

ACADEMY OF SCIENCE OF SOUTH AFRICA
REPORT ON THE INTERNATIONAL YEAR OF BASIC SCIENCES
FOR SUSTAINABLE DEVELOPMENT (IYBSSD)



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



DSI CONTRACT REPORTING

IYBSSD Report

as part of

Programme Contract Number:

DSI/CON0056/2018

(as per signed contract)

Programme Title:

ASSAf INTERNATIONAL COOPERATION SUPPORT INSTRUMENT

Compiled by:

Prof Himla Soodyall (ASSAf Executive Officer)
Dr Melusi Thwala (ASSAf Science Advisory Programme and Strategic Partnerships Manager)
Mrs Susan Veldsman (Director ASSAf Scholarly Publishing Programme)
Ms Ina Smith (SciELO SA Planning Manager)

Date:

11 September 2023

Table of Contents

EXECUTIVE SUMMARY	4
1. ABOUT THE UN IYBSSD (GLOBAL)	6
1.1 OBJECTIVES	6
1.2 DURATION.....	7
1.3 GOVERNANCE AND COLLABORATION.....	7
1.4 FUNDING.....	8
2. IYBSSD MOBILISATION AND PARTICIPATION IN THE SOUTHERN AFRICAN REGION (REGIONAL).....	8
3. ABOUT THE SA IYBSSD (NATIONAL).....	9
3.1 GOVERNANCE AND COORDINATION	9
3.2 ASSAF RESPONSIBILITIES	9
3.3 DURATION.....	10
3.4 FUNDING.....	10
3.5 AWARENESS RAISING, MARKETING AND COMMUNICATION	11
4. SA IYBSSD IN ACTION.....	11
4.1 SA LAUNCH OF THE IYBSSD	11
4.2 2023 ANNUAL YOUNG SCIENTISTS’ CONFERENCE: ADVANCING SUSTAINABLE DEVELOPMENT THROUGH BASIC SCIENCE RESEARCH.....	13
4.3 NATIONAL SCIENCE WEEK 2022	13
4.4 SCIFEST AFRICA 2022	14
4.5 2021/2022 NSTF-SOUTH32 SPECIAL THEMES AWARD “BASIC SCIENCE FOR SUSTAINABLE DEVELOPMENT”	14
4.6 <i>QUEST SCIENCE FOR SOUTH AFRICA</i> ISSUE DEDICATED TO IYBSSD	15
4.7 SA IYBSSD SCHOOL COMPETITION.....	15
5. EVALUATION AND IMPACT	16
6. CONCLUSION	17

[APPENDIX A: TIMELINE OF SA IYBSSD ALIGNED EVENTS/ACTIVITIES/INITIATIVES](#)

[APPENDIX B: PROJECTED BUDGET AND EXPENDITURE DETAILS](#)

Executive Summary

The International Year of Basic Sciences for Sustainable Development (IYBSSD) was established by the 76th session of the United Nations (UN) General Assembly in December 2021. This global initiative emphasises the fundamental importance of basic sciences – mathematics, physics, chemistry, and biology – in advancing various sectors, including medicine, industry, agriculture, energy planning, and more. These sciences drive technological innovations, support access to information, elevate societal well-being, and foster international collaboration towards achieving the Sustainable Development Goals (SDGs).

As a UN Member State, South Africa (SA), through the Department of Science and Innovation (DSI), participated in the IYBSSD with the aim of engaging diverse stakeholders and increasing awareness about the transformative potential of basic sciences. South Africa's involvement aligns with Agenda 2030, emphasising sustainability for all global populations. The ASSAf Executive Officer (EO), Prof Himla Soodyall, was tasked with representing the DSI, National Research Foundation (NRF) and Academy of Science of South Africa (ASSAf) as node coordinator.

Throughout IYBSSD, South African initiatives focused on key objectives such as promoting inclusive participation in science, strengthening education and training, investing in basic science, and advocating for open science practices. These objectives were aligned with the IYBSSD's themes, including enhancing the visibility of women in science, fostering international dialogue, promoting science as a global public good, encouraging innovation and economic development, advancing education and human development, and addressing global challenges effectively.

IYBSSD's initial duration was from January 2022 to June 2023, later extended to December 2023. South Africa actively participated through events, conferences, and collaborative efforts and involved numerous stakeholders, including schools. The official inauguration took place in July 2022 at the UNESCO headquarters in Paris, France, with South African representation. ASSAf launched the IYBSSD in South Africa in August 2022.

Governance and collaboration played a crucial role in IYBSSD's success. South Africa actively participated in IYBSSD Steering/Advisory Board Committee meetings and coordinated with international stakeholders. South Africa's significant role in organising and participating in IYBSSD events showcases its commitment to promoting basic sciences for sustainable development.

The South African region also actively promoted IYBSSD by engaging with African countries, African Academies of Science, and the Southern African Development Community (SADC). Collaborations with international bodies and awards dedicated to basic sciences further emphasised the importance of IYBSSD in the region.

ASSAf's responsibilities included stakeholder identification and engagement, launch planning, public awareness, networking, online visibility, media engagement, progress reporting, and scheduling events for IYBSSD. These efforts aimed to raise awareness and mobilise diverse stakeholders within South Africa.

Funding for the South African IYBSSD project was allocated through the DSI-funded Programme: ASSAf International Cooperation Support Instrument (2021/22 funding).

To create awareness, marketing, and communication, various platforms and strategies were employed, including the UN IYBSSD website, the SA IYBSSD website, *Quest Science for South Africa* magazine, the African Scientists Directory, and ASSAf's social media channels, newsletters, mailing lists, and more.

South Africa's participation in IYBSSD was translated into action through numerous events and activities. Some of these included the South African launch, the Annual Young Scientists' Conference, National Science Week, Scifest Africa, awards recognising contributions to basic sciences, and publications such as *Quest Science for South Africa* magazine and many more. Approximately 74 SA IYBSSD events/activities have been registered on the UN IYBSSD Schedule, and an impressive 124 South African organisations (of which 79 were schools) have officially expressed their support for this initiative. During a UN IYBSSD Steering/Advisory Board Committee meeting, South Africa was commended for being one of the most active UN Member States as far as IYBSSD concerned.

The South African IYBSSD School Competition was a highlight, promoting the importance of basic sciences among school learners. Due processes were diligently followed throughout the competition.

A survey facilitated by the UN IYBSSD Secretariat is currently conducted and data are collected to report on the impact of IYBSSD. ASSAf can however report with great accuracy that thousands of individuals were reached through the support of organisations embracing this important year.

In conclusion, South Africa's active engagement with IYBSSD, diverse initiatives, and extensive outreach to stakeholders have made SA IYBSSD a resounding success. It has significantly raised awareness about the critical role of basic sciences in sustainable development. ASSAf is confident that it successfully fulfilled its mandate of creating awareness and mobilising the South African community. The initiative also expanded the reach and influence of the DSI, NRF, and ASSAf, strengthening their footprint in the scientific community and beyond.

