LASER PULSE

Long-term Assistance and SErvices for Research (LASER)
Partners for University-Led Solutions Engine (PULSE)

Year 3 Annual Report (2021)
Higher Education Solutions Network (HESN) 2.0 Programs

LASER PULSE

Delivering Practical, Research-Driven Solutions to Global Development Challenges

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KEY ACRONYMS

AOR:	Agreement Officer's Representative
AM:	Activity Manager
BEO:	Bureau Environmental Officer
CRS:	Catholic Relief Services
CSFA:	Comprehensive Success Factors Analysis
DDL:	Development Data Library
DEC:	Development Experience Clearinghouse
ERT:	Embedded Research Translation
FGD:	Focus Group Discussion
FY:	Fiscal Year
GRCD:	Global Research Challenges for Development
HEI:	Higher Education Institution
IDP:	Inclusive Development Partners
INGO:	International NGO
IR:	Intermediate Result
IU:	Indiana University
KM:	Knowledge Management
LASER PULSE:	Long-term Assistance and SErvices for Research: Partners for University-Led Solutions Engine (LASER in most instances in this report)
LoP:	Life of Program
M/B/IO:	Mission/Bureau/Independent Office
MEL:	Monitoring, Evaluation, and Learning
MSI:	Minority Serving Institution
NGO:	Non-Governmental Organization
PI:	Principal Investigator
PSE:	Private Sector Engagement
RAN:	ResilientAfrica Network
RF:	Results Framework
R4D:	Research for Development
RFA:	Request for Applications
SLA:	System-Level Analysis
SRLA:	Self Reliance Learning Agenda
Sub-IR:	Sub-Intermediate Result
TOC:	Theory of Change
UPC:	USAID Partner Countries
UND:	University of Notre Dame
USAID:	United States Agency for International Development

1. BACKGROUND

The Long-term Assistance and SErvices for Research (LASER) Partners for University-Led Solutions Engine (PULSE) is a five-year, $70-million program funded through USAID's Innovation, Technology, and Research Hub in the Bureau for Development, Democracy, and Innovation, that delivers research-driven solutions to field-sourced development challenges in USAID partner countries.

A consortium, led by Purdue University, with core partners Catholic Relief Services (CRS), Indiana University (IU), Makerere University, and the University of Notre Dame (UND), implements the LASER PULSE program through a growing network of more than 2,500 researchers and development practitioners in 61 countries. LASER PULSE currently manages 31 research awards in 15 countries.

The Innovation, Technology, and Research Hub leads USAID in original experimentation, using data and evidence in decision-making, harnessing scientific and technological advances, open innovation, and digital technology to transform development.

2. MAJOR MILESTONES/ACHIEVEMENTS

2a. Top achievements for LASER in FY 2021

Observed impact outcomes: In FY3, LASER conducted exit interviews with the research teams of the completed projects (the Tusome and SRLA buy-in activities) and the USAID technical Activity Managers (AMs). During the interviews, we observed a change in the mindset of the researchers and practitioners involved in the projects. A researcher we interviewed was very appreciative of LASER's collaborative approach and mentioned that "It [ERT] is a new approach to research methodology to co-create research questions and methods together in interdisciplinary teams with practitioners." Another researcher used the experience of LASER's approach to reflect on their teaching curriculum, saying they would include a section on "constructing a team and how to come together in an interdisciplinary way" in their curriculum. The researchers, from the Self-Reliance Learning Agenda (SRLA) project, also mentioned that approaching research using ERT helped them to "deliver effective training, design the model of service delivery, and start to plan for scalability to ensure as many producers, traders, retailers, and community based organizations can benefit from the interconnectedness of the [block-chain technology] application." Similar sentiment was echoed by the practitioners, where they credited the success of the project to the involvement of the stakeholders from the beginning through conceptualization, design, and implementation. One practitioner mentioned that such engagement of all stakeholders made the participants feel a "sense of ownership which was a boost to all".

In two other instances, the impact was noted in USAID's endorsement of recommendations and knowledge products. During the South Sudan Psychosocial Impact Evaluation, USAID's Activity Manager mentioned that USAID will "continue to integrate psychosocial interventions within their education projects". This was followed by similar commitments from South Sudan's Ministry of Education. Impact was also reflected in the USAID-funded program 'Supporting Holistic and Actionable Research in Education'- SHARE's decision to use LASER's ERT approach. USAID said it is "fantastic to build on the wealth of knowledge from LASER PULSE for SHARE." Further details to the quotes and context can be seen in our Program and Policy Changes document

LASER Gender Training: USAID's Feed the Future Innovation Lab for Food Safety at Purdue continues to require LASER's Gender training as a mandatory part of their RFAs. This speaks to the quality of our training material. We have discussed this further in later sections.

The Self-Reliance Learning Agenda (SRLA) project, commissioned by the USAID Office of Learning, Evaluation, and Research (LER) and the Bureau of Policy, Planning, and Learning (PPL), concluded in this reporting period. The project focused on measuring local-level capacity and commitment to self-reliance. The researchers found no standard indicators, and determined it was necessary to develop context-specific indicators. Through extensive co-creation, the team developed an annotated literature and measurement matrix, and identified points for USAID to consider when determining what and how to measure changes to capacity and commitment in various technical areas and at different phases of scale. Then the team developed a step-by-step participatory process to identify context-specific commitment to self-reliance indicators. Even though there is a shift away from the term "journey to self-reliance (J2SR)", USAID Activity Managers (AMs) reported that the J2SR matrix is relevant and valuable because it defines local capacity development. The USAID AMs reported that they were pleased with the deliverables and that "the value we see in working with a mechanism like LASER PULSE is we want to think about analytic rigor and that lives in academia". The project produced six main deliverables including a full report and guidance manuals that represent translated research outputs. The links to the deliverables were shared in the bi-annual report.

