. Emerging Themes for GCSSRP

Against the wider background sketched above, five related thematic areas have emerged from engagements with academics, policy makers and practitioners – see Table 1a. These include research into holistic transformations, economic and technological transformations, transformations of how and what we value and learn, transformations in how actors and various knowledges are included and finally, the institutional architectures required for such a research programme and how these need to be transformed (governance and government):

1) **Global Change systemic perspectives, social and sustainability transformations*:*** This thematic area focuses in on the drivers, processes and outcomes that influence and are required for more holistic, or systemic shifts at landscape and wider system level. These are often historically constituted and can result in 'lock-in' social systemic processes, technological and institutional forms that are unjust and / or unsustainable and that require shifting. There is need for knowledge production to highlight future systemically oriented pathways for social-ecological system change and the enabling of more sustainable processes and resilient ecological systems. In such contexts radical changes in social systems are sometimes required, going beyond conventional social-ecological systemic frameworks to address political ecology, political economy, intersectionality and socio-materiality. Adaptive and transformative orientations to such changes have different implications that require elicitation.

2) ***Transformations*** **in development, economics and technologies and practices in global change / sustainability contexts:** This thematic area focuses in on the way in which development (including the Sustainable Development Goals, SDGs, the NDP and local development trajectories), and economic and technological systems are changing and constraining and/or enabling shifts towards sustainability (or not). For example, the tendency towards adopting fourth industrial revolution technologies without giving full attention to their implications in the long and short term for work, and/or societal change towards sustainability. This thematic area calls for research that provides data, modelling, and policy for economic and technological changes and also re-imagining of these trajectories around sustainability in a developing country environment where inequalities, poverty and unemployment continue to plague society. Re-imagining work in ways that embrace principles of inclusive sustainable development, green jobs, and societal well-being are needed. Similarly research into associated technological and economic innovations that produce just, transformative pathways for transitioning to sustainability is also required. Associated with these trajectories are shifts in cultures and practices at community and organizational levels that embrace new modalities and possibilities reflecting green work, circular economy, reclaiming the commons, care and well-being principles (i.e. common good principles) for sustainable societies to emerge.

3) ***Global Change and transformative*** **social learning, multi-dimensional meanings and values**: This thematic area focuses on societal interactions and learning, narratives, storytelling and indigenous knowledge i.e. platforms for creative and transformative ecologies of knowledge. For sustainability to emerge, there is need to engage more critically with the creativity and politics of knowledge, and to create trajectories for social learning that are more inclusive of multi-dimensional meanings, ethics, diverse cultural fabrics and values. Giving attention to inter-institutional as well as intra-active processes are needed to develop models of transformative social learning and to influence innovations in local learning, education, training, professional learning and skills development systems at all levels within a lifelong learning framework. Diverse learning approaches, cultures, narratives, modalities and settings all need to be in focus for this type of transformation in the education, learning and skills system. Organisational learning in South Africa remains an under-researched area, especially in connecting

organizational learning to policy responsiveness and citizen engagement. More in-depth research is also needed into boundary-crossing methodologies that can mobilise collective social learning, stewardship, and creative practices in formal as well as informal learning environments.

4) **Global Change, transformative social movements for change and social system change**: This thematic area addresses the importance of research to expand behavioural change, citizen action and engagement, and agency for social change towards greater well-being and sustainability. It also foregrounds the need for longitudinal research to conceptualise and monitor longer term social systemic changes towards sustainability. Micro- and macro-level research focusing also on how micro and macro social processes are linked, and how they are shaped by gender, race, class and social differentiation are needed. There is especially need for further insight into relations between different actors and levels of change in the social system and how these are / are not responding to global change challenges, well-being and sustainability. This thematic area also focuses attention on power relations and how these circulate, how power relations function to hold inequalities, unsustainability, and vulnerabilities in place, and how power relations can be transformed in order to enable sustainability and well-being for all in the short term, as well as the longer term.

5) ***Transforming*** **institutions for responding to global change challenges and opportunities – politics, governance and institutions.** This thematic area focuses attention on social innovations, the politics, economics, governance and institutional transformations necessary to improve governance and equitable access to and distribution and use of South Africa's natural resources, landscapes and social-ecological systems for sustainability and inclusive sustainable development. It includes a focus on how globalization is shaping governance responses to global change challenges (or not), and how legal and political practices, policies and institutions need to transform in order to more adequately respond to global change challenges, including governance of the sustainable development goals. Attention to governance trajectories such as sustainable development, decolonization and just transitions (and the juxtapositions and intersections of these), and how these are being articulated (or not) in guiding policy and practice development from a multi-levelled perspective is also required. The thematic area also draws attention to the need for research into human rights and social justice dimensions of governance and sustainability (e.g. governance of land, water; gender relations etc.), and seeks research into equitable access to and practices in land, water and other natural resources, taking into account both customary and formal arrangements. It foregrounds political economy and political ecology and the connections between them.

