What have we learned from working collaboratively on the ASSAR project?

By Lucia Scodanibbio

Contact

Collaborative Adaptation Research Initiative in Africa and Asia
c/o International Development Research Centre
PO Box 8500, Ottawa, ON
Canada K1G 3H9
Tel: (+1) 613-236-6163; Email: cariaa@idrc.ca

Funded by:

Table of Contents

List of Tables

List of Figures

List of Boxes

Abstract

An increasing number of large multi-partner, geographically distributed, interdisciplinary research consortia are being funded to address wicked problems in the socio-ecological realm, such as those associated with climate change and sustainable development. Some argue that this collaborative research model holds the potential to yield unique insights that can be applied to multiple regions and reflect a more systemic and integrated understanding of the issues. However, working collaboratively across several time zones, different institutional and personal capacities, and opposed disciplines and local contexts, also entails large transaction costs and a challenging integration process. This report explores the learning that emerged midway through the Adaptation at Scale in Semi-Arid Regions (ASSAR) project; a five-year multi-country, multi-disciplinary research project that seeks to explore some of the main barriers and enablers to effective, widespread and sustained adaptation to climate change in semi-arid regions of Africa and Asia. By analysing the results of a survey of ASSAR researchers and staff members that was run in late 2016 – halfway through ASSAR's duration – it provides evidence about the multiple difficulties of collaborating, and the importance of developing trusting relationships among team members and partner organisations. Yet, it also points to the range of benefits experienced by the respondents, ranging from acquiring new types of knowledge, enriched by the cross-regional and multi-disciplinary perspectives that are a part of the project, to developing a new network of colleagues and friends. By reflecting on the results of the survey, the report furthermore provides preliminary recommendations around issues that need to be taken into consideration when designing and implementing large, multi-site, interdisciplinary research collaborations.

Introduction

The impacts of climate change are increasingly felt across the world, as temperatures and the frequency of extreme events keep rising. These impacts are felt more strongly in areas that have come to be known as climate change hotspots, such as deltas, where sea level rise is endangering lives and livelihoods, or semi-arid areas, where increasing droughts and floods succeed each other, while temperatures continue to rise. It is within this context that the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA) programme emerged, to build resilience in these hotspots and to research adaptation to inform policy and practice.

The ASSAR project is one of four awarded projects under the CARIAA programme, focusing on the barriers and enablers to widespread and sustained adaptation in semi-arid regions. With a focus on the wellbeing of the most marginalised, ASSAR seeks to understand the root causes of their vulnerability, the responses that have been taken to adapt to climate change and the capacities that exist to do so. With this knowledge, it seeks to provide recommendations that can help to move into the solutions space with regards to adaptation of the most vulnerable.

Comprised of a partnership of five lead organisations – with the University of Cape Town (UCT) as consortium head – and 13 additional partner organisations, the ASSAR consortium undertakes comparative research across four regions in Africa and South Asia. With case studies in Namibia and Botswana (Southern Africa), Kenya and Ethiopia (East Africa), Mali and Ghana (West Africa) and three states of India (South Asia), this four-and-a-half-year initiative (2014-2018) seeks to be able to draw conclusions about the factors that can enable more effective adaptation in semi-arid areas across these regions, and more broadly too. With researchers hailing from a range of disciplines across the social and natural sciences, the team seeks to gain a more holistic understanding of the interaction of climatic and non-climatic factors, cognizant of the fact that climate impacts are just one additional issue in a host of continuously-changing developmental conditions and challenges. The ASSAR team comprises early career researchers including Masters and PhD students, research assistants and interns; as well as mid to senior-level academics such as the project's Principal Investigators (PIs). In addition, the ASSAR partnership comprises practitioners, as one strong characterising feature of the project is its emphasis on research-into-use (RiU), i.e. ensuring that the applicability of the research findings is realised through influencing policy and practice.

The purpose of this report is to present the findings of a survey that was run across the ASSAR consortium halfway through its duration (in September 2016), to assess how ASSAR members experienced the project and what they had learned up to that point. After discussing the methods that were followed, the results of the survey are presented and a number of recommendations are provided that can aid in both the planning and implementation of this type of collaborative research project.

Methods

The survey questions were developed by the ASSAR project coordinator based on ideas generated while reading the Gonsalves (2014) paper[1], and in consultation with two experts on social learning (from IDRC/ex-IDRC) and two ASSAR social science researchers, who helped refine the questions in terms of clarity, and striking a balance between length/comprehensiveness and not threatening response rates. An electronic survey questionnaire comprising 10 compulsory and three optional questions (Appendix A) was set up on Google Forms and initially sent to five volunteers from the ASSAR team who had agreed to test the questions for clarity. After receiving confirmation that the survey was clear, and checking the responses to ensure the questions were being interpreted appropriately, the survey was administered by email to the ASSAR consortium mailing list.

Participants consisted of all ASSAR researchers and staff that have a CARIAA google account, meaning that they are actively involved in the project (a total of approximately 130 members of the ASSAR consortium). The email was sent by the project coordinator (myself), who is known to everyone in the consortium, and suggested a number of potential benefits of answering (e.g. improving the way we work together as a consortium – see email in Appendix B). However, participation was voluntary and responses could be sent anonymously. Responses were accepted over a period of 2.5 months (second half of September 2016 to end of November 2016), although an initial deadline was given for 30th September. A reminder email was sent in early October to encourage more responses from the areas which were found to be lacking, to have a representative sample of members from (i) across the four ASSAR regions, (ii) the range of professional roles (from early career to principal investigators) and (iii) from the different sectors (academics to practitioners) involved in the consortium. The email particularly encouraged early career researchers (i.e. Masters and PhD students), consultants involved in the ASSAR project, and the India regional team partners to respond.

By the end of November, 61 members (47%) of the ASSAR consortium had responded to the survey. The 61 responses were analysed inductively by allowing relevant concepts, patterns, themes or issues to emerge from the data, but in ways that spoke to the survey questions (as per thematic analysis – Braun and Clarke, 2006). Although content analysis and the use of codes was not used in the strict sense, the patterns emerging from the data were used to identify common categories by which responses could be classified. The relative importance accorded by the different respondents to certain issues was noted, as were specific expressions or words used to describe particular points (e.g. challenges, highlights, etc.). In the process of classifying each response, these primary categories were further refined in an iterative fashion (as is common in qualitative analysis – see de Wet and Erasmus, 2005), to capture, as accurately as possible, the range of relevant responses. For most survey questions, however, the "other" category was also included, as in each case a number of responses did not talk to any of the existing categories and it was not deemed feasible to add additional ones. Depending on the richness of the answers, each response could fall under more than one category. Once all the primary categories were defined in this first round of analysis, a further process of higher-level categorisation was undertaken (yielding secondary categories), to capture broader themes that the primary categories spoke to.

---

[1] This paper, commissioned at the start of the CARIAA programme, reviews literature on collaborative research initiatives focused on climate adaptation and provides a number of lessons for their design, management and monitoring.

Results

Of the 61 respondents, 31 were female and 30 male. Respondents were asked to classify themselves across different categories according to their role in ASSAR, and had the possibility of ticking more than one role. Approximately 46% of respondents characterised their role in the project as early career researchers, while others indicated their role as senior researchers (approx. 25%); practitioners (approx. 15%); project steering committee (PSC) members (approx. 10%) and other (approx. 26%).

The responses around the most valuable things learned by ASSAR members halfway through the project focused on both research content and the process of working together (see **Figure 1** and **Figure 2** for secondary and primary categories respectively). For instance, the secondary category on learning something new, included new content, though more importantly, it was around new ways of thinking about and conducting one's research, as well as a broadened understanding of issues, including an enhanced realisation of their complexity (**Table 1**). The appreciation around the importance of different types of expertise fully encompassed the diversity of the ASSAR consortium, referring to its cross-regional aspect, the variety of disciplinary perspectives, the inclusion of practitioners alongside researchers, and the interactions among different levels of seniority. On process, survey respondents appreciated having learned about the consortium model, including how it works, the inherent challenges involved, and the importance of relationships and spending time together.
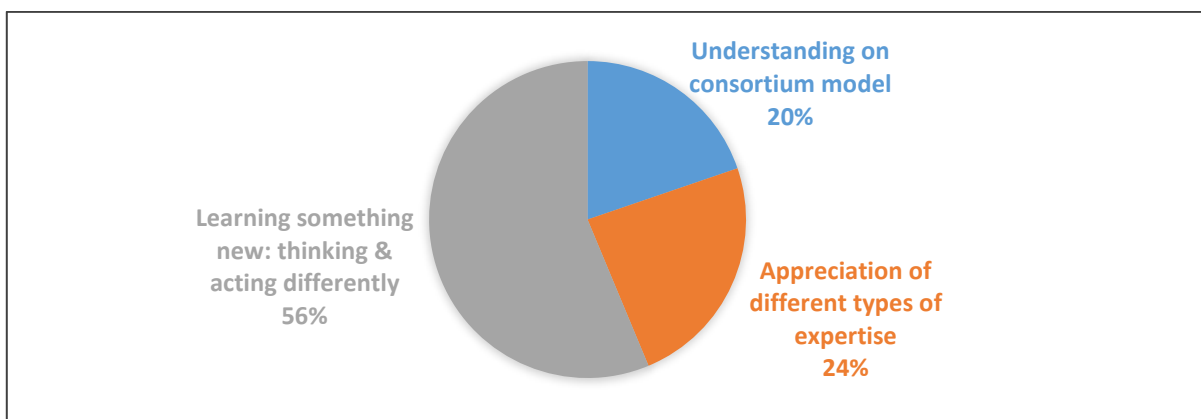