Speed, scaling, and quality of LASER award process. To speed up the timeline for making awards and enable RFAs to be issued without a prior in-country R4D conference, the RFA process for Ethiopia and Vietnam was changed from a two-step review of a concept note and a full application to a one-step review of the full application alone. This reduced the time from RFA issuance to funding recommendation to USAID from eight months to four months. Additionally, to ensure the quality of applications that LASER recommended to USAID, we made multiple changes in the RFA process. Two main changes included: creation of sub-criterion "Attention to local context and leveraging local capacity" under the Research Merit criterion to account for strengths of in-country HEIs; and implementation of a co-creation phase allowing LASER to work closely with final-stage applicants to help improve their applications based on reviewer and LASER's feedback.

Private Sector Engagement (PSE) (Phase 1): LASER completed PSE phase 1 buy-in work in September of 2021. The buy-in implemented a private sector engagement evidence and learning strategy that will enable USAID staff to implement best PSE practices, based on learnings and evidence. The research addressed several priority questions, posed by USAID as part of their PSE Evidence and Learning Strategy and produced four key products to be used by USAID that include – two interactive website tools - 'PSE Harmonizing Indicator Tool' with a back-end repository of data/information that highlights the existing alignment between USAID objectives and private sector business objectives, and an 'Evidence Gap Map' (EGM) to support identification of existing literature in PSE and highlight absolute and synthesis gaps. The research products also included a Perspective Study literature review of over 2,000 papers, covering both business and social science literature on public-private partnerships along with a USAID PSE Process Analysis Study that elaborates on specific bottlenecks, root causes, lessons learned, and recommendations for the different phases of the PSE Lifecycle. The Perspective Study and USAID PSE Process Analysis study are in review stages.

2b. Top two cumulative LASER achievements since project start

Embedded Research Translation (ERT) model: One significant cumulative LASER achievement is the creation and operationalization of the Embedded Research Translation (ERT) model. LASER initially articulated it as the 'Research Translation Value Chain', but later recognized the need to emphasize the integrated, iterative, and collaborative nature of research translation in its funded projects and built this approach into its current form as ERT. We further developed the four key components of ERT: partnership, process, product, and dissemination via an overview of the ERT model as well as training on Introduction to Embedded Research Translation. In FY2 and FY3, LASER began providing

direct support to funded projects (both RFA awardees and USAID buy-ins) through co-designing each project's ERT strategy with the project team, setting up one-on-one meetings with each project team at project launch, creating an ERT project tracker to highlight the ERT activities in each project, circulating a biannual needs assessment survey to identify any ERT support needs, developing support tools and guidance for implementing ERT, and carrying out exit interviews with team members, including USAID in buy-ins. So far 686 members enrolled in ERT training and 595 passed. Further background on how LASER PULSE has applied USAID's CLA (Collaborate. Learn. Adapt) approach in developing the ERT model is published in a case study on the USAID Learning Lab website.

LASER's network is unique in its focus and functionality. Its searchable platform provides members a unique opportunity to connect with thousands of HEI researchers and practitioners worldwide. It is also a source of online training, courses, newsletters, blogs, and funding opportunities that are open to all its registered members. In comparison, other HEI researcher networks, such as ResearchGate, are not development research focused, and yet others such as Life Science Network are focused on one specific technical sector. Over the years, LASER has built a large network of 2500+ members from 61 countries, and while our members are active in utilizing LASER content, there is very little collaboration among the members themselves. To become an interconnected platform, LASER is taking a two-phase approach: in FY3 we incorporated Circle functionality in the online platform to create dedicated space for the members to share best practices, thoughts, articles, resources, opportunities etc. In addition, we created closed Circle groups for project research teams in specific countries, so that they can collaborate, share research outputs, updates, challenges, and mitigation strategies among themselves. This was in response to the feedback provided by the Ethiopia research teams during the Inaugural meeting in August 2021. Secondly, in FY4 we will conduct a network engagement series covering topics that were highlighted by the network members via a survey. These topics include: ERT Overview, how to Engage with the LASER PULSE Network, Demo and workshop on new tools and learning modules on nudging, dissemination planning, pathways to policy change, and storytelling, best Practices in Partnership, Process, Product, and Dissemination, gap analyses for Somalia and South Sudan, barriers to Researcher-Practitioner Collaboration, applying for/managing USAID and/or federal grants and Guiding questions for research translation.

3. SUMMARY OF KEY ACTIVITIES FY 2021

This section is organized according to the objectives and Intermediate Results (IR) of LASER's Results Framework (RF).

3a. IR 1: Increase HEI delivery of collaborative and effective development-focused research

- LASER completed the gap analysis on HEI's institution research infrastructure in Ethiopia and summarized its findings in the report "Understanding Ethiopia's Higher Education Institution Research Infrastructure, Research Translation, and Sustainability Mechanisms ." Further data collection was extended to Somalia and South Sudan for a comprehensive gap analysis report which will be submitted in the Q1 of FY4. A report on the gap analysis conducted across Sub-Saharan Africa, Ethiopia, and Vietnam was also completed and is in the final stages of internal review.

- In FY2, LASER published a study on the 'Assessment of the research context and research capacity in HEIs in Africa.' In FY3, the findings of the study were used in developing two online

courses on 'Research Leadership' and 'Research project management'. We are in the process of uploading the course on our website.

- LASER identified the needs of the network members and project teams via assessment surveys and developed guidance materials to actively promote useful and relevant translation research products and their dissemination. The topics include Adapted Ladder of Abstraction Template for Storytelling, Effective Storytelling Supplemental Narrative, Harnessing the Power of Nudge in Research Translation, and Impacting Policy Change Brief Guide

- LASER hosted a virtual Private Sector Engagement (PSE) event to make private sector entities aware of LASER's work and its research translation methodology. It was organized with a goal to explore potential opportunities for engagement with the Private sector.