Table 1a: Global Change Social Science knowledge areas and research themes in the GCSSRP

A	B	C	D	E
Global Change system transformations – involving interrelated social ecological relational dimensions	**Transformations in development, economics, technologies and practices in global change context**	**Global Change & transformative social learning, multi- dimensional meanings and values**	**Global Change & transformative social movements and social system change**	**Transforming institutions for addressing global change challenges – politics, governance and institutional change**
1. Drivers, processes, and outcomes for wider scale systemic shifts. 2. Social and ecological resilience, human and social adaptive and transformation change capacities and responses to wider global changes / systemic changes. 3. Histories, legacies, pathways and the future of systemic change.	1. Innovation and technology supporting greater well-being and sustainability 2. Re-imagining development (including the SDGs), jobs, work and economies for well-being and sustainability 3. Re-imagining cultures, behaviours and practices for well-being and sustainability 4. Data development, modelling and policy for economic transformations towards sustainability.	1. Politics of knowledge and learning, engaging multi-dimensional meanings, ethics and values 2. Transformation in education, training, life-long learning and professional learning systems, settings and modalities. 3. Organisational learning and social innovation systems and institutional changes. 4. Collective transformative and /or transgressive social learning methodologies, processes, modalities and outcomes, and creative practices.	1. Behavioural change, citizen engagement, action and agency for change. 2. Longitudinal research to monitor long-term social system changes – learning from the past to shape future engagement. 3. Micro-ecological and micro-economical behavioural and social change, and incl. emergent relations between these levels of change 4. Complex power relations to address inequality and vulnerability and enable well-being and sustainability.	1. Globalisation and impact of governance on environmental change. 2. Legal and institutional practices (e.g. decolonization; just transitions). 3. Equitable access to social, economic and ecological resources (e.g. role of land reform; ecological infrastructure etc.). 4. Human rights, social and environmental justice and accountability (of key actors). 5. Politics and governance of natural systems and resources for transitions to sustainability – political economy & political ecology.

All thematic areas outlined above have policy and practice implications for sustainable development of South African society. There is potential to develop synergies across the diversity of approaches, especially around the way in which the diversity of perspectives provide over-arching insight into global change and transformations towards sustainability in the context of complex societies in transition.

Given the need for a more engaged research focus and the need to move towards a more relationally constituted, complex systems approach, a strong focus on ways of engagement (e.g. modes of science and society engagement) and shared principles of engagement going forward have been identified for the SWIFT approach in the GCSSRP (see Table 1b).

Table 1b: Cross sectional dimensions – Systems, actors, methods and approaches

Systems Change and Transformation (with emphasis on the social in systems) Multi-levelled system changes; Complex systems; Complicated & simple systems; Activity and landscape-level systems; ***Moving from activity, landscapes, institutional, and sector-based systems to wider societal and social-ecological system changes and transformations (with due relational engagement and without conflations).***
Agents for change Local and indigenous change agents; Government, business, civic and civil society as change agents; Youth change agents and the youth dividend; Intersectionality: race, class, gender and identities Intersectionality: multi-actor groups ***Developing adequate theories of agency and change in a complex societal and social-ecological system change environment.***
Methods and approaches for transformations and systemic change Modelling and integrated approaches (including economic modelling (e.g. GEM and NEM); Diversity of social research approaches (e.g. co-engaged research, narratives, art-based creative practice and discourses; network mapping, mechanisms analysis, monitoring, measuring, expansive learning research etc.); Data development and data curation; Diversity of representational modalities ***Foregrounding methodological innovation that allows for boundary crossing and inter- and transdisciplinary approaches.***

5. Aim and Objectives

5.1 General Aim

The aim of the Global Change Social Science Research Plan is to provide a framework for research that pursues a transformative approach to global change responses focusing on the emergence of ***sustainability with, in and for societal transformations (SWIFT)***.

With this in mind, the GCCSRP aims to pro-actively engage the social sciences, arts and humanities in Global Change research in ways that complement and extend Earth System Science and Socio-Technical transitions research in the sphere of Global Change Science in South Africa. The intention is to strengthen South Africa's knowledge contribution in the Global Change Social Sciences. Through this programme the aim is also to advance inclusive and just transitions and transformations towards sustainable development and social justice in South Africa, in Africa, and more widely. A key approach is producing co-engaged knowledge that enhances capacity for implementation of the SDGs and the National Development Plan.

5.2 Specific Objectives of the GCSSRP

To strengthen a systemic approach to global change social science research in South Africa that is led by the social sciences, arts and humanities.

To provide a coherent and identifiable base for research in the Global Change Social Sciences, that addresses research in these key areas:

- Global change system, social and sustainability transformations;
- Transformations in development, economics, technologies and practices for advancing sustainability and social justice in a global change context;
- Global change and transformative social learning, multi-dimensional meanings and values;
- Global change, transformative social movements and social system change;
- Transforming institutions for responding to global change challenges and opportunities – politics, governance and institutions.
- Co-design and use of Transdisciplinarity approaches, beyond merely the academic in developing potential solutions to Global Change challenges.

To extend institutional capabilities and human capacity for research in the global change social sciences.

To offer a monitoring and evaluation framework that can support co-learning amongst researchers involved in the GCSSRP.

