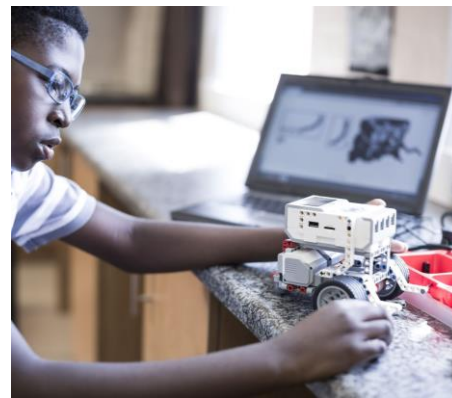


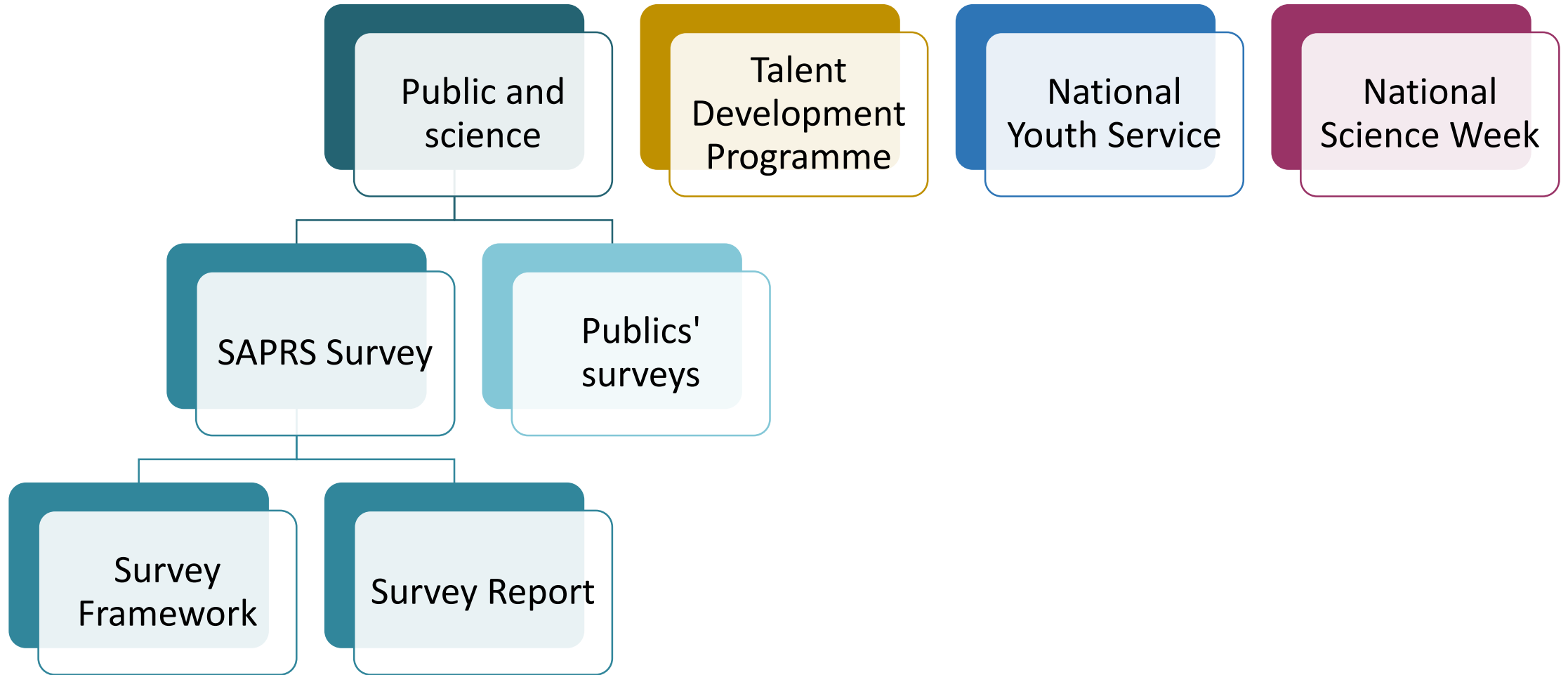
Science Engagement Workplan 2023-2024

HSRC

30 June 2023



Science Engagement Projects





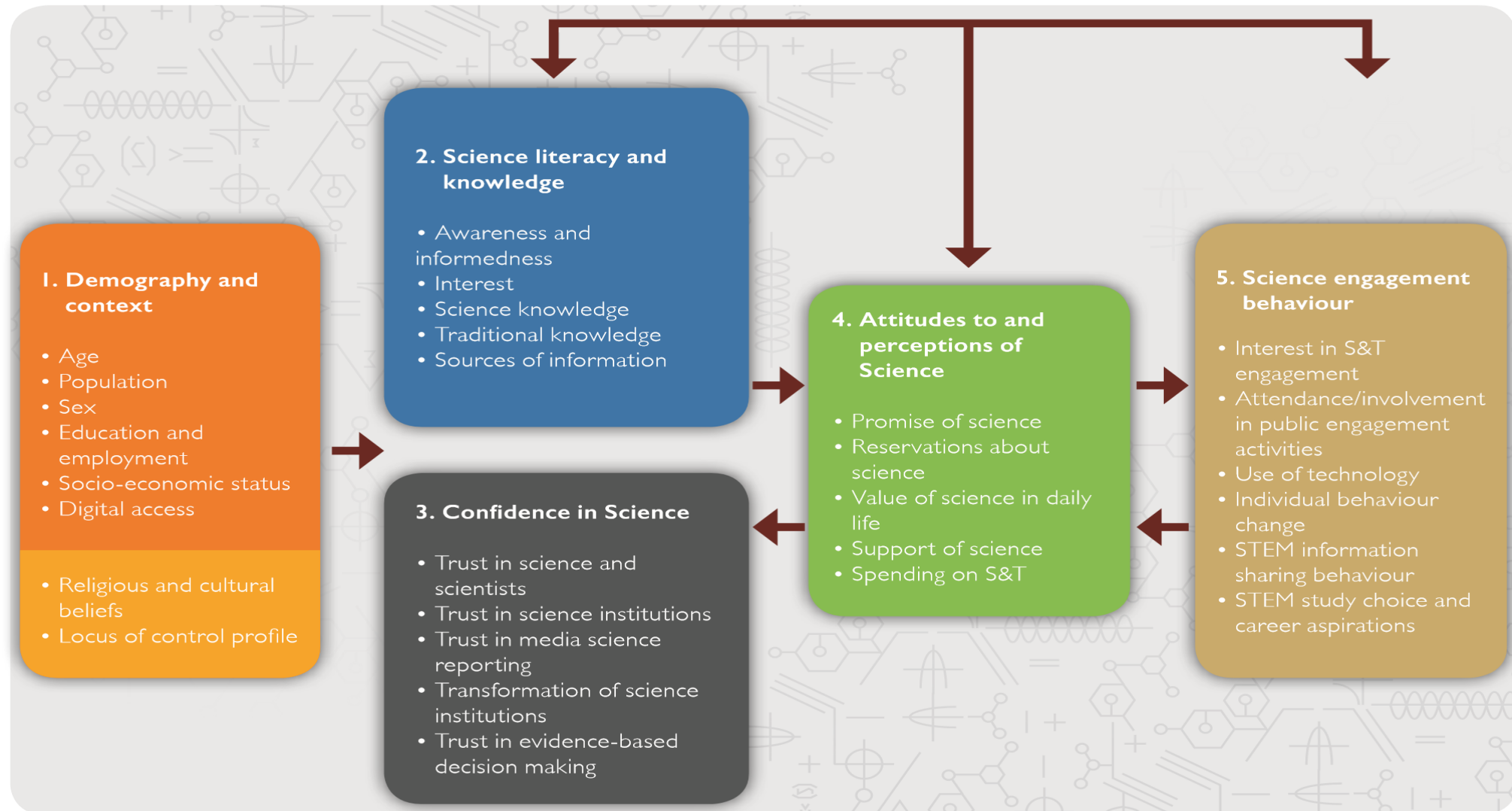
THE
SOUTH AFRICAN
PUBLIC
RELATIONSHIP
WITH
SCIENCE SURVEY
FRAMEWORK

The South African
Public Relationship
with Science Survey

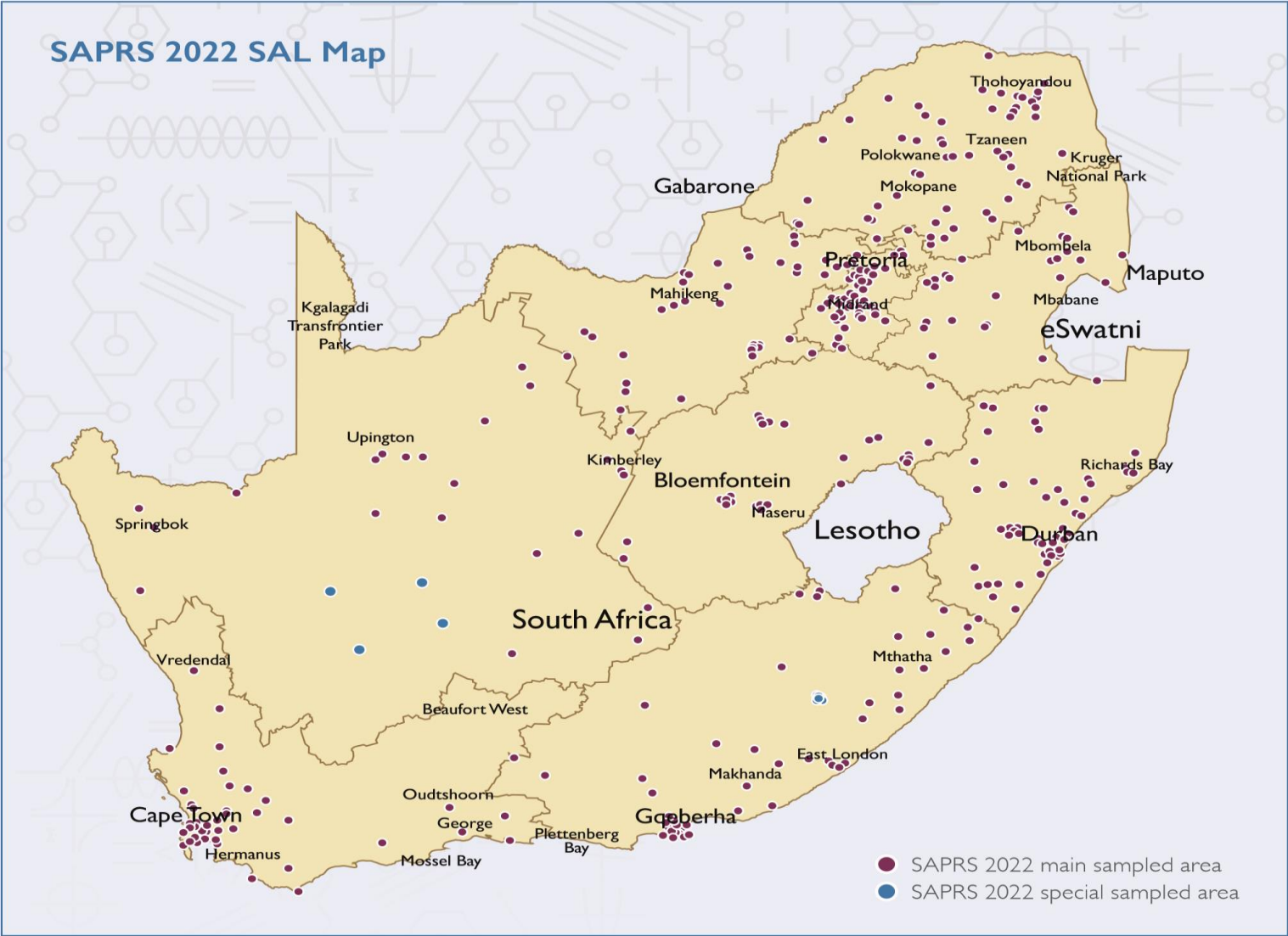
| CONTENTS PAGE OF SAPRS FRAMEWORK | PROGRESS |
|--|--|
| 1. Review of policy, literature and PRS studies conducted globally and in South Africa | Published Reddy, V., Parker, S. and Hannan, S. (2020). <i>Science and the Publics: Mapping Public Relationship with Science Surveys</i> . Human Sciences Research Council: Pretoria. |
| 2. The Science Engagement Monitoring and Evaluation Impact Indicator Framework | Department of Science and Innovation (2021). <i>Science Engagement Monitoring and Evaluation Impact Indicator Framework</i> |
| 3. The Instrument to Measure the SAPRS (loaded to tablets) | 200 PRS items 28 sets of background and demographic variables Available in nine languages (not in isiNdebele and Siswati) Interview took around 1 hour |
| 4. The SAPRS Sample (Fieldwork conducted from Nov 2022 to Jan 2023) | 5 960 interviews in main survey (difficulties accessing middle class & gated households) 249 interviews in special supplementary SKA footprint survey 230 interviews in special supplementary Cofimvaba survey |
| 5. Data entry, verification, cleaning and weighting done | Main survey data weighted to represent the national picture SKA and Cofimvaba weighted to the special areas |
| 6. Data Analyses and Report Writing | In Progress – will report further |

