

# External mid-term evaluation of GRAID

Final report

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## EXECUTIVE SUMMARY

GRAID, or “Guidance for Resilience in the Anthropocene: Investments for Development”, is a program aiming at contributing to a world where resilience forms an integral part of sustainable development for poverty alleviation and human wellbeing. The program synthesizes generates and offers knowledge about resilience for application in sustainable development. It represents a Swedish contribution to the Global Resilience Partnership (GRP) and is housed at the Stockholm Resilience Centre (SRC).

SRC commissioned an external independent mid-term evaluation of GRAID to evaluate program design, implementation, early signs of results and to provide recommendations to further develop the program. The evaluation was conducted by us, the Institute for Development Strategy, from March to June 2018.

Building on 22 more detailed findings, the evaluation drew six overall conclusions.

### **1. GRAID is an important and relevant program.**

The concept of resilience is fundamental to the planet’s future, especially if understood not only as capacity to “bounce back” but also to navigate transformative change. GRAID’s mission to adapt and infuse sustainable development with this concept is therefore of fundamental relevance. GRAID is also a timely program, in sync with trends in sustainable development. In times of increasing short-termism and focus on immediate and attributable results, GRAID provides an important holistic and longer-term perspective.

GRAID has a relevant link to poverty reduction, and the program has a sound generic understanding of how to enact change which is reflected in its useful theory of change. GRAID is in line with Sida’s global strategy under which it is funded, and naturally incorporates gender aspects. GRAID’s relevance was negatively impacted by an erratic GRP. This was however largely beyond the control of the program.

Potential synergies with other programs such as SwedBio have not yet been realized, mostly because GRAID was busy in establishing itself and implementing its work program. The program has also received mixed signals from Sida about whether GRAID should target the agency with its outreach efforts.

### **2. GRAID has been effective in implementing and adapting its work program.**

GRAID has implemented its work program reliably and delivered generally well on planned outputs apart from those specifically aimed at the GRP.

Reflecting SRC’s adaptive management style, the program has been actively questioning and adjusting its approach which we find appropriate given the program’s dependence on implementing partners.

### **3. GRAID has already reached some of its intended outcomes and goals. A key challenge is to ensure that the program’s knowledge products meet the needs of their intended users.**

GRAID has delivered well towards its Module 1 outcomes that are focused on knowledge generation. In Module 2, GRAID is still in the process of developing methods and tools and has not

yet achieved related outcomes. In Module 3, GRAID has successfully offered its knowledge to a broad global audience. Across modules, GRAID has been active and successful in generating and offering knowledge.

The degree to which GRAID will be able to fulfill its outward-looking program mission of “increasing awareness, understanding and use of resilience as an integral part of sustainable development” depends on how relevant, useful and adapted to the needs, constraints and challenges of development practice GRAID’s outreach activities and knowledge products are.

To this end, there are signs that GRAID may have stayed too much in its academic comfort zone, and that what is offered is sometimes driven more by what GRAID staff believes to be relevant and useful than by actual and explicit need and demand of targeted people and institutions.

There are several possible contributing factors to this: lack of explicit demand by the GRP, limited collaboration with programs such as SwedBio with on-the-ground development experience, mixed signals by Sida about wanting to be targeted with GRAID outreach, the fact that GRAID is a frontloaded program that prioritizes knowledge generation over outreach activities, the fact that GRAID is part of SRC which may pull GRAID to the academic side of the research-to-development spectrum, and difficulties with bringing more development-oriented program partners into SRC’s adaptive management culture. More evidence on the degree of need- and demand-orientation of GRAID knowledge products should become available after key Module 2 products have been rolled out later in 2018 and in 2019.

#### **4. Largely due to an erratic GRP, GRAID has not been able to act as effective knowledge partner to it.**

Mostly due to an erratic GRP, GRAID has not been able to liaise and link to GRP as intended. These developments have largely been beyond GRAID’s control.

Nevertheless, GRAID could have shown more entrepreneurship when it became clear that GRP was neither demanding nor using GRAID’s capacities in a significant way. In interviews, people generally agreed when we described GRAID as a bride waiting for a groom that didn’t show up. We have concerns with this picture because GRAID may have cultivated exaggerated expectations of specific demand for – and uptake of – GRAID outputs by the GRP. In our experience, global program secretariats and boards are usually busy organs, and the fact that Sida showed some reluctance of being targeted with GRAID’s insights is not an exception. Hence, even with a fully functional GRP, GRAID would probably have needed to become more proactive regarding linking to its intended target groups and understanding their concrete and explicit needs and demand.

Going forward, GRAID continues to have much potential as a GRP knowledge partner. Strategic alignment and operational collaboration will be facilitated by the facts that GRAID was involved in establishing GRP 2.0 and that GRP will also be housed at SRC.

#### **5. Academic program partners in Stellenbosch saw their roles shift and at times struggled with how they were managed.**

When the program started, the GRAID teams at CSIR and CST saw themselves as program partners on equal footing but now understand their role more as that of subcontractors.

These academic collaboration partners have found GRAID's constantly changing planning and reporting structures difficult to work with and their different organizational cultures and the regional distance to Stockholm have made it difficult for them to embrace SRC's adaptive management culture, even in light of recently intensified communication. There was a perception by those partners that contracts were not extended in time to provide partner staff with a stable funding outlook.

**6. SRC is an excellent academic and adequate institutional home for GRAID but differing objectives need to be managed.**

SRC is an inspiring and stimulating academic home for GRAID and offers – together with Stockholm University – adequate administrative support. We find however that GRAID exists in somewhat of an institutional gray zone: it is neither a fully owned SRC program (i.e. funded from SRC's core resources and fully in sync with SRC's mandate and objectives), nor is it an independent program hosted at SRC (i.e. with its own governance and management structure).

While there is a great deal of alignment in terms of subject matter, SRC has a research focus while GRAID is funded as a development program. This is not necessarily an issue but related risks in terms of development orientation, reporting and management of GRAID staff, as well as fund allocation need to be transparently managed.

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Based on findings and conclusions we issued five recommendations:

- 1. Sida should continue funding the program post-2019;**
- 2. GRAID needs to ensure its relevance and effectiveness for its target groups;**
- 3. GRAID needs to tighten its linkages to GRP without depending on it;**
- 4. GRAID needs to better integrate and manage its academic program partners; and**
- 5. SRC and GRAID need to clarify their institutional relationship.**

## ACKNOWLEDGMENT

We wish to thank SRC and GRAID leadership for excellent support and constructive and open discussions throughout this evaluation. We thank all interviewees for their time and valuable input. The teams in Stockholm and Stellenbosch have provided us with excellent and kind support and collaboration during our visits. Our best wishes are with the program, its people and their important mission.

Markus Palenberg and Andrea Deisenrieder

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## CONTENTS

|  |    |
|--|----|
| Executive Summary .....  | 2  |
| Acknowledgment .....   | 4  |
| Contents .....   | 5  |
| 1. Introduction.....   | 6  |
| 1.1. The program .....   | 6  |
| 1.2. The evaluation.....   | 7  |
| 2. Evaluation findings .....   | 8  |
| 2.1. Relevance .....   | 8  |
| 2.2. Effectiveness .....   | 14 |
| 2.3. Organization and management.....                                | 21 |
| 3. Conclusions and recommendations .....                             | 31 |
| Annex A. People interviewed .....                                    | 36 |
| Annex B. Documents consulted .....                                   | 38 |
| Annex C. GRAID academic publications .....                           | 42 |
| C1. Academic publications and books with GRAID participation.....    | 42 |
| C2. GRAID co-authorship in foundational papers and case studies..... | 45 |

## 1. INTRODUCTION

*This introductory chapter summarizes the program that is evaluated, explains purpose and approach of the evaluation and describes the structure of this evaluation report.*

### 1.1. The program

GRAID, or “Guidance for Resilience in the Anthropocene: Investments for Development”, is a program aiming at contributing to a world where resilience forms an integral part of sustainable development for poverty alleviation and human wellbeing (SRC 2015a, 10). Since 2016, the program’s mission is summarized as to “increase awareness, understanding, and use of resilience as an integral part of sustainable development for achieving poverty alleviation, long term human wellbeing and the maintenance of planetary life-support systems” (GRAID 2017h, 4).

GRAID represents a Swedish contribution to the Global Resilience Partnership (GRP) launched by the Rockefeller Foundation and USAID in August 2014 and joined by Sida in September of the same year (GRP 2016, 4). The program operates with a total budget of 116 Million SEK<sup>1</sup> for 2015-2019, of which about 64 Million SEK have been disbursed in its first three years.

When designed in 2015, the program was conceptualized as a knowledge partner to GRP with three strategic goals:<sup>2</sup>

- **Goal 1 - Knowledge generation:** To further develop the resilience framework, including its underlying principles, theories, practices and empirical evidence, based on on-the-ground experiences and insights from the GRP and its implementing partners.
- **Goal 2 - Methods & tools development:** To further develop methods, practice and actionable tools for integrating resilience into development at local to global scales.
- **Goal 3 - Knowledge outreach and support:** To provide strategic support, capacity building and operate as a knowledge contributor to the GRP.

Each strategic goal was translated into a program module, and a fourth “leadership and coordination” module was added. The objectives of Modules 1-3 are (GRAID 2016f):

- **Module 1:** To further develop knowledge on resilience as an approach for meeting sustainable development needs including long term human wellbeing of poor and vulnerable people and maintaining planetary life support systems.
- **Module 2:** To further develop methods, practice and actionable tools for using resilience as an approach to sustainable development.

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<sup>1</sup> The initial agreement between GRAID and Sida indicated a funding amount of 107 Million SEK until the end of 2018. A “Second Amendment” indicates a reduced amount of 98 Million SEK. Additionally, GRAID proposed for extra funding of 18 Million SEK in 2019.

<sup>2</sup> Copied verbatim (including highlights) from GRAID’s first progress report in 2015 (GRAID 2016a, 5) and very similar to the goals described in the program proposal (SRC 2015a, 10).

- **Module 3:** To increase awareness and understanding in the development community of resilience as an approach to sustainable development.

## 1.2. The evaluation

SRC commissioned an external independent mid-term evaluation of GRAID to “evaluate programme design, implementation, early signs of short and long-term results and to provide recommendations to support Sida and GRAID/SRC in further developing the programme” (SRC 2018c, 1).

The evaluation was conducted by the Institute for Development Strategy<sup>3</sup> from March to early June 2018. The total budget for the evaluation was SEK 498,000; it took us 52 work days to complete it.

After a brief inception phase, the methodology was refined and summarized in an inception report (IfDS 2018). It aims at answering four guiding questions that also provide the structure for this report:

1. **Relevance** (Section 2.1): How relevant are GRAID’s goals and its Theory of Change (ToC) vis-à-vis the program’s stated objectives, Sida priorities, and in the context of the Global Resilience Partnership (GRP)?
2. **Effectiveness** (Section 2.2): How has implementation progressed and what results have been achieved to date or can be expected in future (including GRAID serving as knowledge partner)?
3. **Management** (Section 2.3): What are advantages and disadvantages regarding how GRAID is designed, organized, managed as a program of the SRC?
4. **The way forward** (Chapter 3). What adjustments and approaches can (further) increase GRAID’s relevance and effectiveness i) in the remainder of the current programming phase and ii) in a possible second programming phase?

The evaluation follows a theory-based approach: it not only records past achievements but also uses GRAID’s theory of change to assess likely future results. We implemented the evaluation in a collaborative and participatory manner, with open discussions of our emerging hypotheses, to generate useful insight and recommendations for how GRAID can best operate until 2019 and beyond.

We interviewed 38 people comprising staff at SRC, program partners, Sida, GRP and some external stakeholders (Annex A) and consulted documents, most of which are listed in Annex B. We visited both the SRC in Sweden and the two GRAID program partners in Stellenbosch, South Africa: the Council for Scientific and Industrial Research (CSIR) and the Centre for Complex Systems in Transition (CST). Through these visits we could interact with most people face to face.

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<sup>3</sup> [www.devstrat.org](http://www.devstrat.org).

## 2. EVALUATION FINDINGS

*This chapter presents evaluation findings along the three principal questions guiding this program evaluation, covering relevance, effectiveness, and organization and management. The forward-looking fourth guiding question is addressed in the next chapter.*

### 2.1. Relevance

**Guiding question:** *How relevant are GRAID’s goals and its Theory of Change (ToC) vis-à-vis the program’s stated objectives, Sida priorities, and in the context of the Global Resilience Partnership (GRP)?*

\* \* \*

#### **Finding 1. GRAID’s program objective was – and remains – highly relevant.**

GRAID’s stated aim of contributing to “a world where resilience forms an integral part of sustainable development for poverty alleviation and human wellbeing” (SRC 2015a, 10) and its mission “to increase awareness, understanding, and usage of resilience as an integral part of sustainable development”<sup>4</sup> are widely considered to be of crucial importance among the people we interviewed and the literature we have reviewed.