5.3 Science/research objectives

To generate new knowledge and understanding about global change transformations with, in and for society. This will include knowledge of holistic transformations, economic and technological transformations, transformations of how and what we value and learn, global change social movements and social change, and the institutional architectures and governance transformations required for addressing global change challenges and advancing sustainability and social justice within a rapidly changing global and national environment.

All knowledge areas and themes outlined below have policy and practice implications for inclusive sustainable development of South African society in ways that respond to global change and local challenges such as water security, climate change, clean energy, sustainable land, biodiversity, ecological infrastructure and ocean governance, sustainable human settlements and food systems, and green economy emergence (amongst others). There is potential to develop synergies across the diversity of knowledge areas, especially around the way in which the diversity of perspectives provide over-arching insight into global change and transformations towards sustainability in the context of complex societies in transition.

Specific knowledge areas and research themes include:

KNOWLEDGE AREA 1: Global Change systemic perspectives, social and sustainability transformations

This knowledge area focuses in on systemic shifts at landscape and wider system level. These are often historically constituted and can result in 'lock-in' social systemic processes, technological and institutional forms that are unjust and / or unsustainable and that require shifting. There is need for knowledge production to highlight future systemically oriented pathways for social-ecological system change and the enabling of more sustainable processes and resilient ecological systems. In such contexts enhanced systems understanding that is shaped by socio-political processes is required. Moreover, enhanced understanding of possible radical changes in social systems that go beyond conventional social-ecological systemic frameworks to address political ecology, political economy, inter-sectionality and socio-materiality, may also be needed. Adaptive and transformative orientations to such changes have different implications that require elicitation.

Research themes:

1. Drivers, processes, and outcomes for wider-scale systemic shifts in response to global change challenges
2. Social and ecological resilience, human and social adaptive and transformation change capacities and responses to wider global changes / systemic changes.
3. Histories, legacies, and pathways to sustainability, including the future of systemic change and transformations to sustainability in response to global change challenges.

KNOWLEDGE AREA 2: Transformations in development, economics and technologies and practices in global change / sustainability contexts

This knowledge area focuses in on the way in which development (including the Sustainable Development Goals, SDGs, the NDP and local development trajectories), and economic and technological systems are changing, constraining and/or enabling shifts towards sustainability (or not). For example, the tendency towards adopting fourth industrial revolution technologies without giving full attention to their implications in the long and short term for societal change towards sustainability (e.g. work). This thematic area calls for research that provides data, modelling, and policy for economic and technological changes and also re-imagining of these trajectories around sustainability in a developing country environment where inequalities, poverty and unemployment continue to plague society. The research theme seeks out knowledge of shifts in cultures and practices at community and organizational levels that embrace new modalities and possibilities reflecting green work, circular economy, reclaiming the commons, care and well-being principles (i.e. common good principles) for sustainable societies to emerge.

Research themes:

1. Innovation and technology supporting greater well-being and sustainability
2. Re-imagining development (including the SDGs), greening of jobs, work, skills and economies for well-being and sustainability
3. Re-imagining cultures, behaviours and practices for well-being and sustainability that respond to global change challenges
4. Data development, modelling and policy for economic transformations towards sustainability.

KNOWLEDGE AREA 3: Global Change and transformative social learning, multi-dimensional meanings and values

This knowledge area focuses in on societal interactions and learning, narratives, story-telling and indigenous knowledges in areas related to global change such as green economies, water security, energy, climate change adaptation, biodiversity management, and sustainable human settlements (amongst others). For sustainability to emerge, there is need to engage more critically with the creativity and politics of knowledge, and to create trajectories for global change social learning and sustainable development that are more inclusive of multi-dimensional meanings, ethics, diverse cultural fabrics and values.

Research themes:

1. Politics of knowledge and learning, engaging multi-dimensional meanings, ethics and values on key global change challenges (e.g. water security, energy, food system sustainability, climate change resilience etc.).
2. Transformation in education, training, life-long learning and professional learning systems, settings and modalities towards sustainability.
3. Organisational learning, social innovation systems and institutional changes for sustainability and global change.
4. Collective transformative and /or transgressive social learning methodologies, processes, modalities and outcomes, and creative practices that advance sustainability and social justice in response to global change challenges.

KNOWLEDGE AREA 4: Global Change, transformative social movements for change and social system change

This knowledge area invites research to expand behavioural change, citizen action and engagement, climate and environmental justice, and agency for social change towards greater well-being and sustainability. It also foregrounds the need for longitudinal research to conceptualise and monitor longer term social systemic changes towards sustainability. Micro-and macro- level research, and research on the links between micro-and macro social processes in transformations to sustainability, and how they are shaped by gender, race, class and social differentiation is also needed. This knowledge area also focuses attention on power relations and how these circulate, how power relations function to hold inequalities, unsustainability, and vulnerabilities in place, and how power relations can be transformed in order to enable inclusive sustainable development and well-being for all in short and longer term.

