

Integrating Health Approaches and the Water-Energy-Food (WEF) nexus

Cooperation South Africa (NRF) – The Netherlands (NWO) programme

Call for proposals 2022

National Research Foundation (NRF) and NWO-WOTRO Science for Global Development



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1 Introduction

In this Call for proposals information is provided about the application procedure for 'Integrating Health Approaches and the Water-Energy-Food (WEF) Nexus' funding round. This Call for proposals falls under the responsibility of the National Research Foundation (NRF) of South Africa and the Dutch Research Council (NWO).

In this Call for proposals you will find information about the aim of this programme (Chapter 2), the conditions for the grant application (Chapter 3) and how your pre-proposal and full proposal will be assessed (Chapter 4). This is the information you need to submit a grant application. Chapter 5 states the obligations for grant recipients in the event you are awarded funding, Chapter 6 contains the contact details and Chapter 7 the annexes.

1.1 Background

The Dutch Research Council (NWO), through the Merian Fund¹, and the National Research Foundation (NRF) of South Africa support a long-term scientific collaboration in the Water, Energy and Food (WEF) nexus field. By issuing calls for proposals regularly and by inviting consortia in which researchers from knowledge institutions from both countries work together with societal partners from public, semi-public and private organisations, NWO and the NRF hope to provide effective contributions to support transformations towards sustainability and gradually expand the knowledge base on the WEF nexus field.

NWO and NRF have agreed on strategic knowledge and innovation agendas. A Call for proposals on a jointly agreed theme based on this agenda is published biannually. Funded research projects should be aligned to national research agendas, as well as international initiatives such as the UN Sustainable Development Goals. The collaboration is characterised by an impact-focused approach towards broad societal challenges, is interdisciplinary in nature, and involves societal partners throughout the process.

For this call, NWO and NRF have also agreed to adapt this bilateral programme into a regional programme in order to link expertise across geographic boundaries and by so doing allowing researchers to apply interventions with multiple populations simultaneously. The spread of partners and institutions will also widen access to a greater number of techniques to do research and has the potential to enhance institutional networks beyond the academic sphere allowing for trans-disciplinary research and the principle of co-creation. The WEF nexus is a global, regional and national challenge that cannot be solved by one country alone. It requires multi-country partnerships, multi- and interdisciplinary research with a range of diverse participants in a single project. A partnership between Africa and the Netherlands has a great potential to contribute to the kind of sustainable global society NRF and NWO are all currently aiming for. Therefore, the South African and Dutch researchers are hereby encouraged to include research partners from any of the 16 African countries whose ministries and granting councils are a participating member in the Science Granting Councils Initiative² (SGCI). See **Annex 7.1 for a list of eligible African countries within SGCI**.

¹ The Merian Fund is an initiative of NWO, and aims to stimulate long-term collaboration with important (emerging) science nations. The Merian Fund focuses on broad scientific themes of societal importance that require a mission-oriented approach. The Merian Fund cooperates with seven partners in five countries: FAPESP (Brazil), NSFC and CAS (China), DST and DBT (India), RISTEKDIKTI (Indonesia) and NRF (South Africa). WOTRO Science for Global Development is responsible for the implementation of the calls under the Merian Fund. For more information, see: www.nwo.nl/merianfund.

² SGCI is a multi-funder initiative that aims to strengthen the capacities of 16 science granting councils in Sub-Saharan Africa in order to support research and evidence-based policies that will contribute to economic and social development. The SGCI contributes to strengthening the ability of science granting councils to manage research, design and monitor research programmes based on the use of robust science, technology and innovation (STI) indicators, support knowledge exchange with the private sector, and strengthen partnerships between Science Granting Councils and other science system actors. For more information see: https://sgciafrica.org/en-za/home.

1.2 Available budget

The available budget for this Call for proposals is € 2,800,000 on the Dutch side, and R10 Million (around € 580,000) on the South African side. Within this Call for proposals it is expected that a maximum of four proposals will be awarded funding.

1.3 Submission deadlines

The 2022 NWO (Merian Fund) NRF Call for proposals consists of three phases:

- a research initiative announcement and matchmaking phase;
- a pre-proposal submission phase; and
- a full proposal submission phase.

The deadline for the submission of research initiatives (not mandatory), which are to be submitted to NWO, is **18 January 2022, at 14:00:00 hours CET**.

The deadline for the submission of pre-proposals (mandatory), which are to be submitted to NWO, is **1** March 2022, at 14:00:00 hours CET.

The deadline for the submission of full proposals (mandatory), which are to be submitted to both the NWO and NRF, is: **29 September 2022**,

- at 14:00:00 hours CEST for the submission to NWO; and
- at 23:59:59 hours SAST for the submission to NRF.

When you submit your application in ISAAC and the NRF Online Submission System, you will also need to enter some details online. Therefore please start submitting your application at least one week before the deadline of this Call for proposals. Applications that are submitted after the deadline will not be taken into consideration.

2 Aim

This chapter describes the aim of the programme and the societal impact.

2.1 Aim of the programme

2.1.1 Background

Many societal challenges are global in nature and require flexibility and creativity to find solutions. The COVID-19 pandemic has not only caused immeasurable losses and casualties from a health perspective, but also in the global economy, resulting in high social and environmental costs. If anything, the pandemic demonstrates the risks and limits of globalisation, sector-based approaches and linear thinking in general. The world was caught unprepared, as seen through shortages of essential items at places and times they were needed the most. In addition, the initial reactive responses inadvertently aggravated the stresses in other sectors. Company closures and job losses during and after the lockdowns resulted in a cascading collapse of the global economic system. This included disruptions in production, finance, health, and transport, due to a combination of both demand and supply shocks. Impacts on the ground varied from relatively mild in resilient (often more affluent) societies to devastating in some (mostly poorer) countries and vulnerable groups. This increased inequity at local and international scales.

National governments generally struggled to cope with the challenges. In their reactive responses, they tried to address the immediate needs, while at the same time attempting to address longer-term issues the pandemic exposed. The lingering problems underline the urgency to better address intricate trade-offs between health, economic, social, and national goals. The interconnectedness of the challenges humankind is currently facing has reignited the discussion on the importance of trans-sectoral and inclusive approaches in achieving sustainability. Transformative approaches, such as WEF nexus thinking, have the potential to inform coherent policies and strategies that address the systemic origins and impacts of shocks in an integrated manner. It may guide decision making processes by identifying priority areas needing intervention, enhancing synergies, and minimising unintended negative trade-offs necessary for resilient communities.

However, the COVID-19 crisis has also pointed at weaknesses in WEF nexus thinking, which so far hardly considered health issues. Debates on gaps in the WEF nexus concern the lack of risk-based perspectives and the need for a better consideration of spatial aspects in resource integration³. Potential responses to shocks and solutions for the WEF nexus should not just be country-focused but should also be considered at cross-regional and international interdependencies and collaboration, e.g. trade issues, globalisation, and relocation of production.

2.1.2 Thematic focus: Integrating Health Approaches in the Water-Energy-Food (WEF) nexus

The present pandemic gives reason to include public health as a specific field of attention within the WEF nexus research area. What can we learn from the immediate effects of COVID-19 to make WEF nexus transformations more resilient and robust to risks and crises? And the other way around: can we develop and apply WEF nexus-based transformative approaches to better support pandemic response and preparedness strategies?

A more holistic approach is thus needed, incorporating health, equity and wellbeing. Integrated approaches, such as EcoHealth, aim to bridge the gap between human, animal, environmental, and social health and have been proposed as most useful approaches for tackling COVID-19 and other

³ See for example: <u>The water-energy-food nexus and COVID-19: Towards a systematization of impacts and responses - ScienceDirect</u>

pandemics. The COVID-19 Global Humanitarian Response Plan (GHRP)⁴ is also promoting such linkages and collaborations and the use of integrated approaches in ensuring human health and achieving sustainable development.

General aim and objectives

This call seeks research projects that will integrate the health component in WEF nexus planning through demonstrated practical case studies. Thus, the successful projects should demonstrate and address the interlinkages between water-energy-food, the broader socio-ecological environment and human health in view of providing better response to pandemics, health risks and crises.

The collaborative research financed by NWO and the National Research Foundation (NRF) in this programme is intended to work towards scientific knowledge and innovative solutions for high scientific and societal impact. At the same time, NRF and NWO aim to enhance and strengthen sustainable research collaboration between their two countries and other partners in Africa. We want to invite consortia in which researchers from knowledge institutions will work with societal partners from public, semi-public and private organisations, in order to increase the societal relevance of their research.

This programme therefore, serves as a national and regional research platform designed to provide the knowledge needed to support transformations towards sustainability, by focusing on the Water-Energy-Food (WEF) nexus as the main research area. The objectives of this call include, but are not limited to:

- Providing systematic data, analyses and demonstrated practical case studies on the impact of the pandemics on WEF provision, supply, services, as well as feedback loops and trade-offs that can inform policy and decision making.
- Integrating the health and risk components into the existing WEF nexus thinking, tools and modelling.
- Developing nexus planning based scenarios to inform coherent strategic policy formulations that encompass human health and wellbeing.
- Providing for more holistic approaches and planning tools to mitigating impacts of health and other risks and raising pandemic preparedness.
- Enhancing the resilience initiatives and inform policy on proactive interventions towards Sustainable Development Goals (SDGs).

With this call, NWO and the NRF intend to support research that analyses the systemic, cascading or cross-sectoral impacts of pandemics on the WEF nexus and that contributes to sustainable transformations that integrate relevant health aspects. The research should pay specific attention to the robustness of the nexus planning in terms of risk and the need for spatial - including cross-country integration. The call allows for the inclusion of research partners and case studies from African countries whose ministries and granting councils are a participating member in the SGCI.

Therefore, this nexus research should address one or more of the following thematic areas:

- Mapping the impacts of COVID-19 on the WEF nexus: Undoubtedly, COVID-19 has affected the
 attainment of several SDGs. For example, the initial national lockdowns had severe impacts on food
 insecurity due to the disruption of supply chains. At the same time, access to clean water and
 sanitation was compromised in communities that lack access to gridded services. There is a need to
 systematically map the impacts of COVID-19 on the WEF nexus, particularly assessing the impacts
 of (hampering) achieving SDGs 2, 6, 7 and other related goals.
 - 2. Including the health sector in WEF nexus conceptualisation, discourse, and analytical tools: COVID-19 affected human health and threatened economies, jobs, and livelihoods. It highlighted the need to include health considerations into WEF nexus thinking. Ideally, this implies that health considerations should be factored into WEF nexus conceptualisation, discourse and, importantly, analytical tools. The addition of a health component to existing WEF nexus analytical tools/models will be a priority and supports the impact assessment of current and future pandemics on the WEF nexus, thereby strengthening scenario analyses.

⁴ Global Humanitarian Response Plan COVID-19.pdf

- 3. Including risk-based perspectives and spatial cross-country aspects in WEF integration and integrate WEF nexus thinking into health approaches in reply to crises: COVID-19 exposed existing gaps in historical spatial planning laws and WEF nexus thinking that have persisted and maintained societal inequalities. This was apparent in the initial hard lockdowns, which restricted the movement of people and goods. Going forward, there is a need to make WEF nexus concepts more risk-based and to extend spatial integration in WEF nexus tools/models, focusing on resource-scarce environments to inform more inclusive planning and equitable management of water, energy and food. In addition, health strategies may benefit from WEF nexus concepts in providing more inclusive and effective responses to crises.
- 4. **Developing more holistic, health and risk sensitive approaches for sustainable livelihoods at a local level:** This integrates thematic areas 1, 2, and 3 to develop transformative adaptation strategies to build or strengthen the resilience and sustainability of livelihoods to current and future pandemics at the local level. Further to this, it will develop contextualised WEF nexus frameworks and WEF-sensitive health risk and mitigation strategies to inform policy and decision-making at a local up to cross-country spatial scales.