We would like to thank the DSI for entrusting ASSAf with this initiative, and great thanks to the UN IYBSSD Secretariat, especially Luc Allemand, for valuable support throughout the year.

1. About the UN IYBSSD (Global)

The International Year of Basic Sciences for Sustainable Development (IYBSSD)¹ was proclaimed by the 76th session of the United Nations (UN) General Assembly, on 2 December 2021 for 2022 (later extended to 2023), stressing that the applications of basic sciences (with the focus on mathematics, physics, chemistry and biology), are vital for advances in medicine, industry agriculture, water resources, energy planning, environment, communications and culture. Basic sciences further catalyse technological breakthroughs that meet the essential needs of humanity, facilitating access to information, elevating societal well-being, and fostering peace by enhancing collaboration towards achieving the Sustainable Development Goals (SDGs)².

As a UN Member State, South Africa (SA), through the Department of Science and Innovation (DSI), joined other Member States in embracing this unique opportunity to engage as many possible publics/stakeholders and increase awareness that through a foundational understanding of basic sciences, actions taken will be more effective and for the common good.

1.1 Objectives

South Africa and specifically the DSI and ASSAf participated in IYBSSD through its support of and alignment with Agenda 2030³, adopted in 2015 by the UN General Assembly, as an integrated vision for the sustainable development of all the world's populations.

Throughout the duration of IYBSSD, South African activities centered around aligning with the following key IYBSSD objectives:

- Facilitating inclusive participation in science.
- Strengthening education and training.
- Investing in basic science.
- Promoting open science practices.

South African IYBSSD initiatives were structured to focus on the following IYBSSD themes:

- Enhancing the presence and visibility of women in science.
- Recognising basic sciences as catalysts for international dialogue and peace.
- Promoting science as a global public good.
- Fostering innovation and economic development.
- Advancing education and human development.
- Addressing global challenges effectively.

The key objectives and themes of IYBSSD are deeply entrenched into the work conducted by both the DSI and ASSAf, as evidenced by their past and ongoing initiatives, including the draft DSI Open Science Policy and the DSI Science Engagement Strategy.

¹ <https://www.iybssd2022.org/>

² <https://sdgs.un.org/>

³ <https://sdgs.un.org/2030agenda>

1.2 Duration

The initial period for the celebration of IYBSSD was from 1 January 2022 until 30 June 2023, but it was later extended to 31 December 2023. ASSAf concluded the majority of its IYBSSD activities on the original date scheduled (30 June 2023). ASSAf is currently in the process of bringing the SA IYBSSD School Competition to a close, which will involve awarding the prize money and certificates of acknowledgment.

The official IYBSSD inauguration took place on 8 July 2022 with an opening conference at the United Nations Educational, Scientific and Cultural Organisation (UNESCO) headquarters in Paris, France. South Africa was represented by Dr Blade Nzimande (Minister, DSI), Dr Phil Mjwara (Deputy General, DSI), Mr Thapelo Kepadisa (Assistant Director, DSI) and Ms Eudy Mabuza (SA representative in Brussels).

The SA IYBSSD launch⁴ took place on 25 August 2022. The invitation and programme can be accessed online⁵. A media statement⁶ was issued and an article was published in the ASSAf Newsletter⁷. ASSAf further reported on IYBSSD through its DSI Quarterly Performance Reports and its DSI Annual Report. Social media were utilised to further create awareness (blog posts, facebook, Twitter, mailing lists, etc).

In a recent communication received from the UN IYBSSD Chair, the following was shared:

- The IYBSSD closing ceremony will take place on 15 December 2023 at CERN.
- An International Decade of Sciences (incl. all sciences and all knowledge) for Sustainable Development (IDSSD 2024 - 2033) has been proclaimed by consensus by the United General assembly on 25 August 2023. The initial draft resolution⁸ for the IDSSD was submitted by the following countries: Argentina, Cuba, Equatorial Guinea, Guatemala, Honduras, Hungary, Serbia, **South Africa**, Spain and Vietnam.

1.3 Governance and Collaboration

The IYBSSD Steering Committee⁹ was responsible for the overall management of the International Year. It coordinated and organised the international program. Within it, the Executive Committee ensured the effective day-to-day management. Mr Luc Allemand, Secretary General, was of great help and provided valuable support to ASSAf. The Chair of this committee, Michel Spiro, scheduled regular meetings which were attended by the DSI and the SA Node Coordinator (ASSAf Executive Officer), supported by the SciELO SA Planning Manager. The minutes of meetings held are available on request.

South Africa actively collaborated as part of the meetings. A link¹⁰ to the SA IYBSSD website¹¹ was added to the main UN IYBSSD website on request of the SciELO SA Planning Manager. SA was the only country for which this was done, following the approval of the IYBSSD Steering Committee. The IYBSSD Chair mentioned that South Africa was one of two countries that hosted most of the events and activities in support of IYBSSD, as outlined in the IYBSSD

⁴ https://youtu.be/3gs9kS_1Z9U?si=YOx_yo4p0WsSnAwy

⁵ <https://www.assaf.org.za/2022/08/15/invitation-to-the-international-year-of-basic-sciences-for-sustainable-development-iybssd-roundtable/>

⁶ <https://iybssd.africa/2022/08/18/media-release-iybssd-international-year-of-basic-sciences-for-sustainable-development-launches-in-south-africa/>

⁷ <https://www.assaf.org.za/wp-content/uploads/2022/09/International-Year-of-Basic-Sciences.pdf>

⁸ <https://digitallibrary.un.org/record/4019134>

⁹ <https://www.iybssd2022.org/en/how-we-work/>

¹⁰ <https://www.iybssd2022.org/en/your-proposal-for-the-program-southern-africa/>

¹¹ <https://iybssd.africa/>

Schedule¹². This suggests that South Africa played a significant role in organising and participating in activities related to IYBSSD, emphasising its commitment to promoting basic sciences for sustainable development.

1.4 Funding

The UN IYBSSD did not allocate any funding for this initiative to South Africa. ASSAf was able to financially support the SA IYBSSD School Competition and a select few other events through surplus monies left from the 2021/22 financial year for the DSI-funded Programme: ASSAf International Cooperation Support Instrument (DSI/CON0056/2018) (2021/22 funding). The DSI granted consent for these monies to be utilised for the IYBSSD, following a proposal that was submitted to the DSI¹³.