Research Themes:

1. Behavioural change, citizen engagement, action and agency for change towards sustainability linked to key global change challenges.
2. Longitudinal research to monitor long-term social system changes towards sustainability – learning from the past to shape future engagement.
3. Micro-ecological and micro-economical behavioural and social change towards sustainability, and incl. emergent relations between these levels of change

4. Complex power relations to address inequality and vulnerability and enable well-being and sustainability.

KNOWLEDGE AREA 5: Transforming institutions for responding to global change challenges and opportunities – politics, governance and institutions.

This knowledge area focuses attention on social innovations, the politics, economics, governance and the institutional transformations necessary to improve governance and equitable access to and distribution and use of South Africa's natural resources, landscapes and social-ecological systems for inclusive sustainable development. It includes a focus on how globalization is shaping governance responses to global change challenges (or not), and how legal and political practices, policies and institutions need to transform in order to more adequately respond to global change challenges, including governance of the sustainable development goals. Human rights and social justice dimensions of governance and sustainability (e.g. governance of land, water; energy, sustainable food systems, waste management, and ocean governance etc.), are also in focus, taking into account both customary and formal arrangements. The knowledge area foregrounds political economy and political ecology and the connections between them.

Research themes:

1. Globalisation and impact of governance on environmental change.
2. Legal and institutional practices relevant to transformations to sustainability (e.g. decolonization; just transitions).
3. Equitable access to social, economic and ecological resources (e.g. role of land reform; ecological infrastructure etc.).
4. Human rights, social and environmental justice and accountability (of key actors).
5. Politics and governance of natural systems and resources for transitions to sustainability – political economy and political ecology.

Modes of engagement

Given the need for a more engaged research focus and the need to move towards a more relationally constituted, complex systems approach, a strong focus on ways of engagement (e.g. modes of science and society engagement) involving co-design of shared principles of engagement are necessary for global change social research with, in and for society. Transdisciplinary science and praxis is encouraged, as are systemic approaches, and approaches that are inclusive and agency-centred.

These approaches require relational engagement, development of adequate theories of agency, change and transformation in complex social-ecological system environments. They also require theory development and use of a range of suitable research methods that move beyond positivism in the social sciences and humanities. Such methods can include *inter-alia* hermeneutics and narrative research, mixed methods, modelling, social learning and creative practices, amongst others. Methodological innovation is encouraged that supports boundary crossing and inter-and transdisciplinarity.

The GCSSRP also seeks to strengthen wider impact, beyond technical measures of impact to be inclusive of social praxis impacts where relevant.

5.4 Education & training objectives

These objectives seek to:

- Contribute to the development of research capacity for global change social sciences in South Africa through formal, post-graduate and non-formal education and training of global change social scientists;
- Contribute to the transformation of the global change social science research community specifically and that of the global change community generally in South Africa, in respect of race, gender and age;
- Contribute to improving the research capacity of Historically Disadvantaged Institutions (HDIs) and/or rural universities in South Africa, and their collaboration and participation in the field.

5.5 Criteria for responding to the GCSSRP call

- While interdisciplinarity is encouraged, the projects should be informed by the social sciences or the arts and humanities and should be led by researchers from these disciplines.
- Each project should address a knowledge area *and* include at least one of the research themes, and should also reflect modes of engagement that are relevant to global change research that contributes to the emergence of *sustainability with, in and for societal transformations*.
- Research proposals should have a mix of senior and early career researchers, and also reflect gender and racial equality principles. Partnerships with a diversity of institutions and practitioners is also encouraged.
- The complexity and ethics of co-engaged research should be adequately conceptualized and planned for in the proposal where such approaches are used.
- There should be an explicit commitment, with outlined approaches, for supporting capacity of early career researchers to participate fully in the research programme.
- Knowledge dissemination should extend beyond the writing of academic papers only, and should consider at least one or more additional mode of knowledge co-production and sharing relevant to research communities and/or participants.
- Research proposals should reflect a commitment to 'systemic approaches to transformation thinking' with a reflexive element and learning dimensions built into the planned research programme

6. Institutional arrangement for implementation

The Knowledge Advancement & Support (KAS) directorate is responsible for the overall management and strategic alignment of the GCSSRP programme. The Reviews and Evaluation directorate is responsible for the review processes up to the recommendations of awards, with the Grant Management and Systems Administration (GMSA) Directorate responsible for placing of funding calls, managing the application submission process, disbursement of grant funds and ensuring adherence to the conditions of the grant.

7. Information sources

- DSI Decal Plan (available on request from Jonathan Diederiks (CJ.Diederiks@risa.nrf.ac.za)
- Global Change Social Science Concept Note (available on request from Jonathan Diederiks (CJ.Diederiks@risa.nrf.ac.za)
- National Research and Development Strategy (2025). https://www.nrf.ac.za/about-us/plans-reports/
- DSI White Paper on Science Technology and Innovation
  https://www.dst.gov.za/images/2019/White_paper_web_copyv1.pdf

SECTION 2: GUIDE TO THE CALL

This 2023 Call for the GCSSRP proposals invites applications that address and respond to:

1. Focus areas

It is a targeted call for **Transdisciplinary** research focussed on the following themes as identified within the GCSSRP Concept Document, primarily addressing the following:

- Global change system, social and sustainability transformations;
- Transformations in development, economics, technologies and practices for advancing sustainability and social justice in a global change context;
- Global change and transformative social learning, multi-dimensional meanings and values;
- Global change, transformative social movements and social system change;
- Transforming institutions for responding to global change challenges and opportunities – politics, governance and institutions.