2.2 Integrated and flexible research approach

The challenges addressed in this call are interrelated and multi-scalar, and to reach impact require a holistic approach that spans the entire research and innovation chain. The consortia should crosscut scientific disciplinary boundaries (interdisciplinarity) and integrate scientific and practitioners' knowledge in joint research (transdisciplinarity). Research should focus on the entire knowledge chain, from fundamental to applied and practical research. The proposed research itself should be characterised by integrated perspectives. It should evolve in a process of co-creation with different partners: researchers from South Africa and the Netherlands, including researchers from any of the 16 African countries whose ministries and granting councils are a participating member in the SGCI (if part of consortium), and societal partners should be actively involved throughout the entire project, in (advising on) defining and conducting the research as well as in communicating the progress and results, in order to jointly produce a mutually valued outcome. Added value may be achieved by integrating and synthesising various sources of knowledge to create new knowledge and by creating sustainability through the development of long-term knowledge relations.

Proposals should be based on a thorough review of existing knowledge and should preferably be complementary to existing research initiatives and reinforce these were possible. Project teams are encouraged to use a combination of quantitative and qualitative and quasi-experimental research methods, including operational research, and should include research-into-use approaches.

Research consortia have to adopt a flexible and stepwise research approach and project management, in order to accommodate the intermediate feedback and/or changing realities in policy and practice and to maximise the relevance, potential for use and the sustainability and scalability of results. Throughout project duration, consortia will proactively engage with relevant stakeholders, including policy dialogues. As a consequence, research protocols, planning, design, and budget may need further refinement or revision along the way to maximise the relevance and potential impact of research findings. Kick-off and mid-term stages in project execution are formal moments to reflect on and adapt the research process.

Joint activities

The project teams are also expected to collaborate with other project teams awarded in this call, so as to enhance the impact of the programme aim as a whole. As a part of this, projects will be expected to contribute to (and attend) a joint kick-off, midterm, and final workshops, as well as a final call conference. Projects should budget for this accordingly.

2.3 International collaboration

Proposals should be characterised by equal partnership and sustainable collaboration among the South African, Dutch and SGCI African partners (if part of consortium) and with stakeholders. This includes inter-institutional cooperation, a balanced contribution to the proposed research, gender equality, a focus on capacity building and a frequent exchange between the partners and stakeholders and taking into consideration the South African transformation agenda.

2.4 Societal impact

New knowledge and insights from scientific research can make an important contribution to solutions for current and future societal issues. Examples are the energy transition, health and care, or climate change. Knowledge utilisation increases the chances of research having a societal impact and is therefore an important aspect of the Cooperation South Africa – The Netherlands programme.

2.4.1 Knowledge utilisation⁵

NWO and NRF define knowledge utilisation as an iterative process aimed at achieving societal impact. Through interaction and alignment between researchers and possible users of knowledge, the chances of knowledge utilisation and, accordingly, societal impact increase. NWO and NRF facilitate the possible contribution of research to societal issues by encouraging productive interactions with societal stakeholders during the development and realisation of the research.

In this programme, the <u>Impact Plan approach</u> is used. With this approach, NWO and NRF aim to facilitate the development of an integrated strategy by researchers and partners with the target of increasing the chances of the desired societal impact.

2.4.2 Impact Plan approach

The research conducted in this Call for proposals should have relevance and potential for impact beyond the academic world, such as in societal, technical, economical or cultural realms. Societal impact is never solely an outcome of knowledge and insight from research. Furthermore, societal impact is often only realised in the years after a research project has been concluded. This is why, in addition to having a societal or industry partner within the consortium, consortia should consider how relevant stakeholders can be involved in, or benefit from, the design and realisation of the proposed research project.

To further enhance the potential for impact of the proposed research, the application should state how approaches for achieving impact are integrated in the research design and conducted by the consortium in engagement with end users, such as practitioners, policymakers, and industry. To this end, applicants are asked to include an Impact Plan that sets out the potential for impact of the proposed research. The Impact Plan approach to knowledge utilisation should be integrated into the research design and serves as an aid to increase the impact potential of the proposed research.

The Impact Plan consists of the following elements:

- Productive interactions: Exchanges between researchers and stakeholders in which knowledge is produced and valued that is both scientifically robust and socially relevant. Examples of productive interactions are: formulation of research questions and approaches jointly with potential endusers (co-design), joint execution of research projects and interactive dialogue on research results (co-creation). Interactions can be direct/personal, indirect or financial. The quantity as well as quality of the productive interactions forms an indicator for the potential for societal impact.
- A Theory of Change describes how the research process can contribute to societal/economic impact, taking into account the context, actors involved and describing the sequence of logically-

⁵ For more information about the NWO knowledge utilisation policy and the Impact Plan approach, see the website: www.nwo.nl/en/knowledge-utilisation.

linked consequential relations. Developing a Theory of Change in a joint effort with research partners as well as stakeholders allows for making explicit which (and whose) problem is being tackled, and how the desired change is perceived to happen through research efforts. Projections on expected change will be based on a myriad of assumptions; documenting these assumptions allows for reflection on whether and how expected pathways to impact remain adequate or need adjustment. A Theory of Change is not fixed, but rather reflected on continuously throughout the research process. For this reason, it is also used as part of the monitoring, evaluation and learning trajectory.

- The Impact Pathway, which is part of the Theory of Change, is the visualisation of the change process following from research execution as described in the Theory of Change. It makes explicit how the research activities will lead to results (output) and how exchange of knowledge and the uptake of research output will contribute to desired changes in behaviour, relationships, actions and activities of partners and stakeholders (outcome) that are considered essential to achieving the desired impact.
- A Strategic Activity Planning spells out how the proposed productive interactions contribute to achieving outcomes. Outputs do not automatically lead to outcomes, thus strategies are needed of the research consortium to plan and monitor how their efforts will enhance the potential for outcomes. This planning should include specific activities for:
 - Stakeholder engagement: Who are the relevant stakeholders to engage with according to context analysis, how are the productive interactions organised and when?;
 - Communication strategy: How are engagement dialogues organised and results exchanged and translated, and whose responsibility is it?;
 - Monitoring, Evaluation and Learning: How are results of activities monitored and evaluated, such that assumptions can be tested and activities adjusted accordingly and whose responsibility is it?;
 - Capacity strengthening: How are required capacities (of consortium partners and stakeholders) strengthened in order to achieve the outcomes, how is this organised and whose responsibility is it?

An important part of your Theory of Change and Impact Pathway is to identify assumptions and make them explicit. This concerns assumptions of the members of the consortium as well as stakeholders. Making these assumptions explicit can help you identify where change may happen in a different way than you envision, and where you may find that you need adjustment.

These activities should be placed under the budget module 'Knowledge utilisation' in the NWO budget and "science engagement" in the NRF budget.

The NWO impact e-learning tool can help consortia with creating their impact plan. The e-learning is available at: https://impact.nwo.nl/en/working-with-an-impact-plan.

Box 1: Defining output, outcome and impact

Research outputs relate to the direct and immediate results obtained by a research project or programme.

Research outcomes relate to the changes in behaviour, relationships, actions, or activities of stakeholders as a result of sharing and uptake of research.

Research impact is defined as changes in economic, environmental and social conditions a project or programme is aiming at.

Change is a complex process that depends on a variety of actors and factors of which research is only one. Where research outputs fall under the direct sphere of control of a research project or programme, outcomes belong to their sphere of influence, and impact to their sphere of interest.

Problem analysis PROBLEM AREA TO BE ADDRESSED ASSUMPTIONS CAUSES CAUSES CAUSES CAUSES UNDERLYING KNOWLEDGE-RELATED CAUSES ASSUMPTIONS ASSUMPTIONS ASSUMPTIONS ASSUMPTIONS RESEARCH QUESTIONS AND APPROACH & PROJECT ACTIVITIES

3 Conditions for applicants

This chapter contains the conditions that are applicable to your grant application. Firstly it describes who can apply for funding (section 3.1) and what you can request funding for (section 3.2). Subsequently, you will find the conditions for preparing and submitting the application (sections 3.3 and 3.4) and the specific funding conditions (section 3.5).

3.1 Who can apply

Eligible consortia are composed of researchers based in the Netherlands and in South Africa as well as at least one collaboration partner from a public, semi-public or private practitioner organisation. Consortia are also encouraged to include researchers from any of the 16 African countries whose ministries and granting councils are a participating member in the SGCI. On both the South African side and the Dutch side a senior main applicant is actively involved. Specifically, the Dutch and South African sides of the consortium must fulfil the following requirements:

Dutch side of the consortium:

One main applicant who fulfils the requirements of 3.1.1.

South African side of the consortium:

- One main applicant who fulfils the requirements of 3.1.1;
- If the main applicant is not employed at a historically disadvantaged university (see Annex 7.2 for a list), a co-applicant who fulfils the requirements of 3.1.2.

On the Dutch side or the South African side of the consortium:

 A collaboration partner from a public, semi-public or private practitioner organisation (for-profit or not-for-profit) from either the Netherlands or South Africa and who fulfils the requirements of 3.1.4.

The South African side of the consortium may also include:

One or more research partners from any of the 16 African countries whose ministries and granting councils are a participating member in the SGCI who fulfils the requirements of 3.1.3 (see Annex 7.1).

The consortium may also include other co-applicants or collaboration partners, as long as they are eligible according to the criteria in 3.1.2 or 3.1.3. Together, the consortium members will have the responsibility to:

- formulate relevant research questions and approaches;
- formulate and submit the pre-proposal and full proposal through the main applicants;
- conduct the project activities;
- coordinate knowledge sharing and support the application, dissemination and communication of the project results to a broader group of possible knowledge users that are not a member of the consortium, and;
- take responsibility for the adequate and timely reporting conditions.

Each main applicant and consortium can only submit one proposal. A main applicant cannot participate as a co-applicant in other proposals. From the NRF side South African researchers cannot serve as main applicants or co-applicants on more than one proposal.

This call aims for collaboration across the knowledge sector, including fundamental and applied research, to enhance demand articulation, ownership, and the effective uptake of results. For this reason, all consortium partners, as well as relevant stakeholders, are expected to be engaged in all phases of the project execution, from its inception to sharing the (emerging) results. Evidence of such active engagement will be an important element in the assessment of project proposals and may be

demonstrated through references to involvement in project preparation, active involvement as a project partner and links between the proposed research project and ongoing projects of NGOs, private enterprises, and/or policy implementation.

3.1.1 Main applicants

Dutch side

Full, associate and assistant professors and other researchers⁷ with a comparable position* may submit an application if they have a tenured position (and therefore a paid position for an indefinite period) or a tenure track agreement at one of the following organisations:

- universities located in the Kingdom of the Netherlands;
- university medical centres;
- institutes affiliated to the Royal Netherlands Academy of Arts and Sciences (KNAW) or NWO;
 Netherlands Cancer Institute;
- the Max Planck Institute for Psycholinguistics in Nijmegen;
- Naturalis Biodiversity Center;
- Advanced Research Centre for NanoLithography (ARCNL);
- Princess Máxima Center;
- University of applied sciences as referred to in Article 1.8 of the Higher Education and Scientific Research Act (WHW).

Or at one of the following organisations:

- IHE Delft Institute for Water Education;
- TO2 organisations.