| IMPACT THEMES | IMPACT MEASURES |
|--|---|
| 1. Citizens' scientific literacy | 1.1. Interest in selected scientific domains 1.2. Informedness of selected scientific domains 1.3. Interest in new scientific discoveries 1.4. Recognition of different knowledge forms 1.5. Sources of scientific information |
| 2. Citizens' knowledge of general and Specific science areas | 2.1. Awareness of South African S&T discoveries 2.2. Awareness and informedness regarding natural phenomena 2.3. Science Knowledge Index 2.4. Aspirations of youth to STEM studies and careers 2.5. Awareness and informedness about S&T |
| 3. Citizens' confidence in science & Science institutions | 3.1. Trust in science 3.2. Trust in media's science reporting 3.3. Trust in science institutions 3.4. Perceptions of transformation at science institutions 3.5. Trust in government evidence-based decision-making approach |
| 4. Citizens' attitudes to & perceptions Of science | 4.1. Attitudes regarding the promises of science 4.2. Attitudes regarding the reservations about science 4.3. Perceptions of the value of science to daily life 4.4. Public support of science 4.5. Attitudes to governments and business past S&T investments 4.6. Attitudes to government future S&T investments 4.7. Personal interest in S&T engagement |
| 5. Citizens' science engagement Behaviour | 5.1. Attendance at, or involvement in, public engagement activities 5.2. Adoption of technologies in personal, work and civic spaces 5.3. Individual behaviour change 5.4. Behaviours related to STEM information sharing |

SAPRS model with hypothesised relationships among impact measures



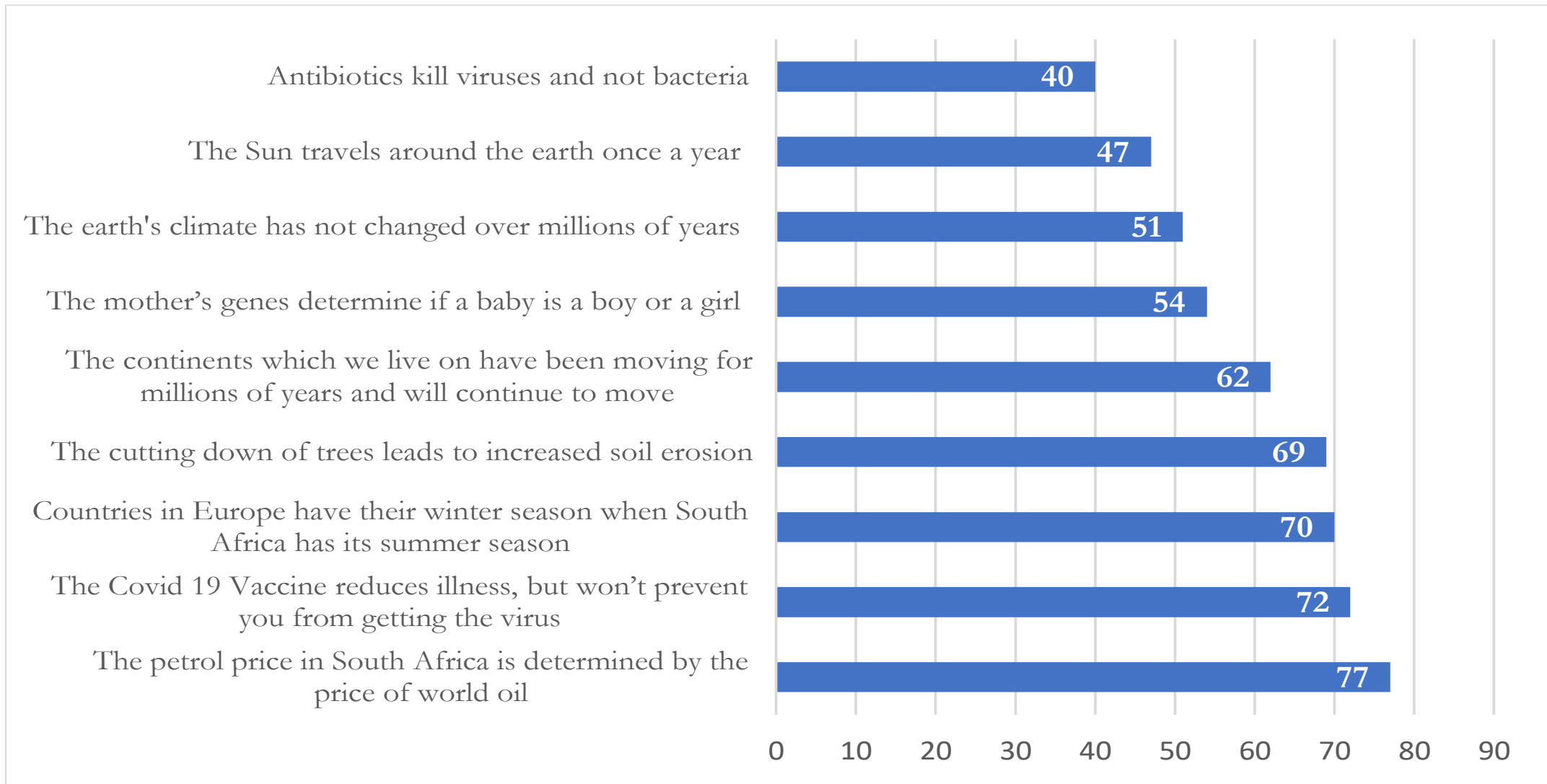
SAPRS map with centroids of 500 sampled small area layers