Although this funding instrument is unique, it is complementary to other instruments, programmes and initiatives like ACCESS; FBIP; ESSRP that support and address the Global Change Grand Challenge, within the context of the DSI STI White Paper and the new DSI Decadal Plan. The aim to ensure that more researchers participate in the various programmes of Global Change Research Plan and at the same time expand the areas of focus of research in the grand challenge. Therefore, quality applications that include and or from newer partnerships/collaborations and approaches to the field will be encouraged and more favourably considered for support

Failure to adhere to these specifications and those subsequently mentioned in this framework will render the application unsuccessful.

2. Call for proposals

- Successful applicants will have their proposal funded **for three years (2024-2026);**
- **All applications *must* be submitted electronically via the NRF Online Submission System at https://nrfconnect.nrf.ac.za/;**
- All applications ***must*** be endorsed by the Designated Authority at the research office or equivalent of the principal investigator's institution before submission to the NRF;
- It is the responsibility of each applicant to familiarise himself / herself with the **internal closing dates** set by their institution in order to meet the NRF closing date.
- **Incomplete or late submissions *will not* be accepted, and without exception will be rejected without review.**

REFER ALL TECHNICAL QUERIES TO:	REFER ALL OTHER QUERIES TO:
SUPPORT DESK **Supportdesk@nrf.ac.za**	**Jonathan Diederiks** **012 481 4104** **CJ.Diederiks@risa.nrf.ac.za**

2.1 Required documentation:

- Completed online application form (see Appendix 1A: Guidelines to proposals).
- Letters from all team members (co-investigators and collaborators) confirming their participation and role in the proposed knowledge production process (to be attached as attachments in online application).

2.2 Eligibility & Selection Criteria

Partnerships among individual researchers representing targeted institutions are required. Only researchers at NRF recognised research institutions in South Africa are eligible to apply as principal investigators. Please note that post-doctoral fellows, students, technical and support staff are not eligible to apply.

2.3 Application screening

All applications validated by the appropriate designated authority of the institution and submitted before the deadline to the NRF via the NRF Online Submission System at https://nrfconnect.nrf.ac.za/ are screened by the NRF for compliance with the eligibility criteria and online application requirements. All eligible and appropriately completed applications are subjected to assessment as detailed in section 4.5 below.

2.4 Application assessment

All eligible and appropriately completed applications are subjected to a competitive review process. The assessment of applications will be the quality of the proposal, as well as the logistics and environmental feasibility. The assessment of applications will be guided by a Panel Assessment Scorecard **(see Annexure 1B)**, and scored according to the Proposal Grading **(see Annexure 2)**.

2.5 Ethics

It is the responsibility of the grantholder, in conjunction with the institution, to ensure that all research activities carried out in or outside South Africa comply with the laws and regulations of South Africa and/or the foreign country in which the research activities are conducted. These include all human and animal subjects, copyright and intellectual property protection, and other regulations or laws, as appropriate. A research ethics committee must review and approve the ethical and academic rigour of all research prior to the commencement of the research and acceptance of the grant. The awarded amount will not be released for payment if a copy of the required ethical clearance certificate, as indicated in the application, is not attached to the Conditions of Grant.

Also refer to the “Statement on Ethical Research and Scholarly Publishing Practices” on the NRF website at https://www.nrf.ac.za/media-room/news/statement-ethical-research-and-scholarly-publishing-practices.

3. Proposal requirements (A guideline for proposals and an assessment scheme is provided in Appendix 1A)

- All proposals must demonstrate the relationship and contribution to further development of the research identified in the Global Change Social Science Research Programme Concept Note.
- While a clear articulation of the relationship that the proposed research work will have and will make on other relevant research investments is important, the contribution it will deliver to policy and practice will be an advantage.
- All proposals must explicitly state the relevance and/or implications of the proposed research on social development (broadly defined) whether scientific or societal in scope.
- For these applications the core research team consists of a principal investigator (i.e. applicant) and one or more co-investigator(s). The project may also include research associates / collaborators. The research team structure rules are described under point 4 below.
- Funding will only be allocated to projects involving at least 3 institutions of which at least one must be a HBU, but teams must be led by an identified principal investigator. We also urge the research teams to have emerging researchers as part of their teams. Funds will be made to a recognised research institution under the name of the principal investigator and his/her institution who will allocate part of the grant to team member institutions.
- Projects must include a collaborative team from a minimum of three institutions, the participation of at least one HDI in the team is a requirement.
- Project teams must include at least 4 emerging researchers (younger than 40 at the time of application) and ensure adequate mentorship and involvement as necessary.
- Projects must include postgraduate training.
- The funding of technical expertise cannot exceed 30% of the proposal budget.
- Projects must identify specific users of the knowledge and information generated, and engage them from the outset.
- The transdisciplinary nature of the proposed work must be explicit.
- Projects must clearly state the impact of the project on understanding and adaptation/mitigation of global change.
- Projects must be demonstrably and explicitly aligned with one of the focus areas identified (See 1 above).
- Due to limited resources, priority will be given to Researchers who don't yet have NRF grants within the GCRP.
- Successful applicants must sign the NRF Conditions of Grant (CoG) attached to the award letter. This will include reporting commitments and financial accounting procedures among others.