Figure 1: Most valuable things learned through engagement in ASSAR (secondary categories; n=167 responses from 61 respondents)
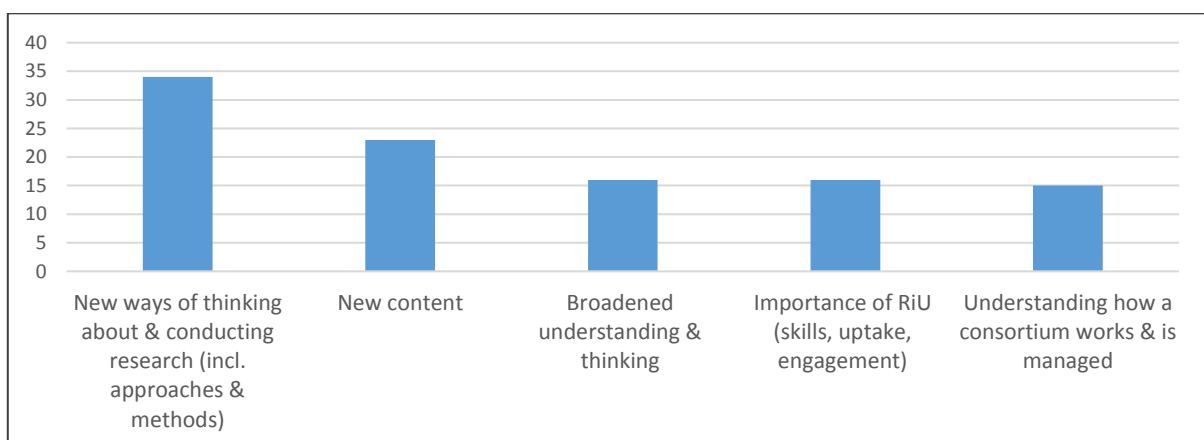

Figure 2: Most valuable things learned through engagement in ASSAR (top five primary categories; n=104 responses from 54 respondents)

Table 1: Supporting quotes that speak to the different primary and secondary categories of responses to the question about the most valuable lessons.

Secondary category	Primary category (no. of responses)
Learning something new: thinking and acting differently (94 responses)	New ways of thinking about and conducting research (including approaches and methods) (34)
	New content (23)
	Broadened understanding and thinking (16)
	Importance of RiU (skills, uptake, engagement) (16)
	Realisation around complexity of issue and topic (5)
Appreciation of different types of expertise (40 responses)	Value of collaborative, cross-regional work (including opportunities) (13)
	Appreciation of diversity of disciplinary perspectives and systemic view (12)
	Working with different ASSAR experts (including senior) (10)
	Working across the practitioner/ researcher divide (5)
Understanding on consortium model (33 responses)	Understanding how a consortium works and is managed (15)
	Challenges of working in a consortium (13)
	Importance of relationships (including face to face time) (5)

"ASSAR's approach to Stakeholder Engagement & RiU has been very valuable to me. Approaching the Stakeholder Engagement the way that we have at ASSAR, adds a great deal of coherence and focus to the process. Moved me away from the business as usual approach. Also, as a researcher, the Stakeholder Engagement process (particularly at the local level) allowed me to interact with stakeholders outside the agenda focused interactions that data collection exercises generally amount to. This meant that I was more receptive to what I heard in the field and [this] has influenced my research."

"The project has been very useful in teaching me the value of collaborative research particularly how to come together with other researchers in sometimes disparate fields to work towards a common goal. It helped me to understand and think in a comprehensive manner not merely limited to my field. My research thinking has certainly broadened since my initial engagement with the project."

"1.Research needs to 'listen and learn' a lot more to practitioners to understand the reality and be effective. 2. Transdisciplinary research is the need of the hour. 3. It helped the xxx team (both research team as well as the practitioner team) to be better informed of the current research needs at the national and global level. 4. Working together across India and Africa has enhanced my understanding of climate and developmental context and built a network of 'colleagues'. 5. The support from the various senior researchers across ASSAR is helpful for xxx as a whole as well as xxx's junior researchers. 6. Working with different institutions is always a challenge. However this can be achieved by continuing the dialogue. 7. An opportunity to take up a new relevant research e.g. the Heat and Health Study"

"The enormous transaction costs - time, travel, interpersonal - involved in such a large project. My learning has been: (i) make sure you have the resources for these transaction costs; (ii) the importance of full time people rather than small bits of many people, because of the delays that happen when many people are needed on a task, but they are all working small bits of time not at the same time."

Numerous types of interactions (e.g. activities, processes, meetings, platforms, etc.) supported each of the lessons identified in the previous question (**Figure 3**). The category "learning by doing", which warrants further explanation, is supported by a number of quotes which point to the diversity of responses that were classified according to this category (see **Box 1**).
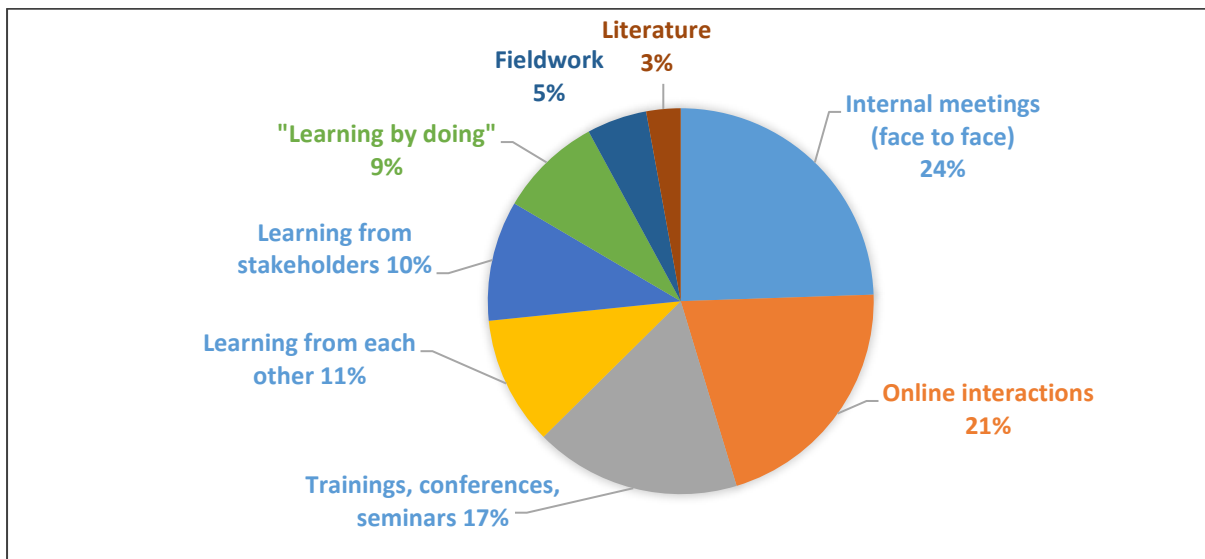

Figure 3: Types of interactions that supported the learning identified in Figure 1 (n=139 responses from 61 respondents)
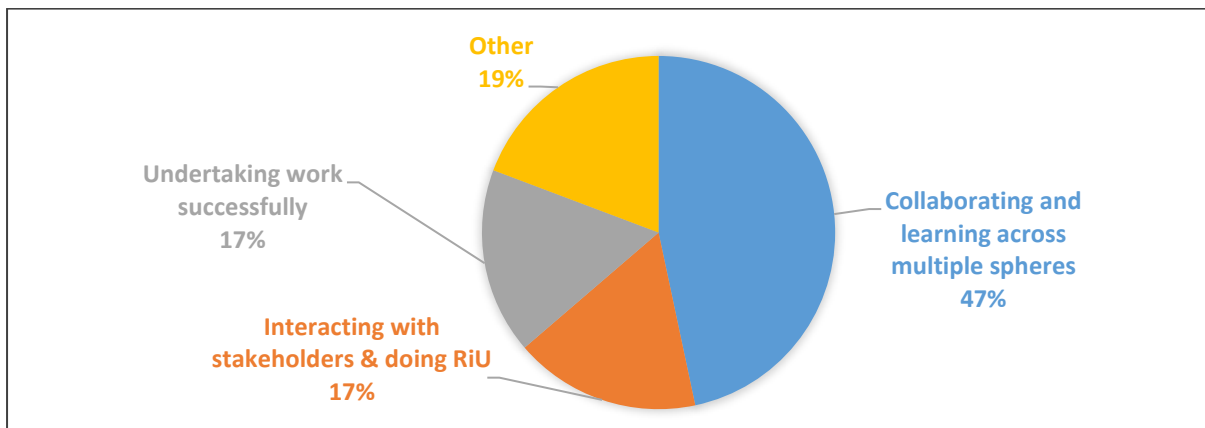