In its first progress report, the program rationalized “the need to integrate resilience as a core strategy of development actions across multiple sectors, scales and regions” by “the dual challenge of (1) rising social and environmental turbulence in an increasingly globalized world facing rising risks of complex and abrupt shocks and (2) that we continue to grapple with the urgency of meeting development needs of the poor and vulnerable, while maintaining our planetary life support systems – a critical foundation for human wellbeing” (GRAID 2016a, 4). We find that this rationale continues to make GRAID highly relevant.

The program seems also in sync with a general global trend towards more interest in resilience. Our interviews reflected this and internet searches for the topic “resilience” have increased by a factor of four since 2004 while related topics only marginally increased (e.g. “climate change”) or decreased (e.g. “sustainability”).<sup>5</sup>

Global frameworks for sustainable development such as the Sustainable Development Goals (SDGs) also increasingly acknowledge the need for resilience and highlight the importance of a systemic approach to sustainable development. While the Millennium Declaration did not refer to resilience in 2000 (UN 2000), the Agenda for Sustainable Development made multiple references to different types of resilience in 2015 (UN 2015).

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<sup>4</sup> <http://www.stockholmresilience.org/policy--practice/graidd.html> and <http://graidd.eearth/about/>, visited on May 7, 2018.

<sup>5</sup> <https://trends.google.com>, visited on June 7, 2018. Worldwide trends since 2004 for the topics “resilience”, “climate change” and “sustainability”.



**Finding 2. GRAID’s relevance was impacted by an erratic GRP.**

When established in 2014, the Global Resilience Partnership (GRP) was set up with a threefold structure (GRP 2016, 5):

- Five “programmatically features” that cut across regions and sectors to provide global capacity building and accelerate the impact of programs;
- Competitive calls for proposals around “challenges”, partner networks and regional hubs to identify and source locally-relevant solutions; and
- Identification of “local needs and solutions” sourced from GRP’s focus regions, i.e. the Sahel, the Horn of Africa, and South and Southeast Asia.

Intended as a knowledge partner to the GRP, GRAID was designed to allow close and relevant integration with this structure (GRAID 2016d, 2):

- GRAID’s Module 1 on knowledge generation and sharing focused on supporting GRP’s “learning and innovation” programmatic feature. Module 2 with its focus on practice, approaches and training planned to support GRP’s “measurement and diagnostic” feature. Module 3 with its focus on policy and outreach intended to support GRP’s “policy and influence” feature. The GRAID proposal had originally mapped Modules 1 and 2 differently (SRC 2015a, 11) which was later adapted as GRAID’s work program was developed in more detail.
- All modules were also designed to support GRP challenges through i) providing relevant learning and knowledge materials and to harness learning from and between the challenges (Module 1), ii) offering methods, training and networks needed to implement resilience thinking in the challenges, and iii) supporting linkages relevant to the challenges.

When designed, GRAID purposefully did not identify its own implementing partners and relied instead on doing this together with GRP after the program had started (SRC 2015a, 11).

The GRP was however slow in establishing itself, never fully functioned as intended, and in 2017 one founding partner (the Rockefeller Foundation) decided to leave the partnership.<sup>6</sup>

As a consequence for GRAID, demand for the program’s knowledge products, collaboration with GRP partners and access to real-world development experience through GRP’s challenges, networks and local needs and solutions remained considerably below expectations. GRAID was left in a limbo; lacking the close partnership to serve as knowledge partner in, and uncertainty of when that partnership would become effective.

As each GRAID module depended on some form of close collaboration with GRP, GRAID had to find alternative sources for real-world experiences and local needs and solutions (Module 1), alternative

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<sup>6</sup> From interviews, we have understood that a range of different issues were at play that were neither caused by GRAID nor under the programs control. Most GRP documentation was not available to this evaluation because of confidentiality agreements between GRP partners.

partners for developing methods and capacities to apply them (Module 2), and platforms and entry points for knowledge transfer and policy influence (Module 3).

The program visibly struggled with these new tasks and it can be argued that its activities and outputs have overall been less driven by outside demand and more by internal supply than in a scenario with a fully functional GRP.<sup>7</sup>

In our assessment, GRAID and SRC leadership could do little to avoid this situation and have managed it reasonably well, a view that was widely shared also at Sida. Contact to GRP and the idea to serve GRP as knowledge partner was never abandoned which provides a good basis for engagement with GRP 2.0 that is now being housed at SRC as well.

**Finding 3. GRAID’s link to poverty reduction is necessarily theoretical but could be less abstract.**

In our view, GRAID cannot be expected to plan for or demonstrate direct links to development impacts, including on poverty reduction. This is because GRAID’s principal contribution is “upstream” in the sense of being indirectly rather than directly linked to intended “downstream” effects the program aims to achieve in development practice and results. This naturally leaves GRAID with limited influence (and no control) over ultimate outcomes such as poverty reduction.<sup>8</sup> GRAID aims at raising awareness, understanding and usage of resilience thinking and concepts of development practitioners which, in turn should lead to strengthened sustainable development impacts. GRAID also explicates the importance and role of resilience in global frameworks such as the SDGs which then needs to find its way to downstream application.

This said, we find that GRAID could explicate better how its outputs, i.e. its knowledge products across Modules 1-3 and the program’s 15 flagships can change development practice,<sup>9</sup> how those changes can translate into improved sustainable development and better approaches to poverty reduction, and what assumptions are made about these causal connections. This finding is not restricted to the flagship “resilience perspectives on gender, equity and poverty” but includes all program activities and results and is closely linked to the next finding.

**Finding 4. GRAID’s theory of change is useful and well thought-through but can be developed further.**

GRAID has developed a clear understanding of its goals and of how it intends to reach them. Early thinking to this end is visible in the program proposal that describes a results hierarchy from

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<sup>7</sup> Nonetheless, GRAID has aligned the higher-level aim of “GRAID as a knowledge partner to the GRP” with the program’s outcome structure in 2017. This higher-level aim resembled a flagship when contributing to four outcomes (1.1, 1.3, 2.3, 3.3) and to six outputs (1.1.6, 1.3.1, 2.3.1, 2.3.2, 3.3.1, 3.3.3). In parallel, there is an explicit outcome namely “to act as a knowledge partner to the GRP to shape their understanding and application of a resilience approach to sustainable development” (3.3). (GRAID 2018b, 69-74).

<sup>8</sup> GRAID can also have some limited direct influence on the poor and vulnerable, for example when co-developing or piloting approaches in the field, but the program’s principal contribution is indirect, e.g. when such approaches are widely used by development practitioners.

<sup>9</sup> Including who exactly is targeted, e.g. people, institutions and/or policies.

program goals to module objectives and onto planned outcomes, together with a detailed narrative (SRC 2015a). Goal and objective statements have subsequently been refined and restructured, a mission statement has been developed,<sup>10</sup> and the results hierarchy has been developed into a logframe that also covers activities. GRAID has illustrated the way it intends to influence development practice in useful diagrams and examples (GRAID 2018b, 12 and 29), and the program conducted a comprehensive risk analysis that reveals several assumptions and necessary conditions for the program to be effective (GRAID 2018b, 14).

Together with narrative descriptions in annual work plans (GRAID 2015, 2016g, 2016e), we find that these elements provide a comprehensive explanation of how GRAID aims to achieve its objectives. Taken together, we consider them GRAID's theory of change.

This broader understanding of what constitutes a theory of change may not reflect how the program understands the concept. GRAID's monitoring and learning approach document and the 2017 progress report portray "GRAID's Theory of Change 2017-2021" as a diagram, a short explanation, and one example (GRAID 2018b, 12–13, 2018c, 12–13). We note that in this report we consider GRAID's theory of change to not be restricted to these but to also include the elements listed above.

Related to this, we find that a minor weakness of GRAID's theory of change is that it is distributed across different documents and planning and reporting tools, and that the terms may be understood too narrowly.

While the theory of change is explicit about linking GRAID activities to the program's knowledge products across modules and flagships it offers only very generic explanations and remains on the level of general principles regarding how those products are intended to increase awareness, understanding, and use of resilience in sustainable development.

For example, the very different impact pathways through which GRAID could influence development practice are not differentiated. In its theory of change diagram (GRAID 2018b, 12), labor-intensive co-development between GRAID and development agency staff is suggested but it remained unclear to us if this is indeed the most realistic<sup>11</sup> or cost-effective pathway towards GRAID objectives. Underlying assumptions and constraints are not discussed, and no alternative pathways are offered that would describe how some of GRAID's principal outreach activities operate (Finding 12). In addition, it would be helpful to further segment and specify target groups further into the people and specific institutions GRAID directly aims to reach.

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<sup>10</sup> „To increase awareness, understanding, and use of resilience as an integral part of sustainable development for achieving poverty alleviation, long term human wellbeing and the maintenance of planetary life-support systems" (GRAID 2016g, 9).

<sup>11</sup> Module 3 knowledge products, for example the MOOC, the Rethink journal or the [graid.earth](http://graid.earth) website, disseminate information with little interaction with recipients.

**Finding 5. Although broader in thematic scope, GRAID aligns well with Sweden’s global strategy under which it is funded and has a convincing link to poverty alleviation.**

GRAID is funded under Sweden’s global environmental strategies, since early 2018 this is the “Strategy for a sustainable environment, climate and oceans, and sustainable use of natural resources”<sup>12</sup> (Regeringskansliet 2018).

Theoretically, thematic areas covered by GRAID activities could be considered to lie beyond those covered by these strategies. This does however not appear to represent an issue and interviewees at Sida and GRAID felt that the interconnectedness of development sectors and themes was such that GRAID activities outside of the immediate thematic scope of the strategy could well be justified as long as the program also tackled those themes central to the strategy.

GRAID’s link to poverty alleviation is convincing but requires some understanding. It is indirect and abstract but at the same time also fundamental. It is *indirect* because GRAID does not directly target the poor but rather aims at influencing those that do (Finding 3). It is *abstract* because it remains unclear how – under real-world development conditions – “a world where resilience forms an integral part of sustainable development” will better support poverty alleviation and human wellbeing. This is in line with the program’s *raison d’être* which is exactly to translate the abstract idea into the development context. Lastly, it is *fundamental* because GRAID addresses global risks with potentially devastating consequences for the entire planet, including the entire human species.

**Finding 6. Gender is naturally addressed but not systematically mainstreamed.**

Due to the program’s focus on interconnectivities in socio-ecologic systems, gender and equity are natural areas for knowledge generation in GRAID. The flagship “Resilience perspectives on gender, equity and poverty”<sup>13</sup> synthesizes and develops knowledge on how gender, equity and poverty shape relations and feedbacks within social-ecological systems through the lens of intersectionality (GRAID 2016e, 8). In other activities, gender is less prominent and while frequently referred to in the program proposal and throughout progress reports the subject is only mentioned explicitly in relation to the above flagship in GRAID’s 2018 logframe (GRAID 2017k).

GRAID’s gender expert and the gender-related flagship also advise SRC/GRAID staff on gender, both generally through seminars and specifically through feedback on other GRAID activities and products, for example in relation to the Wayfinder (GRAID 2018c, 20).

The capacity of GRAID’s gender experts is too limited to ensure that gender would be systematically integrated into all program activities. It was for example not possible to comprehensively screen all contributions to the MOOC regarding how gender was addressed and integrated. We find that this is not an issue because it is in line with what the program set out to do. We understand from the

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<sup>12</sup> <http://www.government.se/articles/2018/03/new-strategy-to-increase-the-level-of-ambition-regarding-global-efforts-on-the-environment-climate-and-oceans/>, visited on May 9, 2018.

<sup>13</sup> Formerly “Gender and Resilience in Development” (GRAID 2018c, 19).

program's goals and objectives that gender is one (important) element of GRAID but not a primary program objective.

**Finding 7. Important synergies between SwedBio and GRAID exist but have not yet been realized.**

Established in 2002 at the Swedish University of Agricultural Sciences in Uppsala, SwedBio moved to SRC in 2011 and is managed as a Sida-funded SRC program with an annual budget larger than that of GRAID.

SwedBio focuses on knowledge generation, dialogue and exchange between practitioners, policymakers and scientists for the development and implementation of policies and methods that contribute to poverty alleviation, equity, sustainable livelihoods and resilient social-ecological systems rich in biodiversity.<sup>14</sup>

As such, SwedBio and GRAID have important potential synergies. SwedBio's decade-long experience with facilitating on-the-ground stakeholder input into national and global policy dialogues could help GRAID ensuring that its upstream work agenda in Modules 1 and 2 remains relevant and useful for intended target groups. SwedBio experts could inform outreach in Module 3 and support GRAID's work on concretizing its theory of change. SwedBio could facilitate access to both the field level through its implementing partners (often local NGOs) and to national and global policy arenas, for example to the Convention for Biological Diversity (CBD) with which SwedBio leadership appears well connected. GRAID, on the other hand, could bring SwedBio closer to the GRP in which it has not been involved and knows little about, and could serve as a knowledge partner also for SwedBio's work.