For these two (types of) organisations, it is necessary to check whether they meet the following cumulative criteria:

- is based in the Kingdom of the Netherlands;
- is a public institute and carries out its research independently;
- receives at least 50 percent public funding;
- is not-for-profit other than for the purpose of carrying out further research;
- its researchers enjoy freedom of publication in international scientific journals.

Please note: these conditions will be assessed by NWO **prior to** submission of the pre-proposal. To this end, the applicant's organisation must submit the following documents by email to southafricamerian@nwo.nl no later than ten working days before the submission deadline, so by 14:00:00 hours CET on 15 February 2022:

- a recent extract from the Chamber of Commerce register;
- the deed of incorporation, articles of association or other formal document indicating the public task and the non-profit status;
- the latest available annual accounts accompanied by an auditor's statement.

If NWO has not assessed the organisation in advance, it cannot take the pre-proposal into consideration.

*A comparable position refers to a researcher that has a demonstrable and comparable number of years of experience in carrying out scientific research and supervising other researchers as a full, associate or assistant professor. A lector or senior researcher employed by a university of applied sciences (HBO) or a TO2 institute must be able to demonstrate three or more years of research experience in order to act as a Principal Investigator.

⁶ Main applicant, also reffered to as Principal Investigator in South Africa, is a researcher who will bear the main responsibility for the project including its technical and administrative coordination as well as scientific and financial reporting.

⁷ Such as the position of lector, which applies to researchers from a university of applied sciences (HBO).

Persons with a zero-hour employment agreement or with a contract for a limited period of time (other than a tenure track appointment) may not submit a proposal. An exception to the required duration of appointment may be made for: lectors employed by a university of applied sciences (HBO) and senior researchers employed by a university of applied sciences or a TO2 institute under a temporary appointment that does not cover the entire duration of the project.

It could be the case that the applicant's tenure track agreement ends before the intended completion date of the project for which funding is applied for, or that before that date, the applicant's tenured contract ends due to the applicant reaching retirement age. In that case, the applicant needs to include a statement from their employer in which the organisation concerned guarantees that the project and all project members for whom funding has been requested will receive adequate supervision for the full duration of the project.

Applicants with a part-time contract should guarantee adequate supervision of the project and all project members for whom funding is requested.

South African side

- Only working researchers/scientists residing in South Africa and affiliated with a recognised South
 African public higher education or research institution such as a university, university of technology
 or science council are eligible to apply.
- Private higher education institutions are not eligible to apply under this programme.
- The SMEs, private companies/ industries, and NGOs cannot serve as a main applicant but can form part of the research consortium.
- It is 'obligatory' for South African main applicant based at historically advantaged institutions to include, as part of the consortium, a research partner from any of the historically disadvantaged institutions. Proposals submitted by an applicant based at a historically advantaged institution without a research partner from a historically disadvantaged institution will be ineligible (and will not be submitted for review). The research partner from the historically disadvantaged institution in this case can serve as a co-applicant in the proposal (see section 3.1.2 below on 'co-applicants'). Also see Annex 7.2 for a list of historically disadvantaged universities.
- Applicants based at historically disadvantaged institutions including (1) those based at the two new universities, i.e. the Sol Plaatje University (SPU) and the University of Mpumalanga (UMP), and (2) those based at the NRF National Research Facilities (such as SAIAB, SAEON, iThemba LABS, SAAO, SARAO, ETC.) can act as PIs and submit proposals without the involvement of and/or partnering with researchers based at historically advantaged institutions if they so wish.

3.1.2 Co-applicants

A co-applicant is a participant in the consortium and receives funding through the main applicant.

Dutch side

Full, associate and assistant professors and other researchers⁸ with a comparable position* may be a co-applicant if they have a tenured position (and therefore a paid position for an indefinite period) or a tenure track agreement at one of the following organisations:

- one of the institutions listed in 3.1.1 (on the Dutch side of the consortium);
- an organisation not listed in paragraph 3.1.1 which meets the following cumulative criteria:
 - o is based in the Netherlands;
 - o is a public institute and carries out its research independently;
 - receives at least 50 percent public funding;
 - o is not-for-profit other than for the purpose of carrying out further research;
 - its researchers enjoy freedom of publication in international scientific journals.

Please note: these conditions will be assessed by NWO **prior to** submission of the pre-proposal. To this end, the co-applicant's organisation must submit the following documents by email to southafrica-

⁸ Such as the position of lector, which applies to researchers from a university of applied sciences (HBO).

merian@nwo.nl no later than ten working days before the submission deadline, so by 14:00:00 hours CET on 15 February 2022:

- a recent extract from the Chamber of Commerce register;
- the deed of incorporation, articles of association or other formal document indicating the public task and the non-profit status;
- the latest available annual accounts accompanied by an auditor's statement.

If NWO has not assessed the organisations in advance, it cannot take the pre-proposal into consideration. *Please note:* If new applicants are added to the consortium in the full proposal, a further assessment based on these conditions will have to take place. Here too, the above documents should be submitted by email no later than ten working days before the submission deadline, so by 14:00:00 hours CEST on 15 September 2022.

*A comparable position refers to a researcher that has a demonstrable and comparable number of years of experience in carrying out scientific research and supervising other researchers as a full, associate or assistant professor. A lector or senior researcher employed by a university of applied sciences (HBO) or a TO2 institute must be able to demonstrate three or more years of research experience in order to act as a Principal Investigator.

Persons with a zero-hour employment agreement or with a contract for a limited period of time (other than a tenure track appointment) may not submit a proposal. An exception to the required duration of appointment may be made for: lectors employed by a university of applied sciences (HBO) and senior researchers employed by a university of applied sciences or a TO2 institute under a temporary appointment that does not cover the entire duration of the project.

It could be the case that the co-applicant's tenure track agreement ends before the intended completion date of the project for which funding is applied for, or that before that date, the co-applicant's tenured contract ends due to the co-applicant reaching retirement age. In that case, the co-applicant needs to include a statement from their employer in which the organisation concerned guarantees that the project and all project members for whom funding has been requested will receive adequate supervision for the full duration of the project.

NWO will not award funding if, in its view, the provision of funding would constitute State aid within the meaning of Article 107 of the Treaty on the Functioning of the European Union.

South African side

There is one type of co-applicant from a research institution based in South Africa:

a researcher from one of the institutions listed in 3.1.1, who has an employment contract for at least the duration of the application procedure and the duration of the research the grant is applied for and who has a PhD or an equivalent qualification. Researchers with a zero-hour contract at one of the institutions above cannot be a co-applicant. An exemption can be made for researchers on a 'tenure track' contract at one of the institutions above.

3.1.3 Research partner from African countries in SGCI

Each consortium is encouraged to include one or more research partners from research institutions based at any of the 16 African countries whose ministries and granting councils are a participating member in the SGCI. See **Annex 7.1 for details on SGCI**. Please take note of the following:

- African countries participating in the SGCI: Botswana, Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Tanzania, Uganda, Zambia, and Zimbabwe.
- Both the Dutch and South African researchers in the proposal must clearly indicate the benefit of co-opting an African partner and the research activities that will be carried out in the SGCI African partner country.

- The SGCI African partner should be involved in the impact plan and should be a signatory to the Consortium Agreement.
- If applicable, the Dutch and South African researchers should also indicate (in the Consortium Agreement) the type of contribution (in kind / in cash) to be made by the SGCI African partner country.

Please note: personnel of these organisations are excluded from payment of salaries and research costs from the NRF grant. It is possible via the NWO grant (see Annex 7.4)⁹, for a maximum of \in 75,000 of the total budget.

All organisations participating in a consortium must be registered as a legal persona.

3.1.4 Collaboration partner from a practitioner organisation

A consortium includes at least one partner from a public, semi-public or private practitioner organisation (for-profit or not-for-profit). Public and/or private practitioner collaboration partners are partners from the public and/or semi-public sectors and/or industry. They are closely involved with the research and impact plan.

Please note: personnel of these organisations are excluded from payment of salaries and research costs from the NWO or NRF grant, unless they are hired through the NWO module 'Material costs' – work by third parties (see Annex 7.4).

All organisations participating in a consortium must be registered as a legal persona.

3.1.5 Consortium

The Dutch main applicant submits the pre-proposal and full proposal via the NWO web application ISAAC and the South African main applicant submits the full proposal via the NRF Online Submission System. They are responsible for informing each other and the rest of the consortium of any feedback received on the eligibility of the application.

The assessment process will take place via ISAAC. The Dutch main applicant is responsible for sharing the reviewer reports, information regarding the rebuttal and any further information with the rest of the consortium.

The South African main applicant and the Dutch main applicant will be informed of the grant decision by their respective funding agencies. They are responsible for informing each other and the rest of the consortium of this decision.

After a proposal has been awarded funding, the main applicants will become the project leaders and point of contact for their respective funding agencies. The (knowledge) institutions of the main applicants will be the main beneficiaries and will take responsibility for the project secretariat, the day-to-day management and all financial affairs of the research project, including the final financial accountability towards their respective funding agencies.

Co-applicants and collaboration partners have an active role in realising the project. The (sub) project leaders and beneficiary/beneficiaries are jointly responsible for realising the entire project.

3.2 What can be applied for

Different costs can be reimbursed from the NRF and NWO grants. The application form allows you to specify which organisation you would like to cover a certain cost. You should complete two budgets, one

⁹ NWO will not award any funding to partners in countries that fall under national or international sanction legislation and rules. The EU Sanctions Map (<u>www.sanctionsmap.eu</u>) is guiding in this respect.

specifying the costs to be covered by the NWO grant and one specifying the costs to be covered by the NRF grant.

Reimbursable costs NRF budget

The South African researchers can apply for a maximum of R1 600 000 for research-related activities per consortia project to be paid annually for over 4-years. The NRF budget makes allowance for research related activities, reciprocal research visits/ mini sabbaticals by young researchers, knowledge sharing costs (i.e. science engagements), etc. The R1 600 000 research funds exclude support for one 2-year postdoctoral fellow and one 3-year doctoral student per consortia project. The financial support for these two positions will be a top-up on the overall research funds. The NRF Online Submission System has a section for budget requirements. South African applicants must ensure that they complete this section of the application form in line with **Annex 7.3** (i.e. NRF budget allocation per allowable research activities).

Reimbursable costs NWO budget

For an application in this Call for proposals, a maximum of € 700,000 can be applied for from NWO. The maximum duration of the proposed project is four years. The budget modules (including the maximum amount) available for this Call for proposals are listed in the table below. Apply only for funding that is vital to realise the project. A more detailed explanation of the budget modules can be found in the annexe to the Call for proposals (7.4).

Budget module	Maximum amount
PhD student	2 positions, according to VSNU or NFU rates ¹⁰
Professional Doctorate in Engineering (PDEng)	3 full-time positions, positions in combination with PhD student(s) and or postdoc(s), according to VSNU or NFU rates ¹⁰
Postdoc	2 full-time positions, according to VSNU or NFU rates ¹⁰
Non-scientific staff (NSS) at universities	€ 100,000, non-scientific staff at (NSS) universities ¹⁰ , in combination with PhD student(s) and/or postdoc(s) ¹⁰
Other Scientific personnel (OSS) at universities	€ 100,000, in combination with PhD student and/or postdoc
Research leave	5 months, 1 FTE, according to VSNU or NFU rates ¹⁰
Personnel universities of applied sciences, educational institutions and other organisations	3 full-time positions, rates based on <i>Handleiding Overheidstarieven 2021</i> (HOT) (Manual for Dutch Government Fees 2021)
Material costs	€ 15,000 per year per FTE scientific position
Investments (up to € 150,000)	Maximum € 150,000
Knowledge utilisation	Maximum 20% of the total budget applied for
Internationalisation	Maximum 20% of the total budget applied for
Money follows Cooperation	Less than 50% of the total budget applied for
Project management	Maximum 5% of the total budget applied for

3.3 Preparing an application

The 2022 call consists of three phases:

- Announcing of research initiatives (not mandatory)
- Preparing a pre-proposal
- Preparing a full proposal

¹⁰ For personnel outside the Netherlands, the local rates are reimbursed up to a maximum equal to the VSNU rates. **Please note**: costs for personnel from South Africa may only be applied for in the NRF grant.

