

CIFOR-USAID FELLOWSHIP

A formative assessment



Final report

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USAID
FROM THE AMERICAN PEOPLE



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Executive summary

Background

CIFOR-USAID Fellowship (CUF) is a capacity development program which aims to train Indonesian students by enrolling them into selected graduate programs in the United States. CUF is also an effort to prepare future leaders in Indonesia's natural resources management. The program started on October 1, 2015, partnering with Northern Arizona University (NAU), University of Florida (UF), University of Missouri (MU), and Yale University.

Evaluation Methods

The purpose of this internal formative evaluation is to i) inform the capacity development strategies of CIFOR and the CGIAR research program on [Forests, Trees and Agroforestry](#) (FTA)¹, ii) to develop and trial appropriate methods to routinely evaluate CIFOR supported Ph.D. and master's students, and iii) to provide USAID with an assessment of the relative benefits of the applied fellowship model.

The key evaluation questions (KEQ) that this evaluation attempts to answer are: 1) What did the CIFOR-USAID Fellowship program achieve?; 2) What elements of the model should CIFOR and USAID consider integrating into future educational investments?; 3) Does the model represent good value for money? In trying to answer the KEQs, this evaluation undertook a thorough desk review and used informational interviews, the Most Significant Change (MSC) story technique, web-based survey, and semi-structured interviews.

Findings

What did the CIFOR-USAID Fellowship program achieve?

- CUF has realized its specific objective by sending 26 Indonesian students in two groups, including four USAID-PRESTASI² students, to enroll in relevant graduate programs in the US. As for end-of-program outcomes, CUF participants obtained academic training, conducted individual research in Indonesia, and 20 out of 22 of the CUF-funded participants had completed their study by the time this report was finalized.
- The participants said they had improved their skills and knowledge in research methods and analysis, including research design and collaboration, how to develop a research proposal, and more specific knowledge such as in psychological theories regarding conservation behavior. Further, participants highlighted personal development in term of self-actualization, understanding themselves, and better communication and social skills. Participants felt these developments would equip

¹ FTA is the CGIAR Research Program aimed at enhancing the role of forests, trees and agroforestry in sustainable development and food security and to address climate change <http://foreststreesagroforestry.org/about-us/>

² Program to Extend Scholarships and Training to Achieve Sustainable Impacts (PRESTASI) is an USAID training program that provides opportunities for Indonesians to earn Master degrees in selected fields from a university in the U.S. <http://www.prestasi-iiif.org/index.php/id/>

them to make decisions and to be better professionals in their future careers. They also said CUF had allowed them to build a professional network. All of these skills and knowledge are relevant to equip the graduates to contribute to Indonesia's environmental challenges in the future and to be effectively participating in policy dialogs.

- There were also benefits for the partner universities. Faculty advisors gained international experience by advising students from Indonesia and visiting the students' fieldwork locations. They also expanded their networks in Indonesia, by interacting with CIFOR scientists, Indonesian academic institutions, and other organizations that were involved in their students' fieldwork. They could use this experience to enhance their career as well as adding research diversity to their portfolio. Faculty advisors said that CUF also benefited undergraduates and other graduate students by offering diversity in student bodies, research discussions, and in-person interaction with the Indonesian enrollees.

What elements of the model should CIFOR and USAID consider integrating into future educational investments?

CIFOR and USAID should consider 1) evaluating the choice of university partners to ensure the best possible alignment with CUF goals; 2) trialing a different way of selecting candidates with a specific target of beneficiaries; 3) facilitating ways to promote more interaction between CUF cohorts; 4) working with partner universities to provide need-based pre-academic training; 5) formalizing requirements for advisors to visit fieldwork sites (i.e., mentioning this requirement in the contract between CIFOR and universities); 6) encouraging CIFOR advisors to play a more active role and facilitate coordination between CIFOR advisors and faculty mentors; and 7) establishing a link between the CUF program and the research and engagement component within GOLS.

Does the model represent good value for money?

CUF's average cost per students for two academic years was US\$ 76,200. Other scholarships that send Indonesian students to graduate schools in the U.S. have an average estimated cost of US\$ 70,000 to US\$ 76,000. CUF is at the high end of this range, with an average cost of US\$ 76,200 per student. CUF, however, has a specific field of study which is not the focus of the other scholarships along with mandatory fieldwork in Indonesia. When comparing the benefits and the long-term expected value that CUF fellows would contribute to the future of Indonesia's forest management, CUF provided a good value for money. When designing future programs, we recommend that CIFOR allocates funding to activities that more directly support the outcomes of the program (e.g., establishing alumni networks, facilitating participant gatherings and ongoing collaboration, publishing joint journal articles) and makes adjustments to decrease: 1) the book and supplies allowance; 2) the settling in and contingency allowance; and 3) the students' living cost allowance.

Conclusions

CUF achieved valuable results and provided good value for money. All CUF fellows returned to Indonesia, 20 of 22 students obtained their master's degree and work in sectors related to natural resources management. In terms of future educational investments, we recommend CIFOR to consider a different mechanism to select candidates, strengthening the alumni network, encouraging active role of CIFOR advisors, facilitating coordination between advisors at CIFOR and universities, assessing the possibility for pre-academic training, establishing a link between CUF

and the GOLs' research and engagement component, and prioritizing funding to activities that directly support the outcomes.

Acronyms

AIFS	Association of Indonesian Forestry Students
CAFNR	College of Agriculture, Food & Natural Resources
CEFNS	College of the Environment, Forestry, and Natural Sciences
CIFOR	Center for International Forestry Research
CIPAV	Center for Research in Sustainable Production Systems
CUF	CIFOR-USAID Fellowship
DC	District of Columbia
ELTI	Environmental Leadership Training Initiative
F&ES	Forestry and Environmental Study
FTA	Forests, Tree and Agroforestry
GHG	Green House Gas
GOLS	Governing Oil Palm Landscapes for Sustainability
GRE	Graduate Record Examination
ICRAF	World Agroforestry
IELTS	International English Language Testing System
KEQ	Key Evaluation Question
LoA	Letter of Agreement
LoI	Letter of Interest
MU	University of Missouri
NAU	Northern Arizona University
NGO	Non-Governmental Organization
PRESTASI	Program to Extend Scholarship to Achieve Sustainable Impact
RTI	Research to Impact
SFRC	School for Forest Resources and Conservation
SNR	School of Natural Resources
SWS	Soil and Water Sciences Department
TCD	Tropical Conservation and Development Program
ToC	Theory of Change
TOEFL iBT	Test of English as a Foreign Language internet Based Test
TOEIC	Test of English for International Communication
UF	University of Florida
USAID	United States Agency for International Development
WEC	Wildlife Ecology and Conservation

1. Background

1.1 About this report

The purpose of this report is to assess CUF achievements, discuss the challenges, provide an early assessment of the program's value, and suggest recommendations that could help a similar future capacity development program reach its intended goals.

1.2 CIFOR-USAID fellowship

Rationale

In 2014, Indonesia surpassed Brazil as the nation facing the greatest loss of primary forest cover (Margono, 2014). As Indonesian forests are the most diverse ecosystems on land, their loss threatens global biodiversity. Biodiversity plays an essential role in providing economic, social, and environmental benefits. Growth in the agricultural sector, particularly palm oil production, has contributed to growing government revenues, employment, and higher incomes for millions of Indonesians. Despite all these benefits, palm oil production comes with significant social and environmental risks. Therefore, the Governing Oil Palm Landscapes for Sustainability (GOLS) project is a critical intervention to help government agencies, private businesses, and civil society organizations fashion solutions to Indonesia's resource management challenges.

GOLS is a project run by the Center for International Forestry Research (CIFOR) and funded by United States Agency for International Development (USAID). GOLS consists of two components; the first is research and engagement, and the second is the graduate fellowship program, called CIFOR-USAID Fellowship (CUF). CUF is a response from CIFOR to USAID's request to design and manage a program of masters-degree graduate training in U.S. universities in forest management, forest and biodiversity conservation, forest economics and governance, and land use and landscape planning, and allied fields. CUF was designed to address the need to support Indonesia's natural resource management by increasing capacities of young people who have the potential to become Indonesia's future leaders.

Beneficiaries

CUF will directly benefit Indonesian students' education and knowledge and, by extension, these candidates' professional networks, families, and the candidates' organizations. By participating in this program, the students will gain a graduate degree that will help them in their future careers. They will also gain real-world experience by doing the research project for completing their theses. As the graduate training is in the United States, the candidates will also have the chance to build their international network by their interactions with other students, faculty members, and other professional practitioners in the related fields. Improving the candidates' education, knowledge, professional, and social network will hopefully benefit the communities in the long term. The program intends to select candidates who have the potential to be effective agents of change in their chosen fields.

Objective, intended outcomes, and key activities

CUF objective is to train Indonesian students in the selected graduate program in the U.S. in subjects related to biodiversity and sustainable landscapes. CUF started on October 1, 2015, with an end-of-program outcome to have the participants earn their master's degree and return to Indonesia. CUF hopes that participants will gain and increase their knowledge, skill, and network in the targeted fields. To achieve this outcome, CUF implemented a series of activities focusing on identifying university partners, selecting students, academic training, and research.

Identification of US universities partners – CIFOR selected four U.S. universities offering masters degrees with the following criteria:

- i. Offering degrees related to forest and biodiversity conservation and management within the priority area of specialization—such as forest governance, conservation biology, sustainable development, and corporate sustainability practices.
 - ii. A commitment to providing academic counseling and guidance to students from developing countries.
 - iii. A good record of graduating students from developing countries on schedule.
- CIFOR considered universities which would admit cohorts of students annually. Potential benefits of this approach are that students would have a small group of peers to collaborate with on Indonesian topics, and university faculty may have greater incentive to tailor curricular and counseling support to a small group of students than for individual students.

Selection and placement of candidates - CIFOR advertised the fellowship opportunities using two main channels:

- (1) Targeted networks such as the Association of Indonesian Forestry Students (AIFS), Indonesian universities and their forestry faculties, government agencies, Non-Governmental Organizations (NGOs), research institutes, and partners organizations.
- (2) CIFOR website³ and social media.