Until now collaboration and cross-fertilization between the programs has been limited. From SwedBio's perspective, GRAID had its hands full with establishing itself and dealing with an erratic GRP and therefore had little capacity to engage with SwedBio in a systematic way beyond occasional staff-level collaboration. Both the 2015 GRAID proposal and the latest SwedBio proposal (also 2015) mention the other program and sketch collaborative options but do not develop and integrate those systematically (SwedBio 2015; SRC 2015a). GRAID work plans made only fleeting mention of SwedBio.<sup>15</sup>

**Finding 8. Sida has sent mixed signals about wanting to work directly with GRAID as a knowledge partner.**

As one of the principal GRP members and as a home to many development practitioners, Sida itself is a natural target for GRAID's information sourcing (Module 1), co-development (Module 2), and

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<sup>14</sup> SwedBio's mission is to "Enable knowledge generation, dialogue and exchange between practitioners, policymakers and scientists for development and implementation of policies and methods at multiple scales – which contribute to poverty alleviation, equity, sustainable livelihoods and social-ecological systems rich in biodiversity that persist, adapt and transform under global change such as climate change." (<http://swed.bio/about/>, visited on May 10, 2018).

<sup>15</sup> The 2015-16 work plan mentions that GRAID intends to build on lessons from SwedBio when designing its monitoring, evaluation and reporting system (GRAID 2015, 13), the 2017 workplan mentions that GRAID will use storyline indicators also used by SwedBio, and mentions SwedBio in its risk mitigation (GRAID 2016g, 16 and 31). The 2018 work plan does not mention SwedBio (GRAID 2016e).

outreach (Module 3) efforts. In our interviews at Sida (Annex A), we received opposing feedback on whether GRAID should engage Sida in any of these ways.

In our interviews with SwedBio stakeholders we learned that Sida maintains a continued helpdesk function through which Sida employees can request small studies (up to 2 weeks) without going through formal contracting. This service is provided by the Swedish University of Agricultural Sciences in Uppsala and Gothenburg University who, in turn, contract experts as needed, including frequently from SwedBio. This could be one avenue for GRAID to provide resilience know-how to Sida on a pull- rather than on a push-basis.

## 2.2. Effectiveness

**Guiding question:** *How has implementation progressed and what results have been achieved to date or can be expected in future (including GRAID serving as knowledge partner)?*

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### **Finding 9. GRAID has reliably implemented and achieved most planned activities and outputs.**

After commencing activities in 2015 and during 2016, GRAID reliably implemented workplan activities (GRAID 2015, 2016d) and thereby established a sound basis for achieving the aims of the GRAID proposal (SRC 2015a, 32). After a shorter progress report for 2015 focused on establishing the program (GRAID 2016b), subsequent progress reports comprehensively summarized activities and related outputs in an accessible and useful manner (Finding 22). From these reports we have synthesized principal activities and outputs in 2016 and 2017 (Table 1).

In terms of written outputs, we estimate that GRAID has contributed to more than 30 academic publications and books to date and has more than 20 additional publications in the pipeline (Annex C). This seems adequate, especially since GRAID does not focus on academic publications and because of the time-lag from research activities to publication.<sup>16</sup>

Other written outputs are numerous and range from non-academic publications such as the GRAID's Rethink magazine and 8 insights briefs to films and draft frameworks and notes. Many of these documents are not (yet) publicly accessible and have not been reviewed by us.

Based on our interviews, we also find that a significant share of knowledge across Modules 1-3 is not explicit but rests with GRAID's researchers themselves.

Explicit and implicit knowledge is brought to the fore in the many meetings and dialogues GRAID organized or participated in. In 2016 and 2017, GRAID participated in more than 100 meetings and dialogues, ranging from internal GRAID workshops, meetings with Sida, the GRP and partners, prominent fora such as the World Economic Forum and workshops with experts in the field.<sup>17</sup>

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<sup>16</sup> In addition, several work streams started only in 2017.

<sup>17</sup> The progress reports for 2016 and 2017 listed 113 key meetings and dialogues, some of which had no GRAID staff participation (Finding 22).

Table 1. Principal activities and outputs in progress reports 2016 and 2017 (GRAID 2017h, 2018c).

|          | 2016 Progress Report   | 2017 Progress Report  |
|----------|--|---|
| Module 1 | GRAID started generating and synthesizing knowledge, drafted guidelines for resilience assessments/ approaches, began analyzing case studies and developed a prototype model   | Further knowledge synthesis and case analysis was undertaken, initial knowledge products were completed, scopes on gender, poverty alleviation, equity, ecosystem services and sustainable development were refined, a database on regime shifts was made available and several workshops were held                 |
| Module 2 | GRAID began to review and develop new resilience assessment methods, tested RAPTA <sup>18</sup> in Ethiopia, prepared course materials, started preparations for the MOOC and initiated the Changemakers network   | A typology, a framework (both urban context) and an analytical method for comparative assessments were developed, the Wayfinder was almost completed, a guide (infrastructure) is under development, workshops and a colloquium took place, and GRAID contributed to a training dialogue and workshops with the GRP |
| Module 3 | GRAID contributed to diverse dialogues and events, released first knowledge products, started preparing the Resilience Conference at SRC and a Colloquium in Johannesburg for 2017, prepared the launch of the online journal Rethink for January 2017 and set up preparations for outreach activities | GRAID disseminated knowledge products via rethink.earth and a Rethink printed issue, graid.earth served as basic online presence, the MOOC course design was completed, international dialogues and conferences were held, and briefing notes were developed and distributed online and in print                    |

Overall, from our study of reports and through interviews with GRAID staff and external stakeholders, we conclude that GRAID has been an active program that has engaged in most activities and delivered well against most outputs of its workplans. GRAID has only remained below what was planned with activities explicitly relying on GRP, as discussed in Finding 13 below.

This overall good performance on the activity and output level is commendable especially for 2016 as the program was in a nascent stage marked by hiring staff and establishing itself.

In the following findings, GRAID's effectiveness in Modules 1-3 is analyzed in more detail on the outcome level by summarizing early signs of effects caused by GRAID outputs, and by discussing factors that affect effectiveness in reaching planned outcomes.

**Finding 10. GRAID is delivering well towards its Module 1 outcomes. To date, there is however little evidence on direct uptake of generated knowledge and risks related to access and relevance need to be managed.**

With its activities in Module 1, GRAID aims to further develop knowledge on resilience to meeting development needs of poor and vulnerable people (GRAID 2017k), including by incorporating poverty, gender and human rights (Outcome 1.2) and by knowledge sharing and co-development in networks beyond the program (Outcome 1.3).

<sup>18</sup> The Resilience, Adaptation Pathways and Transformation Assessment (RAPTA).

Based on our review of activities and outputs in Module 1, much has been achieved towards reaching these outcomes, including a multi-year effort in building a comprehensive regime-shift database. This high level of activities and outputs also reflects the program's overall focus on this module (Finding 14).

For us, the central question regarding Module 1 outputs and outcomes is their likelihood to effectively contribute to GRAID's outward-looking mission.<sup>19</sup> This question translates into how relevant, timely and useful the knowledge generated in Module 1 is for development practitioners and institutions targeted by the program.

To this end, the program faces several challenges. One aspect is that some knowledge generated by the program may remain implicit, i.e. in the heads of GRAID staff (Finding 9). We find this a natural challenge for a program such as GRAID that cannot be entirely avoided and hence needs to be managed. Apart from the risk of losing that knowledge if staff leaves the program there are limits to the capacity of people to share tacit knowledge, especially if it cannot easily be expressed in explicit ways. We assume that much of GRAID's value-add when co-developing knowledge together with partners rests on such forms of knowledge.

Another challenge is that generated knowledge may not always be relevant from the perspective of development practitioners and their institutions. This is analyzed in Finding 16 as it applies across modules. The associated risk is that while important knowledge is generated, it is not acknowledged and absorbed by development practitioners and their institutions targeted by GRAID, which is generally recognized in GRAID's risk management plan (GRAID 2018b, 14–23).

Lastly, and related to the previous point, we find that GRAID probably faces a natural capacity challenge related to what type of knowledge is generated: abstract and theoretical knowledge can sometimes (not always) be rather efficiently produced in-house, for examples through review of existing scientific publications. In contrast, co-development of knowledge together with development partners is usually a slower and less straightforward process.

Actual evidence on uptake of Module 1 knowledge is limited. For example, in 2017 GRAID's Module 1 flagships reported the following "early signs of impact":

- Two UN processes used GRAID approaches for scenario planning (GRAID 2017a, 2, 2017d, 12);
- A report of the Bertha Centre at the University of Cape Town on how social entrepreneurs create systems change used GRAID ideas (GRAID 2017a, 2);
- The Convention for Biological Diversity asked for co-designing a dialogue (GRAID 2017b, 3);

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<sup>19</sup> "Increase awareness, understanding, and use of resilience as an integral part of sustainable development for achieving poverty alleviation, long term human wellbeing and the maintenance of planetary life-support systems" (GRAID 2017h, 4).



- An expert was asked to present at several events at the Southern African Systems Analysis Centre (SASAC) inception week and the DRIFT/IHS refresher course for African Sustainability Practitioners and others; (GRAID 2017d, 6); and
- Participants of the South Africa T-lab teamed up to induce a food charter. With the charter they intend to address some of the challenges in the Western Cape food system (GRAID 2017d, 11).

Even considering that the flagship reports from which these early signs of impact were drawn may not reflect all effects it appears that – to date – interest and adoption of Module 1 flagship outputs has remained limited. GRAID leadership stressed that this observation was in line with expectations and that significant uptake and adoption are only expected in subsequent years.

We agree with this view because it is also in line with original expectations for GRAID’s initial 4-year period in the GRAID proposal (SRC 2015a, 32). We however point out that the above-mentioned challenges need to be addressed and managed to ensure that Module 1 outputs and outcomes can indeed effectively contribute to GRAID’s program objectives.

**Finding 11. Module 2 is still in the process of developing methods and tools.**

Module 2 activities aim at developing methods and actionable tools for integrating resilience into sustainable development (outcome 2.1) which should then contribute to improved understanding (outcome 2.2) and usage (outcome 2.3) of those approaches and tools by the GRP and the development community (GRAID 2017k).

Currently, approaches under Module 2 are still being development, piloted, or revised. Flagships reported the following “early signs of impact” for Module 2 in 2017:

- 30 resilience practitioners from around the world partnered to initiate a community of practice and to apply a complexity lens in their work (GRAID 2017c, 2);
- A follow-up dialogue was held with the African Center for Cities conference at UCT (GRAID 2017e, 3);
- Requested to collaborate with the African Centre for Cities (GRAID 2017e, 3);
- eThekweni municipality and the Durban Research Action partnership requested follow up presentations and conference presentation (GRAID 2017e, 3); and
- CST researchers have been invited to give expert input on resilience in several regional development initiatives (USAID Resilience Work-shop with 60 natural resources managers, planners and users) (GRAID 2017d, 16).

From our interviews, GRAID clearly makes an effort to pilot and test tools to ensure their relevance and usefulness to practitioners. Examples are piloting of RAPTA<sup>20</sup> in Ethiopia and Wayfinder in the Sahel. We have not been able to review these tools and hence the challenges listed under the previous finding apply in principle also to Module 2.

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<sup>20</sup> Resilience, Adaptation Pathways and Transformation Assessment (RAPTA).

In line with plans, most tools and approaches under Module 2 are still “under construction” contributions to this module’s outreach-focused outcomes remain limited to those directly involved in piloting and testing them.

To put possible effects of Module 2 methods and tools into perspective, the Wayfinder may be instructive. Wayfinder is “a practical guide to design, facilitate and lead collaborative change processes in social-ecological systems” (GRAID 2018a, 2). It has similarities to earlier resilience assessment guides such as the Resilience Alliance’s practitioner’s workbook for assessing resilience in social-ecological systems (Resilience Alliance 2010) but will be more interactive and offer online resources when it will be launched later in 2018. A benchmark for its potential effectiveness is the Resilience Alliances workbook which is available online since 2010 and has since been cited in about 200 academic publications. It also appears to be referred and linked to across a variety of research and development organizations.<sup>21</sup> Actual usage of the Wayfinder may also be impacted by the substantial amount of time required for applying it. An interviewee estimated that about a one-year-long effort at 20 hours per week would be needed.

Another example with more specific toolsets is the “African urban development” flagship that intends to closely collaborate with African partners to develop, test and share approaches to integrating resilience concepts into existing urban planning tools, with the overarching aim of contributing to making African cities more resilient. In 2017 that flagship, among other, generated a framework on the city level that incorporated SRC’s resilience principles and developed a typology for Durban categorizing flood resilience of communities. The CSIR team leading this flagship had pooled their experiences with more than 15 African cities and felt that a principal achievement were relationships and trust built with their counterparts, something future work could profit from (GRAID 2017f, 2).