2. IYBSSD Mobilisation and Participation in the Southern African Region (Regional)

There was a concerted effort to raise awareness about the IYBSSD among fellow African countries. Here are some key points:

- **African Scientists Directory:** Information about IYBSSD was shared with scientists representing 54 countries through the African Scientists Directory¹⁴. This was a significant step in spreading awareness about the initiative across the continent.
- **Engagement with African Academies of Science:** ASSAf collaborated with other Academies of Science across Africa to disseminate vital information about IYBSSD. A meeting with the Executive Director of the Network of African Science Academies (NASAC) on 4 March 2022 produced positive results. The theme of its Annual Meeting of African Science Academies (AMASA) (28-30 November 2022) was adapted to encompass the IYBSSD objectives, emphasising the enhancement of sustainable agriculture and food systems in Africa, aligning perfectly with IYBSSD's goals.
- **Engagement with the Southern African Development Community (SADC):** During a meeting on 16 May 2022, facilitated by the DSI, the Senior Technical Advisor for Science, Technology, and Innovation from the SADC Secretariat expressed her intentions to involve the UNESCO Regional Office and collaborate with them in support of IYBSSD. This indicated a regional commitment to the initiative. A SADC Consultative Experts Meeting was held on 31 May 2022, during which the possibility of an IYBSSD presentation during the SADC Ministerial Meeting on Education Training, Science, Technology and Innovation on 20 June 2022 was discussed. A summary of the outcomes of this meeting can be accessed online¹⁵.
- **TWAS-SAREP Regional Young Scientists Award:** The TWAS-SAREP Regional Young Scientists Award for 2022 was dedicated to Basic Sciences. However, no applications were received from the Least Developed Countries or the Science and Technology Lagging Countries. It was decided that the award will be re-advertised and will be finalised in November 2023.

¹² <https://www.iybssd2022.org/en/schedule/>

¹³ Notes of DSI/ASSAf Meeting <https://docs.google.com/document/d/1TAgfKFpxYOYf2IU5IWg49S9Iwfh5ZXym6NyNl-yzhkk/edit?usp=sharing>

¹⁴ <https://africanscientists.africa/>

¹⁵ <https://www.sadc.int/latest-news/sadc-ministers-responsible-education-training-science-technology-and-innovation-call>

- **Annual Young Scientists' Conference:** The theme for the 2023 (12-13 June 2023) conference was Basic Sciences for Sustainable Development with a focus on (1) Innovation in health and biomedical sciences, (2) The climate-water-energy-food nexus, (3) Clean energy and water research, (4) Education and research in basic sciences, (5) Artificial intelligence, machine and deep learning, and (6) Biodiversity and agriculture. The conference was aligned with the principles of the IYBSSD, and served to strengthen the presence and visibility of women, promoted basic sciences as sources of international dialogue and peace for the global public good, and fostered innovation, education, economic and human development to meet global challenges.
- **African Country Participation:** Representatives from several African countries actively participated in IYBSSD activities, including attending IYBSSD Steering/Advisory Board Committee meetings. This demonstrates a broad engagement with the initiative across the continent. A report¹⁶ on IYBSSD activities in Ghana has further been published by the Ghana Academy of Arts and Sciences.

An effort was made to track activities by fellow African countries. Apart from the activities being added to the UN IYBSSD Schedule, news items were further added to the SA IYBSSD website (blog posts)¹⁷.

3. About the SA IYBSSD (National)

3.1 Governance and Coordination

In January 2022, the DSI engaged the participation of the ASSAf Executive Officer to serve as the regional coordinator for IYBSSD 2022 activities in the southern African region. The South African Basic Sciences Platform (SABSPlat), under the guidance of the DSI's Director of Basic Sciences, has played a pivotal role in fostering an enabling environment for scientists to actively participate in the IYBSSD project. This solid foundation facilitated ASSAf's continued coordination efforts. Additional support for the implementation of the South African component of the IYBSSD project was extended by the SciELO SA Planning Manager.

ASSAf established a dedicated core team comprised of ASSAf staff members to provide expert advice on matters related to IYBSSD. Meetings between the DSI, ASSAf, and the National Research Foundation (NRF) were arranged upon the DSI's request. Progress updates were communicated via email and during virtual meetings, which included comprehensive presentations.

3.2 ASSAf Responsibilities

ASSAf outlined the following responsibilities as its key priorities in successfully coordinating IYBSSD at a national level:

- **Representation at IYBSSD Steering Advisory Board Committee Meetings:** Collaboratively representing South Africa alongside the DSI at meetings of the IYBSSD Steering Committee or Advisory Board to contribute to the global efforts.

¹⁶ <https://www.iybssd2022.org/en/iybssd-celebrations-in-ghana/>

¹⁷ <https://iybssd.africa/>

- **Awareness Creation and Stakeholder Identification:** Raising awareness about IYBSSD and identifying stakeholders from diverse groups as outlined in the DSI Science Engagement Strategy.
- **Stakeholder Engagement and Communication:** Inviting identified stakeholders to participate in IYBSSD initiatives and ensuring continuous communication with them once they commit, thereby sustaining momentum.
- **Launch Planning and Execution:** Strategically planning and successfully executing the launch of IYBSSD in South Africa, creating a strong starting point for the initiative.
- **Broad Public Awareness:** Ensuring widespread awareness of South African IYBSSD activities across various publics, emphasising inclusivity.
- **Stakeholder Networking:** Facilitating connections and collaboration among different stakeholders involved in IYBSSD.
- **Online Visibility:** Enhancing the visibility of IYBSSD through the UN IYBSSD, South African IYBSSD, and ASSAf websites, as well as through active social media engagement.
- **Media Engagement:** Issuing media releases when relevant to communicate key developments and milestones related to IYBSSD.
- **Progress Reporting:** Regularly reporting on the progress made in IYBSSD coordination to the DSI to ensure transparency and accountability.
- **Scheduling:** Evaluate IYBSSD proposals submitted from South Africa and evaluate for inclusion on the IYBSSD Schedule. Where approved, add details to the IYBSSD Schedule website.

These responsibilities demonstrate ASSAf's comprehensive and proactive approach to the effective management and promotion of IYBSSD at the national level in South Africa.

3.3 Duration

The initial period for the celebration of IYBSSD was from 1 January 2022 until 30 June 2023 (18 month period), but it was later extended to 31 December 2023. ASSAf concluded the majority of its IYBSSD activities on the original date scheduled (30 June 2023). ASSAf is currently in the process of bringing the SA IYBSSD School Competition to a close.

3.4 Funding

The sum of ZAR 472,000.00 has been allocated to the IYBSSD project under the DSI-funded Programme: ASSAf International Cooperation Support Instrument (DSI/CON0056/2018)(2021/22 funding). The custodian responsible for overseeing this DSI-funded Programme is the ASSAf Science Advisory Programme and Strategic Partnerships Manager.

The ASSAf Core IYBSSD Team has been entrusted with the management of the funds allocated to this initiative. Currently, an audited financial report is in the process of being compiled to ensure transparency and accountability. Additionally, a simplified outline of the projected budget and expenditure details can be found in Appendix B.