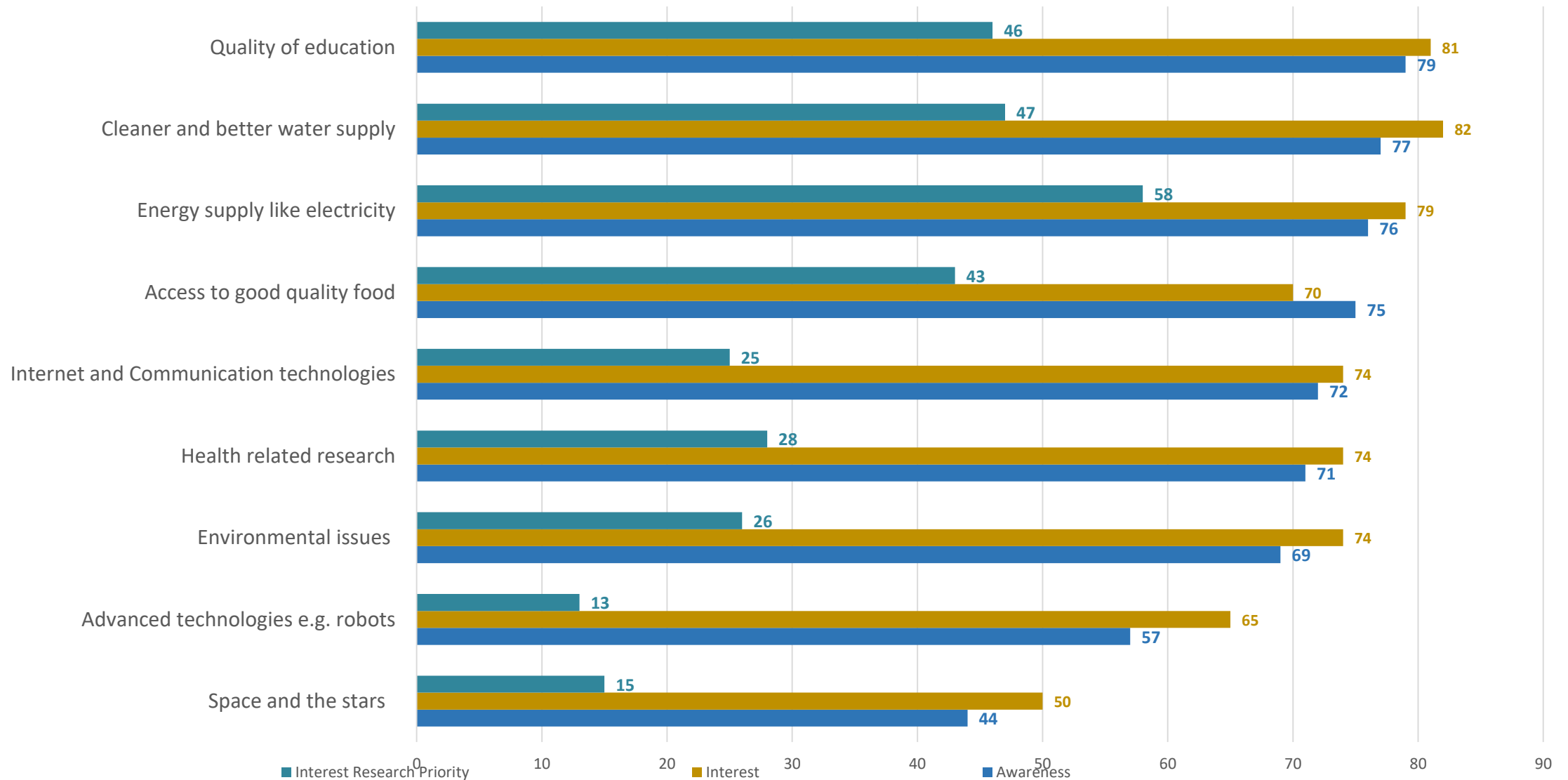
The South African Public Relationship with Science: Promises and Reservations Co-existing