**Finding 12. Module 3 has succeeded in offering its knowledge products to a global audience, and there are encouraging signs of interest, but to date there is little evidence on the degree to which these have increased awareness, understanding and behavior change.**

Module 3 aims at providing the development community “with access to knowledge products aimed to increase awareness about resilience as an approach for sustainable development” (outcome 3.1), which should allow it to “gain a deeper understanding on resilience as an approach for sustainable development” (outcome 3.2) (GRAID 2017k). Also, in Module 3 GRAID aims to act as knowledge partner to GRP, which is discussed separately (Finding 13).

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<sup>21</sup> Citation analysis using Google Scholar and web search using Google, June 7, 2018.

In Module 3, GRAID has already offered several knowledge products to a global audience:<sup>22,23</sup>

- Overall, 4,698 people signed up for GRAID’s Massive Open Online Course (MOOC).<sup>24</sup> The course started on April 30 and lasts until July 1, 2018. The course consists of 7 modules, one of which is released every week. The MOOC is open to all and free of charge and participants are expected to invest 2 to 4 hours per week. We find these sign-up figures encouraging and consider them indications of significant initial interest.
- GRAID’s online journal website Rethink.earth received 22,500 unique visitors<sup>25</sup> since its launch on January 16, 2017 (close to 50 per day on average). The website publishes in-depth features on resilience thinking, opinions, commentaries and short videos. Average visitors spent about 6 minutes on the site which is enough to read through one of the shorter articles or view one or two short videos but not sufficient for reading the more in-depth pieces. Likely, some visitors only spend very little time on the website while others remained considerably longer, giving them time to also absorb the longer features. A hard copy edition of the magazine with 900 copies was positively received at the 2017 Resilience conference in Stockholm, and a subsequent edition with 600 hard copies has been produced. Moreover, Rethink engages in social media activities via Facebook, Twitter, Instagram and a newsletter.<sup>26</sup>
- GRAID has so far produced 8 “insight briefs” which are easy to understand short documents about selected resilience-related topics (GRAID 2017i, 2016e, 2017j; GRP 2016; GRAID 2018d, 2018e, 2018f, 2018g). The briefs are available for download on GRAID’s website, have been distributed at meetings and conferences in print, have been promoted through SRC’s social media channels, and were sent out by email to people involved in GRP, requesting them to distribute them further. Especially SRC’s social media

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<sup>22</sup> GRAID’s homepage [graid.earth](http://graid.earth) provides basic explanation about GRAID and serves as a depository for GRAID insight briefs. It is not intended for outreach, which is confirmed by its visitor figures: about 1,400 unique visitors came to the website in the last year (between April 1, 2017 when the first post was made and April 30, 2018) which equals about 3.5 per day on average. This low number can be explained by primarily internal use, i.e. it seems likely that the site does not attract many visitors not directly associated with the program

<sup>23</sup> Information from flagship reports is not separately presented in this finding because it is mostly covered by the information presented.

<sup>24</sup> Information received by GRAID on June 26, 2018.

<sup>25</sup> As of April 27, 2018. A unique visitor is one or more website visits within a limited period from the same internet address (this means the same person browsing the website repeatedly would be counted as several visitors when doing it on different days but as one visitor when doing it in the same session).

<sup>26</sup> As reported in a face-to-face interview on May 2, 2018: Facebook: 995 (2017: more than 500); Twitter: 555 (2017: 415); Instagram: 219 (2017: 153); Newsletter: 363.

presence is significant, with tens of thousands of followers.<sup>27</sup> When searching for the briefs on the web, we could however not find the briefs cited in other publications,<sup>28</sup> nor were they mentioned by other organizations.<sup>29</sup>

GRAID leadership had an ambivalent view regarding these tools. Senior GRAID staff felt that, on the one hand, these tools allowed the program to reach a large audience with its knowledge products but, on the other hand, they worried that these channels allowed only for very limited interaction and relationship building, something they considered important for effectively fostering understanding, learning and behavior change in targeted groups.

As mentioned before (Finding 9), GRAID has also engaged in intense face-to-face outreach activities in the form of meetings and dialogues. Based on GRAID's reporting of participant numbers, we estimate that GRAID has reached more than 10 thousand people through these interactions.<sup>30</sup>

In summary, GRAID has clearly been able to reach a significantly sized global audience through its Module 3 activities. In some instances, these figures also reflect initial participant interest (e.g. MOOC and other knowledge products offered online). We find it therefore likely that contributions to the intended Module 3 outcomes of increased awareness and understanding have been made – and continued to be made. The degree to which these effects have happened – and will happen in the future is however difficult to assess at this stage and require more investigation, for example systematic tracking of participants over some period.

Regarding relevance and usefulness of GRAID outputs we found Rethink articles and GRAID's insight briefs easily understandable also for people without a scientific background and without prior knowledge of resilience. While some specialist terminology was used, it was usually explained in simple enough terms.

Also based on our own review of some of these products, we felt that they would likely be effective for raising awareness but less so for inducing behavior change, simply because they did not offer much practical, actionable advice.

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<sup>27</sup> On June 6, 2018, SRC had 20 thousand followers on Twitter, 16 thousand on Facebook, 3 thousand on YouTube, and 1,500 on Instagram (numbers rounded). GRAID itself does not have social media accounts but is present under "Rethink" with follower figures in the hundreds.

<sup>28</sup> We searched on June 6, 2018 on Google Scholar and Research Gate for the titles of the 8 briefs.

<sup>29</sup> This does not exclude that content of the briefs may be used in other publications.

<sup>30</sup> GRAID has documented participant numbers for the events as following: Of the 38 dialogues in 2016 GRAID indicated 412 participants for 11 of these events (GRAID 2017h, 49–51). For 38 of 75 key meetings<sup>30</sup> in 2017 participant numbers were documented, a total of 5.266 people (GRAID 2018c, 53–59). As participant numbers are not documented for various presentations (e.g. at the Harvard Kennedy School, at a Conference at the University of Cambridge) and other events, we estimate that GRAID directly reached out to more than 2.000 people through these dialogues in 2016. For the same reason we estimate the number of people directly addressed through key conferences in 2017 account to more than 10.000 people.

**Finding 13. While providing important support to GRP, GRAID activities in Modules 2 and 3 have not yet been able to significantly shape GRPs understanding and approach to resilience.**

Some Module 2 and 3 activities and outcomes specifically target the GRP:

- Some outcomes under Module 2 target the GRP as well as the development community and set out to improve their “understanding of resilience approaches” and to implement resilience research tools and methods in their work. Module 2’s focus on GRP remains however limited: only 2 of 13 outputs directly involve the GRP (GRAID 2017k)
- More importantly, some Module 3 activities aim at co-producing GRP’s learning agenda, co-designing GRP communication materials, and to host key seminars and workshops together with the GRP. Together, these activities aim to “act as a knowledge partner to the GRP to shape their understanding and application of a resilience approach to sustainable development” (GRAID 2017k).

As described earlier (Finding 2) the GRP was not the partner GRAID had planned for. In addition, GRP leadership and key staff in the GRP Secretariat have changed in 2017. Because of these factors and based on interview feedback from GRAID and GRP, intended outcomes related to the GRP have not yet been achieved.

This said, GRAID has provided operational support to GRP in the past and has begun to closely collaborate with GRP’s new incoming CEO. GRAID is in a good position to deliver on its GRP-related outcomes in the future, especially since there now is close collaboration with the new GRP leadership and because the program will be housed at SRC alongside GRAID.

### 2.3. Organization and management

**Guiding question:** *What are advantages and disadvantages regarding how GRAID is designed, organized, managed as a program of the SRC?*

\* \* \*

**Finding 14. GRAID is a “frontloaded” program that – in terms of funding and human resources – prioritizes knowledge generation over tool development and outreach.**

Between its three productive program modules,<sup>31</sup> GRAID prioritizes knowledge generation (Module 1) over method and tool development (Module 2) and outreach activities (Module 3). Not counting management and overhead resources, in 2015-2017 the program allocated half (49 percent) of its resources to Module 1, 33 percent to Module 2, and 18 percent to Module 3.<sup>32</sup> The figure for Module 1 has remained close to the program proposal but some resources shifted from Module 3

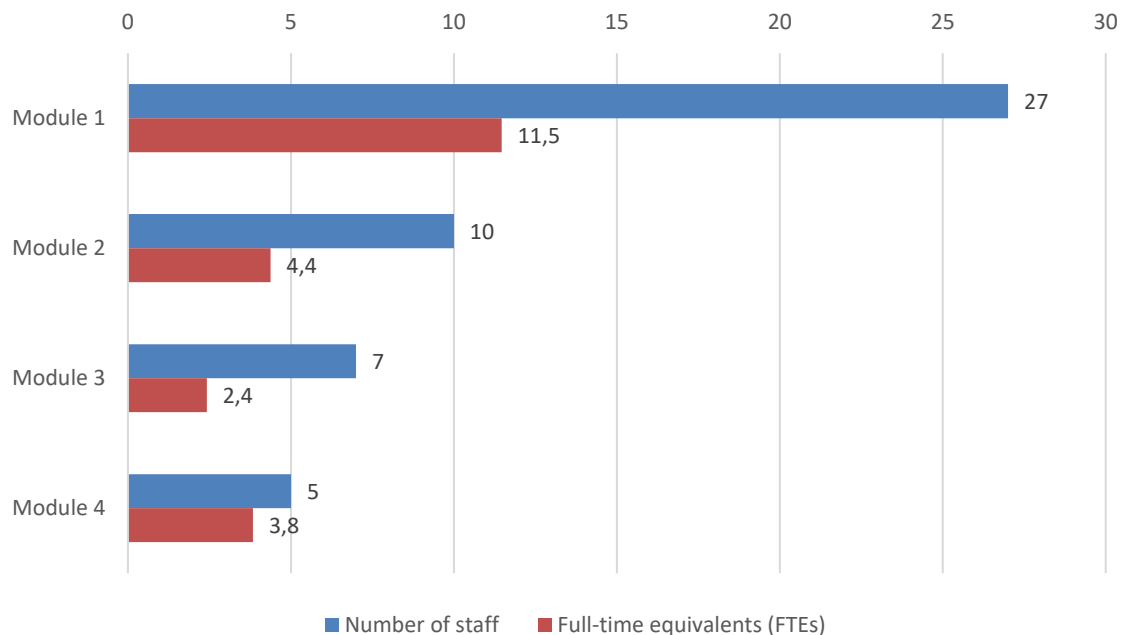
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<sup>31</sup> This paragraph focuses on Modules 1-3 which produce the program’s outputs (hence “productive” modules). The management module (Module 4) and overheads paid to SRC and SU support these.

<sup>32</sup> Based on our analysis of Module 1-3 actual expenses 2015-2017 (GRAID 2016c, 2017f, 2018a)

to Module 2.<sup>33</sup> In terms of human resources at SRC, 63 percent were devoted to Module 1 in 2017, 24 percent to Module 2, and 13 percent to Module 3 (**Fehler! Verweisquelle konnte nicht gefunden werden.**).

From our interviews, the frontloaded distribution of resources reflects the need to synthesize and adapt existing resilience research findings to the development context.



#### **Finding 15. Module 1 outputs feed other modules, but reverse interactions are less visible.**

GRAID’s Modules 1-3 were primarily designed to interface with the GRP (Finding 2) but there is also intended module interaction within the program.<sup>34</sup>

Module 1 outputs were intended to support other modules, especially Module 2. The GRAID proposal states: “The expected long-term impact of this objective [of Module 1] is that a complete set of data and models have been developed, and are integrated and used, especially in Module 2” (SRC 2015a, 15).<sup>35</sup> Generally, knowledge co-production with partners in Module 1 was intended to support Modules 2 and 3 (SRC 2015a, 12) and Module 3 intended to “use insights from expert syntheses, supported by data and analytical capacity” from Module 1 (SRC 2015a, 20).

<sup>33</sup> Between Modules 1-3, the GRAID proposal allocated 51 percent to Module 1, 25 percent to Module 2 and 24 percent to Module 3. These ratios remained constant in budgets in the proposal for 2016-2018 (SRC 2015a, 30-32).

<sup>34</sup> Module 4 is discussed in subsequent findings in this section.

<sup>35</sup> The proposal adds: “The short to mid-term outputs will be that a first set of key data and models have been developed, integrated and are used, especially in Modules 2. In addition shall further advancements of data and models be in progress” (SRC 2015a, 15). These Module 1 objectives are mirrored in Module 2 objectives (SRC 2015a, 18-19).