3.5 Awareness Raising, Marketing and Communication

ASSAf employed various methods and platforms to raise awareness of IYBSSD among the diverse target audiences (publics) outlined in the DSI Science Engagement Strategy. These strategies are detailed below:

- **UN IYBSSD Website:** ASSAf contributed all South African IYBSSD activities to the official IYBSSD Schedule, and select news articles were featured on this platform. Additionally, a hyperlink to the SA IYBSSD website was included on the UN IYBSSD site. It was a stipulation that all supporting South African organisations incorporate the IYBSSD logo into their branding.
- **SA IYBSSD Website:** Significant efforts were invested in documenting all IYBSSD-related developments in South Africa. In addition to news blog posts, the logos of supporting entities were prominently displayed on this site. Progress was meticulously recorded, and in-house marketing materials were crafted for participating organisations to utilise. Guidance on submitting a proposal for an organisational aligned IYBSSD event for inclusion in the UN IYBSSD Schedule were provided. The website was also optimised for indexing by Google, resulting in high visibility.
- **ASSAf Social Media:** ASSAf leveraged both the UN IYBSSD social media channels and its own social media platforms to foster awareness. This encompassed publishing articles in newsletters, featuring content in the *Quest Science for South Africa* magazine, disseminating communications through mailing lists (including dedicated lists for IYBSSD participants/supporters, *Quest* subscribers, and the African Scientists Directory), and active engagement on social media platforms like the ASSAf Facebook, Twitter, and its YouTube channel.

These concerted efforts collectively contributed to disseminating information about IYBSSD in South Africa and engaging a wide range of stakeholders in the initiative.

4. SA IYBSSD in Action

Approximately 74 SA IYBSSD events/activities/initiatives have been registered on the UN IYBSSD Schedule, and an impressive 124 South African organisations (of which 79 were schools) have officially expressed their support for this initiative. More proposals are still being added to the UN IYBSSD Schedule. For a comprehensive listing of all reported SA IYBSSD events and activities, please refer to Appendix A.

Attempting to describe each of the numerous SA IYBSSD activities in detail would be exhaustive. Consequently, the decision was made to highlight a few key examples on national level to provide a representative glimpse of the general approaches pursued in these endeavours.

4.1 SA Launch of the IYBSSD

IYBSSD in South Africa began on a high note, with participants initiating events aligned with the theme as early as 2021. The international launch took place on 8 July 2022, followed by the South African launch on **25 August 2022**. The SA launch was structured as a virtual roundtable discussion moderated by Prof Himla Soodyall, the Executive Officer of ASSAf, who

also serves as the joint vocal point representative (SA)/node coordinator for IYBSSD 2022, representing the DSI, NRF, and ASSAf. 1,033 registrations were received for the launch from 50 different countries, there were 600 attendees, and to date the video recording on the ASSAf YouTube Channel has been viewed 364 times.

The SA event was inaugurated with opening remarks by Mr Imraan Patel, Deputy Director-General for Research Development Support at the South African Department of Science and Innovation (DSI). Prof Jonathan Jansen, President of ASSAf, delivered a plenary session on the interdisciplinarity between basic sciences and the social sciences and humanities in advancing the Sustainable Development Goals (SDGs).

During his remarks, Mr Patel highlighted DSI's support for IYBSSD, emphasising the importance of elevating the profile of basic sciences. He mentioned the presence of the SA Basic Sciences Development and Support Framework (2016) and plans informed by scientometric studies [18] [19] [20] [21] [22] [23] [24] [25] [26] conducted by CREST. Basic sciences are a priority in the SA Science, Technology, and Innovation Decadal Plan, and strengthening selected areas can contribute to economic objectives. The SA Basic Sciences Platform (SABSPlat) is integral to the DSI's agenda in advancing basic sciences.

Prof Jansen, in his keynote address, emphasised the significance of basic sciences for development and expressed ASSAf's full support for IYBSSD. He stressed the need to make a compelling case for basic sciences to a wider audience, both within and outside the scientific community. Prof Jansen used the example of the role of chemistry in developing the PCR test and Covid-19 vaccines to illustrate the practical importance of basic sciences.

He highlighted four key lessons from the pandemic:

- The power of science to intervene in crises.
- The human and sometimes contentious nature of scientific inquiry.
- The importance of humility in scientific communication.
- The need for interdisciplinary approaches to address complex issues.

Prof Jansen concluded by emphasising that the world does not conform to disciplinary boundaries, highlighting the importance of interdisciplinary collaboration.

Following the keynote, a session with thematic presentations was moderated by Prof Stephanie Burton, Vice President of the ASSAf Council. The presentations covered topics such as using basic sciences to accelerate innovation for the SDGs, inspiring the next generation of scientists with a focus on equity, and public engagement with science.

¹⁸ A Scientometric Analysis of Biological Sciences in South Africa http://iybssd.africa/wp-content/uploads/2022/05/Final_Report_Biological_Sciences_in_South_Africa_March_2019v.pdf

¹⁹ A Scientometric Assessment of Chemistry in South Africa http://iybssd.africa/wp-content/uploads/2022/05/Final_Report_Chemistry_in_South_Africa_March_2019v.pdf

²⁰ A Scientometric Assessment of Computer Science in South Africa http://iybssd.africa/wp-content/uploads/2022/05/Final_Report_Computer_Science_in_South_Africa_March_2019v.pdf

²¹ A Scientometric Assessment of Geological Sciences in South Africa http://iybssd.africa/wp-content/uploads/2022/05/Final_Report_Geological_Sciences_in_South_Africa_March_2019v.pdf

²² A Scientometric Assessment of Mathematics in South Africa http://iybssd.africa/wp-content/uploads/2022/05/Final_Report_Mathematics_in_South_Africa_March_2019v.pdf

²³ A Scientometric Assessment of Physics in South Africa http://iybssd.africa/wp-content/uploads/2022/05/Final_Report_Physics_in_South_Africa_March_2019v.pdf

²⁴ A Scientometric Assessment of Statistics in South Africa http://iybssd.africa/wp-content/uploads/2022/05/Final_Report_Statistics_in_South_Africa_March_2019v.pdf

²⁵ Stellenbosch University (SU) Article "Business Day reports on 'basic sciences' study underway at CREST" <https://www0.sun.ac.za/crest/news/business-day-reports-on-basic-sci/>

²⁶ Business Day Article "Early results show investment in SA's science development is paying off" <https://www.businesslive.co.za/bd/opinion/2018-06-27-early-results-show-investment-in-sas-science-development-is-paying-off/>

4.2 2023 Annual Young Scientists' Conference: Advancing Sustainable Development Through Basic Science Research

The South African Young Academy of Science (SAYAS)²⁷, in collaboration with the DSI, ASSAf and the University of Venda (UNIVEN), hosted the 2023 Annual Young Scientists' Conference from **12 to 13 June 2023** at the University of Venda in Thohoyandou, Limpopo Province, South Africa. The partnership network for the 2023 Conference included the Wits Advanced Drug Delivery Platform²⁸, Aspen Pharmacare²⁹ and the Human Sciences Research Council (HSRC)³⁰. This collaboration emphasised alignment of SAYAS partnerships with academia, industry and research councils to co-create opportunities to support emerging researchers in South Africa.