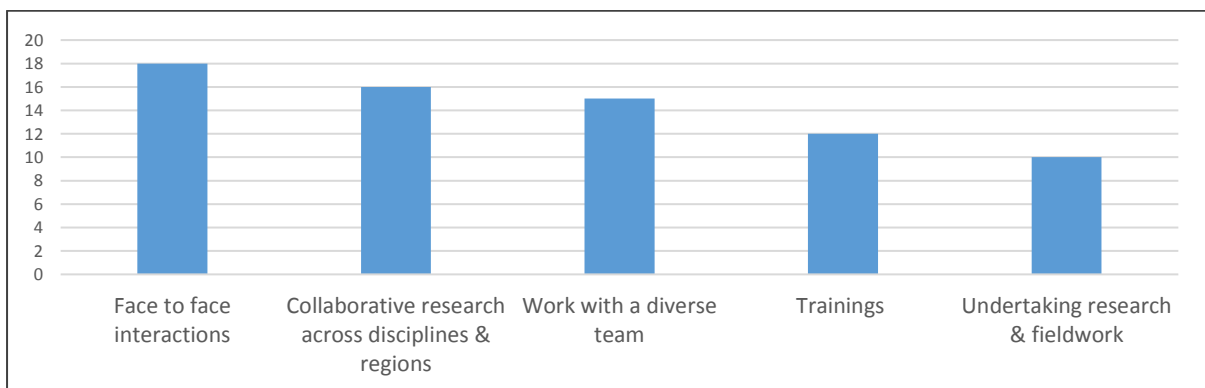**Figure 4:** Top two most valuable experiences in ASSAR (secondary categories; n= 135 responses from 61 respondents)

Figure 5: Top two most valuable experiences in ASSAR (top five primary categories; n=71 responses from 47 respondents)

Box 1: Examples of quotes that were classified as "Learning by doing" (the italics shows the part of the response that was classified according to this category)

"Regular communication with relevant parties; as much as I dislike it: the Google platform is useful and fairly intuitive; *getting to know people on a personal level to understand how best they work, their strengths and their weaknesses and how easy they find it to respond to certain requests.*"
"Learning on East Africa has been supported most of all by field work activities. On the collaboration, the two week short course at UEA really helped. *Without it we may not have been able to write a collaborative paper, with inputs from five people. However, it was also important for one person to take the initiative and push the process along*."
"ASSAR Annual meetings; webinars; attending training workshop and winter school; *collaborative concept note development.*"
"Weekly digest, PSC meetings - monthly and annual, personal meetings with international and national partners. *Interacting with the team, hiring a team.* In the last one year, connecting with people outside the consortium to bounce ideas off, from among the wider research community as well as local civic bodies. As well as reading, academic papers on topics that are not strictly in the gamut of ASSAR but will help make a larger policy impact, and link up our publications with the wider climate change literature. Attending and presenting at research conferences - Our common future, Adaptation Futures."
"*All of my experiences in ASSAR* (meetings, hangouts, emails, work content) have helped me draw these conclusions!"
• "Training workshops and engagement in actual activities related to specific skills such as Transformative Scenario Planning, VRA and Stakeholder Mapping Exercise • Webinar and direct consultation with specific experts e.g. communication personnel in terms of writing blogs or short reports for related activities • Meeting/personal communication with the experts in related field/methodologies or tools learned • Online material e.g. Oxfam Webpage for VRA, Netmap for Stakeholder Influence Mapping, We Adapt etc. • Reports and papers shared on ASSAR website and weekly digest • *Active engagement in developing the tools, implementation and report writing e.g. VRA, stakeholder mapping, interviews on governance, focus group discussions etc.*"
"1) In the cases where individuals or teams really got behind the methodology it was always after having experienced the training itself and meeting face to face. Some of the remote coaching is useful in preparation but it doesn't substitute for face to face engagements and direct experience. However, I think exposure to the process is not by itself sufficient. I think it has something to do with people's openness to the methodology. And also something to do with how those individuals think. I am happy to give you the names of the people that really have championed TSP and ask them what has motivated them in this regard. 2) *This learning has come about through experiencing the process, first in West Africa, and, importantly in India.* The water issue in Bangalore is in a real crisis, and it is a deeply politicised and polarised context. As such, it requires much more oversight and support from Reos and also significantly more resources (time and fund) than is currently available through ASSAR to maximise the chances of a TSP in Bangalore being generative for the system as a whole."

The top two highlights, or most valuable experiences, in ASSAR members' involvement in the project (**Figure 4** and **Table 2**), revolved around interacting and learning through the multiple levels of collaboration (disciplinary, regional, sectoral, age and seniority levels), and getting to know each other and spend time together (which received the highest number of responses overall in the primary categories; **Figure 5**). ASSAR members also really valued the RiU lens and lessons arising from interactions with stakeholders (such as through the fieldwork, Transformative Scenario Planning or Vulnerability and Risk Assessment processes – see quote below). Their responses around being able to successfully undertake research, fieldwork and collaborative writing activities pointed towards the satisfaction obtained when accomplishing particular tasks.

> *"Being able to build a bond with locals and being able to connect and associate with local ground issues."*

The "other" category included responses which did not fit under any of the existing groups, and that referred to – among others – the access to information resources made possible by the ASSAR digest (see quote below); the possibility to work remotely with numerous organisations through the CARIAA platform; the fact that ASSAR is one of the largest projects ever worked on; learning new ways to think about adaptation; enhanced presentation skills; the development of a new interest in climate change (see quote below), etc.

> *"My involvement in ASSAR has made me to develop interest in climate change research. As at now, I have since submitted a research proposal on climate change issues to IDRC, which a major stakeholder in ASSAR too, for research funding."*

> *"To have access to academic materials and information through media such as the Digest. I have read most valuable research papers on vulnerability and climate adaptation from the weekly digest that is made available through ASSAR."*

The "accomplishing work" category included responses that referred to the satisfaction arising from having completed tasks or achieved a particular goal, such as:

- ❖ "Some of the ad hoc communications projects I've been involved with (such as the Theory of Change video, the ASSAR Spotlight, the individual interview videos I compiled) that drew on my creative and strategic strengths and that were very well received. I really enjoyed the process of these activities, but more than that – in a project that is often short on compliments and positive encouragement – the feedback was a great affirmation of my skills as a communicator."
- ❖ "My highest points have been, visiting Ethiopia, and *being able to complete tasks*."
- ❖ "Student Thesis submitted on time."
- ❖ "First PSC retreat in Norwich during which the ASSAR Theory of Change was agreed."
- ❖ "Recording a video diary from Feb- Nov 2014."
- ❖ *"The process of going from project concept note, to full proposal, to implementation of the proposal has been personally a highly valuable experience* - have learned a lot, would do many things differently next time round, but it has been a pleasure enabling such a diverse set of people to interact within ASSAR."
- ❖ "To be able to work constructively in a team housing researchers of diverse backgrounds. *Working under pressure to deliver and deliver well!"*
- ❖ "Hearing from the Paramount Chief in Ghana how valuable he found the first TSP training. That he could easily have left early but chose to stay for the full 2 days of training."

Table 2: Supporting quotes that speak to the different primary and secondary categories of responses to the question about top two highlights

Secondary category (no. of responses)	Primary category (no. of responses)
Collaborating and learning across multiple spheres (63)	Participating in face to face meetings (annual, PSC) (18)
	Undertaking collaborative research across disciplines & regions (16)
	Getting to know and work with a diverse international team (15)
	Working with senior researchers & experts (6)
	Seeing and helping junior researchers grow (6)
	Working across the practitioner-researcher divide (2)
Interacting with stakeholders & doing RiU (23)	Thinking about RiU (including how to communicate & disseminate research) (9)
	Working & learning from stakeholders (9)
	Learning & undertaking TSP with Reos (5)
Undertaking work successfully (23)	Preparing for & undertaking research & fieldwork (10)
	Accomplishing work (9)
	Collaborative writing (4)
Other (26)	Taking part in trainings (including ASOG[2]) (12)
	Other (10)
	International exposure (4)

"Preparing the RiU work stream for our project has been one of the experiences in ASSAR that stands out in my mind, witnessing natural and social scientist work together to see how their research can bring about real world changes has been one of the most valuable experiences that I have had in ASSAR."

"Definitely the opportunity to travel. I was extremely fortunate in that I travelled to Gaborone in 2015, and I attended the Adaptation Futures conference in 2016. Attending the meeting in Gaborone was an incredible experience for me. I was able to have conversations and part-take in discussions with researchers who are at the top of their fields. I was definitely one of the youngest attendees, and probably the least experienced researcher - but I probably learned the most! Adaptation Futures was my first international conference where I presented my Masters research. It was also an incredible opportunity in that I was able to listen to multiple sessions from speakers from all over the world. It was great to hear about different contexts, and reflect on the similarities and differences of my experiences in Cape Town/South Africa."

"The first TSP workshop in Ghana in West Africa because I was able to interact with stakeholders which is a rare opportunity for me and let me see the human face of the work we do. Interacting with the student researchers from West Africa, because they are the future of this type of work and it is very rewarding to play any role in helping them achieve success and more opportunities."

