

Strategies, practices, and challenges for interagency co-authorship in an international science and development program

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1. Motivation

Scientists and development practitioners often come together to address environmental and development issues. While individuals and institutions work toward common objectives, they also face challenges when measured by disparate institutional and professional development indicators, particularly those surrounding knowledge dissemination. Nevertheless, NASA and USAID both require public access to results of research funded by their agencies (NASA 2018, USAID 2016). Guidelines exist on research ethics (e.g., NASA 2017, UAH 2018) and authorship on scholarly publications (e.g., ICMJE 2018, Yale 2018).

2. Background

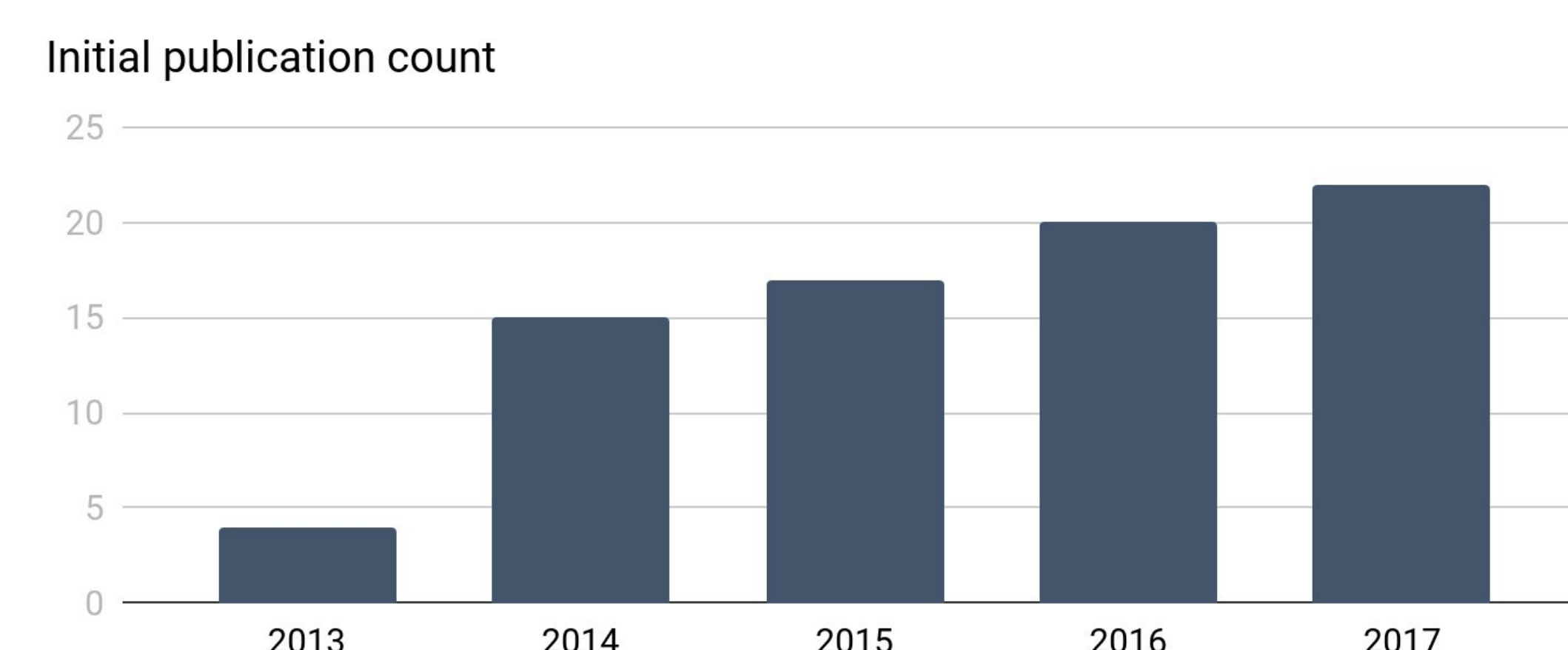
SERVIR is a joint NASA-USAID initiative that is implemented by international organizations that host SERVIR Hubs in 4 active regions. In addition, US-based researchers form a SERVIR Applied Sciences Team (AST), which integrates deeply with Hubs in the co-design and delivery of Earth observations-based solutions. A Science Coordination Office (SCO) provides scientific backstopping to Hubs and promotes scientific sharing across regions. A SERVIR Support Team (SST) focuses on communication of program results and impacts, facilitates reliable access to online data and tools, and provides technical assistance to hubs and in-region partners.