We could observe some of these linkages to be effective. For example, GRAID's insight briefs build on the accumulated expertise of GRAID and SRC staff, to which Module 1 activities contributed. Much of this knowledge is however implicit, and its application in other modules therefore difficult to track explicitly. In terms of process, there are clear indications for re-applying knowledge within the program. For example, the MOOC collected contributions from GRAID (and SRC) staff in its teaching modules.

When assessing module interactions, it is important to remember that GRAID is not operating in isolation and, hence, program modules draw on and interact with the outside world (in addition to interacting with other GRAID modules). GRAID draws on a vast pool of existing and ongoing resilience research that goes beyond SRC. GRAID is also not the only program or institution applying resilience to the development context (Module 1), nor engaging in resilience assessments (Module 2), nor in advocating resilience thinking (Module 3). Hence it seems reasonable to see GRAID as an open program, a view shared by interviewed staff. Because of this, Modules 1-3 were generally not considered as successive steps in a results chain (in which Module 2 builds on Module 1, and Module 3 on Module 2). Rather, each module was considered to add value by itself, and synergies between them were considered additional benefits. This is mirrored in the proposal and in later planning documents that place some outreach activities into each module rather than concentrating them exclusively in Module 3.<sup>36</sup>

There is less evidence on program-internal reverse linkages, i.e. of Module 2 and 3 insights influencing knowledge generation in Module 1. The 2017 progress report mentions lessons learned primarily in the context of learning within modules or with respect to sharing insights with partners. This is important in relation to Finding 16 below that reveals worries that GRAID may have remained too "upstream", i.e. too academic and somewhat removed from actual development needs and practice. The above thoughts about GRAID as an open program also highlight the need for GRAID to liaise more with programs that are better connected to development practice (Finding 7).

**Finding 16. SRC is a formidable academic home for GRAID but there are worries that this setup distances GRAID from real-world needs and constraints of development practice.**

Interviewees widely considered SRC a globally leading institution for resilience research. Senior SRC staff were viewed as global thought leaders on the subject. As an established institution,<sup>37</sup> there is also confidence in its research capacities. A senior external stakeholder involved in the GRP from its inception expressed this as follows: "if SRC is involved, I know that the scientific input will be

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<sup>36</sup> The proposal states that "Insights from GRAID's Module 1 [...] will play a substantial role in shifting the academic, and eventually public discourse in relation to resilience and development" and that "GRAID's Module 2 [...] will substantially influence practitioner communities and stimulate capacity building on the ground, through training and carrying out of resilience assessments, as well as other forms of education" (SRC 2015a, 19–20). In a similar vein, GRAID's results framework also includes engagement activities and network support in Module 1, and piloting, training, capacity development, collaboration and co-design into Module 2 (GRAID 2017k).

<sup>37</sup> SRC was established in 2007, building on and continuing prior research on the subject.

world-class”. Based on our interactions with SRC staff and our (limited) review of SRC publications and reports, we concur with these characterizations.

Interviewees also widely agreed that SRC was a formidable academic home for GRAID. They felt that by being physically and managerially integrated into SRC, the program could closely interact and collaborate with SRC leadership and senior SRC research staff and thereby access their accumulated knowledge and expertise. This was considered especially effective for GRAID’s synthesis work in Module 1, and for ensuring general conceptual rigor and direction.

Most interviewees outside the GRAID hub in Stockholm, including some at Sida, however worried that SRC might be too academic a home for GRAID and felt that GRAID would benefit from being brought closer to development practice. They felt that knowledge generated by the program was not always relevant to needs and constraints of development practice because it was too abstract and detached from the realities of international development, and because it was expressed in a too scientific language with “SRC resilience terminology” prominent in written GRAID products. In the first case, knowledge would need to be operationalized by the recipient before being useful. In the second case, interviewees felt that terms like “Anthropocene”, “planetary boundaries”, “social-ecological systems” or “complexity lens” could hinder rather than help communication with non-scientists, even if explained after being introduced. Interviewees related these issues to a potential lack of development know-how and an overall more academically oriented mind-set of GRAID staff in Stockholm.

In a few cases, interviewees also felt that SRC, as an institution, was inflexible towards other definitions and understandings of the term resilience, for example by insisting that the term meant not only the capacity of systems to recover from shocks but also to navigate transformative change. Most interviewees however felt that SRC was pragmatic enough, emphasizing the importance of the underlying concept rather than insisting on terminology. One interviewee summarized this as follows: “if you have an in-depth understanding of resilience you don’t need buzzwords anymore and you can choose language and concepts to maximize your counterpart’s understanding.”

**Finding 17. GRAID’s organizational and managerial integration with SRC gave the program a head-start but poses management challenges.**

GRAID is part of the SRC’s organizational structure. In terms of governance and reporting, this implies that GRAID leadership reports to SRC leadership and is part of SRC’s management team. GRAID-funded postdoctoral staff are often academically supervised by senior SRC scientists that are not necessarily part of GRAID. This helped getting the program started as it didn’t have to establish its own governance and could build on established SRC management structures and procedures. It also ensured that junior staff obtained good academic supervision important for quality end products and, from the perspective of young researchers, also important for a future research career.

The present setup however also poses challenges for GRAID leadership in terms of shaping and implementing GRAID’s work program:



- Most GRAID staff works for the program on a part-time basis, often with SRC funding their remaining time. In 2017, 46 people worked for GRAID at SRC<sup>38</sup> with a total investment of time equaling 22 full-time equivalents (FTEs). In that year, only 6 staff held full-time positions (i.e. equaling 1 FTE) throughout the year. .
- Career development and performance feedback processes are managed by SRC rather than GRAID. This means that GRAID leadership reports to SRC leadership, and that most GRAID staff set their career development targets and discuss their annual performance with SRC managers rather than with somebody in GRAID, reducing the degree of influence and control GRAID leadership has over GRAID staff.

These challenges can affect the ability of GRAID leadership to manage GRAID staff and to develop and supervise the program's work program. GRAID staff may experience a so-called "two masters" situation<sup>39</sup> when reporting in parallel to GRAID and SRC managers. This is not necessarily an issue because senior SRC managers and researchers clearly take a keen interest in contributing to GRAID and in advancing the program towards its goals, even those not formally listed as GRAID staff.

The challenges associated with GRAID's tight integration with SRC would however become problematic should SRC institutional interests differ from those of GRAID as a program. In interviews, the main concern to this end was organizational capture of GRAID by SRC. Some interviewees felt that SRC could pull GRAID activities towards the research side of the research-development spectrum, closer to its mandate as world-leading science center<sup>40</sup> but potentially away from a practical, development practice-oriented focus.

Some interviewees also remarked that SRC's funding structure had become increasingly skewed towards more external grants and less core funding. This development would accelerate further when the 12 year-long support of SRC by the Swedish Foundation for Strategic Environmental Research (MISTRA) would end after 2018.

We find this an important observation that merits close attention going forward. Other organizations, for example international CGIAR research centers, have faced similar challenges in the past. In 2017, SRC'S total turnover was 170.8 MSEK of which 129.1 MSEK (76 percent) were external grants (including SwedBio and GRAID) and 41.7 MSEK (24 percent) core funding (SRC 2018b, 74).<sup>41</sup> This means that even before MISTRA funding ends in 2019, SRC's core funding share is at only half of the 50 percent recommended by the 2013 evaluation of SRC by MISTRA. That

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<sup>38</sup> Not counting collaborators at partner institutions.

<sup>39</sup> A "two masters" situation occurs when one staff reports to two managers and may become a problem if there is lack of precision concerning for what functions staff is responsible to each "master", and how conflicts between the two are to be resolved (World Bank IEG and OECD DAC 2007, 81).

<sup>40</sup> SRC describes itself as "an international centre of excellence for resilience and sustainability science" and "a world-leading science centre" (<http://www.stockholmresilience.org/about-us.html>, visited on June 28, 2018).

<sup>41</sup> Core funding in 2017 was composed of 24.2 MSEK (58 percent) from Stockholm University and 17.5 MSEK (42 percent) from MISTRA (SRC 2018b, 74).

evaluation also found that a situation in which only Stockholm University provided core funding would be non-viable for SRC (Johansson et al. 2013, 36).

A shrinking SRC core funding share could have potential consequences for GRAID. For example, labor law-related obligations of retaining permanent SRC staff might negatively affect opportunities for temporary staff and annual allocations to program partners. In our budget analysis, we have not seen any indications of this for the years 2016 and 2017 that we analyzed. In those years, budgets for Stellenbosch partners were above what was planned in the GRAID proposal. Interviewed senior staff at SRC understood these potential risks and seemed ready to manage them.

**Finding 18. SRC's unique management style is appreciated in Stockholm but was difficult to extend to academic program partners in Stellenbosch.**

SRC's organizational culture is marked by flat and informal management hierarchies and by adaptive management that invites questioning of the status quo and adjusting of objectives and approaches.

GRAID staff in Stockholm has adopted the same management style, generally appreciates it and feels it is the right approach for managing a program such as GRAID that itself operates in an evolving and unpredictable environment.

CSIR and CST, GRAID's program partners at Stellenbosch University in South Africa, started into the program considering themselves equal partners but felt that their relationship with SRC and GRAID leadership had then evolved into a classical vertical management hierarchy. Interviewees expressed some disenchantment with lack of feedback and communication on reports and requests for collaboration and with what was perceived as unilateral decision-making in Stockholm.

During our visits, we experienced quite different organizational cultures in SRC, CSIR and CST. While CST enjoys considerable managerial and financial flexibility as a comparatively small unit closely associated with Stellenbosch University, CSIR is South Africa's central and premier scientific research and development organization with about 3,000 staff and the advantages and disadvantages that come with being the largest research and development organization in Africa.<sup>42</sup> In our view, it is probably easier for the CST team to adapt to SRC's management style than for the team at CSIR.

Interviewees generally felt that communication had improved over the last year, mainly due to regular conference calls between Stockholm and Stellenbosch and a recent visit of GRAID leadership to Stellenbosch.

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<sup>42</sup> [https://en.wikipedia.org/wiki/Council\\_for\\_Scientific\\_and\\_Industrial\\_Research](https://en.wikipedia.org/wiki/Council_for_Scientific_and_Industrial_Research), visited on June 5, 2018.

**Finding 19. GRAID’s planning and reporting structure has .changed over time, with positive and negative effects.**

Since GRAID started in 2015, its planning frameworks have been in evolution. The program’s results- and logframes have evolved until 2016 before stabilizing in 2017 (Table 2), and flagships were introduced in 2017 and rearranged in 2018 (Table 3).

Some changes were minor and related to renumbering, renaming and repackaging of essentially the same set of activities. Other changes were substantial and involved changes in content and scope. According to our interviews, all changes reflect attempts by GRAID leadership to improve and better define the program’s approach.

*Table 2. Number of indicators in GRAID results- and logframes (SRC 2015a; GRAID 2015, 2016f, 2017k)*

| Document                 | Number of outcomes |          |          |          |       | Number of outputs |          |          |          |       |
|--------------------------|--------------------|----------|----------|----------|-------|-------------------|----------|----------|----------|-------|
|                          | Module 1           | Module 2 | Module 3 | Module 4 | Total | Module 1          | Module 3 | Module 4 | Module 4 | Total |
| <b>Program proposal</b>  | 2                  | 2        | 1        | N/A      | 5     | N/A               | N/A      | N/A      | N/A      | N/A   |
| <b>2015-16 work plan</b> | 3                  | 4        | 2        | N/A      | 9     | 17                | 16       | 9        | N/A      | 42    |
| <b>2017 work plan</b>    | 3                  | 3        | 3        | 1        | 10    | 13                | 13       | 11       | 4        | 41    |
| <b>2018 work plan</b>    | 3                  | 3        | 3        | 1        | 10    | 13                | 13       | 11       | 4        | 41    |

Clearly, moving planning targets and reporting structures do not make life easy for evaluators, but program staff at SRC generally appreciated both the present structure and the fact that the program constantly questioned and reinvented itself. In interviews, also Sida had no problem with evolving frameworks and appreciated the introduction of flagships as a useful intermediate level of aggregation: more fine-grained than GRAID’s four modules, and less detailed and more meaningful than tracking progress along the program’s 41 outputs.

Similar to our previous finding regarding SRC’s adaptive management culture (Finding 18), program partners in Stellenbosch found it less easy to work with constantly changing planning frameworks. This was mostly because they saw themselves on the receiving end of planning and decision-making, i.e. being informed about changes rather than being partners in co-developing them.