"1. Attending the COP in Paris and presenting at the D&C days. 2. Single-handedly formulating, conducting and managing research in rural Karnataka. Of course I have built a team of RAs to work with me and have got guidance from my seniors, but I am proud to have managed to get the research off the ground, contextualise the ASSAR SD&G questions for our local situation and train/mentor junior researchers (e.g. xxx and xxx). These RAs have gone on to attend competitive conferences in India and both have also been selected for the SOG and I am proud to see them become capable researchers in their own right. This is very fulfilling to see and, in a small way, be part of."

---

[2] ASSAR Small Opportunities Grant

Responses to the question around the top two challenging moments in ASSAR showed a relatively even spread across four categories (**Figure 6** and **Table 3**), revolving around (i) the setting up of the project (including the comparability aspect); (ii) the actual difficulties of working collaboratively (including those due to personal relationships); (iii) what have been defined as "everyday challenges" (related to logistics, funding, staffing); and the overwhelming feature of ASSAR (meeting and information overload, against insufficient time). It is also interesting to note that some respondents answered that they did not face any challenges. Relationships and failed teamwork was the most challenging aspect respondents faced (**Figure 7**).
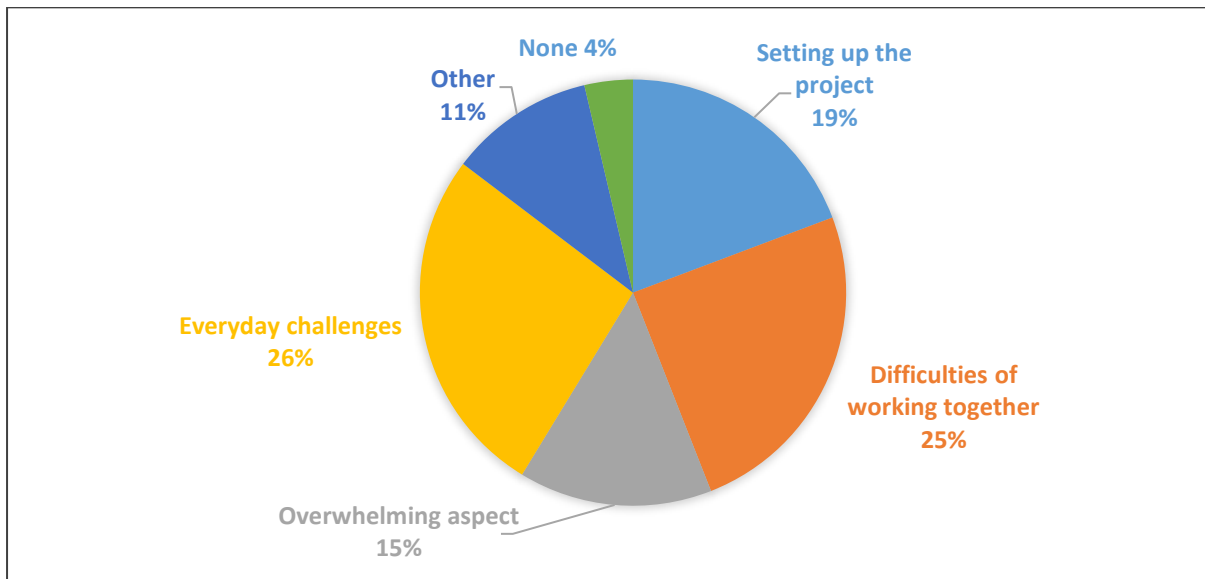

Figure 6: Top two most challenging moments in ASSAR (secondary categories; n=109 responses from 61 respondents)
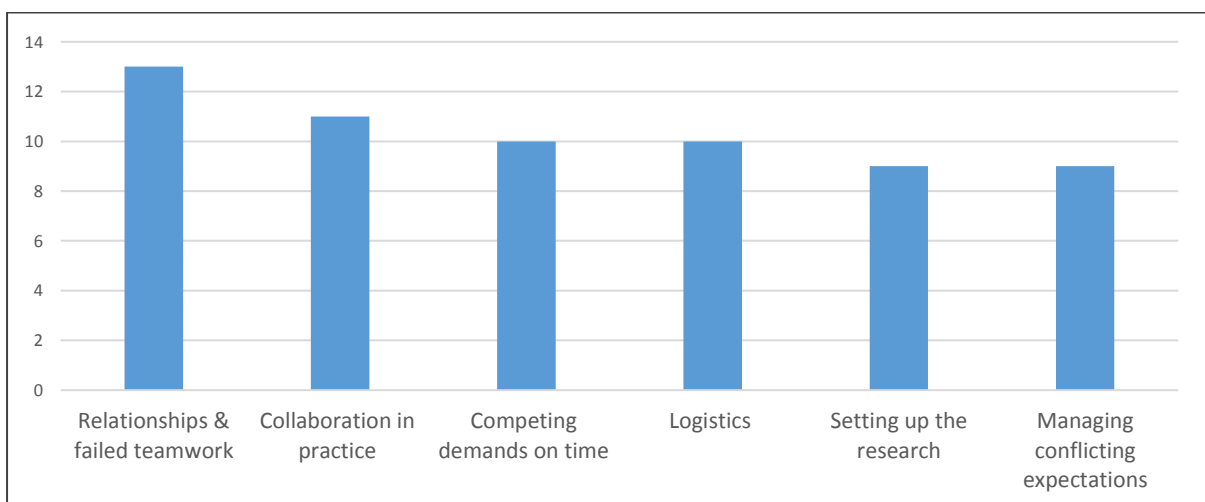

Figure 7: Top two most challenging moments in ASSAR (top six primary categories; n=62 responses from 41 respondents)

The "other" category included individual responses that ranged from having to deal with a live drought emergency to lacking support to acquire specialised skills; personal issues (e.g. related to health); working in an unsupportive and demanding environment; the contradiction of working in a climate adaptation project and yet travelling long distances by plane; and the following:

> *"I haven't got much responsibility or pressure. But it has been challenging trying to stay "involved" with the project when writing up my thesis. When I was conducting my research I felt that I was contributing to the ASSAR project in some small way. However, as time has passed, I don't know if my research will be valuable to the project and I don't know if the ASSAR consortium would even find it interesting."*

When respondents were asked to rate how beneficial the fact that ASSAR is a consortium was to them, 80% answered that it was either extremely important or important, while 18% remained in the middle category and one respondent said it brought no benefits to their work (**Figure 8**).
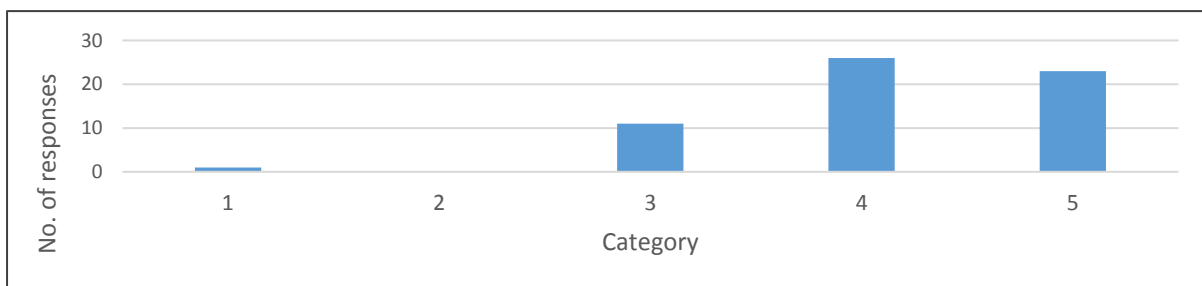
Figure 8: How beneficial it is that ASSAR is a consortium (from category 5 "*extremely important*", to category 1 "*no benefits to my work*" – please note that only the two extremes were defined in the survey; n=61 responses)

The following questions in the survey went into further detail on the value and difficulties of being part of a consortium. When asked about the most useful part of working in a consortium, responses revolved around the access to diverse networks, sets of expertise and skillsets, sources of information, ways of thinking, approaches, funds and research sites – among others – that are afforded (**Figure 9**). Further detail about individual responses, particularly that also show the range of answers under the "other" category are presented in **Box 2**.