By advertising on the targeted networks, CIFOR hoped to get more applicants that had educational backgrounds and working experience in areas that are in-line with CUF and had future goals related to Indonesia's ways of managing its resources. In placing the candidates, CIFOR counseled applicants on which of these universities offer curricular programs of greatest relevance to their academic interests and professional goals. CIFOR also advised candidates on preparing their applications, helped them registering for Graduate Record Examinations (GRE) and English language proficiency tests, and securing visas.

Orientation program for successful candidates - Successful applicants participated in an orientation seminar in Bogor before embarking to the U.S. to begin their studies. Seminar topics included a review of key forest management and conservation issues in Indonesia, including climate change policy, land use and land tenure policy, biodiversity conservation issues, and the architecture of forest governance, including the roles and relationships among state, private sectors, and NGO actors. CIFOR

³ Video and flyer are available at CIFOR's website <https://www.cifor.org/youtube/usaaid-cifor-fellowship-program/> and http://www.cifor.org/documents/pdf_files/201500345%20USAID-CIFOR%20master's%20degree%20flyer%20v02.pdf

briefed participants on aspects of living and studying in the U.S., guided on securing academic support and counseling, housing, and dealing with emergencies and potential difficulties. The seminar also introduced participants to the forms of academic support provided by CIFOR in the course of their training.

CIFOR academic support – CIFOR encouraged its scientists to work with students and their academic advisors in helping develop projects for students' research in Indonesia. CIFOR support could take the form of helping students identify interesting research projects, assistance with research design, provide students with opportunities to participate in CIFOR research projects, and reviewing research papers including the master's thesis.

Budget

The total budget of CUF is US\$ 2,440,675, as shown in the table 1. 73% of the budget is the cost of attendance⁴ that covers the admission cost, the expenses for securing U.S. visas, tuition fee, health insurance, cost of living, book and supplies allowance, settling in/contingency allowance, and fieldwork expenses. The cost of attendance for each student is different based on their university placement and based on the duration of their studies.

Table 1: CUF budget break down

Cost Categories	Budget	
Cost of attendance	1,783,759	73%
Direct Labor	202,000	8%
Travel, workshop, publications, and others	169,791	7%
GRE & English proficiency	15,552	1%
Research support charges	87,320	4%
Monitoring and evaluation	22,583	1%
Indirect Costs	159,670	7%
Total	2,440,675	

The direct labor and research support components are budgeted to cover CIFOR's personnel that are directly involved in the CUF project and their usage of CIFOR facilities. The travel, workshop, and publication budget is to cover the cost of project related travels including to support students and CIFOR staffs attending the workshop in Washington D.C. and to cover CIFOR visit to universities during the project period.

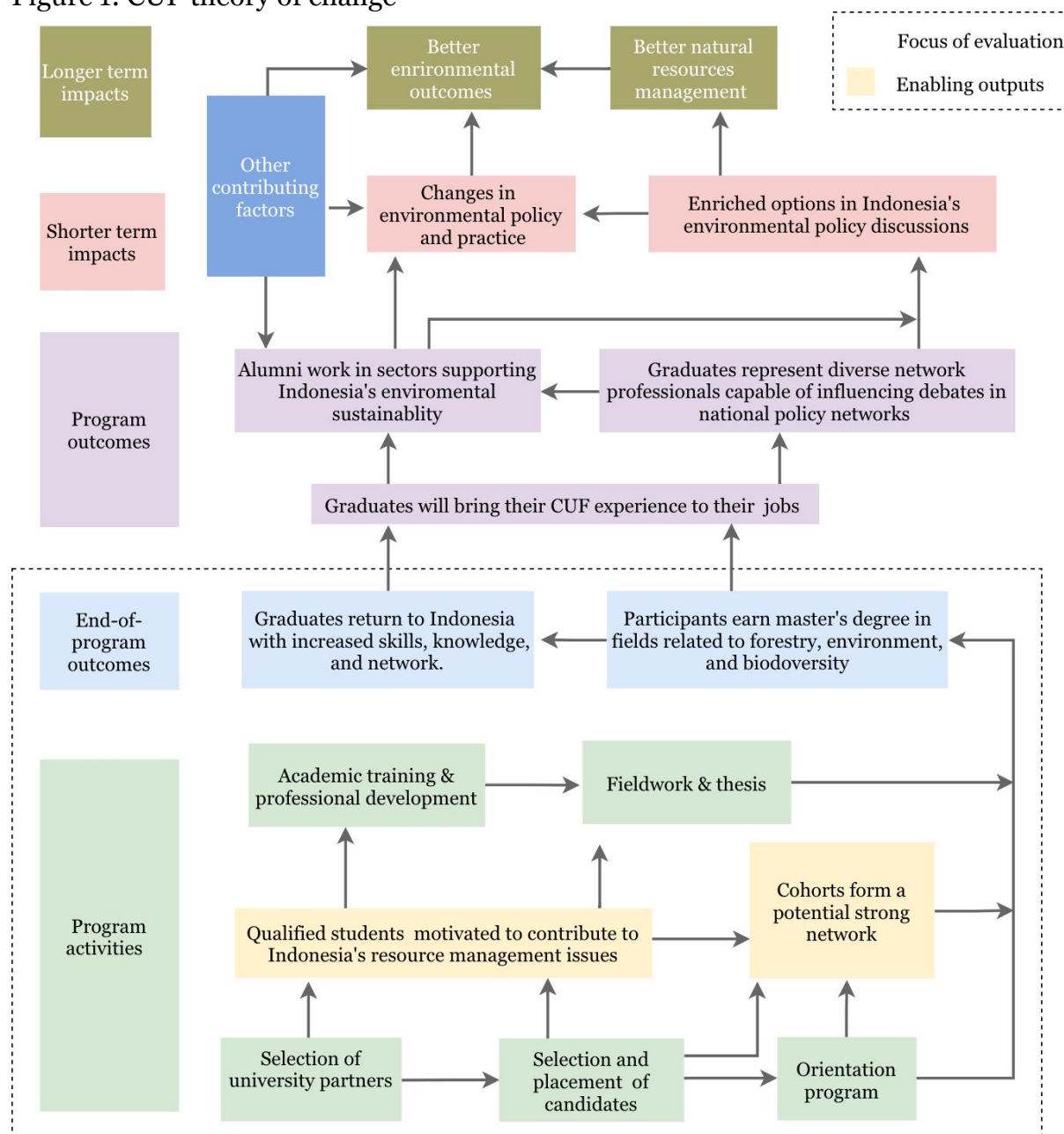
Theory of change (ToC)

The CUF ToC visualizes how the program planned to achieve its objectives and outcomes through implementing its activities. CUF program relied on the assumption that relevant graduate school experiences will open pathways to change in dealing with Indonesia's challenges in sustainable resource management. CUF focuses on the university selection, student selection and placement, academic training, and an individual research project in Indonesia. Upon completion of the study, the students will return to Indonesia with increased knowledge, skills, and network in fields related to forestry, environment, and biodiversity. Back in Indonesia, graduates will bring

⁴ The official budget line is consultant, as written in CIFOR's financial reports to USAID.

their CUF experience to their future jobs and will be part of a shift in Indonesia towards more sustainable use of Indonesia's land and natural resources.

Figure 1: CUF theory of change



As part of our hypotheses concerning the causal pathways of change, we rely on the following assumptions:

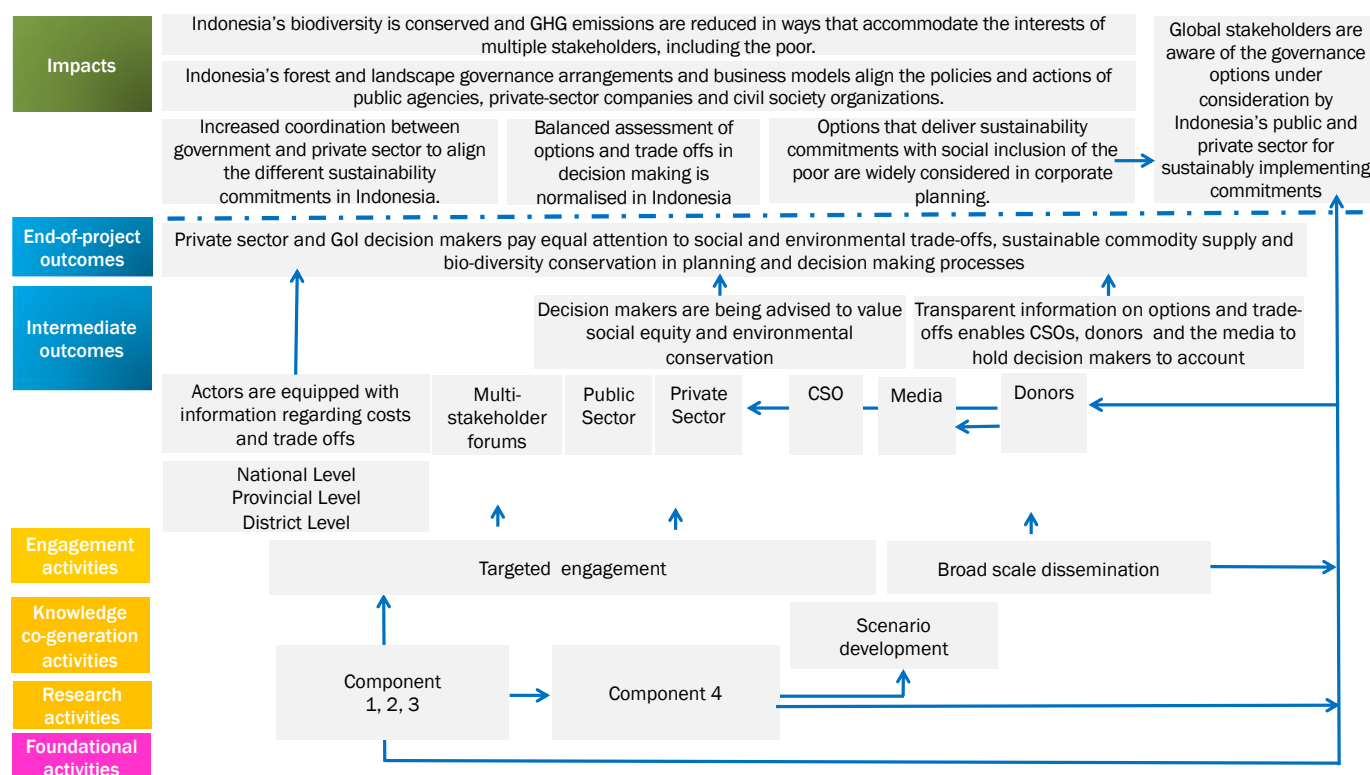
- Universities partners are committed to providing all the facilities and faculty advisors to each of the selected students.
- CIFOR's supervisors are committed to advising the students, and if there were any changes in CIFOR's personnel, these would not affect field work schedules.
- The participants will complete their degree within the agreed timeframe in fields related to biodiversity and sustainable landscapes.
- The participants will return to Indonesia and are committed to support Indonesia's sustainable land use and natural resources management.