*Table 3. GRAID Flagship structure in 2017 and 2018 (GRAID 2018c, 14–44, 2017g, 6).*

|          | Flagships 2017   | Flagships 2018   |
|----------|--|--|
| Module 1 | 1. Transformations theory and practice for development                   | 1. Resilience insights for development                       |
|          | 2. Development in the Anthropocene                                       | 2. Resilience evidence from cases around the world           |
|          | 3. Creating transformative spaces in African food systems                | 3. Syntheses: Complexity and development in the Anthropocene |
|          | 4. Gender and resilience in development                                  | 4. Resilience perspectives on gender, equity and poverty     |
|          | 5. Synthesis on resilience, poverty and livelihood in vulnerable regions | 5. Transformative spaces                                     |
|          | 6. Tipping points and surprise in a turbulent world                      | 6. Knowledge mobilisation networks                           |

|          |  |   |
|----------|--|---|
| Module 2 | 7. Developing a new method and guide to implement resilience in development projects | 7. Wayfinder: resilience process guide for action |
|          | 8. Social-ecological resilience and African urban development                        | 8. Africa urban development and resilience        |
|          | 9. Building resilience into infrastructure assessment and planning                   | 9. Infrastructure and resilience in Africa        |
|          | 10. Comparative assessment to guide GRP  | 10. GRAID changemakers                            |
|          | 11. Training dialogues for GRP challenge grantees                                    | 11. Wayfinder pilots                              |
|          | 12. Building an African GRAID Resilience Changemakers network                        |   |
| Module 3 | 13. Rethink.earth - an online magazine on resilience thinking for global development | 12. Massive Open Online Course (MOOC)             |
|          | 14. Massive Open Online Course (MOOC): Transforming Development Practice             | 13. Rethink.earth                                 |
|          | 15. GRAID's website – sharing and repository (graid.earth)                           | 14. Policy influence                              |
|          | 16. Policy and practice streams at the 2017 Resilience Conference                    | 15. Insights and practice                         |
|          | 17. GRAID briefing notes and insights briefs   |   |

**Finding 20. GRAID financial management is adequate and transparent but contracting is perceived by academic program partners to not always be timely.**

SRC and GRAID utilize Stockholm University's financial systems and accounts. Analog to Finding 17 on organizational integration of GRAID into SRC, this allowed GRAID to begin operations without having to establish its own financial management. Because of how Stockholm University is managed financially, this brings the important advantage of GRAID being virtually free of cash-flow risks: operating within its approved budget, the program can satisfy its financial commitments directly from the university's accounts. Also, financial carryovers into subsequent years are possible if agreed.

Academic program partners in Stellenbosch have struggled with the fact that GRAID only issued yearly contracts and indicated that contracts were not always extended in time to provide staff with a stable funding outlook.

From interviews at SRC we have understood that GRAID manages its own funding on an annual basis as well. Sida funding tranches for GRAID are approved annually based on the program's annual work plans. Usually, approval is granted in November or December of the year before, i.e. just weeks before the funding year begins. This tight overall approval schedule for GRAID funding largely determines when SRC can approve partner contracts. Apart from this constraint to approval schedules we were unable to fully reconcile accounts of perceived delayed contracting.

GRAID workplans and progress reports offer clear and coherent financials, and SRC's financial administrator could provide us with all requested information in a timely fashion.

Before the program began in 2015, Sida commissioned a KPMG-led review of SRC along five dimensions: i) management and organization, ii) risk management, iii) anti-corruption, iv) auditing, procurement and financial management, and v) granting funds. The report found that, overall, SRC had well-functioning operational planning and financial control. It also identified several areas that

could be improved, namely transparency of overhead costs, measures for risk management, prevention of corruption, and board member nomination (SRC 2015b). SRC has since followed up on these issues (SRC 2017, 2018a), which we however have not assessed in any detail apart from how overheads are handled in the next finding.

**Finding 21. GRAID overheads are transparent and in line with those of SRC. Partner overhead rates vary significantly.**

With relevance for GRAID, transparency of SRC's management of overheads was mentioned in the 2015 KPMG review (Finding 20).

We found that SRC calculates overheads yearly in a transparent manner. The only notable particularity is that the overhead rate is expressed with salary costs – rather than total costs – in the denominator. SRC overheads reflect SRC's indirect costs such as management, finance and administration, rent and electricity, materials, house costs and depreciations, but also payments to Stockholm University for access to its services. The latter accounts for about one third of SRC's total overhead in 2017 (Muratspahic 2018c).

As a percentage of direct salaries, SRC's overhead was 56 percent in 2015 and 51 percent in 2016 and 2017 (Muratspahic 2018a, 2018b, 2018c).<sup>43</sup> For GRAID, Sida negotiated a flat overhead rate of 50 percent, significantly below SRC's 2015 overhead rate and slightly below 2016 and 2017 rates.

Notably, SRC does not charge overheads on non-SRC staff and does also not charge any pass-through fees on funds transferred to program partners (as is common practice in research for development programs, for example in the CGIAR). This means that program partners receive a share of GRAID funding without any deductions by SRC.

GRAID partners pay overheads to their institutions from their allocated funds. In 2017, partner overhead rates – expressed as share of total budget – was 10 percent for the Resilience Alliance, 25 percent for CST, and 61 percent for CSIR.<sup>44</sup> In comparison – i.e. also expressed as share of total budget and not as share of direct salaries as above – GRAID's overhead rate was 23 percent if partner budgets are included and 30 percent without them.

**Finding 22. GRAID's approach to M&E is useful and in line with the program's theory of change, however little is known about the degree to which GRAID contributes to its intended outcomes.**

GRAID's approach to M&E is summarized in a comprehensive document (GRAID 2018a) that prioritizes learning over accountability-focused reporting, and qualitative and mixed-method assessments over quantitative, indicator-based reporting. We find this approach appropriate for GRAID as it embraces chance and change rather than attempting to force activities and results into a rigid framework that would not do justice to the program's difficult-to-predict opportunities to enact change.

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<sup>43</sup> SRC separates the overhead calculation along research and education salaries. The figures shown are research-related overheads (research salaries represent 96-97 percent of all direct SRC salary costs).

<sup>44</sup> We had no information of the overheads of CSIRO in Australia.

After a short report for 2015 (GRAID 2016b) GRAID progress reports reflect this approach and summarize progress along modules and, since 2017, flagships in a comprehensive and easy to understand fashion (GRAID 2017h, 2018c). Reflecting GRAID's focus on learning, progress reports also contain a self-reflective "see more of and see less of" section and a discussion of risks. Evidence is mostly reported in narrative form, and mostly on the level of activities and outputs. Within and beyond its reporting, GRAID also collects bibliographic information and tracks website visitor and social media follower figures, gathers event participants information and collects user figures for its knowledge products. Overall, we find that GRAID adequately tracks, describes and reflects on its activities and outputs.

A minor issue on the output-level is attribution of outputs to GRAID. At times, it remains unclear to which reported outputs GRAID has contributed. For example, of the 30 different foundational papers and case studies listed in the 2015-2017 progress reports, 7 appear to have no GRAID co-authorship (Annex C). Regarding listings of events, some events at which SRC (but not GRAID) staff spoke are included as well.

On the level of outcomes, tracking of progress is naturally more difficult. Here, progress reports rely mostly on anecdotal evidence in the form of (positive) statements of GRAID collaborators. On this level, GRAID's M&E does not yet make use of the wide array of innovative approaches listed in its monitoring and learning document that could be applied for assessing and describing results associated with GRAID (GRAID 2018a, 3–4). Evidence for actual uptake and usage are scarce in progress reports which is understandable for past years but will become increasingly important going forward when more outcomes are expected.

A minor issue on this level is that GRAID's program goal, its module objectives, and outcomes on the sub-module and flagship level describe *types of results* and, usually, do not attempt to quantify or otherwise provide a sense of the magnitude of the intended change (SRC 2015a, 32). This naturally makes it difficult to judge whether intended outcomes and higher-level results have been achieved or if and when they will be achieved in the future.

For example, outcome 2.2 in the 2017 workplan (GRAID 2016e) is: "The GRP and development community have an improved understanding of resilience approaches and how to implement resilience methods and tools into their work" which contributes to the Module 2 objective of "To further develop methods, practice and actionable tools for using resilience as an approach to sustainable development." The three flagships contributing to this outcome have developed a method, conducted a training with GRP partners and held four events. A positively biased observer might argue that, formally, the outcome has already been fully reached because *some* improved understanding of *some* members of the development community was probably achieved. In contrast, a critically biased observer might expect *significantly* improved understanding of the *development community as a whole*. Such an observer could therefore argue that the objective remains far from being reached.

### 3. CONCLUSIONS AND RECOMMENDATIONS

*This chapter summarizes conclusions and recommendations. Whereas the findings presented in the previous chapter are directly based on evaluative evidence, the conclusions and recommendations in this chapter draw on them but also aim to provide meaning and explain what can be done going forward.*

**Guiding question:** *What adjustments and approaches can (further) increase GRAID’s relevance and effectiveness i) in the remainder of the current programming phase and ii) in a possible second programming phase?*

\* \* \*

#### **Conclusion 1. GRAID is an important and relevant program.**

The concept of resilience is fundamental to the planet’s future, especially if understood not only as capacity to “bounce back” but also to navigate transformative change. GRAID’s mission to adapt and infuse sustainable development with this concept is therefore of fundamental relevance. GRAID is also a timely program, in sync with trends in sustainable development (Finding 1). In times of increasing short-termism and focus on immediate and attributable results, GRAID provides an important holistic and longer-term perspective.

GRAID has a relevant and convincing link to poverty reduction (Finding 3 and 5), and the program has a sound generic understanding of how to enact change which is reflected in its useful theory of change (Finding 4). GRAID is in line with Sida’s global strategy under which it is funded (Finding 5), and naturally incorporates gender aspects (Finding 6). GRAID’s relevance was negatively impacted by an erratic GRP. This was however largely beyond the control of the program (Finding 2).

Potential synergies with other programs such as SwedBio have not yet been realized, mostly because GRAID was busy in establishing itself and implementing its work program (Finding 7). The program has also received mixed signals from Sida about whether GRAID should target the agency with its outreach efforts (Finding 8).

#### **Conclusion 2. GRAID has been effective in implementing and adapting its work program.**

GRAID has implemented its work program reliably and delivered generally well on planned outputs (Finding 9) apart from those specifically aimed at the GRP (Finding 13).

Reflecting SRC’s adaptive management style, the program has been actively questioning and adjusting its approach which we find appropriate given the program’s dependence on implementing partners (Finding 2, Finding 18).

#### **Conclusion 3. GRAID has already reached some of its intended outcomes and goals. A key challenge is to ensure that the program’s knowledge products meet the needs of their intended users.**

GRAID has delivered well towards its Module 1 outcomes that are focused on knowledge generation (Finding 10). In Module 2, GRAID is still in the process of developing methods and tools and has not yet achieved related outcomes (Finding 11). In Module 3, GRAID has successfully

offered its knowledge to a broad global audience (Finding 12). Across modules, GRAID has been active and successful in generating and offering knowledge.

The degree to which GRAID will be able to fulfill its outward-looking program mission of “increasing awareness, understanding and use of resilience as an integral part of sustainable development” depends on how relevant, useful and adapted to the needs, constraints and challenges of development practice GRAID’s outreach activities and knowledge products are.

To this end, there are signs that GRAID may have stayed too much in its academic comfort zone, and that what is offered is sometimes driven more by what GRAID staff believes to be relevant and useful than by actual and explicit need and demand of targeted people and institutions (Findings 3, 10-13).

There are several possible contributing factors to this: lack of explicit demand by the GRP (Findings 2, 13), limited collaboration with programs such as SwedBio with on-the-ground development experience (Finding 7), mixed signals by Sida about wanting to be targeted with GRAID outreach (Finding 8), the fact that GRAID is a frontloaded program that prioritizes knowledge generation over outreach activities (Finding 14), being part of SRC which may pull GRAID to the academic side of the research-to-development spectrum (Findings 16, 17), and difficulties with bringing more development-oriented program partners into SRC’s adaptive management culture (Finding 18). More

evidence on the degree to which GRAID knowledge products meet the need and demand of intended users should become available after Module 2 products have been rolled out later in 2018 and in 2019.

As, ultimately, GRAID is about strengthening capacities of individuals and institutions, experiences from that field may be helpful for the program (Box 1).

**Conclusion 4. Largely due to an erratic GRP, GRAID has not been able to act as effective knowledge partner to it.**

Mostly due to an erratic GRP, GRAID has not been able to liaise and link to GRP as intended (Findings 2, 13). These developments have largely been beyond GRAID’s control.

Nevertheless, GRAID could have shown more entrepreneurship when it became clear that GRP was neither demanding nor using GRAID’s capacities in a significant way. In interviews, people generally agreed when we described GRAID as a bride waiting for a groom that didn’t show up. We have

**Box 1. GRAID and good practices for capacity development.**

Good practices for effective capacity development highlight the need for taking a recipient perspective and to provide targeted individual, organization and systems with *what* they need, *how* the need it, *when* they need it.<sup>1</sup>

GRAID staff and the program’s approach to learning clearly reflect a thorough understanding of this (Finding 4) and GRAID leadership agrees with us that relevance, usefulness and timeliness of GRAID knowledge products and outreach activities – as perceived by those targeted with them – are necessary conditions for impact.