Figure 9: Most useful part of working in a consortium (n=105 responses from 61 respondents)

Table 3: Supporting quotes that speak to the different primary and secondary categories of responses to the question about top two challenges

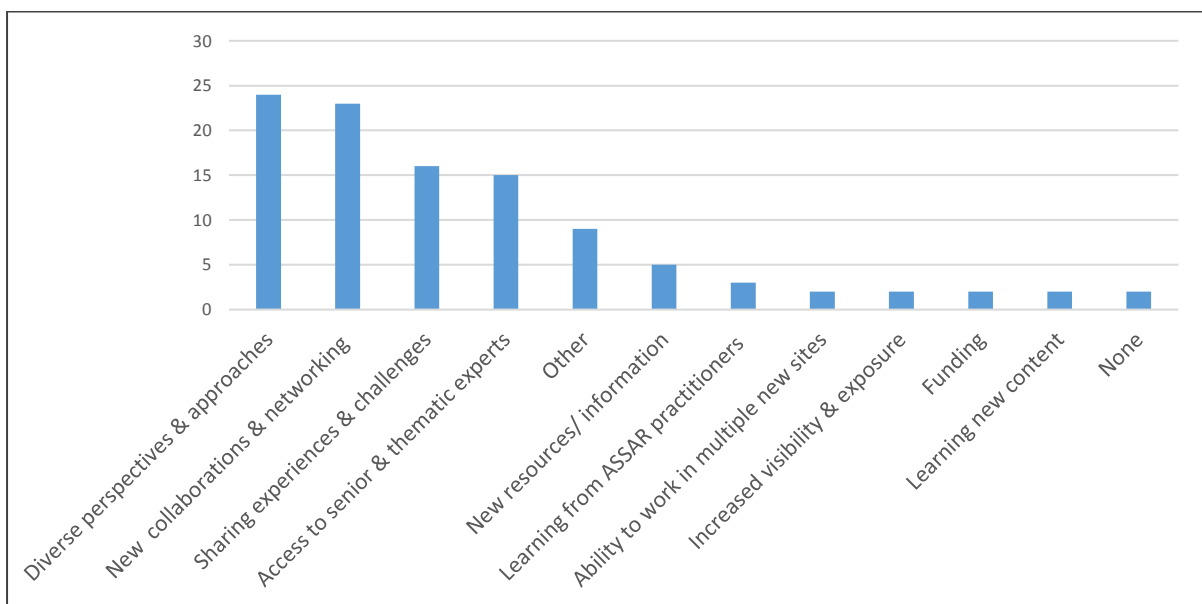| Secondary category (no. of responses)	Primary category (no. of responses)
"Everyday challenges" (29)	Logistics (fieldwork, meetings, etc.) (10)
	Staffing issues (including gender balance) (7)
	Difficulties in delivering on one's responsibilities (e.g. writing papers or reports, doing fieldwork) (7)
	Funding-related (including remuneration) (5)
Difficulties of working together (27)	Personal relationships & failed teamwork (13)
	Collaboration in practice (including responsiveness) (11)
	Collaborative writing (3)
Setting up the project (21)	Setting up the research/ work (incl. achieving comparability) (9)
	Managing conflicting expectations (9)
	Initial unsettlement (including due to complexity) (3)
Overwhelming aspect (16)	Competing demands on time (including deadlines) (10)
	Meeting & information overload (6)
Other (12)	Maintaining stakeholder interest (including due to delays in research) (6)
	Other (6)
None (4)	None (4)

"One of the most challenging tasks was to assist in organising the annual meeting in India, which made me realise the scope of the project. The other challenging task is to switch between multiple and often different tasks (e.g. working on a video vs writing a paper). However challenging these experiences were they have all helped me evolve and grow as a professional and an individual."

"1- To translate my current work to journal papers. 2- Get extra fund to support myself."

"1. Managing xxx's relationship with xxx and their role in the consortium. 2. Recruitment of RiU Coordinators in Southern Africa, including the partnership development process with country partners."

"Collaborating with partners with different subject and institutional backgrounds, which resulted in lot of time spent in gaining trust and understanding; Finding common ground in research questions and methodologies as well as the problem of scales in terms of data - climate scientists vis-a vis social scientists."

"Working in tight time frames particularly on inter region collaborative work where not all participants are as keen or interested in participating towards collaborative research."

"1. Usually multiple deadlines accumulating around the same time. 2. Matching consortium expectations with institutional expectations (aspirations) & being able to do justice to both."

"1. Keeping up with the reporting requirements (both internal and external e.g. to IDRC) and communication (e.g. in the initial days sometimes we used to have 10 emails a day, which improved greatly with the weekly digest). 2. Sometimes, the tendency of disciplinary bias and dominance of certain research lens/approach than others, which is a common challenge in any interdisciplinary team"

"It was also challenging to carry on the field work as the communities had to be convinced as to what the benefits of the study will entail for them."

Box 2: Quotes that talk to the most useful aspects of being part of a consortium (including in the "other" category)

"Getting to know people and researchers in a range of different countries; working with Oxfam gaining insights into how they work in delivering change and campaigns; visiting Cape Town (a very nice place); gaining experience of working within a consortium (some of its strengths and weaknesses)"
• "Being involved in developing tools for data collection and writing reports of different fieldwork activities in the region enrich my understanding on the issues pertaining to well-being, social differentiation, and governance in adaptation to climate change theoretically and methodologically. • Interesting part was the participation in Transformative Scenario Planning workshop. This not only gave a chance to reflect on what as researchers we can bring in to transform the society but the process itself was participatory and enlightens the added value that the community you are studying can add in when thinking about the ways to transform the society. • Attending the annual meeting to be updated of what is happening from different regions and how we complement a big picture of the issues we address in relation to climate change adaptation."
"Making friends! And also new perspectives from such a great variety of people. Greater reach with the research."
"Can draw on the consortia's expertise and even senior researchers without having to think twice."
"Open collaboration, feeling of being equal partners, everybody responsible for what comes out of the project."
"Thinking out of box."
"Getting new opportunities to contribute and getting encouragement from international peers."
"Cross-learnings and the realisation that people connect at fundamental levels irrespective of their ethnic backgrounds, language, colour and all the other prominent differentiators."
"Exposure to so many different approaches from the natural and social sciences on the topic of climate change adaptation, in such a short time."
"The ability to interact and receive inputs from highly respected and experienced researchers."

When asked about the most difficult aspects of working in a consortium, more than half of the responses in the secondary categories (**Figure 10; Table 4**) referred to the transaction costs, including the logistics of working together (which received the top number of responses in the primary categories – **Figure 11; Table 4**), working remotely yet being dependent on others, the time investment required and the consequent difficulties in working comparatively. Politics were also found to be a challenge in the consortium, revolving around power dynamics, competing interests and priorities, and the difficulty of building and maintaining trust and engagement. Lastly, different ways and paces of working, differences in understanding and addressing issues, and a lack of collaborative spirit were also found to challenge the collaborative endeavour. Once again, it is important to note that some respondents reported not having experienced any challenges.
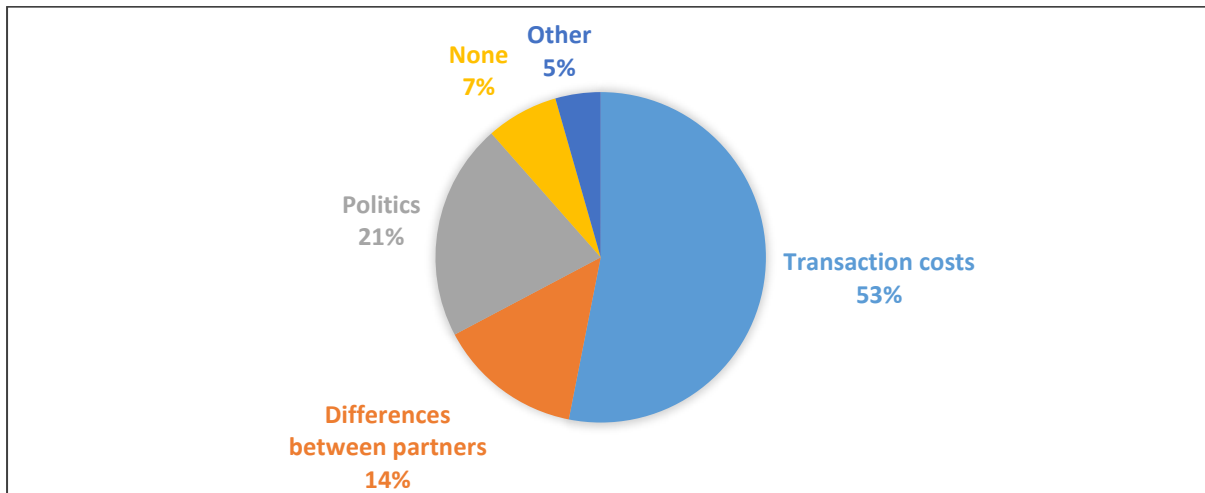

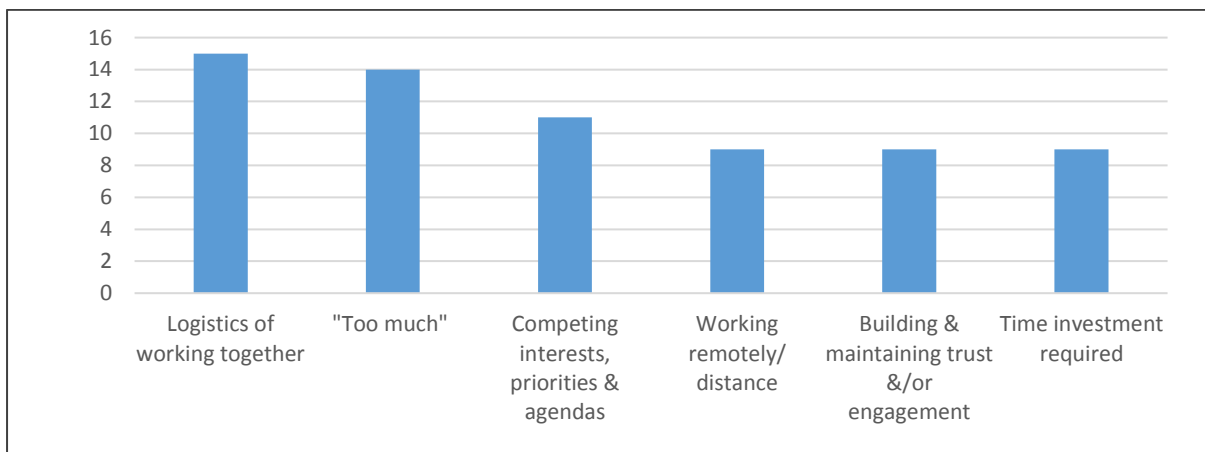**Figure 10**: Difficulties about working in a consortium (secondary categories; n=113 responses from 61 respondents)