The theme for the 2023 Conference was *Basic Sciences for Sustainable Development* with a focus on (1) Innovation in health and biomedical sciences, (2) The climate-water-energy-food nexus, (3) Clean energy and water research, (4) Education and research in basic sciences, (5) Artificial intelligence, machine and deep learning, and (6) Biodiversity and agriculture. The Conference provided an interactive space where 58 young scientists and emerging researchers from over 20 Universities and Research Councils across South Africa showcased their research and connected with emerging and established researchers and all categories of stakeholders from grassroots communities to political decision makers, international leaders, associations, students, and local authorities.

Pre-conference events included an ASSAf Institutional Roadshow. Post-conference activities included SAYAS and ASSAf science engagement activities with invited school learners at the Vuwani Science Resource Centre (UNIVEN), and a SAYAS webinar celebrating South African Youth Month during June 2023, themed "Accelerating youth economic emancipation for a sustainable future".

An article, authored by Prof Willie Chinyamurindi (SAYAS Member), was published at the backdrop of the abovementioned SAYAS Conference. The article is titled: "Young scientists key in advancing basic sciences goal for development"³¹.

4.3 National Science Week 2022

National Science Week (NSW) was celebrated by schools, science centres and science entities across the country, under the theme "Celebrating the role of basic sciences in the modern world". This in keeping with the tradition of acknowledging UN international observances. The complete programme of participating entities and related events can be accessed online³². The week was launched ^{[33][34]} on 30 July 2022 in Durban at the Mangosuthu University of Technology Umlazi Campus, KwaZulu-Natal and spanned from **1 to 6 August 2022**. Science Centres such as the Cape Town Science Centre even had Open Days and offered free entry to the public during NSW.

²⁷ <https://www.sayas.org.za/>

²⁸ <https://www.wits.ac.za/waddp>

²⁹ <https://www.aspenpharma.com/>

³⁰ <https://hsrc.ac.za/>

³¹ <https://www.assaf.org.za/wp-content/uploads/2023/06/2-Youth-Month-Young-scientists-key-in-advancing-basic-sciences-goal-for-developme.pdf>

³² <https://www.saasta.ac.za/programmes/focus-weeks/national-science-week-2022/>

³³ Article Daily Sun <https://www.sn124.com/dailysun/lifestyle/national-science-week-2022-kicks-off-20220729>

³⁴ YouTube Video Recording of Launch Event <https://www.youtube.com/live/Bvu08RUPeZ8?si=3USfSiADyUjO4ArY>

ASSAf celebrated NSW 2022 through a series of engaging activities at the Sisizakele Special School in Ingwavuma and the Mandla Mthethwa School of Excellence in Ndumo, KwaZulu-Natal, South Africa. The engagement sessions encompassed a wide range of topics, including mathematics, access to clean water and sanitation, resilience, and digital wellness. The ASSAf team collaborated virtually with experts in these fields to engage with eight schools, involving approximately 900 learners. The engagement with these remote areas received positive feedback from both teachers and learners, underscoring the value of ASSAf's outreach efforts and the appetite for knowledge and resources in these communities.

4.4 Scifest Africa 2022

Since its establishment in 1996, Scifest Africa³⁵ has served as a gateway to the world of Science, Technology, Engineering, Mathematics, and Innovation (STEMI) for the people of South Africa. Over the years, it has attracted numerous international speakers and workshop leaders, captivating and educating well over a million attendees of all ages. It has grown to become the largest event of its kind on the African continent.

In 2022, hosted from **7 to 13 September 2022**, Scifest Africa embraced the theme "Back to the Basics," drawing inspiration from the UN IYBSSD 2022 theme. Through its programme³⁶, Scifest Africa underscored the vital role of basic sciences, including physics, chemistry, mathematics, and biology, in fostering sustainable development. It highlighted their contributions to realising the 2030 Agenda and achieving the Sustainable Development Goals. The event featured hands-on kitchen experiments, an opening session by Dr Graham Walker emphasising the role of emotions in science, and a dazzling laser show presented by iThemba LABS.

While in Makhanda, ASSAf staff also engaged with various academic and professional figures from Rhodes University, resulting in the establishment of a science engagement community of practice. This community aims to enhance connectivity and the sharing of best practices among science engagement officers and educators, with ASSAf taking the lead in maintaining an email list for interested participants.

Over a thousand *Quest Science for South Africa* IYBSSD themed magazines were distributed among learners, teachers, and community members during the event.

4.5 2021/2022 NSTF-South32 Special Themes Award "Basic Science for Sustainable Development"

The 24th edition of the prestigious NSTF-South32 Awards, often referred to as the "Oscars" of the science, engineering, and technology (SET) community, took place on **21 July 2022**. In alignment with the UNs' International theme of the year, "Basic Sciences for Sustainable Development," the 2022 awards focused on honoring individuals who have made significant contributions to this vital field. Jansie Niehaus, Executive Director of the National Science and Technology Forum (NSTF)³⁷, emphasised the importance of basic sciences, which often operate behind the scenes and form the foundational knowledge upon which applied sciences thrive.

³⁵ <https://www.scifest.org.za/>

³⁶ <https://www.scifest.org.za/scifest-22/>

³⁷ <https://nstf.org.za/>

Prof Marianne Vanderschuren – Professor: Transport Planning and Engineering; and Chair: DSI/NRF/Council for Scientific and Industrial Research (CSIR) Co-funded Smart Mobility Research; and Deputy Dean: Social Responsiveness and Transformation, Dept of Civil Engineering, Faculty of Engineering and the Built Environment, University of Cape Town – was the winner of the 2021/2022 NSTF-South32 Special Themes Award “Basic Science for Sustainable Development” for her role in improving the quality of life of vulnerable road users using Smart Mobility through research solutions based on the basic sciences [38][39]. Prof Vanderschuren is also currently the 119th President of the South African Institution of Civil Engineering (SAICE)⁴⁰.