Across our analysis of activities, outputs and outcomes (Findings 10-13), it was however not apparent that these principles had always been put into practice. For example, there was no process for systematic identification of demand directly from recipients beyond ongoing piloting of some Module 2 approaches. GRAID staff has strong ideas and convictions about what is important and relevant in terms of resilience and development, but people with long-term development practice interviewed by us felt that what GRAID offered was often not what was needed and that knowledge at a more mundane level, more limited in scope, adapted to the concepts used by recipients and without scientific terminology would be more effective.



concerns with this picture because GRAID may have cultivated exaggerated expectations of specific demand for – and uptake of – GRAID outputs by the GRP. In our experience, global program secretariats and boards are usually busy organs, and the fact that Sida showed some reluctance of being targeted with GRAID's insights (Finding 8) is not an exception. Hence, even with a fully functional GRP, GRAID would probably have needed to become more proactive regarding linking to its intended target groups and understanding their concrete and explicit needs and demands.

Examples are engagement in needs assessment and targeting (Conclusion 3), or a more effective engagement with selected institutions such as Sida, for example through Sida's existing helpdesk function facilitated by the Swedish University of Agricultural Sciences and Gothenburg University.

Going forward, GRAID continues to have much potential as a GRP knowledge partner. Strategic alignment and operational collaboration will be facilitated by the facts that GRAID was involved in establishing GRP 2.0 and that GRP will also be housed at SRC (Finding 13).

**Conclusion 5. Academic program partners in Stellenbosch saw their roles shift and at times struggled with how they were managed.**

When the program started, the GRAID teams at CSIR and CST saw themselves as program partners on equal footing but now understand their role more as that of subcontractors (Findings 18).

These academic collaboration partners have found GRAID's constantly changing planning and reporting structures difficult to work with (Finding 19) and their different organizational cultures and the regional distance to Stockholm have made it difficult for them to embrace SRC's adaptive management culture, even in light of recently intensified communication (Finding 18). There was a perception by those partners that contracts were not extended in time to provide partner staff with a stable funding outlook.

**Conclusion 6. SRC is an excellent academic and adequate institutional home for GRAID but differing objectives need to be managed.**

SRC is an inspiring and stimulating academic home for GRAID and offers – together with Stockholm University – adequate administrative support (Findings 16-20). We find however that GRAID exists in somewhat of an institutional gray zone: it is neither a fully owned SRC program (i.e. funded from SRC's core resources and fully in sync with SRC's mandate and objectives), nor is it an independent program hosted at SRC (i.e. with its own governance and management structure).

While there is a great deal of alignment in terms of subject matter, SRC has a research focus while GRAID is funded as a development program (the same applies for SwedBio). This is not necessarily an issue but related risks in terms of development orientation (Finding 16), reporting and management of GRAID staff and fund allocation (Finding 17) need to be transparently managed.

\* \* \*

**Recommendation 1. Sida should continue funding the program post-2019.**

Because of its pronounced relevance and proven effectiveness in implementing its work program (Conclusion 1, Conclusion 2), Sida should continue to support GRAID also in the next phase starting in 2020.

To attract additional donors, GRAID/SRC should prepare a compelling proposal for this phase until the end of 2018 that speaks to a wider range of donors, i.e. not only to Sida. This proposal should incorporate the findings and recommendations of this report and GRAID and SRC should use their existing networks to reach out to relevant donors and program partners in 2018 and 2019.

In its second program phase, GRAID could be integrated into GRP (**Fehler! Verweisquelle konnte nicht gefunden werden.**), develop its partnership approach and possibly add further relevant partners (Recommendation 4), and clarify its institutional relationship with SRC (Recommendation 5).

A stronger demand orientation (Recommendation 2) could be reflected in co-developing the proposal together with prospective donors and partners.

**Recommendation 2. GRAID needs to ensure its relevance and effectiveness for its target groups.**

In the remainder of its first phase and in its second phase, GRAID needs to ensure relevance and usefulness of its activities and outputs for development practice – as seen from the perspective of intended recipients.

A useful first step could be to invite GRAID staff to reflect and explain by means of short narratives how current activities can contribute to GRAID objectives, in simple but concrete and explicit terms. In line with GRAID's constructive approach to self-reflection and learning, this should be a risk-free exercise leading to ideas of how to make best use of past and present outputs, and how to adjust future activities for increased relevance and usefulness. The process could be structured and facilitated by GRAID's M&E team and supported by external or internal (e.g. SwedBio or CST/CSIR) experts with deep understanding of development practice and development institutions.

On a more fundamental level, GRAID should further develop its theory of change into a program strategy, explaining how program activities are intended to “change development practice”. This includes segmenting and understanding types and levels of the target group of “development practitioners”, and mapping and systematically assessing different pathways to reach them. This should result in practical advice on needs assessments, opportunities, formats, languages and terminology but also on how to adapt GRAID knowledge to the concepts and contexts of individual development institutions and disciplines. One example for the latter are “influencing strategies” for planning activities and tracking effects agencies have on specific development institutions.

**Recommendation 3. GRAID needs to tighten its linkages to GRP without depending on it.**

In its next program phase, GRAID needs to ensure that its linkages to GRP are tight and effective.

One way to ensure this would be to design GRAID as an integral element of the GRP, possibly together with SwedBio, with clearly defined mandates and reporting of GRAID to GRP leadership and governance. Such a setup would ensure tight linkages and also help ensuring relevance of GRAID activities and knowledge products for its intended users.

As GRP will take some time to establish itself, GRAID's mandate should allow the program to move ahead with its activities without depending on GRP capacities.

**Recommendation 4. GRAID needs to better integrate and manage its academic program partners.**

Going forward, GRAID should clarify whether it is a partnership program in which partners have equal say or a program at SRC that sources out some of its work to subcontractors. GRAID leadership should communicate roles and responsibilities more clearly and consistently to program partners.

In our view, partnerships on equal footing can be the more effective option.

GRAID leadership also needs to consider the different organizational cultures of its partners for which adaptive management may not be palatable or possible and continue the useful trend to more communication through regular conference calls and visits.

**Recommendation 5. SRC and GRAID need to clarify their institutional relationship.**

Together with Sida (and potentially other donors), GRAID and SRC should clearly define their institutional relationship, and take measures to manage related challenges (Conclusion 6).

## ANNEX A. PEOPLE INTERVIEWED

| Name                    | Institution/Function  |
|-------------------------|---|
| Allyson Quinlan         | Resilience Alliance, Senior Research Fellow (part of Wayfinder team)  |
| Andrea Downing          | SRC/GRAID, Models Expert  |
| Andrew Merrie           | SRC/GRAID, Communications Officer   |
| Belinda Reyers          | SRC/GRAID, Program Director   |
| Carl Folke              | SRC, Director of Science  |
| Deon Nel                | SRC/GRP, CEO (incoming)   |
| Djimé Adoum             | CILSS (Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel), Secrétaire Exécutif (former and new GRP governance) |
| Ellika Hermansson Török | SRC/SwedBio, Director (acting)  |
| Emina Muratspahic       | SRC, Head of Administration   |
| Emma Ludvigsson         | SRC/GRAID, Program Coordinator  |
| Eva Brattander          | SRC/GRAID, Monitoring Officer   |
| Grace Wong              | SRC/GRAID, Thematic Expert  |
| Hans Magnusson, Sida    | Sida, Director Africa Department (former GRP contact)   |
| Ilse Kotzee             | CSIR, Researcher  |
| Jamila Haider           | SRC/GRAID, Poverty Traps  |
| Johan Rockström         | SRC, Director   |
| Kerstin Jonsson Cisse   | Head, Unit for Global Economy and Environment, Sida   |
| Kristi Maciejewski      | CST, Researcher   |
| Marika Häggman          | GRAID, Rethink  |
| Michele-Lee Moore       | SRC/GRAID, Deputy Director  |
| Michelle Audouin        | CSIR, Researcher  |
| Michelle Dyer           | SRC/GRAID, Gender expert  |
| Mikael Atterhög         | Sida, Thematic Coordinator for Environment, Climate Change and Sustainable Service (current GRP contact)                              |
| Nadia Sitas             | CSIR, Senior Researcher   |
| Nathaniel Matthews      | GRP, Program Director   |

|                   |   |
|-------------------|---|
| Olof Olsson       | SRC, Managing Director                                      |
| Oonsie Biggs      | CST, Team Leader  |
| Patrick O'Farrell | CSIR, Team Leader   |
| Pia Lindström     | Sida, Programme Manager                                     |
| Rika Preiser      | CST, Researcher   |
| Ryan Blanchard    | CSIR, Researcher  |
| Sara Öberg Höper  | Sida, SwedBio contact                                       |
| Scott Drimie      | CST, Researcher   |
| Sturle Simonsen   | SRC, Head of Communication                                  |
| Tim Daw           | SRC/GRAID, Module 1 Leader                                  |
| Ulla Andrén       | Sida, Policy Specialist(involved in GRP from Sida)          |
| Victor Galaz      | SRC, Deputy Science Director (responsible for GRAID in SRC) |
| Zahra Ayadi       | Sida, Programme Specialist                                  |

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## ANNEX C. GRAID ACADEMIC PUBLICATIONS

## C1. Academic publications and books with GRAID participation

Because papers listed in progress reports are not always attributable to GRAID, we asked the program to provide us with a list of publications that had GRAID co-authorship.

We received 42 references, 16 of which are published. Among the 16 published references we were unsure about GRAID co-authorship in one case (Mugwedi et al. 2017)<sup>45</sup> and among publications in preparation in three cases. The table below lists and summarizes 12 GRAID publications; the remaining were not accessible online.

| Title   | Reference                         | GRAID co-authors (time with GRAID)                        | Content (our summary)  | Module |
|---|-----------------------------------|---|--|--------|
| A framework for analyzing regime shifts in social-ecological systems: The Regime Shifts Database.         | (Biggs, Peterson, and Rocha 2015) | Oonsie (R.) Biggs (2015-2018), Garry Peterson (2015-2017) | This paper features a comprehensive description of the Regime Shifts Database (RSDB) along with a short theoretical introduction into the field of social-ecological systems and regime-shifts. The benefit of the database to provide an overview over and information of different generic regime-shift types has thereby been emphasized as an important contribution to an academic field, which has so far been mostly characterized by individual case studies. The overall focus of the paper has been put on the precise description of the content and different functions of the database.   | 1      |
| Transforming communicative spaces: the rhythm of gender in meetings in rural Solomon Island               | (Dyer 2018)                       | Michelle Dyer (2017-2018)                                 | This paper summarizes the findings of a case study regarding communicational patters at meetings in the rural Solomon Islands within the context of gender equality and women empowerment. Following up on that, precise information is provided, as to how women participated in the meetings. In addition to general information pertaining to the theoretical background of gendered power relations, the study aims to contribute a specific case study that is showcasing the undermined role of women as part of mixed gender discussions, as well as a guideline for similar research in the future.  | 1      |
| Global governance dimensions of globally networked risks: the state of the art in social science research | (Galaz et al. 2017)               | Per Olsson (2015-2017)                                    | This paper represents a comprehensive theoretical review, discussing the challenges of globally networked risks in view of international governance, while demonstrating the contributions of so-called broader social sciences. In doing so, the review features among others an extensive explanation of globally networked risks and five key findings that are allegedly closing the previously defined research gaps. The key insights and thus contributions that have been emphasized include the importance of and challenges faced by international institutions and international crisis management, the potentially rapid evolution of international norms, as well as the difficulties in scaling up policy experiments regarding innovative capacities and identifying optimal reforms. | 1      |

<sup>45</sup> Our criteria for GRAID co-authorship was: i) at least one listed author is also listed as GRAID staff at any time in 2015-2017 and ii) the author has worked for GRAID *before* the paper was published.