3.3.2 Announcing of research initiatives

Before submitting the pre-proposal, applicants are invited to announce their research initiatives online on the Merian Fund South Africa programme <u>web page</u>. This may enable potential partners to contact an applicant and possibly join a consortium or it may give reason to merge certain research initiatives.

The steps involved in writing a research initiative are:

- download the research initiative form from the NWO web application ISAAC or from the NWO web page (on the grant page of the <u>funding instrument</u> concerned);
- complete the research initiative form;
- save the research initiative form as a PDF file and email it to NWO (southafrica-merian@nwo.nl);
- fill in the requested information online in ISAAC.

NWO will post the submitted research initiatives on the programme web page. A virtual matchmaking event will be organised, in which the call and its conditions will be further highlighted.

The steps involved in joining the virtual matchmaking event are:

- The applicants of registered research initiatives will be invited to a virtual matchmaking event;
- Partners interested in joining a specific research initiative should make themselves known through e-mailing the applicant or NWO (southafrica-merian@nwo.nl).

3.3.3 Preparing a pre-proposal

The steps involved in writing your application are:

- download the application form from the NWO web application ISAAC or from the NWO web page (on the grant page of the funding instrument concerned);
- complete the application form;
- save the application form in ISAAC as a PDF file and upload it (without any annexes);
- fill in the requested information online in ISAAC.

You must write your application in English.

An application can only be submitted via the web application ISAAC. Applications that are not submitted via ISAAC will not be taken into consideration.

As the Dutch main applicant, you are required to submit the application via your own personal ISAAC account.

It is important to start with your application in ISAAC on time:

- If you do not yet have an ISAAC account, then you should create this on time to prevent any possible registration problems.
- Any new organisations must also be added to ISAAC by NWO.
- You also need to submit other details online.

Applications submitted after the deadline will not be taken into consideration by NWO and NRF. For technical questions, please contact the ISAAC helpdesk, see contact (Chapter 6).

Do you, the South African main applicant, co-applicants and/or collaboration partners work at an organisation that is not included in the ISAAC database? You can report this via relatiebeheer@nwo.nl so that the organisation can be added to the database. This can take several days. It is therefore important that you report this at least one week before the deadline.

The main applicants must inform the organisation where she/he works about the submission of the application, and the organisation must accept the granting conditions of this Call for proposals.

3.3.4 Preparing a full proposal

The steps involved in writing your application are:

- download the application form from the NWO web application ISAAC or from the NWO web page (on the grant page of the funding instrument concerned);
- complete the application form;
- save the application form in ISAAC and in the NRF Online Submission System as a PDF file and upload it with any compulsory annexes; and
- fill in the requested information online in ISAAC and in the NRF Online Submission System.

Compulsory annexes:

- Budget;
- Letter of commitment from the organisations of the main applicants, co-applicants, SGCI African partners (if part of consortium) and public or private collaboration partners, in which the institutions confirm that they agree to the conditions required for the execution of the project. The letter must be signed by the Dean of the faculty or director of the organisation and be printed on the letterhead of the institution or organisation. See the format in Annex 7.5;
- Draft consortium agreement;
- CVs of both main applicants and all co-applicants, SGCI African partners (if part of consortium) and collaboration partners;
- In case of co-financing: a letter of guarantee from the co-financing organisation confirming the numeric amount that will be provided as co-financing. In case the organisation of a consortium member provides co-financing, this confirmation can be included in the letter of commitment. Letters of guarantee and commitment are unconditional and do not contain any opt-out clauses.

Annexes must be uploaded in ISAAC and in the NRF Online Submission System separately from the application. All of the annexes, except for the budget, must be submitted as PDF files (without encryption). The requested budget from NWO must be submitted in ISAAC as an Excel file and the requested budget from NRF must be submitted in the NRF Online Submission System. Any annexes other than those above-mentioned are not permitted.

You must write your application in English.

An application can only be submitted via the web application ISAAC and the NRF Online Submission System. Applications that are not submitted via ISAAC and the NRF Online Submission System will not be taken into consideration.

Further details regarding submission to NRF

Applications must be submitted through an online application process to the NRF on the NRF Online Submission System at https://nrfsubmission.nrf.ac.za./. Please make use of the 'General Application Guide 2022' for assistance on the steps to follow when applying for international research grants. The link to the guide will be published on this web page: https://www.nrf.ac.za/funding/nrf calls.

Further details regarding submission to NWO

As the Dutch main applicant, you are required to submit the application via your own personal ISAAC account.

It is important to start with your application in ISAAC on time:

- If you do not yet have an ISAAC account, then you should create this on time to prevent any
 possible registration problems.
- Any new organisations must also be added to ISAAC by NWO.
- You also need to submit other details online.

For technical questions, please contact the ISAAC helpdesk, see contact (Chapter 6).

Do any newly added consortium members work at an organisation that is not included in the ISAAC database? You can report this via <u>relatiebeheer@nwo.nl</u> so that the organisation can be added in the database. This can take several days. It is therefore important that you report this at least one week before the deadline.

3.4 Conditions for submission

3.4.2 Formal conditions for submission

NWO and NRF will assess your application against the conditions listed below. Your application will only be admitted to the assessment procedure if it meets these conditions. After submitting your application, we request you to be available to implement any possible administrative corrections so that you can (still) meet the conditions for submission.

The conditions for the pre-proposal are:

- the main applicants, co-applicants, SGCI African partners (if part of consortium) and collaboration partners meet the conditions stated in Section 3.1;
- the application form is, after a possible request to make additions or changes, is correct, complete and filled out according to the instructions;
- the application is submitted via the Dutch main applicant's ISAAC account;
- the application is received at or before the deadline set;
- the application is written in English;
- the proposed project has a duration of at most four years;

The conditions for the full proposal are:

- the main applicants, co-applicants and collaboration partners meet the conditions stated in Section
 3.1:
- the main applicants submitted a pre-proposal;
- the application form is, after a possible request to make additions or changes, is correct, complete
 and filled out according to the instructions;
- the application is submitted via the Dutch main applicant's ISAAC account to NWO and via the South African main applicant's account to the NRF Online Submission System;
- the application is received at or before the deadline set, by both NWO and NRF;
- the application is written in English;
- the application budget is drawn up in accordance with the conditions for this Call for proposals;
- the proposed project has a duration of at most four years;
- all of the required annexes have been submitted.

3.5 Conditions on granting

The <u>NWO Grant Rules 2017</u> and the Agreement on the Payment of Costs for Scientific Research are applicable to all grants awarded by NWO. The NRF Conditions will be detailed in the 'Conditions of Grant' Contract to be signed between the researchers and the NRF during the award process.

3.5.1 Data management

Responsible data management is part of good research. NWO and NRF want research data that emerges from publicly funded research to become freely available. Furthermore NWO and NRF want to raise awareness among researchers about the importance of responsible data management.

Data management NWO

The results of scientific research must be replicable, verifiable and falsifiable. In the digital age, this means that, in addition to publications, research data must also be publicly accessible insofar as this is possible. NWO expects that research data resulting from NWO-funded projects will be made publicly available, as much as possible, for reuse by other researchers. "As open as possible, as closed as necessary" is the applicable principle in this respect. Researchers are at least expected to make the data and/or non-numerical results that underlie the conclusions of work published within the project publicly available at the same time as the work's publication. Any costs incurred for this can be included in the project budget. Researchers should explain how data emerging from the project will be dealt with based on the data management section in the proposal and the data management plan that is drawn up after funding is awarded.

Data management section

The data management section is part of the proposal. Researchers are asked before the start of the research to consider how the data collected will be ordered and categorised so that this can be made publicly available. Measures will often already need to be taken, during the creation of data and analysis of the data, to make its later storage and dissemination possible. If it is not possible to make all data from the project publicly available, for example due to reasons of privacy, ethics or valorisation, then the applicant is obliged to list the reasons for this in the data management section.

The data management section in the proposal is not evaluated and will therefore not be weighed in the decision whether to award funding. However, both the referees and the committee can issue advice with respect to the data management section.

Data management NRF

South African main applicants and co-applicants should ensure that the above-mentioned data management plan also conforms to the data management standards and requirements of their university.

3.5.2 Scientific integrity

The projects funded in this call must be carried out in accordance with the nationally and internationally accepted standards for scientific conduct such as stated in the Netherlands Code of Conduct for Research Integrity (2018). By submitting the proposal, the applicant commits to this code. In the case of a (possible) violation of these standards during a project funded in this call, the applicant should immediately inform NWO and NRF of this and should submit all relevant documents to NWO and NRF. More information about the code of conduct and the policy regarding research integrity can be found on the website: www.nwo.nl/en/scientific-integrity.

3.5.3 Ethical statement or licence

The applicant is responsible for determining whether an ethical statement or licence is needed for the realisation of the proposed project. The applicant should ensure that this is obtained from the relevant institution or ethics committee on time. If the project is awarded funding, then the grant is issued under the condition that the necessary ethical statement or licence is obtained before the latest start date for the project. The project cannot start until NWO and NRF have received a copy of the ethical statement or licence.

It is the responsibility of the main applicants, in conjunction with their institutions, 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.

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 contract. 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.

3.5.4 Nagoya Protocol

The Nagoya Protocol ensures an honest and reasonable distribution of benefits emerging from the use of genetic resources (Access and Benefit Sharing; ABS). Researchers who make use of genetic sources from the Netherlands or abroad for their research should familiarise themselves with the Nagoya Protocol (www.absfocalpoint.nl). NWO and NRF assume that researchers will take all necessary actions with respect to the Nagoya Protocol.

3.5.5 Co-funding

- Partnering institutions from the SGCI African countries are encouraged to make in-kind and/or incash contributions;
- Co-financing by private and/or public parties is not a requirement for this Call, but if available, can take the form of in-kind or cash co-financing;
- It is possible for contributions to be partially in-kind and partially cash. The amounts of co-financing specified in the budget should correspond to the amount of co-financing specified in the guarantee letter or, in case of co-financing by an organisation that is part of the consortium, in the letter of commitment. Letters of guarantee and letters of commitment are unconditional and do no contain opt-out clauses;
- Institutions from SGCI African countries and the private and/or public parties that are part of the consortium should be involved in the research for the duration of the project;
- Co-financing provided by a South African institution or organisation should be included in the South
 African budget, and should be accounted for to NRF. Co-financing provided by other institutions or
 organisations should be included in the NWO budget, and accounted for to NWO;
- After a proposal has been awarded funding, NWO will invoice the private or public party that has pledged an in-cash contribution if that in-cash contribution exceeds € 5,000. After the contribution has been received, the money will be awarded to the project. Cash contributions of less than € 5,000 are marked by NWO-WOTRO as in kind contributions. It is the responsibility of the Dutch main applicant to invoice cash co-funding organisations who are contributing less than € 5,000.