- v. Graduated participants would work in partnership with other actors and catalyze change for more sustainable resource management solutions in Indonesia.
- vi. There would be jobs available for recent graduates in related fields that support them in being agents of change.
- vii. The private sector, policymakers, and government officials would be open to changing present-day policies and will welcome ideas for improving Indonesia's landscape governance.

We focused on assumption i to iv as assumptions v-vii are beyond the scope of this assessment.

Although CUF is part of the GOLS project, CUF was not designed to link to the research and engagement component of GOLS. The latter aims to “support the development of forest and landscape governance arrangements that align the policies and actions of public agencies, private-sector companies and civil society organizations in ways that contribute to more effective biodiversity conservation and reduction of GHG emissions and accommodate the interests of multiple stakeholders, including the poor”, as stated in CIFOR proposal to USAID (2015). CUF ToC shows broader outcomes and impacts than research and engagement ToC (figure 2), and there were no intended relationships between CUF's student's field study and research to the GOL's research and engagement's objectives.

Figure 2: GOLS's research and engagement theory of change



2. Evaluation methods

2.1 Evaluation purpose

The purpose of this internal formative evaluation is as follows:

- To inform CIFOR and [Forests, Trees and Agroforestry \(FTA\)](#)⁵ capacity development strategy.
- To develop and trial appropriate methods for routinely evaluating CIFOR supported Ph.D. and master's students.
- To provide USAID with an assessment of the relative benefits of the fellowship model.

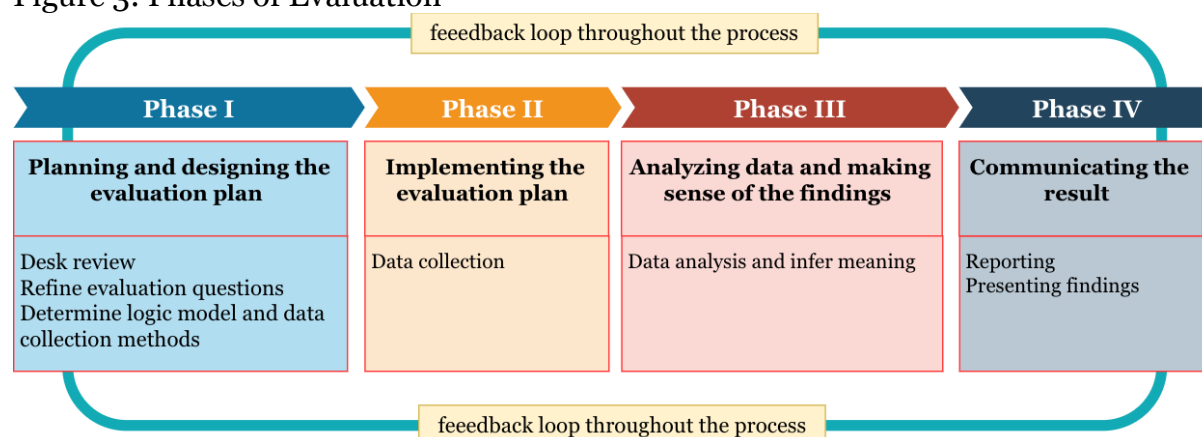
The KEQ that this report attempts to answer are:

1. What did the CIFOR-USAID Fellowship program achieve?
2. What elements of the model should CIFOR and USAID consider integrating into future educational investments?
3. Does the model represent good value for money?

2.2 Methodology

We structured the evaluation in four stages as shown in figure 2.

Figure 3: Phases of Evaluation



Phase I: Planning and designing the evaluation

In this phase (September – October 2018), we developed an understanding of the CUF intervention model by conducting a desk review of all program-relevant documents as provided in [Annex 1](#). We then assessed information needs and defined the context of evaluation as well as identified any potential constraints. We also performed informational interviews with selected CIFOR staff (see [Annex 2](#)) and conducted an evaluation stakeholder analysis where we divided the evaluation stakeholders based on their involvement, roles, and power dynamic in this evaluation related to the specific information that we need.

⁵ FTA is the CGIAR Research Program that aims to enhance the role of forests, trees and agroforestry in sustainable development and food security and to address climate change
<http://foreststreesagroforestry.org/about-us/>

Table 2: Evaluation stakeholders based on their interest and influence

Stakeholders	Stake or Interest	Avenues of influence
1) CIFOR:		
a. GOLS project leader and manager	High	High
b. GOLS team members	Medium	Medium
c. Research to Impact (RTI) team	High	High
d. Finance and project management unit	Medium	Low
2) USAID	Medium	High
3) University partners	High	Medium
4) FTA – Capacity development team	Medium	Low

The primary intended users of this evaluation would be CIFOR GOLS' program leader and manager. They would use these evaluation findings as part of their whole program's deliverables. They will also use the evaluation results to improve the design and implementation of similar capacity development programs in the future. CIFOR's Research to Impact (RTI) team is responsible for leading appropriate ex-post and ex-ante assessments of CIFOR initiatives. Therefore, they have high interest and influence in assessing CUF program's effectiveness and use this evaluation notes on methods to guide similar program evaluation in the future.

The secondary users would be USAID staff, university partners, and FTA capacity development team. This evaluation will give input to USAID's grant review to improve the future programs to contribute to the development outcomes. University partners can use these findings to enhance their international partnership with institutions that might have an interest in applying for a similar scholarship. Last, this evaluation will give input to the FTA capacity development team in ways that contribute to a better capacity development program design and implementation.

Phase II: Implementing the evaluation plan

We collected and collated the data to answer the KEQs and the sub-questions below.

KEQ 1: What did the CIFOR-USAID Fellowship program achieve?

- 1.1 To what extent were the program objectives realized and how?
- 1.2 What did students find most valuable about the CUF experience?
- 1.3 Were there co-benefits for participating universities and, if so, what were they?

KEQ 2: What elements of the model should CIFOR and USAID consider integrating into future educational investments?

- 2.1 Were there differences in student experiences and, if so, what factors contributed to these differences?
- 2.2 What lessons are there from the Forest Fellowship model that CIFOR should consider in developing their overall capacity development strategy?
- 2.3 What should be done differently if CIFOR implements a similar model in the future?

KEQ 3: Does the model represent good value for money?

Data collection

Semi-structured interviews (November 2018 – February 2019)

We conducted 24 semi-structured interviews with faculty advisors, administrators, students, and CIFOR and ICRAF advisors. A list of interviewees is provided in [Annex 2](#) and the guide for this semi-structured interview is provided in [Annex 3](#). We collected data on key elements of the program, factors that correlate to successful achievement of the students, whether there were co-benefits for the university by participating in this program, students' most valuable experience, challenges and ideas to improve the program.

MSC story exercises (April 2018 and October 2018 – February 2019)

As we would like to understand what was the most valuable about the CUF experience from students' point of view (see sub-question for [KEQ 1](#)), in April 2018, we conducted a Most Significant Change (MSC) exercise, an inductive, participatory, narrative-based assessment framed around a single open-ended question (Davies & Dart, 2005). We collected the most significant change stories from 26 participating students at a workshop in Washington D.C. We provided the MSC interview questions (see figure 4) to students, paired a first cohort student with the second ones, asked them to interview each other, and requested the interviewers to take note in the storyteller's own words. [Annex 4](#) provides a complete guide for the MSC exercise.

Figure 4: MSC interview questions

Question	Purpose of the question
1. What has changed for you as a result of your participation in the Forest Fellowship program? List a few things that come to mind.	To capture a range of changes experienced by the participating students.
2. We have been talking about a number of changes (refer to list above), from your point of view, which do you think is the MOST significant change. Please try to describe this change in the form of a story: <ul style="list-style-type: none">• Beginning (situation before the change)• Middle (what happened)• End (situation after)	<p>To reflect the participatory approach that empowered the students to have a voice on what they thought was the most important change.</p> <p>To clarify the details of what happened before and after joining this fellowship by asking the beneficiaries to compare and contrast the changes they experienced.</p>
3. Why did you choose this change in particular? e.g. Why was it significant for you?	To identify the perceived reasons for the change by the participating students.

At the same workshop, CIFOR RTI team leader facilitated the review and selection processes of the MSC stories. We divided the participants into six groups, marked by different colors: purple 1, purple 2, yellow, green, pink, and orange. In every group, each participant read the story that they collected to the entire group, together they mapped the stories to a specific change, and each group chose one most significant change story. We used the MSC stories to assess the intermediate and process outcomes by getting a rich description of the changes which also captured unexpected outcomes.

Web-based survey (December 2018 – February 2019)

As the participants in the MSC method tend to favor success stories (Davies & Dart, 2005), we conducted a web-based survey to balance the potential appreciative bias of MSC. To ensure that all survey items were clear and effectively probe the issues, in December 2018, we conducted a pilot test to check the clarity of each question and to seek respondents' comments on the questions and explain his/her choices. We invited three people to participate in this pilot test. We chose participants that would mimic similar characteristics with the CUF participating students. The pilot test respondents were Indonesian students pursuing a master's degree in CUF related fields in U.S. universities, but not part of the CUF program. Based on this pilot test, we revised the survey and invited CUF participants to fill it in January to February 2019, to get as many participants as we could. In total, we had 21 respondents (out of 26), representing 81% of the total participants.