- LASER completed the migration of its website from Stemedhub to laserpulse.org. The new website enables easy registration, simplified access to training and other LASER-created online tools, enhanced search for collaboration and matchmaking.

3b. IR 2: Increase HEI synthesis, exchange, and translation of research results into usable development products and practices

- LASER co-created and obligated funds for a new buy-in in FY3 by the Bureau for Humanitarian Assistance (BHA), Private Sector Engagement 2 Evidence Gap Map Addendum. Additionally, LASER also worked closely with the Operating Units for the co-creation of the 'Armed Conflict and Violence Prevention Learning Agenda' (CVP-LAIT), 'Multi-year Emergency Program Impact Evaluation in South Sudan', and 'Tanzania Early Grade Social and Emotional Skills and Phonics-Based Literacy Learning Agenda' buy-ins. 'Cultural Restoration Program for Northern Iraq' and 'Evaluation of Somalia's Accelerated Quality Learning Program' buy-ins also co-created their phase 2 during FY3.

- LASER prepared and released RFAs for Vietnam, Ethiopia, and Global Research Challenges for Development (GRCD), and awarded five subawards for Vietnam, four for Ethiopia, and proposed three for GRCD. The project descriptions can be found on the 'Research' tab on our website (while Vietnam and Ethiopia project pages are up, we are working on GRCD)

- LASER supported the democratization of the CSFA and the creation of System-Level Analysis (SLA) training materials to assist with the GRCD RFA process. It comprises a 40-minute video, various activity worksheets, and a guided-step tutorial.

- LASER defined the learning objectives for the Problem to Context (P-C) training, drawing on Innovation Science theory and translation objectives. The modules cover fundamental concepts underlying P-C maps, value of the P-C maps through selected case studies, and a step-by-step process to construct specific P-C maps for a challenge.

- LASER conducted a rapid systematic review of literature on research translation over archived academic journal publications and found that there are no consistent terminologies and standard processes in research translation (report embargoed for the time being). A key conclusion is that the existing translation models such as technology transfer and integrated knowledge translation are sector specific (agriculture and global health, respectively). A second conclusion was that LASER's proposed ERT model is unique compared to other translation models in terms of its defined pillars (partnership, process, product, and dissemination), as well as associated supporting training materials and tools.

3c. IR 3: Increase dissemination of translated research results for evidence-based solutions

- LASER developed a communication strategies report based on a synthesis of primary research findings across its program from 13 sources (including KIIs and focus groups in Colombia, Vietnam, and Ethiopia; surveys; literature reviews); a situation analysis of existing researcher-practitioner collaborations; a SWOT analysis for LASER, including its goals, objectives and key messages for researchers and practitioners; and an implementation plan.

- The *LASER PULSE Newsletter* was launched in December 2019 and is released every quarter. On average, the newsletter has a 30 percent open rate (745 of 2,465 and 875 of 2,568 opened for the December 2020 and March 2021 newsletters respectively). The June Newsletter had 41percent open rate (1049 of 2581). This 30 or above percent open rate is very good compared to an average of 17.57 percent email open rate (data source, April 2021). All the newsletter articles are available on our website under blog.

3d. Sub IR 4: Enhance systems and structures for gender and minority considerations in the HEI network that enable women and minorities to conduct research

As in past years, in FY3, LASER's online gender training was required for all wishing to apply for LASER RFA's in FY 2021. LASER incorporates, in addition to research translation, gender considerations into the co-creation process to help research teams strengthen their applications. To date, LASER has 1,030 members enrolled for the Gender training of which 917 have passed (89 percent pass rate).

4. ENGAGEMENT WITH PARTNERS FY 2021

4a. LASER partnerships with institutions of higher education

Through the Request For Applications Awards and new buy-ins, new partnerships have been developed as well as continued throughout the award management cycle. Some of the activities cultivating these new partnerships include the East Africa Awards for ongoing partnerships. The Colombia, Vietnam, Ethiopia, and GRCD RFA Award rounds contributed towards the engagement of the newest partnerships, as well as the most recent multi-institutional buy-in for the Tanzania Early Grade Social and Emotional Skills and Phonics-Based Literacy Learning Agenda. All ongoing, new and potential partnerships can be found here.

4b. New and ongoing partnerships for human and institutional capacity building

- Through the Request For Applications (RFA) Awards and new buy-ins, LASER has developed new partnerships and strengthened relationships between U.S. and partner country HEIs. We have continued capacity building with the previously awarded projects in East Africa by helping research teams complete their annual workplans and data management plans.

- The LASER Research Management team held webinars for potential RFA applicants in relation to the Colombia, Vietnam, Ethiopia and GRCD RFAs. The team held co-creation meetings with applicants for research projects recommended for funding by their respective consensus panels. The co-creation meetings utilized support from LASER teams (Research Management, Embedded Research Translation, Gender, and the Business Office) to provide feedback to strengthen applications before submission to USAID. Applicants also received assistance with Initial Environmental Examination forms. Communications with these potential awardees included frequent email exchanges with LASER research project managers. The team also held

an inaugural meeting to launch the selected projects, ensuring the necessary guidance was provided for the applicants to be successful.

- All U.S. HEIs and developing country partnerships and financial support can be found here.