4. Project team composition and project design

The following eligibility criteria are applicable in respect of the project team composition and project design. The core research/knowledge generation team may consist of a principal investigator and co-investigator(s) and collaborator(s).

- The **PRINCIPAL INVESTIGATOR** (i.e. the applicant) must be an active academic researcher who takes intellectual responsibility for the conception of the project, its strategic decision and the communication of results. S/he will also take responsibility for managing and administering resources allocated to the project. Such a person must have the capacity to make serious commitment to the project and

cannot assume the role of a supplier of resources for work that will largely be placed in the hands of others.

- A **CO-INVESTIGATOR(S)** is an active academic researcher who provides significant commitment, intellectual input and the relevant expertise into the design and implementation of the knowledge production process and application, and will be involved in, all or at least some well-defined knowledge production activities within the scope of the proposal.

- **COLLABORATORS** are individuals or groups who are anticipated to make relatively small but meaningful contribution(s) to the knowledge production endeavours outlined in the proposal.
    - Post-doctoral fellows, students, technical and support staff may NOT be listed as principal OR co-investigators.

5. Timelines

The GCSSRP grants will be awarded over a period of three years. Successful grantees who wish to apply for further funding after the completion of a three-year funding cycle must submit new applications. All applications will be assessed on a competitive basis. The GCSSRP funding cannot be automatically renewed or extended. Preferential treatment will not be given to those who have previously received NRF funding.

6. Management of the GCSSRP Funding

The GCSSRP programme is managed via the Global Change Programme of the NRF. The Knowledge Advancement & Support (KAS) Directorate of the NRF manages the GCSSRP programme and is primarily responsible for:

- Strategic oversight and management of the programme;
- Coordinating and facilitating activities of the programme funding;
- Compiling funding instrument research and evaluation reports;
- Stakeholder engagement; and
- Ensuring that the funding instrument delivers on its intended goal(s).

7. Financials

7.1 Funding ranges

Proposals up to a maximum of R6 000 000 can be considered for a GCSSRP grant award distributed over 3 years (R6 million over 3 years). Prudent and efficient budgeting is advised and expected.

7.2 Funding support

Project funding will be awarded to successful applicants for a period of three years. Successful applicants who wish to apply for further funding after the completion of a three-year funding cycle **must** submit new applications. These applications will be assessed on a competitive basis, there is **no** automatic renewal or extension of funding and **no** preferential treatment will be given to those who have previously received NRF funding. Please note that the funding of technical expertise cannot exceed 25% of the proposal budget and at least 30% should be allocated to student (M and PhD) support.

7.3 Postgraduate student support

The National Research Foundation (NRF) has developed a new Postgraduate Student Funding Policy that will use postgraduate student funding as a lever to address the challenges of inequity of access, success and throughput. The policy is underpinned by the pursuit of research excellence in all of its dimensions and has transformation of the postgraduate cohort as the core objective. Its purpose is to retain high academic achievers in the system to pursue postgraduate studies up to the doctoral level, as part of a national drive to grow the next generation of academics to sustain South Africa's knowledge enterprise. The NRF is prioritising postgraduate students with research inclination, with the aim to grow the pool of early career researchers. Another motivation for this policy is to fast-track the development of postgraduate students in high-impact, priority and vulnerable disciplines critical for national socio-economic development.

All the postgraduate students will be expected to apply on the NRF Online Submission System by accessing the link: https://nrfconnect.nrf.ac.za/. This single-entry point will allow the NRF to co-ordinate the applications that have not yet had the financial means test conducted, this financial means test will be conducted by Ikusasa Students Financial Aid Programme (ISFAP). Postgraduate students will be funded either at Full Cost of Study (FCS) or Partial Cost of Study (PCS) under the new policy. To ensure equity of access to postgraduate studies, financially needy students (i.e., those whose combined household income is R350 000 per annum or less) and students with a disability will be funded at FCS. Academic highfliers achieving a distinction or first-class pass will also be eligible for funding at FCS. International students as well as any other South African student who is not eligible to be funded at FCS will be eligible for PCS funding.

The students are expected to meet the NRF minimum entry requirement to be eligible for FCS or PCS as illustrated in Table 1 below.