4.6 Quest Science for South Africa Issue dedicated to IYBSSD

Quest Science for South Africa magazine **Volume 18 Number 2 (July – September 2022)** tied in with IYBSSD. In this edition, the editor managed to bring together a diverse array of articles that span a wide spectrum of topics. The magazine's commitment to the belief that basic sciences should not remain confined to academic discourse but should also be applied to enhance essential services and foster sustainable livelihoods in Africa is evident in its coverage. The authors examined the science and legislation governing water services and public health, dissected the various governmental structures responsible for municipal service delivery, and provided a thorough analysis of South Africa's progress towards achieving its sustainable development goals. The article titled “Getting the basics right. What are basic sciences and what do they mean for South Africa's sustainability goals?” introduced the IYBSSD theme. Access the full text open access version of this issue online⁴¹.

In addition to being available online for free, 5,000 copies of *Quest* are printed quarterly and sent to 1,928 schools in nine provinces that offer mathematics and physical science as school subjects; 224 public libraries nationally; 26 public universities; 56 university libraries; 21 private schools; 138 subscribers; 33 science centres in the SAASTEC network; 11 government departments.

4.7 SA IYBSSD School Competition

The SA IYBSSD School Competition was launched on *International Mathematics Day* (Theme: “Mathematics Unites”), which was held on 14 March 2022. The competition was announced across South African schools using social media, web announcements, and an announcement in the *Quest* magazine. Initially it was decided that one school from each province would be the winner of a ZAR 10,000.00 prize. Unfortunately, there were insufficient enrolments, and in the end the following prizes were awarded to three schools:

First Prize of ZAR 20,000.00

Qoqa Secondary School⁴², Orange Farm, Johannesburg, Gauteng

2x Second Prizes of ZAR 10,000.00 each

Merlewood Secondary School⁴³, Port Shepstone, KwaZulu-Natal

³⁸ Article in IOL “UCT Professor wins award for her commitment to safe and secure transport at ‘Science Oscar’”
<https://www.iol.co.za/capeargus/news/uct-professor-wins-award-for-her-commitment-to-safe-and-secure-transport-at-science-oscars-51b1310b-117b-4a54-81c1-c84f74c3df4d>

³⁹ Article in ITWeb “UCT professor to spearhead rethink of e-mobility ecosystem”
<https://www.itweb.co.za/content/KWEBbvYzBY97mRiQ>

⁴⁰ South African Institution of Civil Engineering (SAICE)

⁴¹ <https://research.assaf.org.za/bitstream/handle/20.500.11911/241/Quest%20Vol%2018.2.pdf?sequence=73&isAllowed=y>

⁴² <https://drive.google.com/drive/folders/1x-G1FP4iLuZXpNqILQuNA2fLHFvaG-rQ?usp=sharing>

⁴³ https://drive.google.com/drive/folders/1WG2BQ2_0_TPxd0HXGogDwLiheREuGQa?usp=sharing

Meloding Secondary School⁴⁴, Virginia, Free State

The winners will also receive certificates of acknowledgment and be invited to contribute articles on their projects to a future issue of the *Quest* magazine. Schools will further be required to propose how the prize monies will be utilised to further support the teaching of basic sciences at their respective schools.

Due processes were diligently followed throughout the entire event. More information on the competition can be accessed online⁴⁵. To summarise:

- Phase 1: Schools completed an online form to demonstrate their interest in entering the competition (by 15 April 2023). 54 schools demonstrated their interest in entering, and their school logos were added to the SA IYBSSD website (consent was granted by the school).
- Phase 2: Schools were provided with the link to an online form where they submitted the final entries (by 31 May 2023). Entries were received from 19 schools only.
- Evaluators completed an evaluation form containing evaluation criteria⁴⁶ for each entry received (1–30 June 2023). The 12 evaluators were from ASSAf, the Marang Centre for Mathematics and Science Education (WITS)⁴⁷, the South African Agency for Science and Technology Enhancement (SAASTA)⁴⁸ and Jive Media Africa⁴⁹. All evaluation/feedback were captured in a private online folder.
- The winners were informed via email on 18 July 2023.

5. Evaluation and Impact

The UN IYBSSD Secretariat has facilitated a survey⁵⁰ for all participants to gauge the effectiveness and impact of IYBSSD. This survey remains open for responses, and ASSAf encourages active participation from all stakeholders. Once the survey concludes, feedback will be obtained from the UN IYBSSD Secretariat.

⁴⁴ <https://drive.google.com/drive/folders/1tAkbmYB9kJADZRhNm4cCIYTRKY82SuNK?usp=sharing>

⁴⁵ <https://iybssd.africa/iybssd-school-competition-2023/>

⁴⁶

https://docs.google.com/forms/d/e/1FAIpQLSdqHM3LOA5lwTb13Y8oDD3mwf_pL3AFasXi82hObc0HObmWyg/viewform?usp=sf_link

⁴⁷ <https://www.wits.ac.za/experts/education/>

⁴⁸ <https://www.saasta.ac.za/>

⁴⁹ <https://jivemedia.co.za/>

⁵⁰ https://docs.google.com/forms/d/1AdjGaxBC0ebxpBDqDr-rl8SoXG-OtOfLWfZfSlsssewI/viewform?pli=1&ts=64f99cbf&pli=1&edit_requested=true

6. Conclusion

Judging from the extensive outreach to stakeholders and the multitude of IYBSSD activities organised and submitted by South African entities, it becomes abundantly clear that SA IYBSSD has been nothing short of a resounding success. The enthusiastic engagement and diverse initiatives undertaken within the framework of the UN IYBSSD have significantly contributed to raising awareness and promoting the vital role of basic sciences in sustainable development.

ASSAf is confident that it has successfully fulfilled its mandate of raising awareness and mobilising the South African community to recognise the significance of basic sciences in our daily lives. The ASSAf EO has further successfully represented the DSI, NRF, and ASSAf as the SA IYBSSD node coordinator.

Overall, this initiative, along with the active engagement of stakeholders, has significantly expanded the reach and influence of the DSI, NRF, and ASSAf.

Appendix A: Timeline of SA IYBSSD Aligned Events/Activities/Initiatives

Activities/events/initiatives are listed according to the start date of each.