We used open-ended (q1-8 and the profile questions) and matrix close-ended (q1a-g) survey questions, see [Annex 6](#). We collected the information on students' perceptions (q1a-h) on their experience in this fellowship. We also gathered information on skills and/or knowledge gained or improved (q2), students' perception on key factors on their successful outcomes (q3), the challenges students faced (q4), the students' most valuable experience (q5), students' idea to improve the program (q6, q7), students' future goal (q8), and how the students knew about the program (q9). We also gathered information on students' characteristics based on gender, the academic year students started the CUF (first or second cohort), university, current employment, and years of working experience before the program, see [Annex 7](#). In asking questions about students' satisfaction, we used different scale systems as listed in table below.

Table 3: Survey rating scale

Overall experience and cohort learning	Orientation	Social life and field work	Faculty advisor	Cohort
Very satisfied	Very good	Excellent	Extremely helpful	Extremely valuable
Somewhat satisfied	Good	Good	Very helpful	Very valuable
Neither satisfied or dissatisfied	Fair	Fair	Somewhat helpful	Somewhat valuable
Somewhat dissatisfied	Poor	Poor	Not so helpful	Not so valuable
Very dissatisfied	Very poor	Terrible	Not at all helpful	Not at all valuable

Review financial data and key informant interviews (January – February 2019)

We worked with the project and finance team in reviewing the overall project financial documents and conduct interviews with project staff members.

Phase III: Analyzing the data and making sense of the findings

We applied a content and theme analysis by coding the content of interviews, open-ended questions in the web-based survey, and the MSC stories to identify patterns and evidence linked to the evaluation questions and the theory of change. We used NVivo for qualitative analysis and descriptive statistics for the results of the online survey. We analyzed the financial data and other project documents to answer the value for money questions qualitatively.

Phase IV: Communicating the result

The final deliverables of this evaluation are: 1. this final report, and; 2. step-by-step notes to guide future capacity development evaluations.

3. Findings

KEQ- 1: What did the CIFOR-USAID Fellowship program achieve?

CUF realized its specific objective by sending 26 Indonesian students in two groups, including four USAID-PRESTASI⁶ students who went through the same selection process but had a different funding source. CUF fellows obtained academic training, conducted individual research in Indonesia, and 20 out of 22 of the CUF-funded fellows completed their study, by the time we prepared this report. Of all graduates, eleven of them were from the first cohort and seven from the second. All of the first cohort (13 students) returned to Indonesia and eleven of them now work in sectors related to natural resources management. The participants said they had improved their skills, knowledge, and expanded their network through CUF experience. The detail of CUF achievements is discussed in sub-questions below.

Sub-question 1.1: To what extent were the program objectives realized and how?

Students were distributed equally in NAU, UF, and MU for both cohorts, and two students were placed in Yale, as Yale joined the program in 2017.

Table 4: Students Distribution per University

University	Cohort 1 (2016)			Cohort 2 (2017)			Total		
	F	M	Tot	F	M	Tot	F	M	Students
MU	3	1	4	3*	1*	4	6	2	8
NAU	1	1	2	6**		6	7	1	8
UF	4	3	7		1	1	4	4	8
Yale				1	1	2	1	1	2
Total	8	6	13	10	2	13	18	8	26

*) Including one USAID-PRESTASI students

**) Including two USAID-PRESTASI students

CUF's end-of-program outcome is to have these students earn their master's degree with increased skills, knowledge, and network. The first cohort started in Fall (August or September) 2016 and was expected to graduate by Spring (May) 2018. Five of the first cohort graduated in Spring 2018, and another five graduated within June to December 2018. One student did her defense in December 2018 and graduated in May 2019. By the time we prepared this report, 11 students out of 13 of the first cohort had

⁶ Program to Extend Scholarships and Training to Achieve Sustainable Impacts (PRESTASI) is an USAID training program that provides opportunities for Indonesians to earn Master degrees in selected fields from a university in the U.S. <http://www.prestasi-iiief.org/index.php/id/>

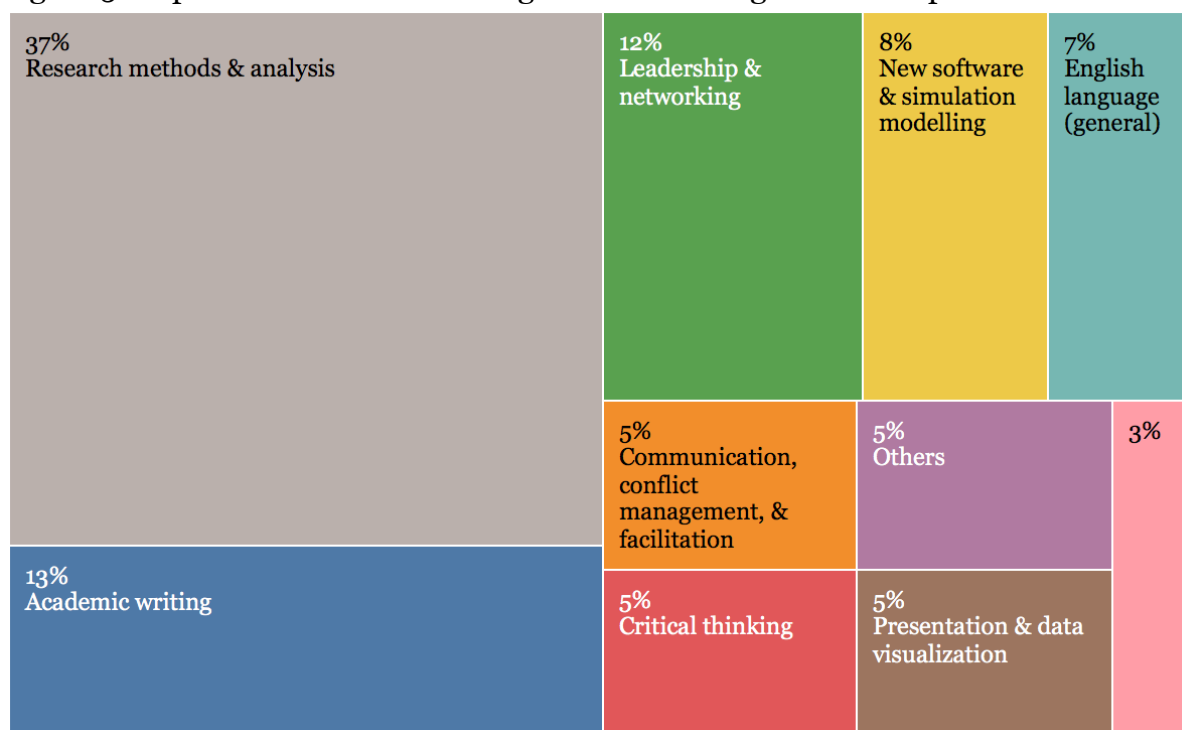
completed their study, and two will not graduate. We do not know the reasons for these exceptions. All of the students from the first cohort were already back in Indonesia. All of the CUF-funded second cohort students (9 fellows, n=9) graduated in May to July 2019. The detail of the students' updates is provided in the table 5 below.

Table 5: Completion of Studies – CUF fellows

Univ	Enrolled	Completed	Remarks
NAU	8	8	
MU	8	7	<u>First cohort:</u> One student graduated in May 2018, one in Jun 2018, one in July 2018, and one will not complete her study. <u>Second cohort:</u> Four students completed in May 2019, one in June 2019, and one in July 2019
UF	8	7	<u>First cohort:</u> Six students completed their program in 2018. Two students graduated in May 2018, two in August 2018, one in December 2018, and one graduated in May 2019. One student will not graduate under CUF scheme. <u>Second cohort:</u> One student graduated in May 2019.
Yale	2	2	
Total	26	24	

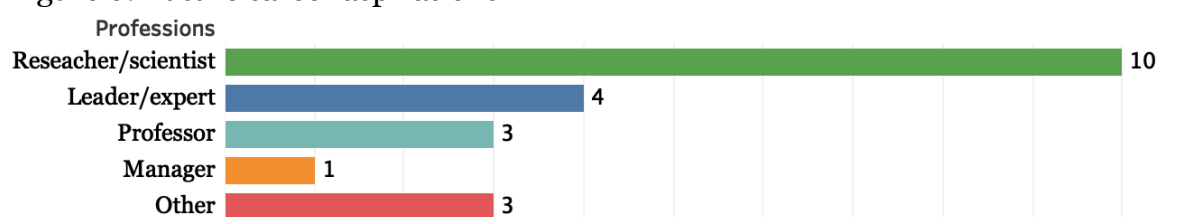
CUF expects students to return to Indonesia and apply their graduate experiences (including skills, knowledge, and network they gained) in their future careers, to support Indonesia's natural resources management. The survey (*q2: What are the top three skills or knowledge you gained or improved by participating in this fellowship?*) shows that most participants listed research methods and analysis as the top three skills/knowledge they gained/improved through this fellowship. This includes research methodology, research methods, data (quantitative and qualitative) analysis, research design, research collaboration, developing a research proposal, and a specific skill in psychological theories regarding conservation behavior. The second most mentioned skill or knowledge is academic writing, and the third is leadership and networking. Overall, there were variations of skills and knowledge that students felt they have gained or have improved from their CUF experience. All of these skills and knowledge are relevant to equip the graduates to contribute to address Indonesia's environmental challenges in the future and to be effectively participating in policy dialogs.

Figure 5: Top three skills or knowledge that students gained or improved



The survey (q8: ‘Professionally, where do you see yourself in 5-10 years?’) result shows that ten respondents (n=21) wanted to pursue careers as researchers/scientist and as a forestry auditor. They wanted to work in think tanks, research organizations, or NGOs in natural resources management, sustainable land use, forestry, and ecology sectors. Three students wanted to be professors, one student wanted to be a manager in a conservation agency. Four students wanted to be leaders in conservation program, natural resources management, and their own start-up NGO. The remaining 14% (3 students) did not specifically mention their future professions but stated they wanted to work in a think tank organization, be a socio-economist, and doing work with community in conservation sector. Of all respondents, 10 students (n=21) wanted to continue their education by pursuing a Ph.D. degree.

Figure 6: Future career aspirations



How CUF achieved its specific objective and end-of-program outcomes?

CUF has achieved its specific objectives and outcomes by focusing on the selection process, academic training, and research components.