Table 1: Eligibility criteria for NRF postgraduate funding for FCS and PCS

<table>
<tr><th rowspan="2">Study Level</th><th colspan="2">Full Cost of Study

(South African Citizens and Permanent Residents only)</th><th>Partial Cost of Study

(South African Citizens; South African Permanent Residents and 5% Non-South African Citizens)</th></tr>
<tr><th>Exceptional Achievers</th><th>Financially Needy & Students with Disability</th><th>Other</th></tr>
<tr><td rowspan="2">Honours</td><td>• ≥ 75% Mark in Final Year of study</td><td>• ≥ 65% Mark in Final Year of study</td><td>• ≥ 65% Mark in Final Year of study</td></tr>
<tr><td colspan="3">Honours students must be 28 years of age or younger in the year of application.
Non South African Citizens are not eligible for Honours Scholarships.</td></tr>
<tr><td>Masters</td><td>• ≥ 75% Mark for Honours
• Completed Honours in one year</td><td>• ≥ 65% Mark for Honours
• Completed Honours in one year</td><td>• ≥ 65% Mark for Honours
• Completed Honours in one year</td></tr>
</table>

	Masters students must be **30** years of age or younger in the year of application.		
Doctoral	• ≥ 75% Mark for Masters • Completed Masters in two years	• ≥ 65% Mark for Masters • Completed Masters in two years	• ≥ 65% Mark for Masters • Completed Masters in two years
	Doctoral students must be **32** years of age or younger in the year of application.		

In cases where a grade is not indicated, the application will not be considered for funding by the NRF.

The NRF will allocates all postgraduate bursaries under its management control as follows:

- 95% South African citizens and permanent residents;
- 5% students from SADC countries and from the rest of the world; and
- 55% women.

The NRF disaggregates these targets for South African citizens and permanent residents as follows:

- 90% Black (African, Coloured, and Indian);
- 10% White; and
- 1% students living with a disability.

For further details on the NRF Postgraduate Funding policy, kindly refer to the framework document which is available on www.nrf.ac.za

7.4 Financial control and reporting

These grants are to be used for the purposes of GCSSRP and human capital development under the auspices of the NRF grant and finance policies. The funds are released on acceptance of the conditions of grant both by the applicant and his/her employing/affiliated institution.

The funds will be awarded against a number of items such as equipment, running costs, travel costs, staff development, etc.

Successful applicants will be expected to provide a written annual Progress Report (PR) in order for the NRF to ensure that the objectives of proposed knowledge production are met. The PR will address specific indicators as prescribed by the NRF. The submission of the reports is a prerequisite for the release of the subsequent year's funding. These grants will fall under the NRF audit requirements for beneficiary institutions.

7.5 Access to research outputs/ achievements

Research outputs must be reported on request and will be made available in the format of data citation which will include:

- Summary of research project
- Creator(s)/Authors

- Publication/production Year
- Title of dataset/research paper
- Publisher/producer
- Location

Datasets will be made available subject to copyright and Intellectual Property Rights.

8. Acronyms

DSI	Department of Science and Innovation
ESSRP	Earth Systems Science Research Programme
GCSSRP	Global Change Social Science Research Programme
GCGC	Global Change Grand Challenge
GCRP	Global Change Research Plan
GMSA	Grant Management and Systems Administration
HBU	Historically Black Universities
KAS	Knowledge Advancement & Support
KPI	Key Performance Indicator
MTEF	Medium-Term Expenditure Framework
NRF	National Research Foundation
NSI	National System of Innovation
RE	Reviews and Evaluation
RISA	Research and Innovation Support and Advancement
SDG	Sustainable Development Goals

Appendix 1A: Guideline for proposals

1. Working title of the project
2. Name, position, institution and contact details of PI
3. Name(s), position(s), institution(s) and contact details of co-Investigator(s)
4. Name(s), position(s), institution(s) and contact details of collaborators
5. List of participating institutions
6. Comprehensive list of project team members
7. Science content abstract (200 words)
8. Relevance and impact abstract (200 words)
9. Human Capacity Development abstract (200 words)
10. Science content ▪ Problem statement / introduction (≤ 1000 words, excluding figures and references) ▪ Strategic orientation in relation to this call for proposals (≤ 500 words) ▪ Approach (and structure of proposal if appropriate) (≤ 1000 words, excluding figures and references) ▪ Key research questions (≤ 500 words) ▪ Activities in relation to research questions and key personnel involved ▪ Data acquisition requirements (including existing data and new observation and acquisitions anticipated) ▪ Outputs planned (≤ 500 words) ▪ Please provide a Gantt chart of activities ▪ Please provide a set of up to five objectively verifiable indicators for assessment of success of the planned research.
11. Research relevance and impact ▪ How is this research relevant and to whom? (refer to recommended documentation) (≤ 500 words) ▪ What contribution will it make scientifically and/or socially? (≤ 500 words) ▪ Outcomes anticipated (≤ 1000 words) ▪ Pathway to impact (how will this research be utilized and by whom) (≤ 1000 words) with appropriate objectively verifiable indicators for assessment of success.
12. Human Capital Development (HCD) ▪ What particular area of HCD will be developed / augmented in the project? (≤ 500 words) ▪ How many postgraduates, and at what level, will be engaged in the project at which institutions, race & gender, (including co-supervision from collaborators)? – Please provide a table. ▪ What (if any) training workshops and other related training activities are planned ▪ Race and gender of applicant (PI) and race and gender of the rest of the team (consortia) ▪ Please provide a set of up to three objectively verifiable indicators for assessment of success of the planned HCD activities.