Figure 11: Difficulties about working in a consortium (top six primary categories; n=67 responses from 41 respondents)

Table 4: Supporting quotes that speak to the different primary and secondary categories of responses to the question about the difficulties of working in a consortium

Secondary category (no. of responses)	Primary category (no. of responses)
Transaction costs (60)	Logistics of working together (15)
	"Too much" (e.g. overlapping deliverables, demands, info, emails, activities) (14)
	Time investment required (9)
	Working remotely/ distance (9)
	Being dependent on others (7)
	Difficulty to work comparatively & streamline (6)
Politics (24)	Competing interests, priorities & agendas (11)
	Building & maintaining trust &/or engagement (9)
	Power dynamics (4)
Differences between partners (16)	Different ways of understanding &/ or addressing issues (7)
	Slow & varying pace among partners (6)
	Lack of collaborative spirit (including responsiveness) (3)
None (8)	None (8)
Other (5)	Other (5)

"1) Difficult to coordinate various independent organisations which didn't have necessary a real obligation between each other. 2) Organisations members are mostly working in remote, so we are losing something without physical interaction."

"Not being able to make things happen because of others. Having way too much on my plate (so much time on organising and meeting etc.) and not being able to focus on strategic aspects and important deliverables such as writing papers (also important for career progression)."

"The four ASSAR themes and many other activities seemed to be a challenge to keep up and remain productive. Felt like ASSAR is loaded."

"Keeping up/down with multiple institution's pace. So much is lost in translation while working across different contexts, disciplines. Too much reporting at too many levels."

"Too much time spent in conveying ideas and convincing scientists and partners having different subject backgrounds; sometimes opportunities are skewed in favour of lead partners (maybe due to nature of the contracts and funds availability)."

"Standardizing and streamlining processes"

"Sometimes I have the feeling that I am losing my independence and thing are not going as fast as I would like. I have learnt to work independently and now I am learning to work "together"."

"Trying to merge the contributions from these researchers and those from my xxx supervisors, who are not involved in the ASSAR project was a difficult period in my work."

"I haven't yet experienced the "being a part of consortium" aspect."

The "other" category included, among others, responses related to team dynamics and personalities; inability to promote methodological innovation (see quote below); insufficient/ not timeous attention for students from senior researchers; inability to reach out to and connect at a more personal level with interesting people:

> *"Reaching out to interesting people. There are many people in the consortium with very many different approaches towards the research we do but connecting with them at a more personal level is not easy for various reasons."*

> *"Coming to consensus on methods (we actually still haven't done that!). I feel the consortia model doesn't allow for methodological innovation. We tend to fall back on the lowest common denominator - e.g. household surveys."*

On ASSAR members' levels of engagement and motivation to be part of ASSAR, responses indicated that close to 85% of respondents felt highly motivated or motivated, 8% of the responses fell in the middle category and close to 7% were poorly motivated (**Figure 12**).
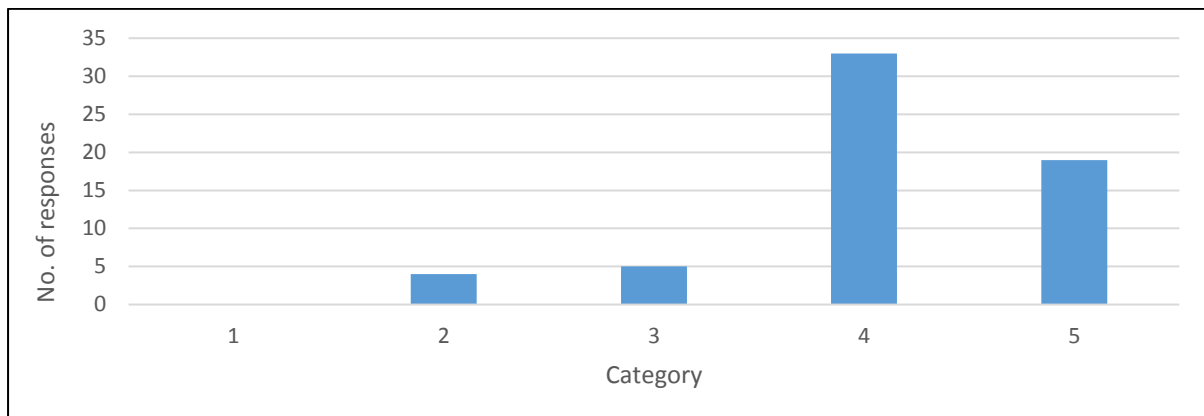

Figure 12: Degree of motivation and engagement felt in ASSAR work (from category 5 "highly", to category 1 "not at all" – please note that only the two extremes were defined in the survey; n=61 responses)

When asked what would need to have happened by the end of ASSAR for respondents to feel the most satisfied and fulfilled, nearly half of the responses revolved around RiU-related gains (ranging from having influenced policy and resulted in benefits on the ground, to having communicated findings in different ways, having received positive feedback from stakeholders and developed adaptive capacities; **Figure 13)**. About 40% of responses focused on more academic gains, with the bulk centring on publishing (top response overall, see **Figure 14**), but also having generated new knowledge, mastered a new research method, or graduated, in the case of students. Personal gains revolved around expanding one's network and having future opportunities, as well as having done a good job and improving one's capacities. Some respondents also pointed to issues they would like to see improved before the end of the project, such as collaborating more effectively with the team, having more clarity and independence around one's role, or being in a more supportive environment. **Box 3** includes a number of quotes that show the breadth of responses to this question.
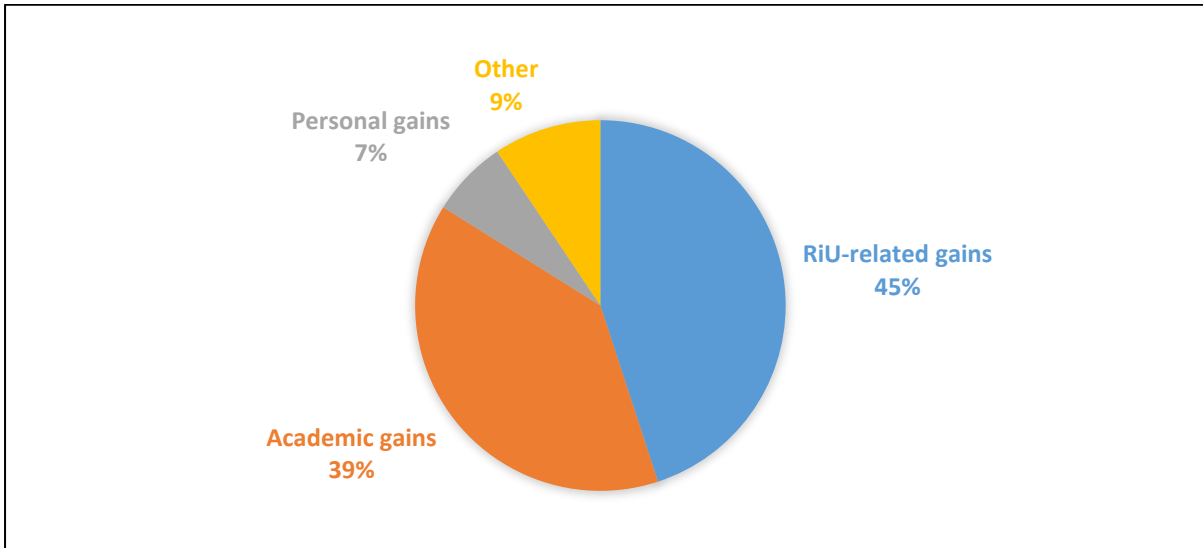
Figure 13: "What will need to have happened by the end of ASSAR, for the most satisfaction" (secondary categories; n=149 responses from 61 respondents)
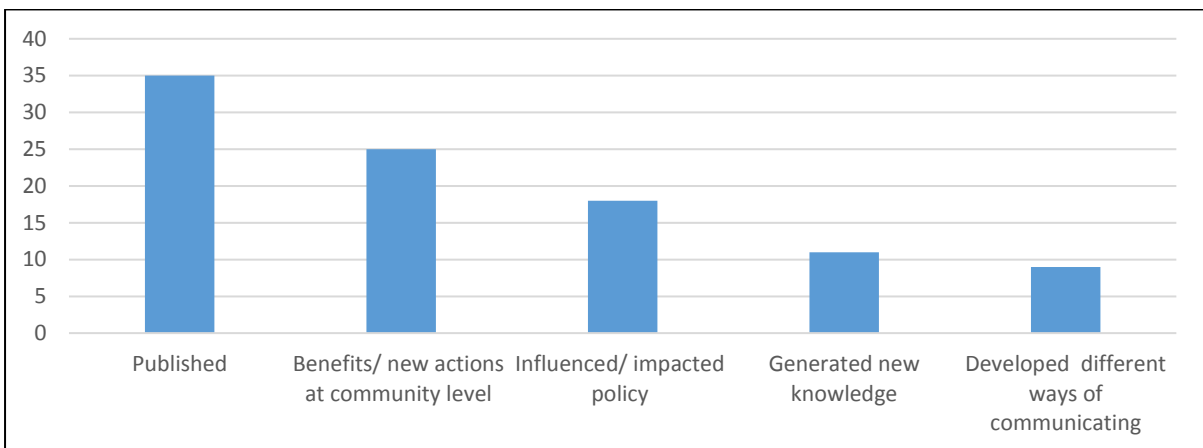