5. MONITORING, EVALUATION, AND LEARNING (MEL)

5a. Progress against indicators

Table 1. Performance Indicator Table for LASER PULSE Year 3 Annual Reporting   *

Key Result Area (Intermediate Result)	Indicator # & Code	Indicator Name	Life of Project		Year 1		Year 2		Year 3		Data Collection Method	Comments
			Target	Achieved to Date	Target	Achieved	Target	Achieved	Target	Achieved		
Objective: Enhanced discovery and application in policy and practice of university-sourced, evidence-based solutions to development challenges	(1) L3.S.2_in1	# of program or policy changes made by public sector, private sector, or other dev. actors influenced by Lab-funded research results or related scientific activities	20	7	2	0	3	4	3	3	PPC Reporting Form*; Outcome Mapping Journal	LASER Core (1) SRLA buy-in (2)
IR1: Increased HEI delivery of collaborative and effective development-focused research	(2) L3.S.1_in2	# of research products produced with LASER-supported funding	92	56	2	5	15	22	20	29	BIDRF** RADRF*** Deliverables Tracker	LASER buy-ins (18); LASER awards (8) LASER core (3) Lead author: 25 F, 4 M
Sub-IR 1.1: Increased capacity of LMIC HEIs to obtain, administer, and conduct effective applied research programs	(3) Custom LP.1	# of tertiary-level educators & faculty who complete pro. dev. activities w/ USG assist. [gender d/a]	1,300	1,191	80	54	400	987	440	150	Online register	49 F, 93 M, 8 n/a Translation and gender online training modules

* Click on the table graphic, or the "Table 1" link above it, to access the full table

5b. Summary of progress toward life-of-program targets (cumulative)

LASER employs dashboard-style charts to assess the life-of-program (LoP) trajectory of selected performance indicators as compared against cumulative targets for each. This is done for 14 official LASER indicators in which targets can be graphed in cumulative percentage terms, against which the actual reported count values are displayed. Since not all indicators are conducive to being shown in this format (e.g. those that report percentage values), 5 official indicators (4, 4b, 5, 9, 11) are not graphed in this manner. Nevertheless, 4 of these exceeded their FY3 targets and the fifth one (LP-5) was 2 percent below its target, and all are on a positive trajectory heading into the out years of the Program.

Based upon indicator reporting, the overall performance of LASER at the end of FY3 is very good. Of the 14 indicators displayed in the graphs, 11 are either above the LoP cumulative targets and/or display a good trajectory. Most, if not all, are expected to continue to perform well through the end of the LASER Program. Indicators LP-2, LP-3, LP-6, and LP-10 look particularly strong and represent some key output and outcome indicators. Likewise, LP-7, LP-13, LP-15, and LP-17 are really outperforming current targets on the basis of unexpectedly large values reported for FY3). Previously, in the FY3 Bi-annual report, we reported LP-14 and LP-15 as "behind or concerning" with regard to their LoP trends. However, both are now displaying a good upward trend, with LP-15 significantly above its LoP target trajectory line, and LP-14 only slightly below its reference line. On the other hand, the trends for LP-8, LP-12 and LP-16 are concerning as they are below the LoP trajectories, and because all three underperformed in FY3 and had a significant drop-off from the FY2 reported values. The particular details with regard to the underachievement of these indicators

are discussed in the next section; the following bullet points, however, briefly touch upon potential actions to address this issue.

- For LP-8, LASER has many new website-based features that will be deployed in FY4 as part of a wider network engagement strategy. For example, the interactive sub-platform "Circle" has already been integrated into the LASER website, with the goal of fostering more interactive participation between Network members and LASER, and Network members themselves (peer-to-peer). In addition, LASER has initiated a new webinar series entitled "LASER Focused" that is intended to draw new viewers (and potential new members) via discussions on interesting topics within development. The LASER Communications Specialist believes that the pathway to increased membership is through the use/uptake of these value-added features by Network members, which will then induce their colleagues and associates to join based on the "buzz" generated.

- For LP-12, LASER has developed three new research translation training videos in FY3 (with plans to deploy at least 2 more in FY4) that we can track under this indicator. The addition of these new modules (and their general promotion as part of network engagement), combined with MSI RFA applicants taking the translation module, should provide the number required to meet the FY4 target. This is especially so if LASER is able to conduct any in-person R4D event, which was the original venue for translation training that LP-12 tracks.

- For L-16: LASER relies heavily on ITR/R for receiving new buy-in opportunities, which ultimately drives this indicator. Currently, LASER has one buy-in for FY4 and another potential opportunity in the pipeline; hopefully, other opportunities will present themselves to allow the Program to draw near to the FY4 target.

5c. Deviance from M&E targets FY 2021

Table 1 above consists of the 19 LASER PULSE indicators, listed in red text from 1-18, with Indicator 4 being repeated (as 4b) under a different Sub-IR. The table also includes four other standard indicators (9a, 9b, 10a, 10b) since, as the subscripts imply, they are related to LP-9 and LP-10. LASER reports on these four informally (i.e. there are no targets).

For FY3, 11 indicators exceeded their targets by 10 percent or more, 4 hit its target exactly or deviated by less than 10 percent , and 4 under-achieved by more than 10 percent. The following bullet points provide some context for the indicators that deviated by 10 percent or more:

- **Indicator 2** L3.S.1_in2 # of research products produced with LASER-supported funding

  + LASER exceeded the FY3 target for LP-2 by 45 percent; contributing to this is the MCSIE buy-in that works in three countries, and issues separate documents for each in addition to a combined one. Also, the South Sudan Psychosocial buy-in and the East Africa Water Security research award reported 3 and 4 datasets, respectively. When targets were developed for this indicator, LASER assumed that the buy-ins and research awards would generate, on average, one dataset per project. LASER is pleased to report a high rate of productivity for our managed projects.