University selection - All four universities offer a master’s degree with thesis in the forest, biodiversity, conservation, and management field. Other than classes, the universities have discussion forums for specific issues in the developing world. All universities provided a faculty (research) advisor for each student and a thesis

committee. The selection of the faculty members to serve as mentor/advisor took place during the application process, as part of the admission requirement. Students cannot be admitted without faculty advisors. We found no information for the universities' records of graduating students, not to mention students from not-developed countries. However, as this criterion is an indicator to ensure that students will graduate on time, we used available information on degree requirements for each university, as listed in table below.

Table 6: Degree requirements

	NAU	UF	MU	Yale
Minimum credits	32 credits <ul style="list-style-type: none"> • 12 credits core courses, • 12 credits elective courses, and • 8 credit for thesis. 	30 credits; At least half of the required credits must be in the major.	30-credit hours of graduate credit, with at least 15 hours comprised of 8000-level courses ⁷ . Not more than 12 hours of the minimum 30 hours are permitted for research, problems, special investigations, and special readings.	48 credits in total. <ul style="list-style-type: none"> • A minimum of 24 credits course works⁸ • A minimum of 12 credits for thesis⁹.
GPA	Cumulative GPA min 3.0. Only six hours of grade C are acceptable.	Cumulative GPA min 3.0	Cumulative GPA of 3.0 (A=4.0) or higher.	No letter grades ¹⁰ .
Credit per semester	The maximum graduate course load is 16 hours/semester. The minimum course load for full-time graduate students is 9 hours/semester.	N/A	N/A	12 credits
Time limit for completion	Students must complete all requirements for their master's degree	All work counted toward the master's degree or specialist degree	The program for the master's degree must be completed within eight years	Four semesters of full-time enrollment. ¹¹

⁷ Mid-level Graduate courses (8000-8999) - Graduate-level courses intended primarily for mid-and upper-level graduate students. Source: <https://snr.missouri.edu/graduate-studies/agroforestry-graduate-program/>

⁸ Courses may be distributed evenly over two years, or a greater course load may be carried in Year 1 to accommodate research-related travel and fieldwork in Year 2.

⁹ Maximum credit for research thesis is 24 credits.

¹⁰ FES uses grades of H (Honors), HP (High Pass), P (Pass), and F (Fail). This is a subjective classification, based on the professor's overall appraisal of the student's work see <http://environment.yale.edu/2017-2018/student-handbook/academic-regulations-and-policies.php>

¹¹ A student requiring more than the equivalent of four semesters of full-time enrollment to complete degree requirements will not be eligible for financial aid after the equivalent of the fourth semester of full-time enrollment unless the student successfully submits an appeal, in which case the student is eligible for financial aid for the equivalent of an additional semester of full-time enrollment.

	<p>within a six-year period.</p> <p>Additionally, courses applied to the master's degree must have been successfully completed within the 6-year time period required for completing the current degree.</p>	<p>must be completed during the seven years immediately preceding the term in which the degree is awarded.</p>	<p>from the first semester in which the student is enrolled in a degree program.</p> <p>Individual academic programs may stipulate a shorter time period.</p>	
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Total credits required, maximum and minimum credits per semester, the time limit for completion, the average time for data collection per research topics, and a study plan might be useful to estimate the time needed to graduate.

Selection of the candidates - CIFOR received 131 applicants for the first cohort (59 females, 72 males) and the number almost double (240 applicants; 110 females, 130 males) for the second cohort. In the first year of recruitment, only 10% of the applicants were admitted as CUF fellows, and 5% got accepted as fellows for the second cohort. In preparing a long-list of candidates, CIFOR used selection criteria that combined academic excellence, English language skills, and future career goals as expressed in the applicants' Letter of Interest (LoI). Applicants who demonstrated interest in Indonesia's sustainable management and had clear career goals in Indonesia were preferred. CIFOR improved this process for the second cohort by applying a scoring matrix¹² based on the following criteria:

1. The relevance of undergraduate degree and major.
2. Academic track record proxied by undergrad's cumulative GPA, awards received, and extra-curricular.
3. Work experience linked to research, education, advocacy, or otherwise relevant.
4. Achievements proxied by publications, presentations, and international conferences.
5. English proficiency proxied by the level of English in LoI(s) or TOEFL/IELTS test scores.
6. Motivation linked to Indonesia's environment sustainability as expressed in the applicants' LoI(s).

CIFOR shared the long-list of candidates with the university partners, and both parties prepared a shortlist of applicants. CIFOR counseled the short-listed applicants to submit their university preferences, then CIFOR and University partners decided who should be invited for interviews. The interviews were held on CIFOR campus by a panel consisting of CUF team leader, CIFOR researchers, and faculty members from each university (except for Yale who interviewed the candidates online). The result of this process is a list of primary candidates who were invited to apply to universities following the regular university process for graduate admission. CIFOR aimed to balance the number of students in each university, particularly for NAU, UF, and MU who joined this program since 2016. As UF admitted eight students in the first year of recruitment, CIFOR excluded UF and only offered three other universities for the

¹² CIFOR ranked each criterion using 1 to 4 scoring where 1 is the lowest.

second cohort. One student was accepted during the first-year selection but enrolled at the second batch in UF.

General characteristics of selected students

Education background and previous training - The 26 selected students had an undergraduate degree/major from fields related to biodiversity and sustainable landscapes from six universities in Indonesia. 18 of the students had a bachelor's degree in forestry and biology, two students from agriculture, and the remaining six students had a background in resource and environmental economics, animal husbandry, social and political science, environmental engineering, and applied meteorology. These students did their undergrad in Institut Pertanian Bogor/Bogor Agricultural University (IPB), Universitas Gadjah Mada (UGM), Universitas Indonesia (UI), Institut Teknologi Bandung/Bandung Institute of Technology (ITB), Universitas Sam Ratulangi (UNSRAT), Universitas Brawijaya (UB), and Universitas Parahyangan (UNPAR).

Table 7: Education background CUF fellows

Fields - University	IPB	UGM	UI	ITB	UNSRAT	UNPAR	UB	Total
Forestry	3	5			1			9
Biology	2	1	4	1	1			9
Agriculture	2							2
Economics	1							1
Applied meteorology	1							1
Environmental engineering				1				1
Animal husbandry							1	1
Political science						1		1
Anthropology			1					1
Total	9	6	5	2	2	1	1	26

Students who did not have an undergraduate degree in fields related to biodiversity and sustainable landscapes had working experience in those fields. On average, the students had two years of relevant working experience, and the average age was 26 years old when they started the graduate training. Nine fellows worked for research centers whether it was international, regional, or research centers in the university. Seven students worked in the private sector, six students worked for NGOs and a think tank, three students were government employees, and one student was a fresh graduate. The selected students had won awards, presented in various conferences, and authored/co-authored different types of publications.

English proficiency – 27% (6 students, n=22) of the CUF funded students had lower English Proficiency test scores than required by the university's programs. Some of them received conditional acceptance where they would need to take specific courses to help them to perform at the graduate level. Some students took initiatives joining English clubs at their universities and regularly visited the writing centers to improve their English.

Post-graduation

- Two students earned Master of Science (MSc) in Forestry (MSF), four students earned MSc in Forest resources and conservation, two students earned MSc in

Wildlife Ecology and Conservation (one with a concentration in tropical conservation and development), and three participants earned MSc in agroforestry.

- These eleven graduates had returned to Indonesia and work in fields that relate to natural resources management. Nine of the graduates work in new organizations and have higher positions compared to their jobs before CUF. They raised from a research assistant to a researcher, from a junior researcher to a coordinator, or work in larger organizations with more responsibilities. Two fellows returned to their previous organizations but have higher positions, one raised from researcher to manager and one from coordinator to program manager.
- The graduates work in various sectors, one in the private sector, three in research organizations, six work for NGOs and thinktank, and one work for an international aid agency.

Sub-question 1.2: What did students find most valuable about the fellowship experience?

The survey (q5: 'What did you find most valuable about this fellowship experience?') shows that students value the opportunity to:

- Work with experts, learn from their peers, and the chance to network (6 respondents, n=21).
- Learn and improve their research skills (5 respondents)
- Grow in personal development (5 respondents) including the process of self-awareness where they have learned to know themselves better in terms of understanding their weaknesses and strengths and become more resilient. Respondents also reported to have better time management skills and gained confidence.
- Receive support from advisors in the new academic setting (5 respondents)

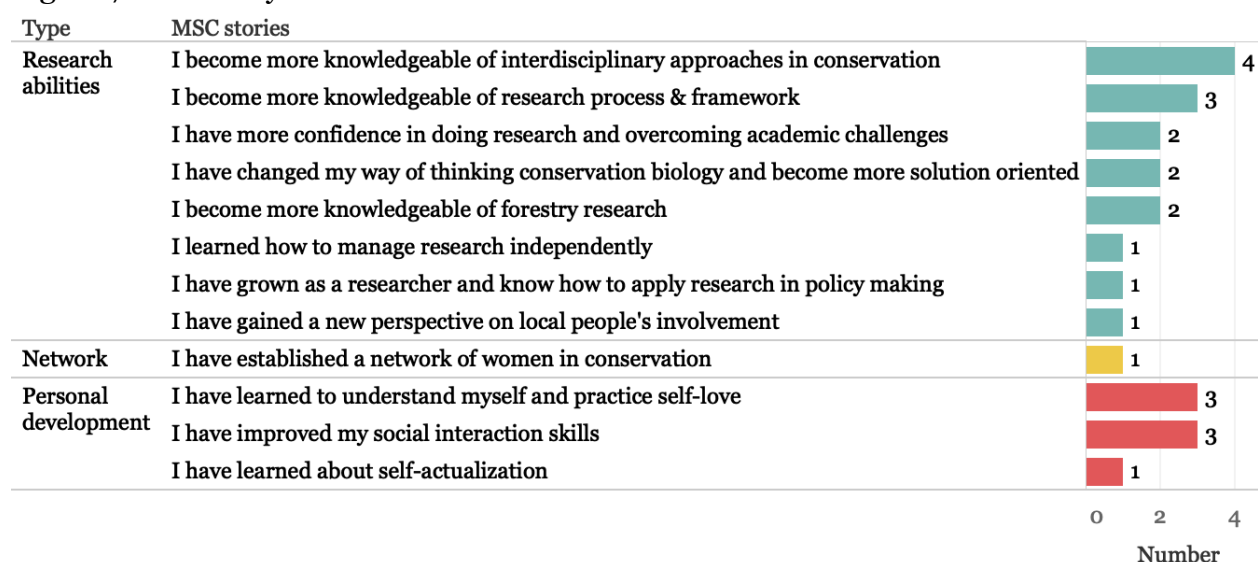
These findings resonate well with the overall MSC stories, which tell common themes where 16 students (n=24) value the changes in research abilities, changes in personal development (7 students) and establishing a network (1 student).