Figure 14: "What will need to have happened by the end of ASSAR, for the most satisfaction" (top five primary categories; n=98 responses from 53 respondents)

Box 3: Quotes that talk to what ASSAR members would like to see happen by the end of the project to feel motivated and fulfilled (including in the "other" category)

"To get a chance to present the work I am involved in ASSAR in international workshops/conferences, to be able to publish at least two papers on the work we are doing on social differentiation and governance, get to know that ASSAR work has influenced decisions and actions in the communities we are working"
• "To have impacted policy at different scales,   • To have designed processes that will aid in bringing about a change in human behaviour,   • To have bridged gaps between society and science,   • To have influenced locals towards better adaptation."
"Clear work plan with realistic deadlines, more independence to do what I think is my job, clear reporting formats and better planning of activities."
"I will need to feel that personally I have done a good job and worked to the best of my ability and that some change and impact will be felt on the ground for the people we are trying to help in the lifetime of the project (even if small) and that there is potential for larger change in the longer term."
"Published 3-4 papers, created popular media products (newspaper articles, documentaries), and initiated further collaborations and efforts to carry on research in the landscape, seeing tangible impacts of ASSAR work on communities."
"For ASSAR partners to feel very strongly about the value of RiU and their commitment to always think about impact, inclusiveness, being representative in formulating and conducting research. Have likewise influenced DFID to be more inclusive, less technocratic in their approach to CCA and development. Have influenced some government and other stakeholders directly (whether in a very tangible way or less so). Having published some interesting work."
"A few publications, impacted lives of rainfed and forest dependent communities in Bhavani and Moyar and have learned the art of carrying out problem oriented and meaningful research instead of research driven by what needs to be published on or what will garner more citations."
• "To have published at least 3 academic papers, with colleagues or independently.   • To have established xxx as a centre of excellence in climate change research, in collaboration with India and international partners.   • To have impacted the pattern of urbanization in India by building capacity across many levels in the country - youth, early career researchers, practitioners, policy-makers.   • Have learned how to guide a team towards common goals."
"Finalised my PhD thesis, published two papers and established long term relationships with a few people on the team for future collaboration."
"To have learnt interesting sound research methods. To have published not only journal articles but also explored different ways of communicating research. To have given back something to the communities we have studied. And lastly It will be almost like a dream If by the end I can start with a longer term academic association with a senior researcher from within the consortium and pursue academic interests in the same theme through a PhD or something."

Conclusions and recommendations

As can be seen from the range of positive highlights and frustrating challenges experienced by the ASSAR survey respondents described above, it is clear that running large-scale transdisciplinary research collaborations is a process that, though full of promising experiences, is also fraught with difficulties. "*Even proponents of team science initiatives note that they are highly labor intensive; often conflict-prone; and require substantial preparation, practice, and trust among team members to ensure a modicum of success*" (Stokols *et al*. 2008 B, p.S96). The literature around the science of team science and transdisciplinary initiatives refers to the importance of collaboration-readiness factors, as a critical item of success.

> "*Collaborative research and training programs that span multiple organizations, geographic sites, scientific disciplines, and levels of analysis may require greater institutional and organizational investments in collaboration-readiness resources to ensure programmatic success than those that are less complex.*"
> (Stokols *et al*. 2008 A, p. S83)

Based on the results that have emerged from this survey, it is possible to provide preliminary recommendations around a range of issues that need to be kept in mind with regards to the setting up and running of collaborative research endeavours – to improve both their effectiveness and the satisfaction of those involved (**Table 5**).

Table 5: Issues to be considered when setting up and running a collaborative research initiative, with supporting quotes from the ASSAR survey

Recommendation	Supporting quote
Choice of partners is critical, as is the size of the consortium	"*Managing the badly thought-through and badly set-up relationship between the PMU and xxx has been one of the most challenging moments.*" "*Change of partners is also another challenge like in the case of East Africa now we are going to start working with University of Nairobi changing the previous one African Wildlife Foundation.*" "*Dealing with xxx - in the early years a lack of performance, and then when things were starting to come right, xxx's insolvency.*" "*I am still not sure if a consortium as large as ASSAR is just too big - perhaps something half the size might have hit the sweet spot in terms of advantages of consortium work versus advantages of being small and nimble and manageable.*"
Importance of setting up a shared approach at the outset and bringing everyone on board	"*The importance of ensuring a shared approach is agreed as soon as possible after a consortium grant is landed - not something that can be taken for granted as emerging from the (often frantic) process of proposal development.*" "*It took me sometimes to understand the research context and how different components are linked together.*" "*ASSAR is a good project but I feel a lot of the activities are not well defined and one has to figure it out as you go along and this is frustrating working with 3 team leaders who all have a different idea on how this could be done.*"

Recommendation	Supporting quote
Investing in relationships and building and maintaining trust is essential	*"Working with the xxx team. Reflecting on the ASSAR team and the challenges in coherence, there is not a natural energy that brings people together in this team so rather it feels that people need to be pushed together."* *"Lack of a stronger Inter-Consortium partnership."* *"Strong partnerships and trust have been slow to develop due to the lack of time spent together. Google Hangout and emails take much longer to develop trust than handshakes and hugs."*
Dealing with power issues & politics	*"Sometimes, the tendency of disciplinary bias and dominance of certain research lens/approach than others, which is a common challenge in any interdisciplinary team."* *"Too much time spent in conveying ideas and convincing scientists and partners having different subject backgrounds; sometimes opportunities are skewed in favour of lead partners (maybe due to nature of the contracts and funds availability)."* *"As with all things involving human interactions politics does come into play, attempting to balance egos and expectations to come out with useful end products has sometimes been a challenge."* *"ASSAR male-dominated at levels of influence."*
Importance of good leadership	*"From an organisational point of view I've learnt how important leadership is to the success of a consortium-style project. Through their actions leaders either inspire or demotivate staff members, and either promote or hinder effective working environments. Their actions, therefore, have a direct bearing on the project's overall productivity and success."* *"On the collaboration, the two week short course at UEA really helped. Without it we may not have been able to write a collaborative paper, with inputs from five people. However, it was also important for one person to take the initiative and push the process along."* *"Moving from the RDS phase to the RRP- It was quite difficult to get a common understanding on from where we start the RRP. Same with the TSP- Basically there was an agreement that all ASSAR regions will implement the TSP, but over time, the decision was made by each region to go for TSP or not..."*
Not forgetting the importance of full-time people (vs. part-time)	*"The enormous transaction costs - time, travel, interpersonal - involved in such a large project. My learning has been: (i) make sure you have the resources for these transaction costs; (ii) the importance of full time people rather than small bits of many people, because of the delays that happen when many people are needed on a task, but they are all working small bits of time not at the same time."* *"Too much to digest and act on, especially considering the amount of time allocated to the project - 4 days a month."*