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|--|-------------------------------|--|--|---|
| Traps and Sustainable Development in Rural Areas: A review   | (Haider et al. 2018)          | Garry Peterson (2015-2017); Jamila Haider (2017-2018); Maja Schlüter (2015,2017)                               | This paper introduces a theoretical review of the poverty trap that has been referred to as one of the few widely acknowledged concepts within the context of sustainable development limitations. As part of this review, focus has been put on the common elements of the concept's different definitions, while demonstrating existing limitations. Following up on that, four key findings have been suggested as an important and beneficial amendment for the existing framework that would allow for a better consideration of hitherto neglected dynamics in line with social-ecological interactions and feedbacks.   | 1 |
| Green Niche Actors Navigating an Opaque Opportunity Context: Prospects for a sustainable transformation in Ethiopian agriculture | (Järnberg et al. 2018)        | Elin Enfors (2015-2018); Per Olsson (2015-2017); Linn Järnberg (2016-2018)                                     | This paper is concerned with the sustainable development in the agricultural sector. Drawing up on the literature review's findings, a case study of Ethiopian agriculture is used to exemplify how the concepts of social-ecological system's theory, such as multilevel perspective and opportunity context, could provide a beneficial framework in assessing, how a sustainable intensification can be reached. By contributing to a more systematic and holistic assessment of sustainability transformation, the study thus aims to help overcoming the alleged problem of a limited transferability of few success stories to larger scale within the context of agriculture, especially in developing countries.     | 2 |
| Mapping Regional Livelihood Benefits from Local Ecosystem Services Assessments in Rural Sahel                                    | (Malmberg et al. 2018)        | Elin Enfors (2015-2018); Line Gordon (2015-2017); Hanna Sinare (2016-2017)                                     | This paper is focused on the display of livelihood benefits at a regional scale in the Sahel region. Drawing up on a previous study, which identified the ecosystem services from several so-called social-ecological patches, i.e. different habitats such as forests or shrublands, at a village-scale in the Sahel region, the alleged livelihood benefits have been backed up with additional field work before being transferred to a broader landscape level for northern Burkina Faso. These findings were then combined with the results of a remote sensing analysis that displayed the different patches at a landscape level, as part of multiple final maps.   | 2 |
| The concept of the Anthropocene as a game-changer: a new context for social innovation and transformations to sustainability     | (Olsson et al. 2017)          | Per Olsson (2015-2017); Michele-Lee Moore (2017-2018)  | This paper features a comprehensive theoretical review of the concepts of social innovation and the Anthropocene in view of sustainability. In doing so, limitations are identified for the first concept, while highlighting the potential contribution of the latter on. Following up on that, three main conclusions are provided, as to how the strengths of the Anthropocene concept could help to overcome among others the lack of a temporal context of research and often missing link between social or ecological approaches pertaining to social innovation. Finally, the Anthropocene concept is emphasized as a beneficial contribution, despite its existing criticism and potentially limited applicability. | 1 |
| Seeds of the future in the present: exploring pathways for navigating towards 'Good' Anthropocenes                               | Pereira, Bennett, et al. 2018 | Garry Peterson (2015-2017); Albert Norström (2015-2017); Per Olsson (2015-2017); Oonsie (R.) Biggs (2015-2018) | This paper emphasized the potential of niche projects to support a sustainable urbanization and spark a transformation at an urban scale over time. For that matter a database has been established in a first step, which features a multitude of such seed-projects, which have then been clustered into different thematic groups, such as Political Ecology or Climate Smart Cities. Following up on that, potential visions for future urban settlements have been created and assessed by means of testing and/or combining these seeds within the context of Anthropocene challenges and scenarios.   | 2 |

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|--|---------------------------------|--|---|---|
| Using futures methods to create transformative spaces: Visions of a Good Anthropocene in southern Africa                       | (Pereira, Hichert, et al. 2018) | Oonsie (R.) Biggs (2015-2018)                        | This paper aims to explore and display future scenarios for Southern Africa that would go hand in hand with the ideas behind a good Anthropocene. Drawing up on the ideas of the concept, a workshop was held in Cape Town to develop multiple potential scenarios based on a multitude of seed initiatives, such as cryptocurrencies or, gene editing or the use of artificial meat, which were meant to help the participants in developing radically new and or innovative ideas for the future development. Following up on that the article features a short description of the methodological approach before focusing in more detail on the workshop, the identified scenarios, and the general conclusions of this study. | 2 |
| Social-ecological systems approaches: revealing and navigating the complex trade-offs of sustainable development <sup>46</sup> | (Reyers and Selomane 2018)      | Belinda Reyers (2015-2018); Odi Selomane (2017-2018) | This paper is concerned with the contribution and insights of the social-ecological systems' framework for projects in line with the 'Ecosystem Services for Poverty Alleviation' concept (ESPA). Subsequent to an introduction into social-ecological systems, the paper thus features a comprehensive and detailed review of ESPA projects that have managed to integrate the hitherto often neglected complexity of social-ecological dynamics, while emphasizing challenges and new approaches in this field.   | 1 |
| Essential Variables help to focus Sustainable Development Goals monitoring   | (Reyers et al. 2017)            | Belinda Reyers (2015-2018); Odi Selomane (2017-2018) | This paper introduces a new approach, targeted at improving the current monitoring process of the Sustainable Development Goals. Following up on that, the continuous input and/or amendment of targets and indicators, as well as an increasing proportion of observations have been reported to undermine the SDG's purpose to facilitate coordinated action. The proposed method of including so-called "Essential Variables" into the monitoring process to increase the operational efficiency between observations and indicators is thus emphasized as beneficial concept. In addition to a general description, the paper further highlights key criteria and applicability of the concept.                               | 1 |
| Integration: the key to implementing the Sustainable Development Goals   | (Stafford-Smith et al. 2017)    | Belinda Reyers (2015-2018); Owen Gaffney (2017)      | This paper is concerned with the effectiveness of the means for implementation in view of the Sustainable Development Goals. In line with the alleged neglect of synergies, when targets are implemented, a new approach is introduced that aims for an increased link across sectors and societal actors, and among the respective countries. Following up on that, the potential contribution and applicability of the approach is described in more detail, featuring among others a section dedicated to the previously defined sectors and societal actors.  | 1 |

<sup>46</sup> The publication we found has a slightly different title from what was indicated to us by GRAID ("Reyers, B. & Selomane, O. 2018. Advancing complex social-ecological systems perspectives and approaches in ecosystem services and poverty alleviation research and policy. In: Ecosystem management and poverty: understanding the trade-offs and how to manage them. Chapter 3.").

## C2. GRAID co-authorship in foundational papers and case studies

GRAID progress reports for the years 2015-2017 list 30 different “GRAID foundational papers and case studies” that “represent the early stage of synthesis of key recommendations and knowledge generation that is supporting the implementation of GRAID”.

Of these 30 references, 23 appear to have GRAID co-authorship and 22 have been published. Of those authored by GRAID, 4 were also covered by the publication list provided to us by GRAID (Annex C1) and are colored in light blue in the table below. 19 publications with GRAID co-authorship were not covered and are highlighted in light green.

This brings our estimate of the number of published academic papers with GRAID co-authorship to a total of 33, and of additional papers with GRAID co-authorship in preparation to 24.

| Title   | Year | GRAID co-authorship   | GRAID mentioned?    |
|---|------|---|---------------------|
| Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. In: <i>The Lancet</i> , 386(10007), pp.1973-2028, (GRAID contributed to the shaping of this report). | 2015 | No GRAID author   |                     |
| An Exploration of Human Well-Being Bundles as Identifiers of Ecosystem Service Use Patterns. In: <i>PloS one</i> , 11(10), p.e0163476.  | 2016 | Oonsie (R.) Biggs (2015-2018); Belinda Reyers (2015-2018)   | No                  |
| Assessment of ecosystem services and benefits in village landscapes—A case study from Burkina Faso. In: <i>Ecosystem Services</i> , 21, pp.141-152.   | 2016 | Hanna Sinare (2016,2017); Line Gordon (2015-2017)   | No                  |
| Bright spots: seeds of a good Anthropocene. <i>Frontiers in Ecology and the Environment</i> . In: <i>Frontiers in Ecology and the Environment</i> , 14(8), pp.441-448.  | 2016 | Oonsie (R.) Biggs (2015-2018); Albert Norström (2015-2017); Per Olsson (2015-2017); Garry Peterson (2015-2017)                  | Not available       |
| Elasticity in ecosystem services: exploring the variable relationship between ecosystems and human wellbeing, 2016. In: <i>Ecology and Society</i> , 21(2).   | 2016 | Tim Daw (2017-2018)   | No                  |
| Resilience (Republished). In: <i>Ecology &amp; Society</i> , 21(4), 44.   | 2016 | Carl Folke (2016)   | In acknowledgements |
| Social-ecological resilience and biosphere-based sustainability science. In: <i>Ecology and Society</i> , 21(3).  | 2016 | Carl Folke (2016); Oonsie (R.) Biggs (2015-2018); Albert Norström (2015-2017); Belinda Reyers (2015-2018); Johan Rockström 2016 | In acknowledgements |
| Sustainability science for meeting Africa’s challenges. In: <i>Sustainability Science</i> , 11(3), 371–372.   | 2016 | No GRAID author   |                     |
| Where and how to prioritize fishery reform? Proceedings of the National Academy of Sciences. USA <a href="http://www.pnas.org/cgi/doi/10.1073/pnas.1605723113">www.pnas.org/cgi/doi/10.1073/pnas.1605723113</a> .                     | 2016 | Henrik Österblom (2015-2017); Jouffray Jean-Baptiste (2016)   | No                  |

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|---|------|--|---------------------|
| Approaching moisture recycling governance. In: Global Environmental Change 45: 15-23.   | 2017 | Patrick Keys (2016-2017);<br>Line Gordon (2015-2017)                           | No                  |
| Essential variables help to focus sustainable development goals monitoring Current Opinion. In: Environmental Sustainability 26-27: 97-105.   | 2017 | Belinda Reyers (2015-2018);<br>Odi Selomane (2017-2018)                        |                     |
| From coherence towards commitment: Changes and challenges in Zambia's nutrition policy environment. In: Global Food Security, 13:49-56. 10.1016/j.gfs.2017.02.006                                     | 2017 | No GRAID author  |                     |
| Implementing the "Sustainable Development Goals": towards addressing three key governance challenges-collective action, trade-offs, and accountability. In: Environmental Sustainability 26-27: 90-96 | 2017 | No GRAID author  |                     |
| Improving participatory resilience assessment by cross-fertilizing the Resilience Alliance and Transition Movement approaches. In: Ecology and Society 22(1): 28.                                     | 2017 | Albert Norström (2015-2017);<br>Garry Peterson (2015-2017)                     | No                  |
| Integration: the key to implementing the sustainable development goals. In: Sustainability Science 12(6): 911-919.  | 2017 | Belinda Reyers (2015-2018);<br>Owen Gaffney (2017)                             |                     |
| Learning about social-ecological trade-offs. In: Ecology and Society 22(1): 2.  | 2017 | Tim Daw (2016-2018)  | No                  |
| Marine ecosystem science on an intertwined planet. In: Ecosystems 20: 54-61 DOI: 10.1007/s10021-016-9998-6.   | 2017 | Henrik Österblom (2015-2017);<br>Carl Folke (2016)                             | No                  |
| Navigating alternative framings of human-environment responses for addressing Anthropocene challenges: variations on the theme of 'Finding Nemo.' In: Anthropocene Journal, 20: 83–87.                | 2017 | Oonsie (R.) Biggs (2015-2018)  | Not available       |
| Off-stage ecosystem service burdens: a blind spot for global sustainability. In: Environmental Research Letters 12(7): 75001.   | 2017 | Tim Daw (2016-2018)  | No                  |
| Research priorities for managing the impacts and dependencies of business upon food, energy, water and the Environment. In: Sustainability Science 12(2):319–331, 2017.                               | 2017 | Belinda Reyers (2015-2018)   | No                  |
| Resilience offers escape from trapped thinking on poverty alleviation. In: Science Advances. 3(5) e1603043.   | 2017 | Steven Lade (2017);<br>Jamila Haider (2017-2018);<br>Maja Schlüter (2015,2017) | In acknowledgements |
| Social Forestry - why and for whom? A comparison of policies in Vietnam and Indonesia. In: Forest and Society 1(2), 78-97.  | 2017 | Grace Wong (2017-2018)   | No                  |
| The concept of the Anthropocene as a game-changer: a new context for social innovation and transformations to sustainability. In: Ecology and Society 22(2):31.                                       | 2017 | Per Olsson (2015-2017);<br>Michele-Lee Moore (2017-2018)                       |                     |
| The social structural foundations of adaptation and transformation in social-ecological systems. In: Ecology and Society 22(4): 16.   | 2017 | No GRAID author  |                     |
| Towards integrated food policy: Main challenges and steps ahead, In: Environmental Science and Policy, 73: 89-92.   | 2017 | No GRAID author  |                     |
| Distilling the role of ecosystem services in the Sustainable Development Goals. In: Ecosystem Services doi: 10.1016/j.ecoser.2017.10.010.   | 2018 | Line Gordon (2015-2017)  | No                  |

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|--|----------|---|---------------------|
| A framework for conceptualizing and assessing the resilience of essential services. Ecology and Society.   | In press | Oonsie (R.) Biggs (2015-2018)   | In acknowledgements |
| Regime shifts in social-ecological systems. Handbook of Research Methods and Applications in Resilience Studies. M Ruth & SG Reisemann (eds). Edward Elgar Publishing. | In press | Oonsie (R.) Biggs (2015-2018)   | Not published yet   |
| Special Issue in Ecology and Society on Designing Transformative spaces for sustainability in social-ecological systems.   | In press | No GRAID author   |                     |
| The Evolution of Social Innovation: Building Resilience Through Transitions.   | No year  | Michele-Lee Moore (2017-2018);<br>Per Olsson (2015-2017)<br>(Chapter contributions) |                     |