1. Outlining the framework informing analysis
2. Methodology
3. Interest and perceived
4. knowledge of science and technology areas
5. Public attitudes to science and technology
6. Trust in science and technology institutions
7. Sources of scientific information
8. Behaviours (impact) relating to science and technology
9. Segmentation analysis – optimists, cynic, co-existence
10. Special Sample: SKA Footprint
11. Special Sample: Cofimvaba district

Example 1: Levels of science knowledge – answered correctly

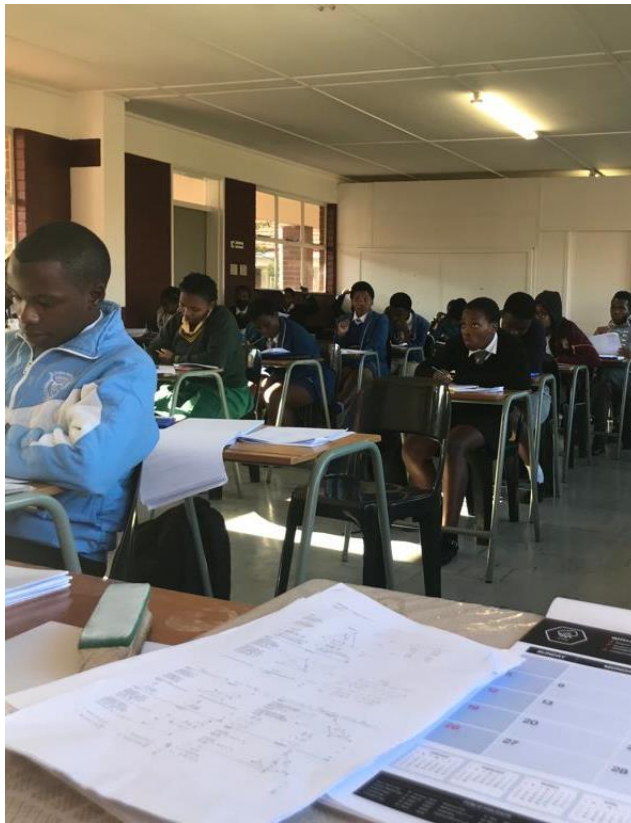


Example 2- Interest, Knowledge and Research Priorities



Plan of work for rest of the year

| Project Activities | Apr-23 | May-23 | Jun-23 | Jul-23 | Aug-23 | Sep-23 | Oct-23 | Nov-23 | Dec-23 | Jan-24 | Feb-24 | Mar-24 | Completion Date: |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------------|
| SAPRS | | | | | | | | | | | | | 31-Mar-24 |
| SAPRS Survey Framework Report | | | | | | | | | | | | | |
| Editing and layout of SAPRS Survey Framework Report | █ | █ | | | | | | | | | | | |
| Finalisation and submission of SAPRS Survey Framework Report | | | █ | | | | | | | | | | |
| SAPRS Survey Report | | | | | | | | | | | | | |
| Begin data analysis for SAPRS Survey | | █ | | | | | | | | | | | |
| Discussion with DSI on SAPRS report stucture | | | █ | | | | | | | | | | |
| Data analysis (descriptive and inferential statistics, index creation, segementation analysis) | | | █ | █ | █ | █ | | | | | | | |
| Produce first full draft of SAPRS Survey report | | | | | | | █ | | | | | | |
| Send draft report to external reviewers | | | | | | | █ | | | | | | |
| Present draft report to small technical committee | | | | | | | █ | | | | | | |
| Revise report based on comments from technical committee and reviewers | | | | | | | | █ | █ | | | | |
| Editing and layout of report | | | | | | | | | █ | █ | | | |
| Present the final report to DSI Exec and other stakeholders | | | | | | | | | | | █ | | |
| National stakeholder conference to present the report | | | | | | | | | | | | █ | |
| Publics' surveys | | | | | | | | | | | | | |
| Develop methodology for survey of 10 Publics | | | | █ | | | | | | | | | |
| Methodology for survey of 10 Publics (Learners and educators) | | | | | █ | | | | | | | | |
| Methodology for 10 Publics (Industry, decision makers, legislators and traditional healers) | | | | | | █ | | | | | | | |
| Methodology for 10 Publics (journalists, science communicators, tourists) | | | | | | | █ | | | | | | |
| Methodology for 10 Publics (Higher ED students, scientists/ researchers at university, IKS knowledge holders) | | | | | | | | █ | | | | | |
| Submit draft report to DSI for comment | | | | | | | | | | █ | | | |
| Revise methodology report | | | | | | | | | | | █ | | |