- **Indicator 3** Custom LP.1 # of tertiary-level educators and faculty who complete professional development activities with USG assistance (e.g. R4D conferences and LASER's online training modules)

  – The under-achievement observed is quite unexpected since targets were adjusted upward in FY2, due to a large number of online training sessions completed (gender and research translation modules) and the assumption that such demand would be sustained. That did not happen, perhaps due to the fact that only one new RFA was issued in FY3 (since applicants

must complete these 2 modules to apply for an RFA) and/or the transition of the website to a new hosting platform. A key contributing factor was also that the planned in-person, post-RFA conferences did not take place due to COVID-19 response policies restricting travel and gathering.

- **Indicator 4** Custom LP.2 Percentage-point improvement on research readiness assessment score

  + LP-4 (and the related LP-4b) measure the scoring of researchers and development practitioners, respectively, that completed selected online training modules. Both of these indicators exceeded their FY3 targets by nearly 25 percent. These results are likely due to the quiz questions that cover the module's content being too easy to answer.

- **Indicator 7** L3.S.2.2_in1-num # of collaborative research initiatives resulting from engagement btw. researchers & dev./policy actors

  + LASER set the target levels for LP-7 based on an assumption of one development practitioner partner per award, but the data now shows that many of our awarded projects involve multiple stakeholders and thus have a broader reach than we originally anticipated. For example, the 5 Vietnam awards have a total of 14 development practitioner partners.

- **Indicator 8** L3.S.1.2_in3 # of institutions or affiliated individuals associated with CDR research networks

  – LASER experienced a substantial decline in Network membership enrollment in FY3, netting only 231 new members. Reasons for this may include the transition to a new platform for the website, as well as the fact that the GRCD RFA did not generate a significant response in terms of applications as previously RFAs appeared to do so. This is because past membership increases appear to correlate with previous RFA issuances, partly due to the fact that applicants must take online training modules, but also because an RFA announcement will generally draw more traffic to the website and hence more interest in LASER (leading to new members). The lack of in-person events also precluded the opportunity to encourage R4D conference participants from enrolling in the LASER Network.

- **Indicator 9** L3.S.1.1_in3 percent of research projects led by UPC or MSI HEIs / research institutions (includes LASER buy-ins)

  + After significant underperformance of this indicator in the first two years of the Program, LASER exceeded the FY3 target for LP-9 by 34 percent – i.e. 7 of the 11 new projects (1 buy-in, 10 research awards) initiated in FY3 are led by UPC researchers (4 Vietnamese, 2 Ethiopians, 1 Tanzanian).

- **Indicator 10** Custom LP.10 # of research products translated for use

  + LASER doubled the target for FY3, reporting 37 translated research products. Similar to LP-2, targets were projected based on the assumption that each research award would generate 2 translated research products (with buy-ins somewhat less). In FY3 alone, the MCSIE, PSE, and SRLA buy-ins each produced 5 translated research outputs. There is no way that LASER can *a priori* predict with any great degree of accuracy how many translation products a given project will end up generating; nevertheless, we are very pleased to see this target exceeded. Note that the targets for both FY4 and FY5 ramp up significantly from the current target level, so LASER anticipates better alignment in those years – although given the current rate experienced, we will likely exceed those targets, as well.

- **Indicator 11** Custom LP.5 Partnership scorecard to measure deep collaboration between researchers and development practitioners

+ The calculated value of 91 (out of 100) derived from the partnership scorecard exceeded the target value of 80 by nearly 14 percent. As such, LASER is pleased with the result as this indicator tracks the strength and cohesion of our managed projects, both buy-ins and research awards.

- **Indicator 12** Custom LP.6 # of development actors trained on translation (at R4D conferences and online modules)

  – This indicator previously tracked even and above in FY1 and FY2, respectively, so the anticipation was for a continuing upward trend. However, as with the similar indicator LP-3, LASER observed the same drop-off in training module completion – actually even more so, percentage-wise, for LP-12. We suspect the same reasons mentioned previously for LP-3 are influencing the decline (e.g. no in-person R4D conferences, only a single RFA).

- **Indicator 13** Custom LP.7 # of LASER-produced research translation materials (e.g. toolkit) utilized by researchers

  + Seven research translation tools were developed in FY2 and were uploaded to the LASER website for use by projects and LASER Network members, as measured by number of downloads. At the time that LASER generated targets for this indicator, it was unknown how many resources would be developed, nor what type of usage we could expect. Targets were therefore developed based upon an assumption that each research award would utilize at least one resource, with additional usage coming from Network members. As can be observed, LASER exceeded the target quite dramatically, and we may want to revise upward the FY4 and FY5 targets, especially since another set of resource materials was developed in FY3 to extend the number of items offered.

- **Indicator 15** L3.S.2.2_in3 # of participants at convenings to disseminate research for use and/or develop policy recommendations

  + The FY3 target for LP-15 was exceeded by more than 100 percent, due to PSE-1 presenting their work in a [webinar event](#) hosted by the Center for Strategic and International Studies (CSIS). The live event had 367 attendees, with 708 and 357 persons later viewing the recording at the CSIS website (see link above) and at YouTube, respectively. LASER is very pleased with this level of convenings attendance/viewing, as it demonstrates that results from research funded by USAID/LASER are reaching a sizable audience.

- **Indicator 16** L3.S.2_in2 # of instances of USAID OUs using CDR-supported research tools, approaches or mechanisms

  – The Tanzania SEL buy-in commenced as of April 1, and this is the only new buy-in that LASER will report on for FY3, although there is another one in the pipeline. Although LASER sought more buy-ins this fiscal year, the demand for LASER's services from USAID M/B/IOs is ultimately beyond our control.