Research abilities – Four students said that through the CUF experience, they became more knowledgeable of interdisciplinary approaches in conservation. Three stories highlighted the changes in students' knowledge of the research process and framework. Two students expressed that they have more confidence in doing research as this fellowship has taught them to overcome academic challenges. Two stories showed the changes in students' way of thinking about conservation biology and how they became more solution-oriented. The rest of the stories talked about how they have grown to become better researchers, how their perspectives on local people's involvement changed, and how they learned to manage research independently.

Personal development – Seven stories reflected changes in self-actualization, how students have learned to understand themselves better, and how they have improved their social skills by respecting others' opinion and time.

Networking – how a student has established a network of women in conservation who functions as a support system.

Figure 7: Summary of MSC stories



Here are three most representative selected MSC stories:

Story 1 - I used to have a very one-sided outlook on forestry and environmental work. I saw myself as someone with best intention to help and wanting to involve locals as much as possible in the process. However, my approach was condescending, it was sort of a “Messiah complex”, where I wanted to help and empower local people because they had no resources to do so. I saw myself as a savior and to a certain extent placed myself above the locals.

At this fellowship, I went to Panama for a fieldtrip as part of a class organized by the Environmental Leadership Training Initiative (ELTI) on Tropical Restoration. The class looked at cattle ranches in Panama’s Azuero Peninsula as a case study. Cattle ranching was the backbone of the locals’ economy, but this enterprise was devastating the landscape without sustainable management. Through this experience, I learned how ELTI created strategies for landscape restoration that were based on local knowledge of both cattle ranching and native tree species. ELTI also touched on the work of the Center for Research in Sustainable Production Systems (CIPAV) and how heavily they relied on local knowledge in running their native tree species nursery that could meet both restoration and economic objectives. This was my first exposure to the importance of treating locals as partners rather than objects of environmental protection work.

My second exposure happened much closer to ‘home’, in New Haven. The Yale School of Forestry and Environmental Study’s (FES) student body had been getting frustrated about the lack of racial and gender representation in the student cohorts and academic faculty. Days before my trip to D.C. a petition was published requesting the school to accommodate more diversity in future admitted student cohorts and faculty employment, and to incorporate diversity topics in student orientation activities; these were standard requests and did not surprise anyone. The real rumpus was with the request on acknowledging the school’s colonialist and racist background – how forestry as a science was started by white men after they realized that they had obliterated the native forests for profit, how environmentalism as a movement started by pushing for the exodus of native people from their land and vilifying their practices that had been proven sustainable for millennia, and how Yale FES was founded on those very ideals, vestiges of which remained even after 100 years of the school.

Students did not ask for FES to be completely taken apart – rather, they asked for FES to formally acknowledge this history and consciously move away from it, as reflected in the previously mentioned requests. This was the eyeopener for me. Everything they stated was historically true and made me question all my approaches when working with other people for environmental protection work.

All the above happened in the spring semester in 2018. Through these experiences, I got a glimpse into how rich traditional ecological knowledge could be and how this resource was largely untapped in current environmental protection efforts. I also have much, much higher concern for the historical involvement of local peoples in such efforts. I realize now that local people are not completely without resources – their intimate knowledge of their home and landscape are as valuable as the funding and tools and manpower I bring to the table. I am no longer approaching locals as a “savior” but rather as a partner and I look forward to incorporating this approach in future work.

Why did you choose this change in particular?

In my future work, I want to focus on North Sulawesi forests and people, thus I also see myself as a local working for my home (Indonesia, *ibid*). Taking a standpoint of being a local on a broader scope, makes me empathize with the people who are local to the landscapes she wants to work on. I think it's important that their legacy and history and culture isn't erased in the wake of my work, or from the work of others in similar positions.

Story 2 - Prior to this fellowship, I worked in ecology research in conservation. I felt that I had limited knowledge about other aspects outside the ecology field, for instance, policy and law that are relevant to conservation. Furthermore, I believed it was important to learn those aspects, but I also realized that I had limited knowledge on how to incorporate them.

In this fellowship, I joined the Tropical Conservation Development (TCD) program in University of Florida. Through that program, I took social science courses related to conservation, such as the community forest management course as well as the conflict management course. In addition, I have learned how to network in professional settings. By joining the [Tropilunch](#), a weekly scientific presentation seminar run by graduate students from the TCD program, I learned how to better develop my knowledge from peer discussions. I felt that I become more knowledgeable, that I gained a lot of new insights compared to my situation before I joined this fellowship. I am more open minded and able to see conservation issues from various perspectives. I believe, my experience in this fellowship will help me with my career aspiration.

Why did you choose this change in particular?

It changed the way I think about conservation issues more comprehensively. It will also be benefiting my career in the future.

Story 3 – I am the first female in the family who decided to work with animals in the wilderness and who successfully secures funding to continue study abroad. I confidently chose the opposite direction from what everybody in the family knows. Without me realizing before, there are some family and society pressures and expectations. When your support system wasn't available and can't understand your type of work and study, and when they start questioning your life decision, it can make

life harder, especially with a lot of responsibilities in graduate school. Trying to keep up the performance in class, maintaining the grades and also exploring opportunities offered on campus and even managing different parts of my research such as finishing my proposals, applying for research grants, dealing with bureaucracy for my camera permits, and maintaining relationships with palm oil company, local university, NGO and the government.

These were a lot and overwhelming. But I feel that in general, academia in the US are more supportive and appreciative if we make an effort and if we communicate our needs/talk to friends more. So, I decided to talk to friends and create a study group and have a talk on a subject that I was studying or on my research to double check if my/our understanding on the issue is in line. I was also reaching out to my advisor on this matter. My advisor is very supportive and provides the help I needed. I got reminded to set small goals daily and work on priorities first. But also, not be overwhelmed over little things and try to see the bigger picture of my work.

The most important thing that I feel is lacking from Indonesia (or from my support system) is to learn to appreciate myself, my work and my effort. To remember my accomplishment when I got stuck on any pressures or expectations. With an opportunity to study and do research in the US, I got the best chance in being mentored, trained and surrounded by the best people. I feel surrounded by the right support to help me feel more empowered to do what I believe – wildlife conservation and that there's nothing wrong to be a female who wanders in the wilderness. Now I have a network with strong women who do work in conservation, and we keep in touch to support each other.

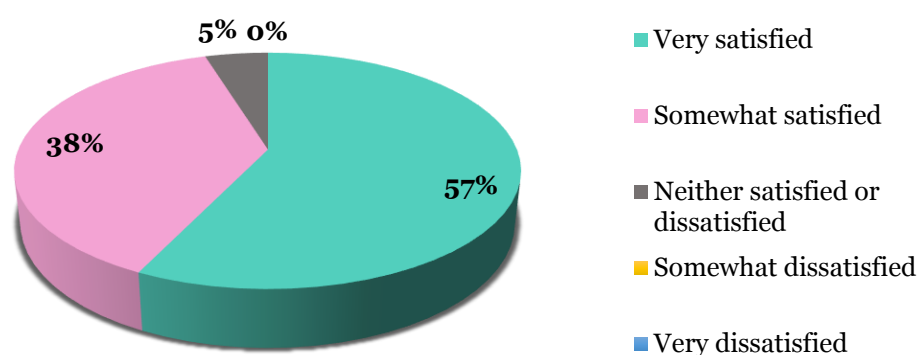
Why did you choose this change in particular?

I think this change is very important for me personally for the long term because to be able to carry on the type of work that I am doing I need to be strong and need to believe in myself. Besides the training that I got through classes in my master program, meeting the diverse women who are strong and work in conservation is one of the best things that happened during the program.

Participants' perceptions on their CUF experience

In general, the survey (*q1-a: 'Overall, how satisfied or dissatisfied are you with your experience at this fellowship?'*) shows that most students had a positive experience in CUF. Of the respondents of the overall survey, 12 participants (n=21) were 'very satisfied' with their overall CUF experience. Eight participants were 'somehow satisfied', and one participant reported 'neither satisfied nor dissatisfied'. The last two groups felt there is room for improvement for the pre-departure orientation. Three of them did not attend the event due to conflicting schedules with the orientation at the university and those who came felt there was not enough clarity on what was expected from the students. This group also felt the peer-to-peer learning from their cohort could be improved, and two respondents felt that their academic advisor could have been more supportive. Respondents felt CIFOR could provide more support to secure students' research permits and give more clarity on students' allowances in terms of eligible items and reimbursement methods.

Figure 8: Students' overall CUF experience



Pre-departure orientation – 18% of the respondents (3 students, n=17) felt the orientation program was 'very good'. Surprisingly, all of these respondents were from the first cohort where they had a one-day seminar in CIFOR campus. Most of the respondents (47%, 8 students) felt the orientation was 'good' and five of them were the first cohort. Five respondents gave 'fair' rating, and one gave a poor rating. We only used data from respondents who attended the orientation in this survey. Based on our interview, most students felt that the orientation would only give them a brief introduction for graduate life, as the period of orientation was relatively short. One student hoped that the orientation gave more information on the GOLs's project in terms of its objectives and research priorities. Therefore, CUF fellows could design their individual research to align with the GOLs' research component.