Recommendation	Supporting quote
Dealing with different working styles & cultures	*"Staying focused when feeling as though some meetings are very dragged out and inefficient (and the need to reflect on whether this is in fact just a feature of different 'cultural' styles)."* *"All members of the consortium work in different ways (e.g. work culture, organisation structure). It is a challenging yet useful experience."* *"Delays in delivery from key researchers on manuscripts and differing ideas of productivity."*
Overcoming challenges to work collaboratively	*"Trying to get people to comment on/add to the draft concept note for the synthesis paper; and trying to get people to respond to a doodle poll to fix a date for a google hangout to discuss the draft synthesis paper, and seek firm commitments."* *"Getting team members to contribute when most needed."*
Avoiding "feelings of isolation" & maintaining connection	*"Being invited to the annual meeting allowed me to put faces to names, something that has very much helped in working with a wide range of colleagues. Before this experience it was easy to feel left out of discussions."* *"I haven't got much responsibility or pressure. But it has been challenging trying to stay "involved" with the project when writing up my thesis. When I was conducting my research I felt that I was contributing to the ASSAR project in some small way. However, as time has passed, I don't know if my research will be valuable to the project and I don't know if the ASSAR consortium would even find it interesting."*
Maintaining motivation	*"Getting the right talent and keep them inspired through the research process."* *"Keeping everyone on board and engaged and signed up to the direction of travel that ASSAR is pursuing; the length of time it takes to move forward can sometimes be problematic."*
Avoiding endless demands and feelings of overwhelm	*"Working in an environment that often feels negative, endlessly demanding and unsupportive."* *"I don't think there are particular moments as such that are challenging. Rather, and I think that this is because of the role I play at xxx, it's the everyday communication and grind between partners that takes its toll on me."* *"Difficulties in communication and ensuring that the right information reaches the right people at the right time without overburdening any one individual."*
Dealing with tension around multiple types of aspirations (incl. re time)	*"The other challenging task is to switch between multiple and often different tasks (e.g. working on a video vs writing a paper)."* *"Not being able to strike a balance between work expectations and other non-work interests."* *"Sometimes the competing priorities of the individual members pull in different directions that makes agreeing on a way forward difficult."* *"Not being able to make things happen because of others. Having way too much on my plate (so much time on organising and meeting etc.) and not being able to focus on strategic aspects and important deliverables such as writing papers (also important for career progression)."* *"Each unit trying to push for implementation of views and suggestions."*

Recommendation	Supporting quote
Dealing with tension between research & RiU	*"Research process are going very slow and we need to keep stakeholders engaged without concrete activities on the field."* *"Working with ASSAR is good, but with my position as RiU responsible person, when the research findings are delayed due to some reason our work is going to be highly affected. So, I am looking forward to get some results from the researchers to be used for the RiU activities."*
Dealing with tension between research and project management	*"Making time for writing! I really feel there should be more time allotted for writeshops and special budgets for them (can be within our sites and not international) which cannot be used for anything else."* *"I was part of too many working groups in the first year or so, which took up a lot of time. Again, made focus difficult, especially finding time and energy for the research side (which is a pity as I am a researcher, not a programme manager type)."*
Dealing with tension between student interests vs. project requirements	*"Having to strike a balance between PhD work and ASSAR requirements."* *"I think It could be "how to align my research questions with ASSAR research questions" so that I do what I am passionate for while answering ASSAR questions."* *"Project activities overlapping with academic activities."* *"Attending to ASSAR responses (meetings, workshops, meeting ASSAR's research interest (objectives), etc.) coupled with what I initially wanted to do. E.g., I initially did not involve issues of social differentiation in my work. But to fulfil ASSAR's interest, I had to bring it in to the research I conducted."* *"Trying to merge the contributions from these researchers and those from my xxx supervisors, who are not involved in the ASSAR project was a difficult period in my work."*
Dealing with tensions between institutional and project requirements	*"Matching consortium expectations with institutional expectations (aspirations) and being able to do justice to both."*
Being innovative while working together	*"Coming to consensus on methods (we actually still haven't done that!). I feel the consortia model doesn't allow for methodological innovation. We tend to fall back on the lowest common denominator - e.g. household surveys."*
Making everyone feel valued	*"Acknowledging every effort a team member bring on the table is very crucial for collaboration. I would say ASSAR consortium should continue to improve on communications and putting value on all input even if it comes from research assistants."*

While the above table concentrates on providing pointers about issues to be kept in mind when setting up (e.g. choosing appropriate partners and getting onto the same page as early as possible) and implementing (e.g. keeping people motivated, making them feel valued) a project, each of these points would need further fleshing out, with provision of recommendations around *how* to do this. A second ASSAR survey will be run towards the end of the project, asking similar questions so that the responses can be compared to this one and issues relating to the research synthesis phase of the

project (which is taking place in the final year) can be captured and understood. More definitive recommendations will be provided then.

This report closes with a few final quotes which once again point to the wealth of lessons that ASSAR partners have harvested during the first half of the project, and which point to the large transaction costs involved, and yet the worth of doing so, if done well!

"We're under capacitated and over committed/expected. There are high expectations and not enough capacity when things take so long and so much is needed. Working in consortia is very difficult - requires lots of time - for relationship building, keeping everyone in the loop, consulting, building capacity (getting everyone on the same pages) etc. You have to spend a lot of time doing things that are not a priority for your career - or not recognised by your institution."

"I think the most essential ingredient for working across very different institutions is trust and transparency. Trust is something that has to be built over a period of time but for it to happen transparency is essential. There should also be a strong and clear leadership for this model to work. I think the desired impact of such large undertaking must clearly be outlined at the start of the project and everything has to follow that."

"Yes, it's been challenging on all fronts, dealing with the diversity of minds and concepts, but in a good way. Surviving this means anything else can be survived."

References

Braun, V. and V. Clarke. 2006. Using thematic analysis in psychology. Qualitative Research in Psychology. 3: 77-101.

de Wet, J. and Z. Erasmus. 2005. Towards Rigour in Qualitative Analysis. Qualitative Research Journal. 5(1): 27-40.

Gonsalves, A. 2014. Lessons learned on consortium-based research in climate change and development. CARIAA Working Paper no. 1. International Development Research Centre, Ottawa, Canada and UK Aid, London, United Kingdom. Available online at: www.idrc.ca/cariaa

Stokols, D., Hall, K.L., Taylor, B.K. and R.P. Moser. 2008 A. The science of team science: overview of the field and introduction to the supplement. Am J Prev Med. 35(2S): S77–S89.

Stokols, D., Misra, S., Moser, R.P., Hall, K.L. and B.K. Taylor. 2008 B. The ecology of team science – Understanding contextual influences on transdisciplinary collaboration. Am J Prev Med. 35(2S): S96–S115.

References

Appendices

APPENDIX A

The survey: What have we learned in ASSAR so far?

<u>Cover message in the survey</u>

This is a short survey to take stock of what we have learned in ASSAR halfway through the project. We are interested in assessing both the learnings related to content (e.g. methods used to explore social differentiation) and to process (e.g. how we work as a consortium).

By taking stock now and repeating this exercise three-quarters of the way through the project and at its end, we hope to be able to:

- draw some conclusions with respect to what ASSAR consortium members have learned through their engagement in the project;

- assess consortium members' experiences (positive and negative) with respect to working in a consortium versus "business as usual";

- use the answers to modify the way we work, so that we can better meet your needs and work more effectively together.

The survey has been intentionally cut down from its original set of questions so that it would not take more than 20' to answer (probably less). This is not an evaluation, so feel free to be honest! We'd appreciate knowing who is saying what, but you are free to answer anonymously if you prefer.

Finally, we'd like to know if you'd be prepared to be part of a follow-up interview post-survey (sometime in October/ November), so that we may augment the results with more qualitative information and further insights. You can let us know in the survey itself.

Thanks a lot for your time! Lucia

The survey

<u>Section A: Who you are</u>
1. Name
2. Primary category you fall under in ASSAR (you can check more than one option)*
    a. Early career researcher / student / research assistant
    b. Senior researcher
    c. Practitioner (RiU as primary focus)
    d. PSC member
    e. Other

<u>Section B: Key learnings</u>

3. What have been the most valuable/ important things you have learned through your engagement in ASSAR? (this could be anything) Why are these important learnings for you?*
4. What type of interactions - activities, processes, meetings (including online), platforms, etc. - supported each of the learnings identified above?*

Section C: Your ASSAR experience

5. What have been your two highlights/most valuable experiences in ASSAR?*
6. What have been your two most challenging moments in ASSAR?*

Section D: Working in a consortium

7. How beneficial is it for you that ASSAR is a consortium?*
    a. 1 (No benefits to my work) to 5 (Extremely important)
8. What has been the most useful part of working in a consortium?*
9. What has been difficult about working in a consortium?*

Section E: Your motivation to be in ASSAR

10. How motivated and engaged do you feel in your ASSAR work?*
    a. 1 (Not at all) to 5 (Highly)
11. What will need to have happened by the end of ASSAR, for you to feel the most satisfied and fulfilled? E.g. to have published x, have impacted y, have learned z*

Section F: Follow-up

12. Anything else you'd like to say in relation to learning and/or your experience in ASSAR?
13. Would you be willing to be interviewed so that we may follow-up on some issues? Lucia may contact you anyway, though :)

*Compulsory questions

Appendix B

Cover email sent on 20th September 2016 to consortia-assar-group@cariaa.net

Dear everyone,

We are now just over halfway through the ASSAR project and in light of this, it's a good moment to reflect on what we have learned so far and how we are working as a consortium.

To do so, I have prepared <u>a survey</u> that I would like **everyone** in the project to complete and that should not take more than 20' of your time, <u>by 30th September</u>.

This will help us both see the value of the project and consortium model, and modify our course based on what we hear. In addition, I am hoping to be able to write up the results that emerge, by repeating this survey in one and two years' time, so that we can see change over time.

As some of you know, this same topic – learning – is also the focus of our next Spotlight, and so we are hoping to be able to use some quotes from the survey to enrich the Spotlight. We will ask for your permission if that is the case.

As mentioned in the survey, I may also follow up with some of you who volunteer, with a brief interview.

Thanks very much in advance and be ready for many reminders, until I get a "good" response rate ☺

Lucia