- **Indicator 17** Custom LP.8 # of translated research products shared with networks, policy-makers, private sector and/or donors

  + The exceedance observed here is of a similar issue as with LP-13, namely that LASER made the assumption that two translated research results, on average per research award and buy-in, would be shared with target groups. While this assumption is generally valid (i.e. 8 of 12 projects reporting translated research in FY3 shared 1 or 2 times with targeted groups), the reported aggregate value is skewed higher by 4 projects disseminating their work more robustly. In other words, these 4 projects produced many translated research products that were shared with multiple groups: for FY3, they reported 4, 6, 8, and 10 instances of

sharing their outputs. LASER is very pleased to exceed the target for LP-17, as it demonstrates that translated research findings are being disseminated in an expansive manner.

- **Indicator 18** Custom LP.9 # of female researchers, and U.S. minority researchers, conducting LASER-funded research

  + The over-achievement here comes from the reporting of 1 Colombia award, 5 Vietnam awards, and 4 Ethiopia awards all in FY3; if the RFAs had been rolled out as planned, these values might have been spread more evenly across the first 3 years of the Program. Nevertheless, the excess in FY3 does counteract the under-achievement reported in both FY1 and FY2.

5d. M&E updates

LASER used the mid-point of its lifespan as an opportunity to make revisions to our Results Framework (RF), in order to: (1) add a fourth IR and four Sub-IRs to represent a path to sustainability for the Program and the LASER Network, and (2) make updates to the original RF structure and wording to reflect the evolution of the Program since its inception. The proposed changes were presented to USAID for review and comments; following the incorporation of the feedback received, the current RF was officially approved on October 6, 2021. Indicators for the new RF elements have been selected in consultation with USAID's M&E Specialist, and will be submitted for approval once they have been finalized in terms of reference sheet development, proposed targets, etc.

Additionally, as mentioned in the previous section, it is likely that targets for a few indicators such as LP-7, LP-13, and LP-17 should be adjusted upward somewhat, and that additional refinement of other indicators and targets should be considered upon further review. This is especially so since LASER will be adding new indicators to account for the new RF elements, as detailed above. Any changes will of course be made in full consultation with USAID, and will be documented in an updated version of the LASER PULSE MEL plan.

6. USAID ENGAGEMENT FY 2021

6a. Summary of current/active USAID buy-ins to program

The summary of the current buy-ins is summarized here

6b. Potential USAID buy-ins to program FY 2021

N/A

6c. Other engagements with USAID FY 2021

RFA- and buy-in-related operating units (OU) engagement: LASER has engaged through RFA's with the USAID missions in Colombia, Vietnam, Ethiopia, Nepal and Rwanda.

7. LESSONS LEARNED/BEST PRACTICES FY 2021

Internal LASER operations

- There are many milestones that a research project achieves besides the planned deliverables and MEL indicators on an ongoing basis. Capturing such interim successes, however, has been an ad-hoc process until FY3, which resulted in missed dissemination and promotion opportunities. In FY4, LASER streamlined capturing successes through modifying our 'project trackers' across

awards to capture success stories on an ongoing basis to be shared via blogs, newsletter and social media posts.

- The activity-based organization of work plans inadvertently results in siloed operations and missed opportunities for capturing cross-cutting knowledge. In FY4, in order to not only capture such value at the overlap of activities but also to promote cross-pollination of information, LASER is organizing itself into working groups as discussed in our FY4 work plan.

Awards (Core and Buy-ins)

- Conducting exit interviews are time consuming but extremely important in capturing evidence of the program and policy changes.

- Higher education institutions in different countries vary in capacity to undertake development research. As evidenced in certain buy-ins like S. Sudan, subawarded HEI researchers had minimal prior experience in development research and translation. As such, development research activities need to be combined with capacity strengthening activities targeting researchers in these institutions. LASER has created multiple such capacity building materials in the form of training, guides and courses for our network, however capacity building takes time. Additionally, the culturally influenced writing style of non-native English speaking research teams is quite different from those of native English speakers. Without formal U.S. or western training/education, this writing style is hard to shift and takes time.

- Lack of needed/expected financial institutions setup in some of the HEI's has proved to be a bottleneck that resulted in delays in our Subaward processes.

COVID-19 Impact

- LASER's inability to hold on-the-ground R4D conferences has impaired progress towards engaging local government stakeholders and other decision makers. Travel and gathering restrictions have resulted in fewer convenings with decision makers that are needed to disseminate research for use and/or to develop policy recommendations.

- Due to COVID-19, LASER has not been able to meet in person as a group for discussion and strategic planning. Remote meetings are not as engaging as in-person meetings, especially for brainstorming or open discussion. LASER found that running an online meeting requires longer lead time for preparation, and multiple meetings may be required to accomplish the same goal.

- COVID-19 continues to affect progress in some LASER-funded research projects. Travel restrictions and lockdown within Kenya and surrounding countries delayed initial visits, stakeholder meetings, and training in the field for East Africa research projects. In addition to travel restrictions, buy-in research projects experienced other challenges, such as inability to reach students and teachers due to school closure or city lockdown; slowdown in response by government agencies, and slowed responses by USAID and in-country partners due to relocation, more workload, less staff, and illness. More details are provided here.

8. PIVOT POINTS/CHALLENGES FY 2021

Virtual events: Due to the COVID-19 induced challenges in the planned in-person gathering and travel, LASER had to pivot to a virtual format. In FY3, LASER conducted an initially planned in-person Private Sector Engagement, as a virtual engagement. In FY4, we are planning to pivot to organizing our post-award R4D events in either a virtual or hybrid manner.

<u>Embedding sustainability in Results Framework and FY4 Work Plan:</u> In FY3, LASER completed the half-way mark in its performance period and to reassess/adapt our operation strategy for FY4 and 5, LASER conducted sessions to discuss its operating strategy vis-à-vis it's larger vision. As a result we revised our Results Framework (RF) to include IR4 "Sustainability of LASER PULSE approaches, activities, and targeted collaborations", along with Sub-IRs 4.1 to 4.4, and Sub-IR 3.2 "Increased generation and dissemination of internal LASER learning through research products and translated research outputs." Additionally, we also recognized that the sustainability of LASER would be built on three main pillars -1) Sustainability of the network; 2) sustainability of the impact created and/or intended by our projects, across regions and 3)sustainability of the LASER program by exploring future opportunities with other donor entities. Our FY4 work plan reflects these changes.