13. Funding requirements (see appendix 2)
14. Summary of financial requirements
15. Please tabulate the funding requirements for each of the three years respectively. Please include:
16. capital equipment required (item and costs)[1]
17. small equipment requirements (item and costs)
18. consumables
19. field costs
20. travel costs

- Personnel costs[2]
- Justification of budget (narrative, explanation of budget items where required)
- Funding leverage
- Please account for any in-kind contributions to the project (salary costs, equipment and facilities to be used)
- Co-funding from any source

[1]The programme cannot fund substantial capital equipment costs but can attempt to leverage funding

[2]Personal costs will only be available to non-salaried staff or staff of institutions that operate on a cost-recovery model. Short term co-funding of technical staff is also allowed. No funding for administrative support will be permitted.

Appendix 1B: Proposal Assessment Scheme

Qualification	
• On time and complete	Qualified or Disqualified
• Eligibility and Requirements as in 4.4, 4.5 and 4.6	Qualified or Disqualified or exception granted
• Budget requirements met	Qualified or Disqualified
Content Assessment <u>For range 1-6:</u> 6 = Perfect 5 = Convincing 4 = Somewhat convincing 3 = Not convincing 2 = Poor 1 = Nonsense	<u>For range 1-10:</u> 10 = Perfect 9 = Almost perfect 8 = Convincing 7 = Almost convincing 6 = Moderately convincing 5 = 50/50 4 = Not convincing 3 = Poor 2 = Very poor 1 = Nonsense
1. Science content (30%)	
Fit to call	x/6
Feasibility and veracity of approach and planned activities	x/6
Veracity of Outputs planned	x/6
Role of partners defined	x/6
Suitable science assessment OVIs supplied	x/6
	Total X / 30
2. Research relevance and impact (25%)	
Reference to source material	x/5
Veracity of relevance argument	x/5
Validity of outcomes planned	x/5
Reasonable pathway to impact	x/5
Suitable impact OVIs supplied	x/5
	Total X/ 25
3. Human Capital Development (HCD) and Equity (35%)	
Veracity of HCD narrative	x/5
HCD requirements met	x/5
Race/Gender of Applicant	x/10
Suitable HCD OVIs supplied	x/5
Race and gender of students supervised	x/10
	Total x / 35

4. Budget (10%)	
Budget requirements met	x/10
Feasibility of the budget	x/10
Veracity of budget justification	x/10
	Total X / 30 (Contribution divide by 3)

Appendix 2: Funding allocation guidelines

a. Knowledge production-related operating costs

Costs for materials and supplies, travel (including conferences) and subsistence, equipment and technical/ad hoc assistance and sabbaticals to other organizations and institutions of higher learning, may be included within the context of the project application. These costs should be justified and commensurate with the planned outputs, as they will be assessed on the criteria provided in the framework. The amount awarded within this framework can be used at the discretion of the applicant.

b. Materials and supplies

Generally (except if central to the knowledge production process itself or if the knowledge producers are based at organizations / institutions which are not state funded), the NRF does not provide financial support for:

- Basic work supplies including stationery, photocopying and printing costs
- Journal publication costs, journal subscription costs, book costs.
- Telephone, fax and internet costs

c. Travel and subsistence

- International conference attendance: Generally, the NRF restricts this amount to R25, 000 per person to a maximum of R50, 000 per application per year for a team proposal, i.e. for principal investigators and co-investigators (local only). The NRF does not pay for students to attend international conferences.
- International visits: These will be considered on a case-by-case basis. Such visits must be integral to the knowledge production plan and strong motivations should accompany these requests. Realistic funding allocations will be based on the requested activities. Only outgoing visits will be considered depending on the availability of funding.
- Local conference attendance: Generally, the NRF restricts expenditure against this item to R4000 per person (all costs). Support for local conference attendance could be requested for all listed co-investigators and postgraduate students. The applicant should motivate for:
  - The benefits to attend more than one local conference per annum if so requested
  - The number of people that should be funded to attend local conferences.
- Local travel: The NRF does not stipulate any rate for mileage as this will depend on the rate which varies per institution/organisation. Applicants are requested to provide details of this rate as well as the estimated distance to be travelled within the given year.
- Local accommodation costs should not exceed R700 per night per person.

d. Technical / ad hoc assistants/ professional costs

- *This funding instrument does not provide funding for the salaries of the team members if they are based at organisations/institutions where the salaries are state funded. In cases where the salaries are not state funded, the total salary amount for all team members will be limited to up to 35% of the overall grant amount. A strong motivation for the salary component must accompany the request.*
- *The NRF would encourage applicants to engage students to undertake the knowledge production*

rather than employing consultants. This guideline however does not apply when specific and/or highly specialized technical expertise is required. This should be CLEARLY motivated for in the proposal.

- *Administrative assistance does not qualify under this category.*