3.5.6 Programmatic coherence

The projects awarded under this call for proposals should contribute to the Water-Energy-Food nexus. To this end, main applicants and researchers are expected to contribute to knowledge exchange and knowledge utilisation activities at the programme level and to attend meetings that will be organised for that purpose. This includes the programme's kick-off, mid-term and concluding workshops with the other projects funded under the Cooperation South Africa (NRF) - the Netherlands programme. This is in addition to the activities organised by the individual projects for this purpose. Consortia should budget for their attendance at these meetings (at least € 15,000).

4 Assessment procedure

This chapter first of all describes the course of the assessment procedure (Section 4.2). It then states the criteria that the assessment committee will use to assess your application (Section 4.3).

The NWO Code for Dealing with Personal Interests applies to all persons and NWO employees involved in the assessment and/or decision-taking process (www.nwo.nl/en/code-dealing-personal-interests).

NWO and NRF strive to achieve an inclusive culture in which there is no place for conscious or unconscious barriers due to cultural, ethnic or religious background, gender, sexual orientation, health or age (www.nwo.nl/en/diversity-and-inclusion). NWO and NRF encourage referees and members of an assessment committee or jury to be actively aware of implicit associations and to try to minimise these. NWO and NRF will provide them with information about concrete ways of improving the assessment of an application.

4.1 The San Fransico Declaration (DORA)

NWO is a signatory to the San Francisco Declaration on Research Assessment (DORA). DORA is a worldwide initiative that aims to improve the way research and researchers are assessed. DORA contains recommendations for research funders, research institutions, scientific journals and other parties.

DORA aims to reduce the uncritical use of bibliometric indicators and obviate unconscious bias in the assessment of research and researchers. DORA's overarching philosophy is that research should be evaluated on its own merits rather than on the basis of surrogate measures, such as the journal in which the research is published.

When assessing the scientific track record of applicants, a broad definition of scientific products is used in this call.

NWO and NRF request committee members and referees not to rely on indicators such as the Journal Impact Factor or the h-index when assessing applications. Applicants are not allowed to mention these in their applications. You are, however, allowed to list other scientific products besides publications, such as datasets, patents, software and code, et cetera.

For more information on how the principles of DORA are implemented in this call, see www.nwo.nl/en/dora.

4.2 Procedure

The application procedure consists of the following steps:

- Submission of the statement of intent
- Submission of the pre-proposal
- Consideration of the pre-proposal
- Assessment of the pre-proposal by assessment committee
- Decision-making by NRF RISA Exectuives and WOTRO Steering Committee
- Submission of the proposal
- Consideration of the proposal
- Peer review by referees
- Rebuttal
- Assessment by assessment committee
- Decision-making by NRF RISA Exectuives and WOTRO Steering Committee

4.2.1 Submission of the statement of intent

The submission of a research initiative is not compulsory for this Call for proposals. The research initiative provides a brief explanation of the research question and an initial indication of the parties involved in the consortium. For the research initiative submission, a standard form is available on the funding page of this Call for proposals on the NWO website. The research initiative must be submitted by the deadline via email (see paragraph 1.3). After submitting the research initiative, you will receive a confirmation of receipt.

4.2.2 Submission of the pre-proposal

The submission of a pre-proposal is compulsory for this Call for proposals. The pre-proposal is a concise proposal. For the pre-proposal submission, a standard form is available on the funding page of this Call for proposals on the NWO website. The pre-proposal form completed by you must have been received before the deadline via ISAAC (see paragraph 1.3). After submitting the pre-proposal, the Dutch main applicant will receive a confirmation of receipt.

4.2.3 Consideration of the pre-proposal

As soon as possible after you have submitted your pre-proposal, the Dutch main applicant will hear from NWO and NRF whether or not it will be taken into consideration. NWO and NRF will determine this based on several administrative-technical criteria (see the formal conditions for submission, Section 3.4). NWO and NRF can only take your pre-proposal into consideration if it meets these conditions.

Please bear in mind that within two weeks after the submission deadline, we may approach you with any possible administrative corrections that need to be made so that your pre-proposal can (still) meet the conditions for submission. You will be given the opportunity to make the corrections, and you will be given five working days to do this. If needed, a second opportunity may be granted with a maximum of two working days.

4.2.4 Assessment of the pre-proposal

The IAC will assess the pre-proposals, without making use of external referees, according to the criteria in section 4.3.1. The IAC will subsequently rank all pre-proposals. The IAC will then present a substantiated advice to the WOTRO Steering Committee and NRF RISA Executives regarding which consortia to invite to submit a full proposal.

The NRF RISA Executives and the NWO-WOTRO Steering Committee will check whether the assessment procedure of the pre-proposals has been carried out in accordance with the Call for Proposals and will provisionally decide on which consortia to invite to submit a full proposal, based on the advice of the IAC. The decision becomes definitive when the NWO-WOTRO Steering Committee and the NRF RISA Executives have come to the same provisional decision.

Consortia whose pre-proposals are judged not likely to be awarded grants will be notified per mail and post that they are not invited to submit a full proposal.

4.2.5 Submission of a proposal

For the submission of the full proposal, a standard form is available on the funding page of this Call for proposals on the NWO website. When you write your full proposal, you must adhere to the questions stated on this form and the procedure given in the explanatory notes. You must also adhere to the conditions for the maximum number of words and pages.

Your complete application form must have been received before the deadline via ISAAC and the NRF Online Submission System (see paragraph 1.3). After this deadline, you can no longer submit a full proposal. After submitting the full proposal, the main applicants will receive a confirmation of receipt.

4.2.6 Consideration of the proposal

As soon as possible after you have submitted your proposal, you will hear from NWO and NRF whether or not your full proposal will be taken into consideration. NWO and NRF will determine this based on several administrative-technical criteria (see the formal conditions for submission, Section 3.4). NWO and NRF can only take your full proposal into consideration if it meets these conditions.

You are asked to be available during two weeks after submitting your full proposal to enter any possible administrative corrections so that your full proposal can (still) meet the conditions for submission. You will be given the opportunity to make the corrections, and you will be given five working days to do this. If needed, a second opportunity may be granted with a maximum of two working days.

4.2.7 Peer review by referees

Before the assessment committee considers your full proposal, NWO and NRF will request input from at least two external referees. These are independent advisers who are expert in the subject of the full proposal. They will assess the full proposal based on the assessment criteria stated in the Call for proposals (Section 4.3).

A maximum of three non-referees can be registered. Applicants can register these non-referees in ISAAC when submitting the pre-proposal and full proposal. NWO and NRF will not approach these non-referees to assess the full proposal as external referees.

4.2.8 Rebuttal

The Dutch main applicant subsequently receives the anonymised referees' reports. Your consortium then has the opportunity to formulate a rebuttal. You will be given 10 working days to submit your rebuttal via ISAAC. If your consortium decides to withdraw the full proposal, then you should do this as quickly as possible by sending an email stating this to the call secretariat and withdrawing the proposal in ISAAC. If NWO receives your rebuttal after the deadline, then it will not be included in the rest of the procedure.

4.2.9 Pre-advice assessment committee

After this, your full proposal, the referees' reports and your rebuttal will be submitted for comments to several members of the assessment committee (the pre-advisers). The pre-advisers will provide substantiated written comments on the full proposal, based on the assessment criteria. They will formulate these comments based on the substantive assessment criteria (see Section 4.3.2) and will give the full proposal a numerical score per assessment criterion. For this, the NRF score table will be used (on a scale of 1 to 5, where "5" is excellent and "1" unsatisfactory).

4.2.10 Meeting of the assessment committee

The pre-advice for each full proposal is the starting point for the plenary discussion of the full proposals by the assessment committee. Following the discussion, the committee draws up a written recommendation addressed to NRF RISA Executives and the NWO-WOTRO Steering Committee about the quality and ranking of the full proposals. This recommendation is based on the assessment criteria. The full proposal must receive an overall qualification of at least "very good" to be eligible for the funding. The full proposal must also receive at least the qualification "good" for each of the separate assessment criteria.

For more information about the qualifications, see www.nwo.nl/en/apply-funding-how-does-it-work.

¹¹ Email addresses: southafrica-merian@nwo.nl and t.phahlamohlaka@risa.nrf.ac.za.

If, after the discussion of the full proposals, it transpires that two or more of the proposals based on their weighted total score cannot be distinguished from each other, then there is an ex aequo situation (see the paragraph about ex aequo).

4.2.11 Ex aequo

NWO and NRF understand ex aequo to be a situation in which two or more full proposals cannot be distinguished from each other based on their weighted score. An ex aequo situation is relevant with respect to the selection or funding limit. The existence of an ex aequo situation is determined as follows. The starting point is the ranking drawn up by the assessment committee, with the final scores rounded to two decimal points. The reference score is the score of the lowest-ranked full proposal within the limit of the amount of applications that can be selected or the available budget. All full proposals with a score that is within 0.05 or less of the reference score will be considered. In this way, the full proposals that are equal within a score of 0.1 of each other will be discussed again by the committee.

If an ex aequo situation occurs at the limit of the amount of applications that can be selected or the available budget, and after discussion the committee concludes that there is no clear distinction in their assessment and the full proposals should indeed be considered ex aequo, then the full proposal with a higher score for the criterion 'Quality of the research proposal' will end as the highest. If the ex aequo situation is not resolved with this, then the full proposal with the highest score for the criterion 'Potential for societal impact' will end highest. If the full proposals are still tied following this, the assessment committee, with the help of an (anonymous) majority vote, will determine the ranking (in accordance with Article 2.2.7, third paragraph, sub a, part iv of the NWO Grant Rules 2017). If this vote provides no resolution either, or is not desirable to vote, the ex aequo situation will be sent on to the NWO-WOTRO Steering Committee and the NRF RISA Executives.

4.2.12 Decision-taking

Finally, NRF RISA Executives and the NWO-WOTRO Steering Committee will assess the procedure followed and the advice from the assessment committee. It will subsequently determine the final qualifications and take a decision about awarding or rejecting the full proposals. The decision becomes definitive when the NWO-WOTRO Steering Committee and the NRF RISA Executives have come to the same provisional decision.

4.2.13 Timetable

Below, you will find the timetable for this Call for proposals. During the current procedure, NWO and NRF might find it necessary to make further changes to the timetable for this Call for proposals. You will, of course, be informed about this in time.

Research initiatives	
18 January 2022 14:00:00 hours CET	Deadline research initiatives (not mandatory)
3 February 2022	Virtual matchmaking event
Pre-proposals	
1 March 2022 14:00:00 hours CET	Deadline pre-proposals
March – May 2022	Assessment committee assesses pre-proposals
June 2022	Applicants receive decision about whether or not to elaborate the pre-proposal into a proposal
16 June 2022	Webinar for applicants who are invited to submit a proposal

Full proposals	
29 September 2022 14:00:00 hours CEST for NWO 23:59:59 hours SAST for NRF	Deadline full proposals
October 2022 – January 2023	Referees consulted
January 2023	Applicants can submit a rebuttal
February 2023	Assessment committee meeting
March 2023	Decision by NWO-WOTRO Steering Committee and NRF RISA Executives

4.3 Criteria

4.3.1 Substantive assessment criteria – pre-proposal

The pre-proposals submitted within this Call for proposals will be substantially assessed on the basis of the following criteria:

- I. Fit within the Merian South Africa 2022 call (60 percent weighting)
- II. Scientific importance of the proposed project (20 percent weighting)
- III. Societal relevance of the proposed project (20 percent weighting)

The assessment criteria are further operationalised below:

- I. Fit within the Merian South Africa 2022 call (60 percent weighting):
 - The consortium addresses a problem relevant to the thematic focus of the Call for proposals.
 - Adequacy of inter -or transdisciplinary research approach, including the clarity and validity of the WEF nexus conceptualisation.
 - The transnational added value to be expected from the collaboration.
- II. Scientific importance of the proposed project (20 percent weighting):
 - The problem definition is scientifically important.
 - There is a plausible likelihood of a scientific breakthrough.
- III. Societal relevance of the proposed project (20 percent weighting):
 - The proposal is societally relevant for the Southern African context.
 - There is a plausible likelihood of a societal breakthrough.