Event/Activity/Initiative	Organiser/s	Start Date	End Date
Physics in my village Competition	South African Institute of Physics (SAIP)	2021/01/01	2021/06/25
Physics in Everyday Life Documentary Series (Parts 1, 2 and 3)	South African Institute of Physics (SAIP)	2021/06/01	2023/12/31
100 Years of Physics in Africa – the Past, Present and the Future	South African Institute of Physics (SAIP)	2021/11/01	2024/12/31
Mathematics Talent Search for Learners Grades 4-7	South African Mathematics Foundation (SAMF)	2021/11/01	2022/05/31
Young Science Communicator's Competition: Tell your Science Story!	National Research Foundation (NRF) South African Council for Natural Scientific Professions (SACNASP)	2022/01/01	2022/10/31
Nzalo Career Guidance & Expo: STEMulator	National Science and Technology Forum (NSTF)	2022/02/23	2022/02/25
ASSAf-NASAC Stakeholder Meeting	Academy of Science of South Africa (ASSAf) Network of African Science Academies (NASAC)	2022/03/04	2022/03/04
International Mathematics Day	UNESCO (incl. SA organisations)	2022/03/04	2022/03/04
Science Café: In defense of basic research	Stellenbosch University (SU)	2022/03/17	2022/03/17
Ocean Awareness Celebration: Dare to Care about Albatrosses	Protea Heights Academy School	2022/04/22	2022/04/22
South African Mathematics Challenge	South African Mathematical Society (SAMS) Association for Mathematics Education of South Africa (AMESA)	2022/05	2022/07
DSI-SADAC-ASSAf Stakeholder Meeting	Dept. of Science and Innovation (DSI) South African Development Community (SADC) Academy of Science of South Africa (ASSAf)	2022/05/16	2022/05/16
Basic sciences in solving the worlds food security and food safety challenges	National Research Foundation (NRF) Centre of Excellence in Food Security	2022/06/07	2022/06/07
Call for Nominations – NRF Awards 2022	National Research Foundation (NRF)	2022/06/10	2022/09/01
OAD Call for Proposals	Office of Astronomy for Development (OAD) International Astronomical Union (IAU) National Research Foundation (NRF) South African Astronomical Observatory (SAAO)	2022/06/10	2022/11/15
71st Lindau Nobel Laureate Meeting: Chemistry (11 SA Young Scientists)	Council for the Lindau Nobel Laureate Meetings	2022/06/26	2022/07/01
A honey inspired event	Royal Society of Chemistry – South Africa – North Local Section	2022/06/28	2022/06/28
NRF Science for Society Youth Dialogue	National Research Foundation (NRF)	2022/06/30	2022/06/30
67th Annual Conference of the South African Institute of Physics (SAIP)(SAIP2022)	South African Institute of Physics (SAIP)	2022/07/01	2022/07/08
Young Science Communicators Competition	National Research Foundation (NRF) South Africa Agency for Science and Technology Advancement (SAASTA)	2022/07/01	2023/06/15
Quest Science for South Africa Vol 18 No 2	Academy of Science of South Africa (ASSAf)	2022/07	2022/09

10th anniversary of the Higgs Boson discovery	South African Institute of Physics (SAIP)	2022/07/04	2022/07/04
The importance and impact of the 'International Year of Basic Sciences for Sustainable Development' for South Africa Panel Discussion	National Institute for Theoretical and Computational Sciences (NITheCS)	2022/07/04	2022/07/04
Launch of the UN IYBSSD	United Nations (UN)	2022/07/08	2022/07/08
2021/2022 NSTF-South32 Awards for outstanding contributions to science, engineering, technology and innovation in South Africa	National Science and Technology Forum (NSTF)	2022/07/21	2022/07/21
Open Day to celebrate chemistry and introduce the IYBSSD	Cape Town Science Centre	2022/07/23	2022/07/23
NITheCS Colloquium: The dawn of exa-scale computing in the climate sciences	National Institute for Theoretical and Computational Sciences (NITheCS)	2022/07/25	2022/07/25
#STEMiflixandChill with the CSIR	Council for Scientific and Industrial Research (CSIR)	2022/08/01	2022/08/05
National Science Week: 'Celebrating the role of basic sciences in the modern world'	National Research Foundation (NRF) South Africa Agency for Science and Technology Advancement (SAASTA)	2022/08/01	2022/08/07
Launch Of UWC Coding and Robotics Club	Science Learning Centre for Africa (SLCA), School of Science and Mathematics Education (SSME), Faculty of Education, University of the Western Cape	2022/08/01	2022/08/07
CSIR Career Day	Council for Scientific and Industrial Research (CSIR)	2022/08/03	2022/08/03
Fruit and Flowers for the Future	Agricultural Research Council (ARC)	2022/08/04	2022/08/04
Pioneering solar physics for a South African space weather capability	South African National Space Agency is South Africa (SANSA)	2022/08/04	2022/08/04
SAEON National Science Week Webinar for high school learners	National Research Foundation (NRF) South African Environmental Observation Network (SAEON)	2022/08/06	2022/08/06
SAEON's Online National Science Week Camp for High School Learners	National Research Foundation (NRF) South African Environmental Observation Network (SAEON)	2022/08/06	2022/08/06
Appreciating Agricultural National Assets	Agricultural Research Council (ARC)	2022/08/15	2023/06/15
What counts as plastics recycling? Fuels vs plastic feedstocks Lecture	Royal Society of Chemistry – South Africa – North Local Section	2022/08/17	2022/08/17
NITheCS Colloquium: Panel discussion on 'Strengthening the presence and the visibility of women'	National Institute for Theoretical and Computational Sciences (NITheCS)	2022/08/22	2022/08/22
Launch of IYBSSD 2022 in South Africa	Dept. of Science and Innovation (DSI) National Research Foundation (NRF) Academy of Science of South Africa (ASSAf)	2022/08/25	2022/08/25
NSTF Discussion Forum: STEM education – disruptions and the future	National Science and Technology Forum (NSTF)	2022/08/29	2022/08/30
Scifest Africa: "Back to Basics"	Scifest Africa	2022/09/07	2022/09/13
NITheCS Panel Discussion: 'Strengthening Education and Scientific Training in the Basic Sciences'	National Institute for Theoretical and Computational Sciences (NITheCS)	2022/09/12	2022/09/12
World Space Week – Angola celebration	World Space Week Association (WSWA)	2022/10/04	2022/10/10
NITheCS Colloquium: 'Artificial Intelligence for sustainable development – A systems perspective' by Prof Deshen Moodley (UCT)	National Institute for Theoretical and Computational Sciences (NITheCS)	2022/10/24	2022/10/24
NSTF Discussion Forum: Basic Sciences for Sustainable Development	National Science and Technology Forum (NSTF)	2022/10/26	2022/10/27
Tshwane Book Picnic and Basic Sciences Exhibition	Ditsong Museums of South Africa	2022/10/28	2022/10/29