<u>Community of Practice (COP):</u> In the past years, LASER has supported the awarded research teams in their research translation efforts. While we continue to do so, we also observed that there is scope for peer learning amongst research teams. This is an opportunity not only for the research teams to learn different ways of operationalizing ERT from each other, but also for LASER to improve and adapt its model based on the shared experiences of the research teams. Hence in FY4, we are launching a Community of Practice (COP) on ERT.

9. KEY ACTIVITIES FOR NEXT REPORTING PERIOD

For FY4, LASER has made conscious efforts in planning activities that speak directly to the sustainability objective. Some of the activities are as below:

- <u>Impact sustainability:</u> Stronger engagement of the research teams among themselves via circle and regular update meetings with the Mission ensures that we are building stronger partnerships towards uptake of our research products.

- <u>LASER sustainability:</u> Organizing Post-Award R4D events, engaging stakeholders across HEIs, practitioners, policymakers, and donors will allow us to explore, new opportunity of continued operations in those regions

- <u>Network sustainability:</u> Executing a series of network engagement sessions based on the topics of interest collected via a survey of the network members will allow us to provide value-add to our network members beyond sharing funding opportunities. Additionally, embedding circle functionality will allow our network members to directly connect with each other, share opportunities, experiences and collaborate easily.

- <u>Changing mindset of stakeholders involved in Development research:</u> In FY4, via Community of Practice (COP) around ERT, LASER will continue to showcase and promote the importance of intentional collaboration of the stakeholders across the project lifecycle and conscious effort towards translation of research into usable products and practices.

- <u>Minority Serving Institutions Request for Application (MSI-RFA):</u> In view of USAID's <u>Diversity, Equity, and Inclusion (DEI) Strategy</u>, Administration's Executive Order (E.O.) 13985 <u>On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government</u> and LASER's own commitment towards supporting research projects led by MSI HEIs, in FY4, LASER will be executing a RFA inviting MSI researchers to conduct or further their development research in partnership with development stakeholders in UPCs.

10. ENVIRONMENTAL MONITORING

The LASER PULSE Cooperative Agreement was reviewed by the U.S. Global Development Lab's bureau environmental officer (BEO) for potential environmental impacts and received a categorical

exclusion pursuant to 22 CFR 216.2(c)(2). Specific FY 2021 activities not enumerated in the Cooperative Agreement, such as buy-ins and RFA grants, were likewise reviewed by the BEO.

LASER also monitors sub-awardees that have Initial Environmental Examinations (IEEs), to ensure that Environmental Monitoring and Mitigation Plans (EMMPs) are being followed, and to address potential environmental or social impacts that may arise during project implementation. To date, this includes one sub-award (East Africa Award Round):

- Building Sustainable Resilient Supply Chains: A Model of Youth Input Resellers in Kenya. PI: Jake Ricker-Gilbert (Purdue). Status : The IEE and EMMP for the project were approved by the BEO in January 2021. The Environmental Mitigation and Monitoring Report (EMMR) for the current reporting period has also been submitted.

11. GENDER/SOCIAL INCLUSION CONSIDERATIONS FY 2021

In the application review stage for Vietnam and Ethiopia RFAs, LASER ensures inclusiveness in viewpoints from both genders in the review process, with a total of 29 female and 23 male reviewers (Vietnam: 17 F and 13 M, Ethiopia: 5 F and 7 M and G RCD: 7F and 3M)

Furthermore, the RAN gender expert participated in the co-creation process that was convened for the four projects recommended for funding through the Ethiopia, Vietnam and GRCD RFAs. The co-creation process required that all the proposals integrate gender concerns in the research questions and methodology design. This will ensure that project implementation employs a methodology that conforms to the gender analysis.

12. DELIVERABLES COMPLETED IN FY 2021

12a. Translated research products from LASER Buy-ins for Y3, Q3/Q4

1. PSE Harmonizing Indicator Tool: Created by the PSE Phase 1 Buy-In (Lead Author: M. Paulsen, University of Notre Dame) and reviewed by USAID; finalized in September 2020; the link is to the platform (website hosted by Notre Dame), as an upload to the DEC is not possible.

2. Additionality Decision Tree: Guidance tool created by the PSE Phase 1 Buy-In (Lead Author: A. Estefan, University of Notre Dame); this is a decision tree produced for USAID internal use.

3. PSE Relationship Scorecard: Measurement tool created by the PSE Phase 1 Buy-In (Lead Author: M. Paulsen, University of Notre Dame); this is a metric produced for USAID internal use to examine the strength of collaborative relationships.

4. Children are easy targets for exploitation and traffickers during Covid-19: Media article (op-ed) by the TIP Buy-In (Lead Author: A. Warria, University of Witwatersrand); published in the Daily Maverick (South Africa) on June 3, 2021; no DEC upload (the link provided is for the article).

5. Coronavirus does not discriminate: Inclusion of migrants in Covid-19 policy crucial for collective wellbeing: Media article (op-ed) by the TIP Buy-In (Lead Author: A. Warria); published in the Daily Maverick on June 20, 2021; no DEC upload (the link provided is for the article).

6. Human Trafficking and the Family: PowerPoint presentation created by the TIP Buy-In (Lead Author: E. Koegl, University of Missouri St. Louis); DEC upload pending.