4.3.2 Substantive assessment criteria – proposal

The proposals submitted within this Call for proposals will be substantially assessed on the basis of the following criteria:

- I. Quality of the research proposal
- II. Potential for societal impact
- III. Quality of the consortium

The criteria carry equal weight and each count for one-third of the final assessment. The assessment criteria are further operationalised below:

I. Quality of the research proposal

- Scientific importance and innovativeness of the research questions and approach;
- Degree to which the proposal fits the thematic focus of the Call for proposals;
- Complementarity to other research programmes or (inter)national research agendas;
- Rigour of the research design: adequacy, feasibility and coherence of the research approach and methodology in view of the problem addressed;
- Interdisciplinarity or transdisciplinarity; the proposal incorporates the scientific disciplines necessary for addressing the problem, as well as knowledge from outside the scientific community;
- Adequacy of the budget.

II. Potential for societal impact

- Relevance for society and potential for societal breakthroughs;
- Suitable involvement of target groups, convincingly responding to their demand;
- Quality of the impact plan:
 - i. a clear problem statement, analysis and vision on the desired societal impact;
 - ii. a logical impact pathway presenting plausible pathways to societal impact;
 - iii. appropriate and feasible strategic activity planning;
 - iv. relevant stakeholder involvement in the development and execution of the impact plan.

III. Quality of the consortium

- Suitability of the consortium partners' expertise in relation to the research project;
- Potential for long-term knowledge relations;
- Quality of the Southern African-Dutch collaboration, including fair and equitable partnership and genuine involvement of researchers from a South African historically disadvantaged university, and from an institution based at any of the 16 SGCI African countries (if part of consortium);
- Experience in supervising postgraduate students.

5 Obligations for grant recipients

This chapter details the various obligations that - in addition to the conditions stated in Section 3.5 - apply after funds have been awarded.

5.1.1 Start and duration of the project

The project should start within six months of the project being awarded. At least one researcher must be appointed to the project at the time of its start. If the project has not started within six months, the NWO-WOTRO Steering Committee and the NRF RISA Executives can decide to revoke the granting decision.

Start documents

The Dutch main applicant and South African main applicant are responsible for ensuring the necessary documents for the start of the project are submitted to their respective funding agencies, so that the project in its entirety can start on time.

NWO

The project can start if the following documents have been approved by NWO:

- A project notification form with information of project staff;
- A data management plan;
- A consortium agreement, signed by all consortium organisations;
- (If applicable) approval of relevant ethics committees;
- (If applicable) receipt by NWO of the first tranche of in-cash co-financing.

NRF

The NRF Conditions will be detailed in the 'Conditions of Grant' Contract to be signed between the researchers and the NRF during the award process.

Publications

When publishing the results of the subsidised research, the support by NWO and NRF should be mentioned.

Annual report

Annually, the main applicants must submit a written report (in English) to inform NWO and NRF on the overall project progress, experiences and output. The main applicants from both countries will receive instructions and a format for this report in advance. On an annual basis, the NRF publishes a national Call for 'Progress Reports' due for each financial year. The South African main applicant is urged to look out for such notifications/calls.

Mid-term report

The projects will also be evaluated at about the mid-term of the projects' running time by a self-assessment. This includes a workshop, organised by the consortium, and sharing and discussing the results with stakeholders from outside the project team. Consortia should include this workshop in their budget. The mid-term report will be based on the conclusions of the workshop, including a reflection on and, if required, revision of the impact plan, the underlying assumptions and the indicators. The assessment committee (see 4.2) created by NRF and NWO will evaluate the progress of the projects based on mid-term reports submitted by the consortia. Interviews or field visits may be organised to evaluate the progress and impact of the projects. The IAC will give recommendations to the projects based on their evaluations.

The mid-term report of all the projects of a call need to be submitted before the joint mid-term workshop and will be used as input for organising the mid-term workshop.

Final report

A substantive final report should be submitted within three months after the end of the project's runtime to NRF and NWO, detailing the research done and the achieved results, as well as a reflection on the project's impact plan and its indicators. As part of this, projects will be asked to again complete a self-assessment, and hold a final workshop and a discussion with stakeholders from outside the project team. The final substantive report will again be evaluated by the assessment committee, created by NRF and NWO. The final workshop should again be taken into account in the consortium's budget.

Final accountability NWO

In addition to the final report, the Dutch main applicant and the controller/financial manager of the Dutch project leader's institution should submit a signed financial end report, organised according to the budget lines of the approved NWO budget. The report should detail, among others, the effective duration (period) and size (fte) of the personnel appointed to the project, and, if applicable, how eventual replacements were arranged. The realised in cash and in-kind co-financing should also be accounted for.

If the Dutch main applicant is not based at a knowledge institution that is subject to the education accountants' protocol of the Ministry of Education, Culture and Science, an external audit report must also be submitted. NWO reserves the right to conduct an external financial audit.

NWO reserves the right to externally evaluate projects financed under this call. The project ends with the issuing of the grant settlement decision. This decision is taken after approval of the final documents by NWO.

5.1.2 Data management

After a proposal has been awarded funding, the researcher should elaborate the data management section into a data management plan. For this, applicants can make use of the advice from the referees and committee. The applicant describes in the plan whether use will be made of existing data, whether new data will be collected or generated, and how the data will be made FAIR: Findable, Accessible, Interoperable, Reusable. Before submission, the data management plan should be checked by a data steward or similar officer of the organisation where the project will be realised. The plan should be submitted to NWO via ISAAC within 4 months after the proposal has been awarded funding. NWO will approve the plan as quickly as possible. Approval of the data management plan by NWO is a condition for disbursement of the funding. The plan can be adjusted during the research. More information about the data management protocol of NWO can be found at: www.nwo.nl/en/research-data-management.

5.1.3 Consortium agreement and intellectual property

For research partnerships to be effective, they have to be fair and equitable. A consortium agreement should be signed by all consortium partners prior to the start of the awarded project, detailing agreements regarding rights (such as copyright, publications, intellectual property etc. of products or other developments in the project), knowledge utilisation, as well as affairs such as payments, progress-and final reports, and confidentiality. The agreement furthermore details agreements on governance of the consortium (to the extent that it gives sufficient guarantee for effective collaboration), finances, and if applicable, basic knowledge to be contributed, of equity. The initiative for the concluding of these agreements lies with the main applicants. NWO and NRF will subsequently check whether the project agreement meets the conditions and will not itself sign the agreement.

The model consortium agreement that NWO and NRF make available must be used and can be found on the funding page of this Call for proposals.

With respect to intellectual property (IP), the NWO IP policy applies. This can be found in <u>Chapter 4 of the NWO Grant Rules 2017</u>. Dutch main applicants and co-applicants must carry out a project funded by NWO during the time that they work for the knowledge institution. If an applicant or a researcher funded by NWO is appointed by more than one employer, then the other employer should relinquish any possible IP rights that emerge from the project of the applicant. South African main applicants and co-applicants should furthermore ensure that any IP emanating from the execution of their project is managed in accordance with the Intellectual Property Rights from Publicly Financed Research and Development Act, 2008 (Act No. 51 of 2008) and is aligned to their university policies.

5.1.4 Socially responsible licensing

The knowledge that emerges from the project could be suitable for use in society. When agreements about licensing and/or the transfer of research results developed under this Call for proposals are made, due consideration should be given to the ten principles for socially responsible licensing, as stated in the NFU factsheet "Socially Responsible Licensing Toolkit for knowledge institutions" (www.nfu.nl/sites/default/files/2020-09/200902-NFU%20Factsheet%20Toolkit%20SRL.pdf).

5.1.5 Open Access

As a signatory to the Berlin Declaration (2003) and a member of cOAlition S (2018), NWO is committed to making the results of the research it funds openly accessible via the internet (Open Access). By doing this, NWO gives substance to the ambitions of the Dutch government to make all publicly funded research available in Open Access form. NRF is also a signatory to the Berlin Declaration and committed to making the results of the research it funds openly accessible. Scientific publications arising from projects awarded on the basis of this Call for proposals must therefore be made available in Open Access form in accordance with the Open Access Policy.

Scientific articles

Scientific articles must be made available in Open Access form immediately at the time of publication (without embargo) via one of the following routes:

- publication in a fully Open Access journal or platform registered in the DOAJ;
- publication in a subscription journal and the immediate deposition of at least the author accepted manuscript of the article in an Open Access repository registered in Open DOAR;
- publication in a journal for which a transformative Open Access agreement exists between VSNU and a publisher. For further information, see www.openaccess.nl/en.

Books

Different requirements apply to scholarly books, book chapters and edited collections. See the Open Access Policy Framework at www.nwo.nl/en/open-science.

CC BY licence

To ensure the widest possible dissemination of publications, at least a Creative Commons (CC BY) licence must be applied. Alternatively – in case of substantial interest – the author may request to publish under a CC BY-ND licence. For books, book chapters and collected volumes, all CC BY licence options are allowed.

Costs

Costs for publication in fully Open Access journals can be budgeted in the application using the NWO budget module for "material costs". Costs for publications in hybrid journals are not eligible for reimbursement by NWO. For Open Access books, a separate NWO Open Access Books Fund is available.

For more detailed information about NWO's Open Access policy, see www.nwo.nl/en/open-science.

6 Contact and other information

6.1 Contact

6.1.1 Specific questions

For specific questions about this Call for proposals, please contact:

Contact person NWO: Jacomijn Verbruggen-Zoutewelle +31 70 344 09 72 / +31 6 23741208 southafrica-merian@nwo.nl

Contact person NRF: Teuns Phahlamohlaka +27 12 481 4385 t.phahlamohlaka@risa.nrf.ac.za

6.1.2 Technical questions about the electronic application systems

For technical questions about the use of ISAAC, please contact the ISAAC helpdesk. Please read the manual first before consulting the helpdesk. The ISAAC helpdesk can be contacted from Monday to Friday between 10:00 and 17:00 hours on +31 20 346 7179. However, you can also submit your question by email to isaac.helpdesk@nwo.nl. You will then receive an answer within two working days.

For technical questions on the NRF online submission system please contact Mr Stephen Dlamini on tel. +27 12 481 4037 or email: <u>SM.Dlamini@risa.nrf.ac.za</u> OR the NRF Support Desk on email: <u>supportdesk@nrf.ac.za</u> and tel. +27 12 481 4202.

6.2 Other information

NRF processes data from applicants in accordance with the NRF Protection of Personal Information Policy and Records Management Policy as aligned to South Africa's Protection of Personal Information Act No. 4 of 2013 (PoPIA).

7 Annexes:

7.1 List of African countries whose ministries and granting councils are a member of the SGCI

The Science Granting Councils Initiative (SGCI) is a multi-funder initiative that aims to strengthen the capacities of 16 science granting councils in Sub-Saharan Africa in order to support research and evidence-based policies that will contribute to economic and social development. Launched in April 2015, the Initiative contributes to strengthening the ability of science granting councils to manage research; design and monitor research programmes based on the use of robust science, technology and innovation indicators; support knowledge exchange with the private sector; and strengthen partnerships between Science Granting Councils and other science system actors.