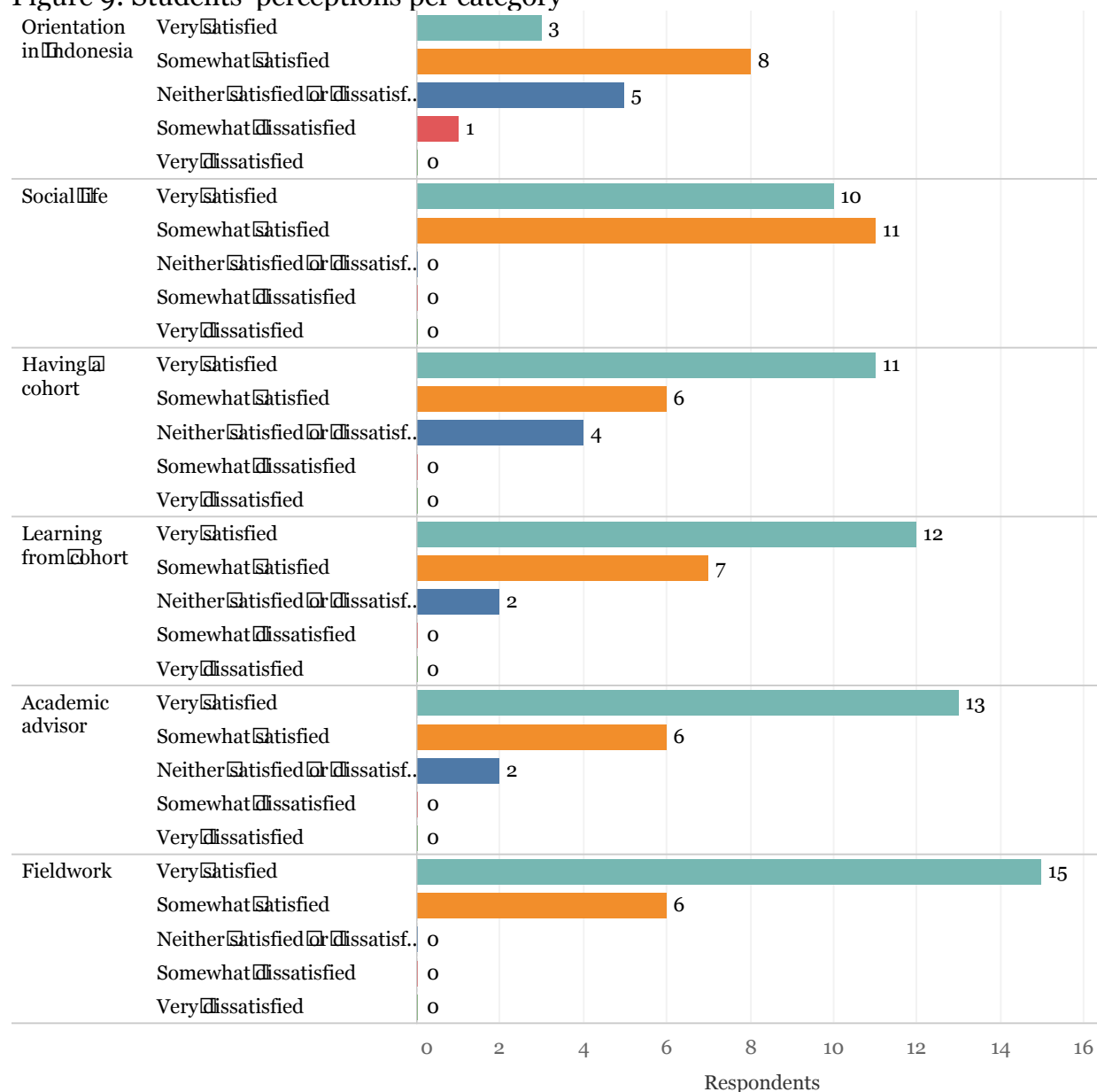
The quality of social life at the university – the survey (q1c: 'How would you rate the quality of your social life overall at this university?') shows that respondents enjoyed their social life at the university, where answers were split between 'excellent' (10 students, n=21) and 'good' (11 students). One respondent made a positive comment about this question because the student had so much peer support and how supportive the school was to facilitate students' work-life balance.

Academic advisor –we asked respondents to rate how helpful their academic advisors is/was (question 1f), and the results were positive. 13 students (n=21) said their advisors were 'extremely helpful' and six students gave 'very helpful' score. Two respondents, however, gave 'somewhat helpful' rating and both were from the second cohort. This result only gave a general perception and could not be used as a standard, as many variables are associated with the relationship between students and faculty advisors, and that would be beyond the scope of this evaluation.

The cohort system – we asked two questions about the cohort system, one to get students' perception on having a cohort (as a support system) and the other one focused on the students' learning process within the cohort. The answers of both questions show similar results; Fifteen respondents (n=21) felt the cohort system was 'extremely valuable'. Four respondents (19%, n=21) felt that having a cohort was 'somewhat valuable' (question 1e) and two respondents reported that they were 'neither satisfied or dissatisfied' with the peer-peer to learning among the cohort (question 1f: How satisfied or dissatisfied are you with your peer-to-peer learning among the cohort which was facilitated by the fellowship program?). Based on our interviews, most students felt the cohort system was helpful at the beginning of the study period and once students focused on coursework and other activities, the

communication within the cohort was less frequent. We found from students' travel reports they felt there should be more gathering events, e.g. a workshop at the Washington DC (April 2018) where all students came to present their work and interact with CIFOR and USAID staff, and with other students in person. They felt such an event helped to strengthen the bond as well as to exchange ideas on their future plans once they returned to Indonesia.

Figure 9: Students' perceptions per category



Fieldwork – Fifteen respondents (n=21) felt their fieldwork experience was 'excellent' and the remaining six students said it was 'good'. A respondent said that fieldwork was a real-world experience to conduct an individual research project. On the other hand, there was one comment requesting CIFOR to provide more help with the research bureaucracy as this might delay the data collection process and would further delay the students' progress, and the final thesis. In our interviews, a student said CIFOR could encourage students to design their fieldwork research to fit the GOLS' research component as it has specific themes and sub-themes. By doing this, the student added, the CUF fellows would have the opportunity to conduct their

fieldworks in the GOLS project sites, expanding their professional network in Indonesia with government agencies and private sectors, and have more opportunity to work on sustainable palm oil productions once they completed their studies. The fieldwork detail per students is provided in table 8.

Table 8: Research subject and fieldwork location

First cohort – CUF students		
Univ	Thesis title	Fieldwork location
NAU	Evaluating the Impacts of Community Forestry Practices in Sumatra Island, Indonesia	Lampung
NAU	Restoring Degraded Tropical Peatlands: Case Studies from Central Kalimantan, Indonesia	Central Kalimantan
MU	Developing Bioremediation Technology using <i>Pseudomonas putida</i> and <i>Populus</i> sp on Petroleum Contaminated Site	
MU	Characterization of Smallholder Agroforestry: Parcelized Cut-and-Carry System for Confined Livestock in Central Java	Central Java
MU	Spatial Analysis to Establish Agroforestry Areas as Buffer Zones in Tropical Peatland Forest of Indonesia	Rimba Raya Biodiversity Reserve area, Central Kalimantan
MU	The Assessment of Soil Enzyme activities in multiple land use Central Kalimantan, Indonesia	Rimba Raya biodiversity area, Seruyan, Central Kalimantan
UF	Habitat Suitability and Population Structure of an Endemic Palm Species (<i>Pinanga arinasae</i>) in Bali, Indonesia	Bali
UF	Stakeholder Perceptions of Fire Care Communities (MPAs): A Government Intervention to Address Fires in Peatlands Using SWOT-AHP Method	Riau and West Kalimantan provinces
UF	Land Use Planning with Respect to Ecosystem Services Trade-offs and Palm Oil Expansion	Ketapang, West Kalimantan [TBC]
UF	Assessment of Factors Contributing to Mammal Distribution in Remnant Forest Patches within the Oil Palm Plantation in West Kalimantan, Indonesia	Pontianak, West Kalimantan
UF	Soil Organic Matter and Vegetation along Elevational Gradient in Nanga Dua Region in West Kalimantan, Indonesia	West Kalimantan
UF	Big Roles from the Big Bats: From the World's Smelliest Fruits to the Lush Forests of Indonesia	Central and West Sulawesi
UF	The Dayak at the Crossroads: Traditional Agricultural Practices and the Challenges of Change in West Borneo, Indonesia	Kapuas Hulu, West Borneo
Second cohort – CUF students		
Univ	Thesis title	Fieldwork location
MU	CBFM (Community Based Forest Management) Participation and Impacts. A Case Study in Forest Management Unit/KPH of Malang, Indonesia	Malang, East Java

MU	Measuring smallholders' level of resilience to water scarcity	Bantaeng District, Central Sulawesi
NAU	Impacts of fire to the population dynamics of the <i>Pinus merkusii</i> Tapanuli and Kerinci ecotype	Aceh, Tapanuli, and Kerinci
NAU	Evaluating the Role of Village Forest Scheme Towards Social, Economy & Ecological Aspects in Kapuas Hulu, West Kalimantan-Indonesia	Kapuas Hulu, West Kalimantan
NAU	Non state certification program for palm oil in Sumatra: Does it benefit the smallholders?	Jambi and South Sumatra
NAU	Invasion of non-native plants in gap created by harvesting activities in East Kalimantan, Indonesia	East Kalimantan
UF	Investigating Tourists' Motivation for Visiting National Park: Case of Komodo National Park, Indonesia	Komodo national park, East Nusa Tenggara
Yale	Analyzing Constitutive Process of Bioenergy Production from Degraded Land: Case from Central Kalimantan, Indonesia	Central Kalimantan
Yale	Tree Species Distribution, Size Class, and Biomass along an Elevation Gradient in Lowland Tropical Forests	Tangkoko Dua Saudara national park, Bitung, North Sulawesi
Second cohort – USAID-PRESTASI students		
Univ	Thesis title	Fieldwork location
MU	Characterization of The Antitumor Taccalonolides Isolated from Black Bat Flower (<i>Tacca chantrieri</i>) in Indonesia	
MU	Productivity and Mortality of <i>Acacia mangium</i> related to Soil Type, Provenance and Mortality Agents in East Kalimantan	East Kalimantan
NAU	The investigation of the natural enemies of the invasive species, <i>Vachellia nilotica</i> , and their allelopathy activities in Baluran National Park, Indonesia	Baluran national park, East Java
NAU	Identifying cryptic species of tarsiers on North Sulawesi, Indonesia	North Sulawesi

Sub-question 1.3: Were there co-benefits for participating universities and, if so, what were they?

We categorize the findings¹³ for this section into three different groups.