Talent Development Programme 2022 Cohort

- TDP 2022 cohort report

Baseline and follow-up learner surveys

Learner focus groups

June/July holiday school observation

Tutor surveys and interviews

Coordinator surveys and interviews

TDP 2022 Post-School Cohorts

- Revision of post-school instruments
 - 2021 cohort: 1 year post-school in 2022
 - 2020 cohort: 2 years post-school in 2022
 - June
- Planning for data collection of post-school cohorts
 - July
- Data collection for TDP post-school cohorts
 - Call centre
 - September

What were they doing in 2022?

- Studying (University/College)
- Working
- Neither studying nor working

Impact of Covid on activities

What are they doing in 2023?

TDP 2022 Post-School Cohorts

- Data analysis
- Report writing
- Finalise and submit TDP 2022 post-school cohort report
 - December



TDP 2024

- Revision of TDP baseline survey for 2024 cohort
 - 1 survey – all new learners
- Administration of online learner survey for 2024 cohort
 - March holiday school

Demographics

Home resources


Attitudes to maths and science

Maths and science achievement

School maths and science

Post-school aspirations

Online learning experience



National Youth Service Progress

- 2022 Report has been submitted to DSI
- The interviews of the 2023 (Tracking 1 for cohort 2022, Tracking 2 for cohort 2021) were completed.
- Tracking 1 response rate = 84% (236/280)
- Tracking 2 response rate = 81 % (395/488)
- A total of 631 respondents were successfully contacted
- The data has been cleaned and is ready for analysis

NYS: To be completed by 31 March 2024

2023 technical report (data collected) will be finalised and submitted to DSI

- 1st interview cohort 2022
- 2nd interview cohort 2021

2024 data collection

- 1st interview cohort 2023
- 2nd interview cohort 2022

How to integrate with SEIMS?



National Science Week 2022

- NSW 2022 report writing
 - Finalised in May 2023
- Editing and layout
 - External editing (10 July)
 - Design and layout of the report (31 July)

NSW 2023

- Revision of NSW data collection instruments
 - Grantholder Survey
 - Reflections on NSW 2023
 - Webinar Observation Schedule
 - HSRC and SAASTA observers
 - Presenter Evaluation Survey
 - Webinars
 - Webinar Participant Evaluation Survey
 - Reflections on the webinars
 - Observation Schedule
 - Site and school visits



NSW 2023

- Data collection
 - Grantholder proposals and reports
 - Online surveys
 - NSW site and school visits (9 provinces)
 - Webinar observation
- Inform grantholders of visits
- Send webinar participant evaluation survey to all presenters
 - Share during sessions





NSW 2023

- Data analysis
 - Quantitative
 - Qualitative
- Report writing
- Finalise and submit NSW 2023 report
 - March 2024

Thank you