The Initiative is being implemented mainly through on-site coaching and mentoring, few regional training workshops by a number of specialist organisations, and support for collaborative research projects. This Initiative was designed on the premise that more effective Councils will strengthen national science systems and lead to nationally led research that contributes to development in participating countries.

The Initiative is currently supported and funded by the United Kingdom's Department for International Development (DFID), the Canadian International Development Research Centre (IDRC), the Swedish International Development Cooperation Agency (Sida), and the South African Department of Science and Technology, the National Research Foundation, and the German Research Foundation (DFG). There are 16 African countries participating in the Initiative representing East, West and Southern African regions as follows:

SGCI Participating Countries in East Africa		SGCI Participating Countries in Southern Africa		SGCI Participating Countries in West Africa	
		-			
1.	Ethiopia	6.	Botswana	12. Burkina Faso	
2.	Kenya	7.	Malawi	13. Côte d'Ivoire	
3.	Rwanda	8.	Mozambique	14. Ghana	
4.	Tanzania	9.	Namibia	15. Nigeria	
5.	Uganda	10.	Zambia	16. Senegal	
		11.	Zimbabwe		

For more detailed information on the SGCI please visit the website: https://sgciafrica.org/en-za/home.

7.2 List of historically disadvantaged institutions

The following eight universities qualify as historically disadvantaged in line with the Department of Higher Education and Training November 2019 Ministerial Statement on university funding:

- University of Limpopo (UL)
- University of Fort Hare (UFH)
- University of Venda (Univen)
- Walter Sisulu University (WSU)
- University of the Western Cape (UWC)
- University of Zululand (UniZulu)
- Mangosuthu University of Technology (MUT)
- Sefako Makgatho Health Sciences University (SMU)

7.3 NRF budget allocation per allowable research activities

NRF Funds can be used to cover the following costs:

- Research-related costs activities to be supported may include expenses relating to field work such as conducting interviews, surveys, laboratory experiments, research-related trips, small equipment (consumables) to a maximum amount of R200 000, etc. Airfare, accommodation, ground transport and subsistence should be calculated using rates as stipulated in institutional travel policies.
- 2-year postdoctoral research support Funds within this programme make provision for one postdoctoral position for duration of 2-years equivalent to the NRF Freestanding Postdoctoral Fellowship. Therefore, PIs are expected to supervise and mentor a postdoctoral researcher who should be allowed to conduct research, either on a pre-specified aspect of the joint project or on their own designed topic within the consortia project and should be supported to publish the work. The responsibilities of this position may also include assisting the PI with the management and administration of the consortia project. The postdoctoral fellows should be prepared to become main applicants so they also take on senior responsibilities like mentoring, grant writing, and teaching.
- Reciprocal research visits/ mini sabbaticals by young researchers the placements should enable the postgraduate students within the project to learn valuable new skills or techniques; access facilities or resources not readily available at home; build relationships with potential new collaborators; and advance complementary collaborative research. The duration of each placement is expected to be 3-6 months with flexibility to split the placement into several shorter visits. Longer placements may be undertaken where this would add value and these should be justified within the application. Placements must enhance, not replace, the standard training and study support that the postgraduate students receive. These placements must be managed to fit within the original funded period of the studentship. Additional funding will not be made available through this call to support studentship extensions for those undertaking international placements. Applicants should include information about how these reciprocal research visits will be managed. Funds within this programme can only be used for these reciprocal research visits/ mini sabbaticals. The honours are on the PIs (and doctoral students) to secure funding for educational expenses of participating students. Doctoral students are hereby advised to apply for scholarship through the NRF call for Student Support which opens the beginning of April each year.
- Knowledge sharing costs (science engagement) The NRF supports science engagement through its coordination and implementation of the Department of Science and Innovation's Science Engagement Strategy. The strategy embraces a broad understanding of science, encompassing systematic knowledge spanning natural and physical sciences, engineering sciences, medical sciences, agricultural sciences, mathematics, social sciences and humanities, technology, all aspects of the innovation chain and indigenous knowledge. Within this context, science engagement refers to activities, events, or interactions characterised by mutual learning and dialogue among people of varied backgrounds, scientific expertise and life experiences, who articulate and discuss their perspectives, ideas, knowledge and values. Science engagement is an overarching term for all aspects of public engagement with science, science awareness, science education, science communication and science outreach, which aim to develop and benefit individuals and society. Researchers funded through the NRF programmes are required to contribute to science engagement and report the related outputs in their Progress Report. Project-related activities, such as joint workshops, seminars, conferences, symposia, lecturer presentations, meetings, local and regional dissemination of results to relevant stakeholders can be covered by these funds.

The total amount requested from the NRF should not exceed R1 600 000 per consortia project. Funding will be made available for a maximum of 4 years, to be paid in annual instalments and exclusively for research activities commencing in 2023. The funds per consortia project have to be utilised as follows:

- R1 600 000 per consortia project for research activities, mobility costs of the research team, doctoral research placements, small equipment, knowledge sharing costs, etc.
- R430 000 for 1 postdoctoral position at R215 000 per annum for 2-years:
 - R155 000 non-taxable stipend
 - R45 000 contribution towards research costs, and
 - R15 000 compulsory institutional contribution.
- Postgraduate student support: The funds makes allowance for 1 doctoral student per consortia project. The PI is expected to encourage his/her identified doctoral student to apply through the normal application procedure for NRF postgraduate students when the call for Student Support opens in April 2023 for a scholarship in 2024. The PI should provide the identified student with his/her grant number (i.e. UID number) which will be provided by the NRF on the Letter of Award. For further details on the eligibility and funding criteria refer to the NRF Postgraduate Funding Policy.

The following are **NOT** to be funded from the NRF funds allocation:

- Consultant's fees
- Large equipment
- Project management fees
- Overheads
- Salaries and temporary staff fees

7.4 NWO budget explanation

It is possible to apply for the funding of the salary costs of personnel who make a substantial contribution to the research. Funding of these salary costs depends on the type of appointment and the organisation where the personnel are/ will be appointed.

- For university appointments, the salary costs are funded in accordance with the VSNU salary tables applicable at the moment the grant is awarded (www.nwo.nl/en/salary-tables).
- For university medical centres, the salary costs are funded in accordance with the NFU salary tables applicable at the moment the grant is awarded (www.nwo.nl/en/salary-tables).
- For personnel from universities of applied sciences and other institutions, the salary costs are funded on the basis of the collective labour agreement salary scale of the employee concerned, in accordance with the *Handleiding Overheidstarieven (HOT) 2021*.
- For the Caribbean Netherlands, the Dutch government employs civil servants on Bonaire, Sint Eustatius and Saba under different conditions than in the European part of the Netherlands www.rijksdienstcn.com/werken-bij-rijksdienst-caribisch-nederland/arbeidsvoorwaarden.

The rates for all budget modules are incorporated in the budget template that accompanies the application form. For the budget modules "PhD student", "PDEng" and "Postdoc", a one-off individual bench fee of € 5,000 is added on top of the salary costs to encourage the scientific career of the project employee funded by NWO. Remunerations for PhD scholarship students ('bursalen') at a Dutch university are not eligible for funding from NWO.

The available budget modules are explained below.

PhD student (including MD-PhD student)

A PhD student is appointed for 1.0 FTE for a duration of 48 months. The equivalent of 48 full-time months, for example an appointment of 60 months for 0.8 FTE, is also possible. If a different duration of appointment is considered necessary for the realisation of the proposed research, then the standard time can be deviated from as long as this is properly justified. However, the duration of appointment must always be at least 48 months.

Professional Doctorate in Engineering (PDEng)

Funding for the appointment of a PDEng can only be applied for if funding for a PhD student or postdoc is also applied for.

The appointment for a PDEng position is a maximum of 1.0 FTE for 24 months. The PDEng trainee is employed by the institution applying for funding and can realise activities that are part of the research at an industrial partner for a specified time. If the research proposal is awarded funding, then an agreement must be concluded with the industrial partner(s) concerned. The underlying "Technological Designer Programme" must be described in the proposal.

Postdoc

The size and duration of the postdoc appointment is at least 6 full months and at most 48 full-time months. The size and duration of the appointment is at the applicant's discretion, but the appointment is always for at least 0.5 FTE or for a duration of at least 12 months. The product of FTE x duration of appointment should always be a minimum of 6 full-time months. The material budget is available to cover the costs of a more limited appointment of a postdoc.

Non-scientific staff (NSS) at universities

Funding for the appointment of NSS required to realise the research project can only be applied for if funding for a PhD student or postdoc is also applied for. A maximum of € 100,000 can be requested for NSS. This includes personnel such as student assistants, programmers, technical assistants or analysts. Depending on the level of the position, the appropriate salary table for NSS at MBO, HBO or university level applies. The size of the appointment is at least 6 full-time months and at most 48 full-time months. The size and duration of the appointment is at the applicant's discretion, but the appointment is always for at least 0.5 FTE or for a duration of at least 12 months. The product of FTE x duration of appointment should always be a minimum of 6 full-time months.

The material budget is available to cover the costs of a more limited appointment of NSS.

Other Scientific personnel (OSS) at universities

Budget for OSS such as AIOS (doctor training to be a specialist), ANIOS (doctor not training to be a specialist), scientific programmers or employees with a master's degree can only be applied for if funding for a PhD student or postdoc is also applied for. For this category, a maximum of €100,000 can be applied for.

The size of the appointment is at least 6 full-time months and at most 48 full-time months. The size and duration of the appointment is at the applicant's discretion, but the appointment is always for at least 0.5 FTE or for a duration of at least 12 months. The product of FTE x duration of appointment should always be a minimum of 6 full-time months.

Research leave for applicants

With this budget module, funding can be requested for the costs of the research leave of the main and/or co-applicant(s). The employer of the applicant(s) can use this to cover the costs of relinquishing him or her from educational, supervisory, administrative or management tasks (not research tasks). The time that is released through the research leave grant can only be used by the applicant(s) for activities in the context of the project. The proposal must describe which activities in the context of the project the applicant(s) will carry out in the time relinquished.

The maximum amount of research leave that can be applied for is the equivalent of 5 full-time months. NWO funds the research leave in accordance with the salary tables for a senior scientific employee (scale 11) at the time the grant is awarded (www.nwo.nl/en/salary-tables).http://www.nwo.nl/salaristabellen

Personnel universities of applied sciences, educational institutions and other organisations

For the funding of salary costs of personnel employed at a university of applied sciences, educational institutions (with the exception of personnel that fall under the VSNU or NFU) or other organisations, the following rates (hours/day) are used. These are in accordance with the *Handleiding Overheidstarieven (HOT) 2021* (Table 2.2; column "Uurtarief productieve uren, excl. btw").

Scale	rate per hour	rate per day	rate per year	Scale	rate per hour	rate per day	rate per year
1	€ 39	€ 312	€ 54.300	10	€ 70	€ 560	€ 98.300
2	€ 40	€ 320	€ 57.300	11	€ 77	€ 616	€ 109.300
3	€ 44	€ 352	€ 62.300	12	€ 87	€ 696	€ 122.300
4	€ 47	€ 376	€ 66.300	13	€ 96	€ 768	€ 135.300
5	€ 50	€ 400	€ 70.300	14	€ 105	€ 840	€ 148.300
6	€ 52	€ 416	€ 73.300	15	€ 113	€ 904	€ 159.300
7	€ 55	€ 440	€ 78.300	16	€ 121	€ 968	€ 171.300
8	€ 59	€ 472	€ 83.300	17	€ 130	€ 1.040	€ 184.300
9	€ 64	€ 512	€ 90.300	18	€ 140	€ 1.120	€ 198.300

Explanation of budget module Material

For each FTE scientific position (PhD student, postdoc, PDEng) applied for, a maximum of € 15,000 material budget can be applied for per year of the appointment. Material budget for smaller appointments can be applied for on a proportionate basis and will be made available by NWO accordingly. Per 0.2 FTE scientific employee applied for at a university of applied sciences, educational institution or other organisation (with a minimum appointment of 0.2 FTE for 12 months) a maximum of € 15,000 in material budget can be applied for per year.