3. Goals

We discuss specific opportunities and challenges in producing and co-authoring peer-reviewed publications, as identified through the SERVIR program. Ultimately, this work aims to

- 1) open a dialogue and improve the management of expectations on publications across a diverse, global network,
- 2) provide perspective for the importance of working together toward common goals, even if institutional performance metrics diverge, and
- 3) lead toward the identification of and removal of barriers for international scientists to present the findings of their research, seek and obtain funding, and collaborate with partners.

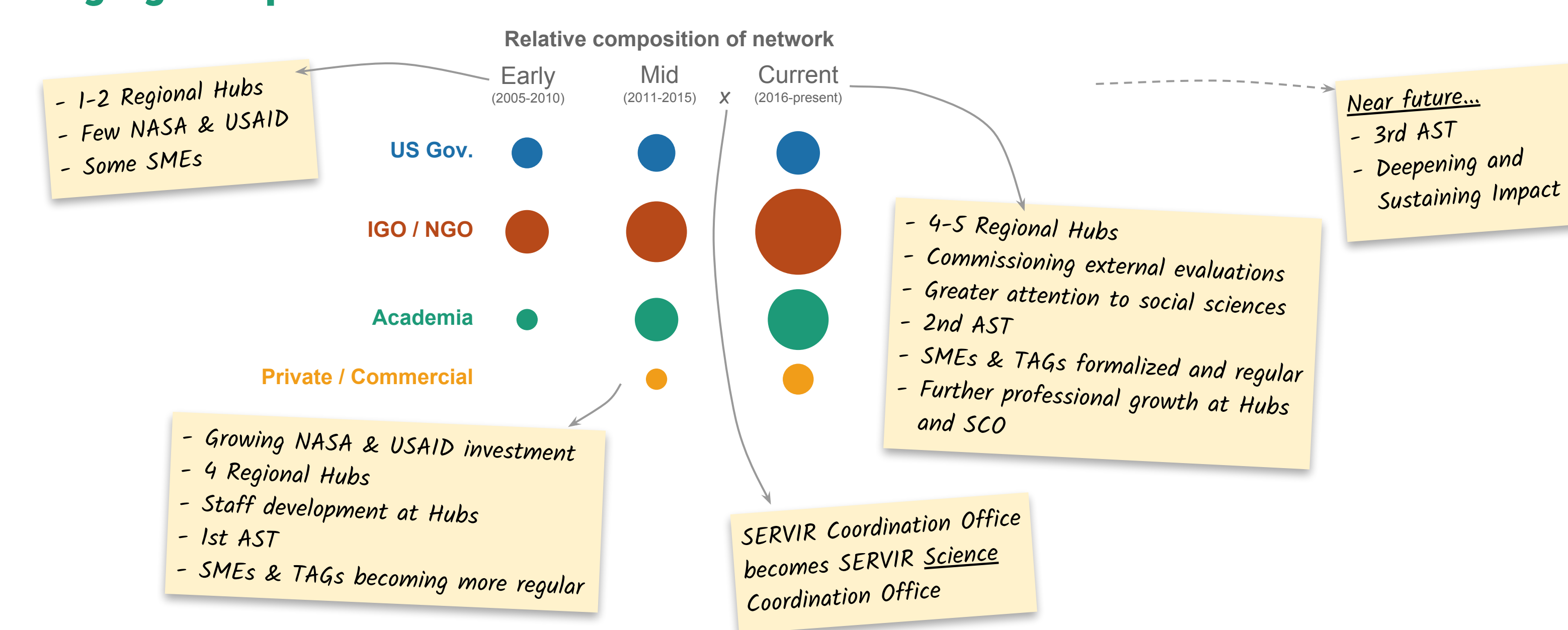
Recent peer-reviewed publications over time



SERVIR's reach



Changing Composition of SERVIR Network



4. Approach

These collaborations generate a wealth of knowledge, demanding proper documentation, dissemination and communication. Communicating results is just as important in the scientific method as it is in the international development process; however, interpretations and approaches vary widely. Here we present some of the challenges and opportunities considering input from diverse institutions in the SERVIR network.

5. Challenges

Institutional / Cultural

- Time management - professionals outside the academic sector may not be able to budget time to identify a research question, select a journal, present research, respond to the peer-review process, etc.
- Honorary authorship is interpreted differently
- Individualism vs. Collectivism (Hofstede et al. 2010) and # of co-authors
- Performance metrics value peer-review publication differently

Logistical

- "Herding cats" across time zones
- The peer-review process can be intimidating and overwhelming.