7. The voices of human trafficking victims and survivors must be heard above all others to elicit change: Media article (op-ed) by the TIP Buy-In (Lead Author: A. Warria); published in the Daily Maverick on July 29, 2021; no DEC upload (the link provided is for the article).

8. Preserving the fabric of our society as we reflect on gender equality and women's rights: Media

article (op-ed) by the TIP Buy-In (Lead Author: A. Warria); published in the Daily Maverick on August 9, 2021; no DEC upload (the link provided is for the article).

9. [Heritage Day: Let's remember the millions of migrants and trafficked victims who yearn for home](): Media article (op-ed) by the TIP Buy-In (Lead Author: S. Marx); published in the Daily Maverick on September 22, 2021; no DEC upload (the link provided is for the article).

12b. Translated research products from LASER Core Awards and LASER Core Activities for Y3, Q3/Q4

1. Be Well, Teach Well: A Locally Defined and Participatory Approach to Measuring Teacher Well-being: Presentation at the CIES 2021 Conference (April 2021) by the D'Sa - Be Well, Teach Well Award (Lead Author: N. D'Sa, University of Notre Dame); DEC upload pending.

2. Be Well, Teach Well: Understanding the Well-being of Teachers in Uganda's Primary Schools : Learning brief created by the D'Sa - Be Well, Teach Well Award (Lead Author: N. D'Sa); DEC upload pending approval by USAID.

3. [Smartphone App Tracks African Indigenous Vegetables for Improved Food Safety in Western Kenya](): Blog post by the Hall - Blockchain for Food Security Award (Lead Author: S. Hendery); no DEC upload, as the link is provided to the Feed the Future AGRILINKS website.

4. [Data-Driven Decision Support for Improved Water Security in East Africa: LASER PULSE East Africa Water Security (LPEAWS) Project Overview](): Presentation by the Gitau - East Africa Water Security Award (Lead Author: M. Gitau, Purdue); DEC upload pending USAID approval.

5. Building Blocks: How blockchain builds cooperative behaviour to strengthen agri-food value chains to advance food security in Kenya: Learning brief created by the Hall - Blockchain for Food Security Award (Lead Author: J. Agnew). DEC upload pending final approval by USAID.

6. Teacher and Child SEL Training Manual and Workbook : Manual developed by the Huang - Uganda SEL Award (Lead Author: K. Huang, New York University); DEC upload pending.

7. Bridging the Gaps in Research Translation for International Development Impact: Presentation at the American Evaluation Association TRE TIG webinar on April 14, 2021 by LASER PULSE (Lead Author: A. Towns); DEC upload pending USAID approval.

8. [Private Sector and Development: Building intentional partnerships to address global challenges](): PSE webinar hosted by the University of Notre Dame on behalf of LASER PULSE; no DEC upload as the link provided is to a YouTube video containing several presentations.

12c. [Translated research products previously reported by LASER for Y3, Q1/Q2]()

12d. Research products from LASER Buy-Ins for Y3, Q3/Q4

1. Reinstating Cultural Practices in Northern Iraq: Phase One Report Completed by the Northern Iraq buy-in team (Lead author: D. O'Driscoll, SIPRI), with the final version uploaded to the DEC (under embargo) on August 6, 2021.

2. [Literature Review on Private Sector Engagement: A Generalizable Framework (Executive Summary)]() Created by the PSE Phase 1 Buy-In (Lead Author: J. Sdunzik, Purdue University), uploaded to the DEC on November 2, 2021.

3. Harmonizing Indicator Tool Indicator Source Repository: Created by the PSE-1 Buy-In as a curated (incl. literature review) repository of ESG Frameworks and Indicators that feed into the PSE Harmonizing Indicator Tool platform (i.e. website hosted at Notre Dame) . Finalized in September 2021; upload to the DEC is not possible.

4. Understanding the Marginalized Indigenous Batwa People of Southwestern Uganda Technical

report produced by the UIP buy-in (Lead author: V. Nyakato); DEC upload pending final approval by USAID.

12e. Research products from LASER Core Awards and Core Activities for Y3, Q3/Q4

1. Transaction and Information Pain Points in African Indigenous Vegetable Value Chains in Western Kenya: A Gender-Responsive AIV Value Chain and Market Analysis Report   Created by the Hall - Blockchain for Food Security Award (Lead Author: J. Agnew). DEC upload pending final approval by USAID.

2. Deployment report: Exploring the Use of Blockchain Technology to Promote the Production and Consumption of African Indigenous Vegetables in Western Kenya : Created by the Hall - Blockchain for Food Security Award (Lead Author: J. Agnew, Virginia Tech). DEC upload pending final approval by USAID.

3. Disseminating and Implementing ParentCorps-Teacher Professional Learning Program to Schools in Uganda, Nepal and the US: Strategies and Impacts : Conference proceedings by the Huang - Uganda SEL Award (Lead Author: K. Huang, New York University); DEC upload pending.

4. Evaluation of Reanalysis Precipitation Data and Potential Bias Correction Methods for use in Water Resources Applications in Data-Scarce Areas : Journal article published in *Water Resources Management* by the Gitau - East Africa Water Security Award (Lead Author: V. Garibay, Purdue); DEC upload pending.

5. Research Translation for International Development: A Literature Review, Framework, and Guide to Developing a Research Translation Strategy : Completed by Catholic Relief Services (Lead Author: L. Riddering); DEC upload pending.

6. Understanding Research Contexts in Higher Education Institutions: Infrastructure, Translation, and Sustainability : Completed by Makerere University (Lead Author: N. Tumuhamye); DEC upload pending approval by USAID.

7. Assessing Sustainability of Future Academic-Practitioner Collaborations in International Development : Conference proceedings by Purdue University (Lead Author: P. Brunese); DEC upload pending.

12f. Research products previously reported by LASER for Y3, Q1/Q2