The applicant is responsible for distributing the total amount of material budget across the NWO-funded personnel positions. The material budget that can be applied for is specified according to the three categories below:

Project-related goods/services

- consumables (e.g. glassware, chemicals, cryogenic fluids, etc.)
- measurement and calculation time (e.g. access to supercomputer, etc.)
- costs for acquiring or using data collections (e.g. from Statistics Netherlands [CBS]), for which the total amount may not be more than € 25,000 per proposal
- access to large national and international facilities (e.g. cleanroom, synchrotron, etc.)
- work by third parties (e.g. laboratory analyses, data collection, citizen science, etc.)
- personnel costs for the appointment of a postdoc and/or non-scientific personnel for a smaller appointment size than those offered in the personnel budget modules

Travel and accommodation costs for the personnel positions applied for

- travel and accommodation costs
- conference attendance (maximum of two per year per scientific position applied for)
- fieldwork
- work visit

Implementation costs

national symposium/conference/workshop organised by the project researchers

- costs for Open Access publishing (solely in full gold Open Access journals, registered in the "Directory of Open Access Journals" https://doaj.org/)
- costs data management
- costs involved in applying for licences (e.g. for animal experiments)
- audit costs (only for institutions that are not subject to the education accountants protocol of the Ministry of Education, Culture and Science), maximum € 5,000 per proposal; for projects with a duration of three years or less, a maximum of € 2,500 per proposal applies

Costs that cannot be applied for are:

- basic facilities within the institution (e.g. laptops, office furniture, etc.)
- maintenance and insurance costs

If the maximum amount is not sufficient for realising the research, then this amount may be deviated from, if a clear justification is provided in the proposal.

Citizen science

Involving citizens (citizen science) can contribute to the quality of the research. With the help of citizens, data and insights can be acquired that would not otherwise be available for research. NWO also funds citizen science. Applicants can use the budget module "material, project-related goods/services, work by third parties" to request a remuneration for the involvement of citizens in projects. The budget module offers a possibility and is not a requirement. Applicants are free to decide whether it is worthwhile involving citizens in the project and what exactly they use this budget for (for example, reimbursement of expenses of citizens, skills training for citizens or technical devices for the participating citizen).

Explanation of budget module Investments (up to € 150,000)

In this budget module, funding can be requested up to a maximum of € 150,000 for investments in equipment, datasets and/or software (e.g. lasers, specialised computers or computer programmes).

Explanation of budget module Knowledge utilisation

A maximum of 20 percent of the grant, € 140,000, can be requested under this call as funding for knowledge utilisation activities. The following conditions apply:

- The aim of this budget module is to facilitate the use of the knowledge that emerges from the research¹².
- Because knowledge utilisation takes many different forms in different scientific fields, it is up to the
 applicant to specify the costs required, e.g. costs of producing a teaching package, conducting a
 feasibility study into potential applications, or filing a patent application.
- The budget applied for should be adequately specified in the proposal.
- Please ensure to budget for activities related to your impact plan, specifically the strategic activity planning, being:
 - Stakeholder engagement (e.g. consultation workshops, expert meetings, roundtable meetings);
 - o Communication strategy (e.g. international exchange events, videos, blogs, newsletters);
 - Monitoring, evaluation, and learning, including your project's kick-off, midterm, and final workshop, learning events, and participation in the programme's joint kick-off, midterm, and final workshop; and
 - Capacity strengthening (e.g. (development of) trainings for researchers or stakeholders (organisations)).

NB: please take into account requirements of knowledge utilisation stated elsewhere in this call for proposals, such as budgeting for kick-off, midterm, and final workshops, and 2.4.2 Impact Plan.

¹² In this budget module, the definition for "knowledge transfer" used by the European Commission in the Framework for State Aid for research and development and innovation applies (PbEU, 2014, C198).

Explanation of budget module Internationalisation

A maximum of € 140,000 can be requested under this call as funding for internationalisation activities. The following conditions apply:

The budget for internationalisation is intended to encourage international collaboration. The amount requested must be specified. If the maximum amount is not sufficient for realising the research, then it may be deviated from if a clear justification is provided in the proposal.

Funding can be requested for:

- travel and accommodation costs in so far as these concern direct research costs emerging from the international collaboration and additional costs for internationalisation that cannot be covered in another manner, for example from the bench fee;
- travel and accommodation costs for foreign guest researchers;
- costs for organising international workshops/symposia/scientific meetings.

Explanation of the budget module Money follows Cooperation (MfC)

The module Money follows Cooperation provides the possibility of realising a part of the project at a publicly funded knowledge institution outside of the Netherlands.

The applicant must convincingly argue how the researcher from the foreign knowledge institution will contribute specific expertise to the research project that is not available in the Netherlands at the level necessary for the project.

This condition does not apply if NWO has concluded a bilateral agreement concerning Money follows Cooperation with the national research council of the country where the foreign knowledge institution is located. At www.nwo.nl/en/money-follows-cooperation you will find an overview of research councils that signed a bilateral MfC agreement with NWO.

The budget applied for within this module must be less than 50% of the total budget applied for.

The co-applicant from the participating foreign knowledge institution must meet the conditions set for co-applicants in Section 3.1 of this Call for proposals, with the exception of the condition that the co-applicant must be employed in the Kingdom of the Netherlands.

The rates for the personnel costs of researchers at the foreign knowledge institution are calculated on the basis of the correction coefficients table of the Marie Skłodowska-Curie grants (EU, Horizon 2020), based on the Dutch VSNU rates. The table can be found at www.nwo.nl/en/money-follows-cooperation.

The main applicant receives the grant and is responsible for transferring the amount to the foreign knowledge institution and for providing accountability for the MfC part of the grant. The MfC part will be part of the overall financial accountability of the project.

The exchange rate risk lies with the applicants. Therefore, gains or losses due to the exchange rate are not eligible for funding.

The applicant is responsible for:

- the financial accountability for all costs in both euros and the local currency, for which the exchange rate used must be visible;
- a reasonable determination of the size of the exchange rate. If requested by NWO, the applicant must always be able to provide a description of this reasonable determination.

If more than € 125,000 is requested within this module, then the final financial statement must be accompanied by an audit report.

NWO will not award any funding to co-applicants in countries that fall under national or international sanction legislation and rules. The EU Sanctions Map (www.sanctionsmap.eu) is guiding in this respect.

Explanation of the budget module Project management

The module project management provides a possibility to request a budget for project management that is at most 5% of the total budget requested from NWO. This budget can only be used for activities that solely support the project for which the grant is requested. The applicant must satisfactorily justify this budget.

Amongst other things, project management is understood to mean the optimal shaping of the organisation structure of the consortium, support of the consortium and the main applicant, monitoring coherency, progress and unity of the project, and alignment between the sub-projects within the project. This task may also be realised by external parties insofar as the expertise is not available at the knowledge institution of the main and/or co-applicant(s). During the tendering procedure for the selection of a third party, knowledge institutions should take into account the procurement rules of the government and, where necessary, follow a European tendering procedure. The activities of the main applicant and co-applicants in the context of the project (management) may not be funded from this budget module.

The budget to be requested for project management can consist of material costs, realisation costs and personnel costs. For personnel costs a maximum rate of 119 euros per hour may be used. The hourly rate of personnel to be appointed is based on the cost-covering rate (*kostendekkend*) and is calculated in accordance with the standard productive number of hours used by the organisation. The cost-covering rate includes:

- (average) gross salary for the post of the employee who will contribute to the project (based on the collective labour agreement scale of the employee concerned);
- holiday allowance and 13th month (if applicable in the relevant collective labour agreement) in proportion to the use in fte;
- social security contributions;
- pension costs;
- overheads.

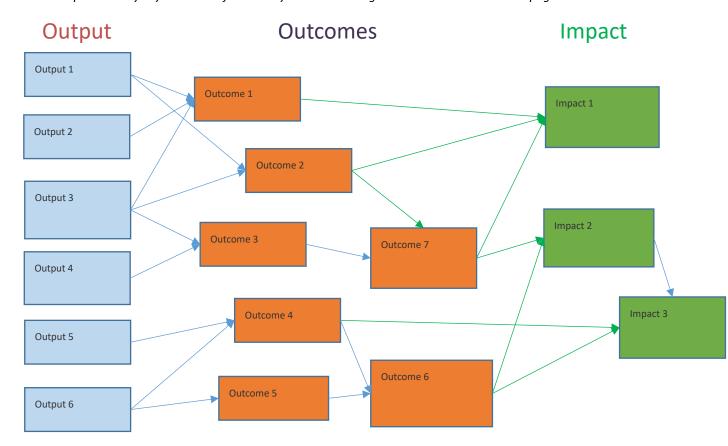
Third parties may realise tasks in the context of project management, but the part of the (commercial) hourly rates that exceeds the hourly rates stated above is not fundable and can therefore not be included in the budget.

7.5 Format Letter of Commitment

[Template letter of commitment for consortium organisation]
[The letter should be printed on the stationery of the consortium organisation concerned]
[Address main applicant]
Concerns: Letter of Commitment
[Location], [date]
Dear [name main applicant],
Dear [name main applicant],
Through this letter, I confirm that [name consortium organisation] is available and committed participate in the proposed project, when funded by NRF and NWO, entitled '[proposal title]', which v submitted to the '[Title of Call]'.
[Outline the availability and commitment of the consortium organisation]
[If applicable, indicate the consortium organisation's total contribution in cash, or quantify the in k
contribution. This amount should be the same as indicated in the application form.]
Yours sincerely,
[Signed by the head of the organisation/department]
Location: [] [Signature]
Date: [] [NAME + POSITION]

7.6 Format Impact Pathway

Please note the lay-out of the diagram is indicative; variations are allowed, as long as all boxes of the diagram remain included. We recommend to limit the diagram to a maximum of one page, for it to present only key elements. If absolutely needed the length could be extended to two pages maximum.



Impact pathway Indicators – to be jointly formulated during the joint kick-off workshop

Formulate SMART indicators for the output and outcomes (Specific, Measurable, Achievable, Realistic, Time-related). Indicators illustrate how success will be recognised at each step in the pathway to impact. It enables verifying if the research project is 'on track' and where it can improve, it helps to steer and manage the research program. Indicators, especially of outcomes, can also be adjusted or made more specific during the execution of the project, since they are also part of the reflective approach (the impact pathway, including indicators, are not set in stone). No indicators need to be formulated at the Impact level.

Output	Indicator
Output 1	
Output 2	
Output 3	
Output 4	
Output	

Outcome	Indicator
Outcome 1	
Outcome 2	
Outcome 3	
Outcome 4	
Outcome 5	
Outcome	

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National Research Foundation (NRF) of South Africa

NWO visiting address: Location: The Hague

Laan van Nieuw Oost-Indië 300

2593 CE The Hague The Netherlands

Location Utrecht Winthontlaan 2 3526 KV Utrecht The Netherlands

www.nwo.nl/en

NRF phyiscal address:

NRF Building South Gate CSIR Complex Meiring Naudé Road

Brummeria Pretoria

South Africa

www.nrf.ac.za/