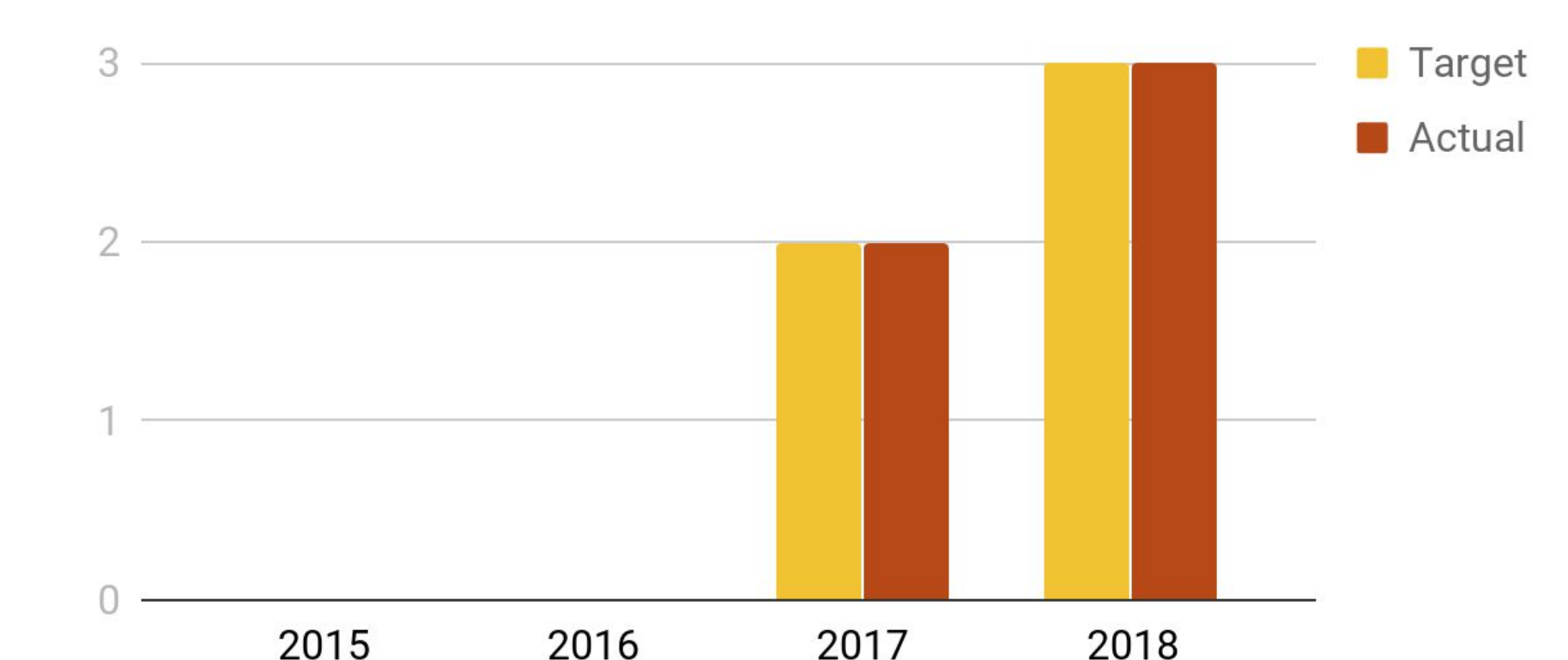
6. Opportunities

- ★ Important mentorship and exchanges on skills, expectations, and ethics take place during the co-authorship process.
- ★ Co-authorship represents a unique opportunity to meet both:
 - academic institution goals to publish, and
 - development goals to build local capacity.
- ★ There is a demand network-wide for virtual mini-exchanges on publishing in peer-reviewed journals.
- ★ Development community sees peer-reviewed publications as a metric for development investments.
- ★ Co-development sets up projects for lasting impact because users own more of the service

7. Evidence of progress

- Some SERVIR Hubs have added peer-reviewed publications to their list of official indicators as measured by USAID.
- Many applied scientists have been able to communicate the impact of their work in different formats (other than papers).
- SERVIR AST provided a learning lab to Hub staff on peer-reviewed publishing.

SERVIR-Mekong indicators for peer-reviewed publications



Acknowledgements

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