Fundamino: Conceptual Roots for Sustainable Development: Mathematics on Stage	South African Mathematical Society (SAMS)	2022/11/04	2022/11/04
NITheCS Colloquium: 'Basic Sciences for Sustainable Development: a Global Perspective and a Year of Celebrations'	National Institute for Theoretical and Computational Sciences (NITheCS)	2022/11/07	2022/11/07
23rd Southern African Association of Science and Technology Centres (SAASTEC) Conference	South African Association of Science & Technology Centres (SAASTEC)	2022/11/14	2022/11/17
NITheCS Colloquium: 'Goldilocks molecules in the Anthropocene' by Prof Guy Midgley	National Institute for Theoretical and Computational Sciences (NITheCS)	2022/11/21	2022/11/21
Smart technologies for a safer rail network Lecture	University of Pretoria (UP)	2022/11/21	2022/11/21
The 7th edition of the biennial African School of Fundamental Physics and Applications & Quarks to Cosmos Africa	Nelson Mandela University (NMU) South African Institute of Physics (SAIP) African School of Physics (SAIP)	2022/11/28	2022/12/09
Annual Meeting of the African Science Academies (AMASA)	African Science Academies (AMASA)	2022/11/28	2022/11/30
World Science Forum 2022 Opening: Celebration of the International Year of Basic Sciences for Sustainable Development (IYBSSD)	World Science Forum (WSF) 2022	2022/12/06	2022/12/06
UKZN PG Research and Innovation Symposium (PRIS) School first prize for: School of Mathematics, Statistics and Computer Science (SMSCS)	University of KwaZulu-Natal (UKZN)	2022/12/08	2022/12/09
Initiatives to promote non-routine mathematical problem-solving skills: 2023 Quiz	South African Mathematics Foundation (SAMF)	2023/01/01	2023/04/30
Initiatives to promote non-routine mathematical problem-solving skills (South African Mathematics Foundation in partnership with MyTutor.chat)	South African Mathematics Foundation (SAMF) MyTutor.chat	2023/01/01	2023/04/09
44 th SACI National Convention: Chemistry for Sustainable Development in Africa (Prof Zurab Janelidze presented on behalf of ASSAf and DSI)	South African Chemical Institute (SACI)	2023/01/08	2023/01/13
South African Mathematics Olympiad	South African Mathematics Foundation (SAMF)	2023/03/09	2023/07/26
Annual Conference of the African Astronomical Society	African Astronomical Society (AAS)	2023/03/13	2023/03/17
South African Mathematics Challenge	South African Mathematics Foundation (SAMF)	2023/03/13	2023/09/27
Brain Awareness Week (Nelson Mandela University Neuroscience Team & Human Physiology Department (Faculty of Science))	Nelson Mandela University (NMU)	2023/03/13	2023/03/17
NITheCS Colloquium: 'The Mind, Mathematics and Sustainable Development'	National Institute for Theoretical and Computational Sciences (NITheCS)	2023/03/14	2023/03/14
"Innovative Scientific Solutions for a Sustainable Future" SA School Competition	Academy of Science of South Africa (ASSAf)	2023/03/14	2023/07/31
Voyager and the outer planets: Combination of Mathematics, Physics, Computing, Data Science and Engineering	Nelson Mandela University (NMU)	2023/04/25	2023/04/25
SA Leg of Kangaroo Competition	South African Mathematics Foundation (SAMF)	2023/05/01	2023/05/07
Pan African Mathematics Olympiad (Rwanda)	African Mathematical Union (AMU)	2023/05/13	2023/05/23
Annual Young Scientists' Conference	Department of Science and Innovation (DSI) Academy of Science of South Africa (ASSAf) South African Young Academy of Science (SAYAS) Organisation for Women in Science for Developing World (OWSD) South Africa National Chapter	2023/06/12	2023/06/13
NITheCS Colloquium: Panel Discussion on 'Building a Sustainable Future: The Power of Basic Sciences'	National Institute for Theoretical and Computational Sciences (NITheCS)	2023/06/19	2023/06/19
Durban University of Technology Workshop on Strengthening the Presence and Visibility of	Durban University of Technology (DUT)	2023/07/19	2023/07/19

Women in Science, Technology, Engineering, Arts, Mathematics and Innovation (Presentation on behalf of DSI and ASSAf by Dr Natisha Dukhi (HSRC) and SAYAS ExCo member)			
TWAS-SAREP Regional Young Scientists Award	The World Academy of Sciences (TWAS)- Sub-Saharan Africa Regional Partner (SAREP)	2023/11	2023/11
16th Frank Warren National Organic Conference	South African Chemical Institute (SACI)	2023/12/03	2023/12/07
UN IYBSSD Closing Ceremony ⁵¹	United Nations (UN)	2023/12/15	2023/12/15

Table 1. SA IYBSSD Events/Activities validated and registered on the official UN IYBSSD Schedule*

** It could be that many more activities/events/initiatives took place, but not all were necessarily submitted for inclusion on the UN IYBSSD Schedule. The same applies to IYBSSD events/activities across the globe in which South Africans might have participated. This table by far not complete, and it only contains the activities/events/initiatives ASSAf were made/became aware of.*

⁵¹ <https://www.iybssd2022.org/en/events/closing-ceremony/>

Appendix B: Projected Budget and Expenditure Details

Proposals requesting funding were received, and ASSAf – on behalf of the DSI - collaborated with the respective organisations to raise awareness about the vital role of the basic sciences in advancing the SDGs. As part of these initiatives, the DSI and ASSAf received recognition in all branding, and comprehensive reports on the various projects were submitted to ASSAf. Each proposal's alignment with the IYBSSD was thoughtfully assessed prior to approval.

Below, please find a breakdown of the financial support provided to these initiatives. The ASSAf Financial Department is in the process of finalising the financial report. The figures presented below are estimations only.

The funds were made available through surplus monies left from the 2021/22 financial year for the DSI-funded Programme: ASSAf International Cooperation Support Instrument (DSI/CON0056/2018) (2021/22 funding). The DSI granted consent for these monies to be utilised for the IYBSSD, following a proposal that was submitted to the DSI.

Date	Event	Committed Amount	Actual Amount	Balance
1 January 2022	DSI/ASSAf IYBSSD Opening Balance			ZAR 412,390.00
1-6 August 2022	National Science Week 2022: ASSAf	ZAR 12,000.00	ZAR 12,000.00	ZAR 400,390.00
29 October 2022	Nna le Bokamoso Science and Arts Academy & North-West University	ZAR 30,000.00	ZAR 30,000.00	ZAR 370,390.00
4 November 2022	South African Mathematical Society (SAMS)	ZAR 25,000.00	ZAR 25,000.00	ZAR 345,390.00
3-7 December 2022	South African Chemical Institute (SACI)	ZAR 20,000.00	ZAR 20,000.00	ZAR 325,390.00
8-9 December 2022	UKZN School of Mathematics, Statistics and Computer Science (SMSCS)	ZAR 10,000.00	ZAR 10,000.00	ZAR 315,390.00
8-13 January 2023	South African Chemical Institute (SACI)	ZAR 75,000.00	ZAR 75,000.00	ZAR 240,390.00
19 July 2023	Durban University of Technology (DUT)	ZAR 150,000.00	ZAR 150,000.00	ZAR 90,390.00
June - July 2023	SA IYBSSD School Competition: ASSAf	ZAR 100,000.00	ZAR 40,000.00	ZAR 50,390.00
11 September 2023	Balance (Surplus)			ZAR 50,390.00

Table 2. Projected Budget and Expenditure Details*

* Not verified by ASSAf Financial Manager yet