A. Faculty advisors

An opportunity to grow - faculty advisors learned new knowledge and perspectives that CUF students brought to class, lab discussions, and one-on-one mentoring sessions. CUF is a thesis-based master's degree where students learn how to conduct research by working with their advisors on a research project. As all of the research projects were located in Indonesia, the faculty advisors need to have an adequate knowledge about Indonesia particularly related to his/her advisee's research context,

¹³ Data from semi-structured interview question: 'Do you think there were co-benefits for the university by participating in this fellowship program?'

to advise the students comfortably. The fieldwork element gave an opportunity for faculty advisors to travel to Indonesia while some of them have never visited the country before. Through this experience, the faculty advisors said, they have learned about the opportunities and challenges their students' face in researching in Indonesia by understanding the situation, meeting the people, and grow to be a better advisor for their current and future students. Also, they had the opportunity to expand their network by creating new potential connections, meeting new colleagues, and new potential partnership. Faculty advisors also benefit in term of career path by building their portfolio through international work.

Research diversity - CUF's students brought their experiences and perspectives to the class and this had enriched the discussion and encourage new ideas on research. A faculty advisor said, that even though the issues facing different countries are similar, ranging from climate change, forest fire, and development planning, the Indonesian cohorts brought a new perspective from one particular country's experience. As most students were assigned to lab groups, a faculty advisor also said they benefited from the Indonesian cohort. *"She enhanced my small lab group because she brought a very different perspective than my other domestic students. It was definitely a win-win, she benefited from being here, I think, and we benefited from having her here."* The cohort, instead of just one student, shared their experiences and views about Indonesia which helped the faculty members to think about the country's issues in the context of their courses. The faculty members were able to draw on the knowledge of the CUF's students and make use of the examples the students provided. This, they said, added to the research diversity on how they design their courses and future research ideas. It encouraged new ideas that might not have been discussed without the presence of the CUF program.

Cultural experience – Faculty advisors have expanded their horizon by learning about other cultures, in the context of how research has been done in Indonesia, the science around it, the motive, and the facilities. *"She opened up a whole new world for me. I would not have traveled to Indonesia if it wasn't for her and wanting to go and experience her study site and see firsthand what she was doing and make sure she had the skill and comfort to collect the data that she needed to."*

B. University in general

Having a cohort of students coming from Indonesia has helped the university building and strengthening its international presence. It will increase the university's international exposure as the CUF students helped to spread the university names and programs to their Indonesian friends and colleagues. As one of the faculty advisors said: *"We are enthusiastic in getting our name out in Indonesia."*

C. Other students and members in the university

This fellowship brought a positive influence on other students, particularly domestic students who have not got the chance to travel abroad. Through in-person interaction with CUF's fellows, other local students learn to appreciate diversity. The presence of the CUF's cohort has brought a new nuance to the anti-Muslim sentiment which is growing at the moment as all some students know about Islam is from terrorism. A faculty advisor emphasized the importance of this in person interaction, she said *"I think it's really positive for especially undergrad students who may not know about Indonesia and how it is a Muslim majority country and manage to keep peaceful."* Overall, the CUF scholars shared their knowledge about Indonesia to other university

members and many of the faculty advisors appreciated this exchange process. The Indonesian cohort also actively participated in student associations, thus offered diversity in the student body.

KEQ 2: What elements of the model should CIFOR and USAID consider integrating into future educational investments?

Selection of candidates: Involving faculty members to select the potential candidates in the second¹⁴ and third¹⁵ stages of the selection process has helped the selection of qualified students. Most of the faculty members appreciated this element as they feel the interview process offered a better judgment compared to selecting students from the paper documents. Most faculty members said they had qualified, top-class students with motivation to succeed in graduate study.

Placement of candidates, the cohort system: The cohort system provides a more comfortable environment for the students to engage in a new place. The cohort has been seen as a support system for the students to adjust with a new academic culture as well as different living conditions where the students can help each other and also bring in more faculty and another graduate student to know more about Indonesia.

Matching students with faculty advisors: The result shows a good match between students and their faculty advisors is crucial for the students' successful outcomes. This process was administered by the university and beyond CIFOR's control.

Communication: Having the primary contact for universities and CIFOR helped to smooth the administrative logistics and academic progress of the students throughout the program.

Fieldwork: This component received positive feedback from faculty advisors. They said that coming to Indonesia to accompany the students conducting their fieldwork is one of the key elements that contribute to the successful outcomes of their students. It helps the faculty advisors to understand the context of the research. This has enabled them to give better advice to their students. Specifically, a faculty advisor said *"Because it's key to American success as well in graduate school, to have an advisor out on the ground with you for part of the time, just to help troubleshoot especially when you have not done research before. So, I think that was a huge component leading to success."*

Professional development: Encourage students to go to conferences to present their work and to network will enrich the students' experience by offering training and voluntary work related to the students' career aspiration.

CIFOR visit to university: Some faculty members said this was the most effective meeting to communicate CIFOR's expectation and to increase the faculty advisors' and students' awareness of the program. Many miscommunication issues were solved during this visit, as CIFOR personnel met the advisors and students in a group and in

¹⁴ Second stage of selection was when CIFOR shared the long-listed applicants to faculty members to come up with a list of short-listed candidates that will be invited for an interview.

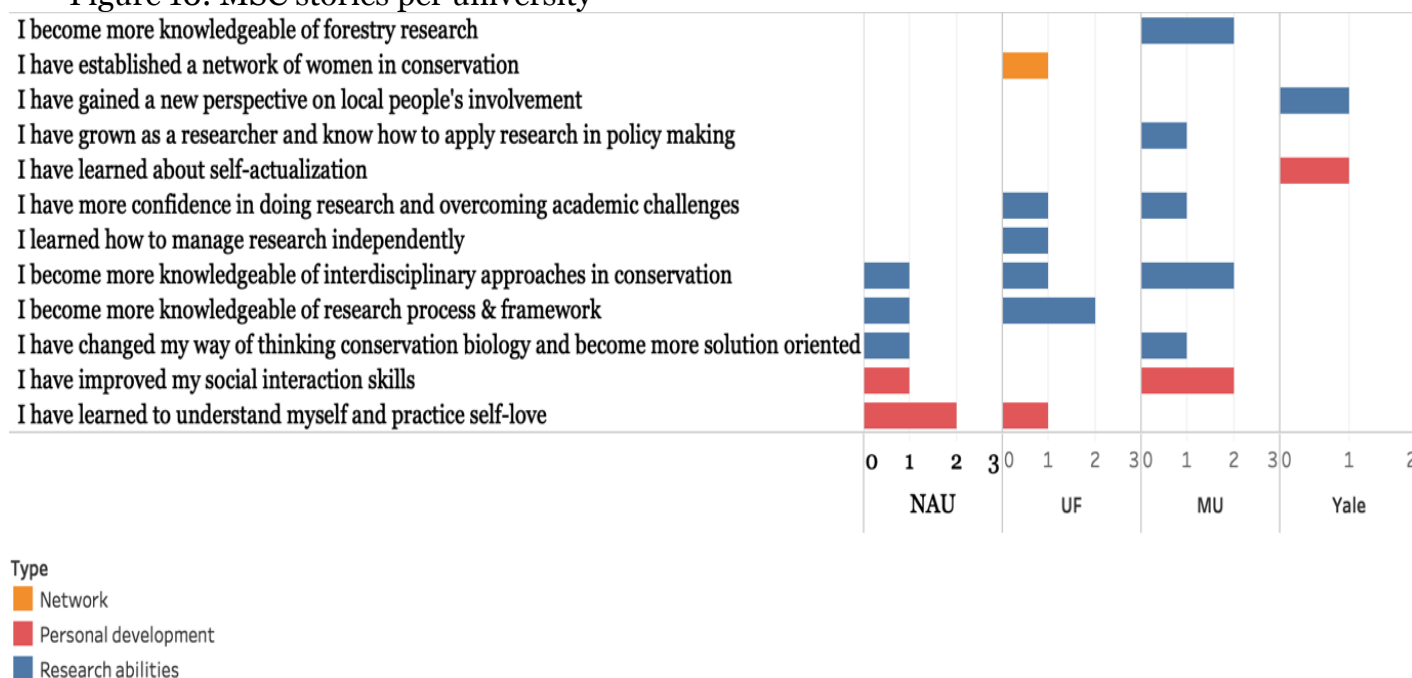
¹⁵ Third stage refers to the interview process

private. In this visit, students presented the progress of their research which gave the students an opportunity to practice in communicating to professionals in a friendly setting.

Sub-question 2.1: Were there differences in student experiences and, if so, what factors contributed to these differences?

We look at the differences in student experiences based on their MSC stories, survey results, and the design and delivery of the programs in four universities. The difference in MSC stories per university is shown in figure 10.

Figure 10: MSC stories per university



Northern Arizona University - Three stories (n=6) of the MSC stories from students in NAU chose changes in their research abilities and three in personal development. Students learned about critical and structured thinking in analyzing an issue. This change has made them see things from various perspectives where they reported to have a broader knowledge in designing and conducting research, as well as accepting different ideas and approaches. In term of personal development and personal effectiveness, students realized the importance of practicing self-appraisal in facing challenges and became better in time management, where they said they had improved their social interaction skills.

The students chose these changes as the most significant ones because they believe that having improved knowledge in research will help them with their future career goals. They reflected how decision-making processes were made in Indonesia that, in their opinions, focused more on short-term outcomes. They hope to be able to be a part of the decision-making processes to create a sustainable solution for the greater good of society. NAU students also believe that understanding themselves, know how to practice self-appraisal, and having better time management will help them in making personal and professional decisions in the future.

University of Florida - Five stories (n=7) of UF students selected changes in their understanding of research, either gaining more exposure to the research process, gaining more knowledge about interdisciplinary aspects of conversation, become more confident in conducting research and overcome academic challenges, learn an entirely new subject on biological modeling, and manage research project independently. One story on personal development mentioned changes in self-recognition and self-appraisal, which made the student more confident in dealing with people and choosing its future field of work. One student chose an MSC story in networking.

Students from UF chose these changes because they felt they could use their CUF experience in Indonesia to achieve their future career goals. In the long term, they felt these experiences (including the networks they have) were useful to help them pursue careers as researchers in various fields, for example, in wildlife conservation, biodiversity fields, as well as working directly with the community.

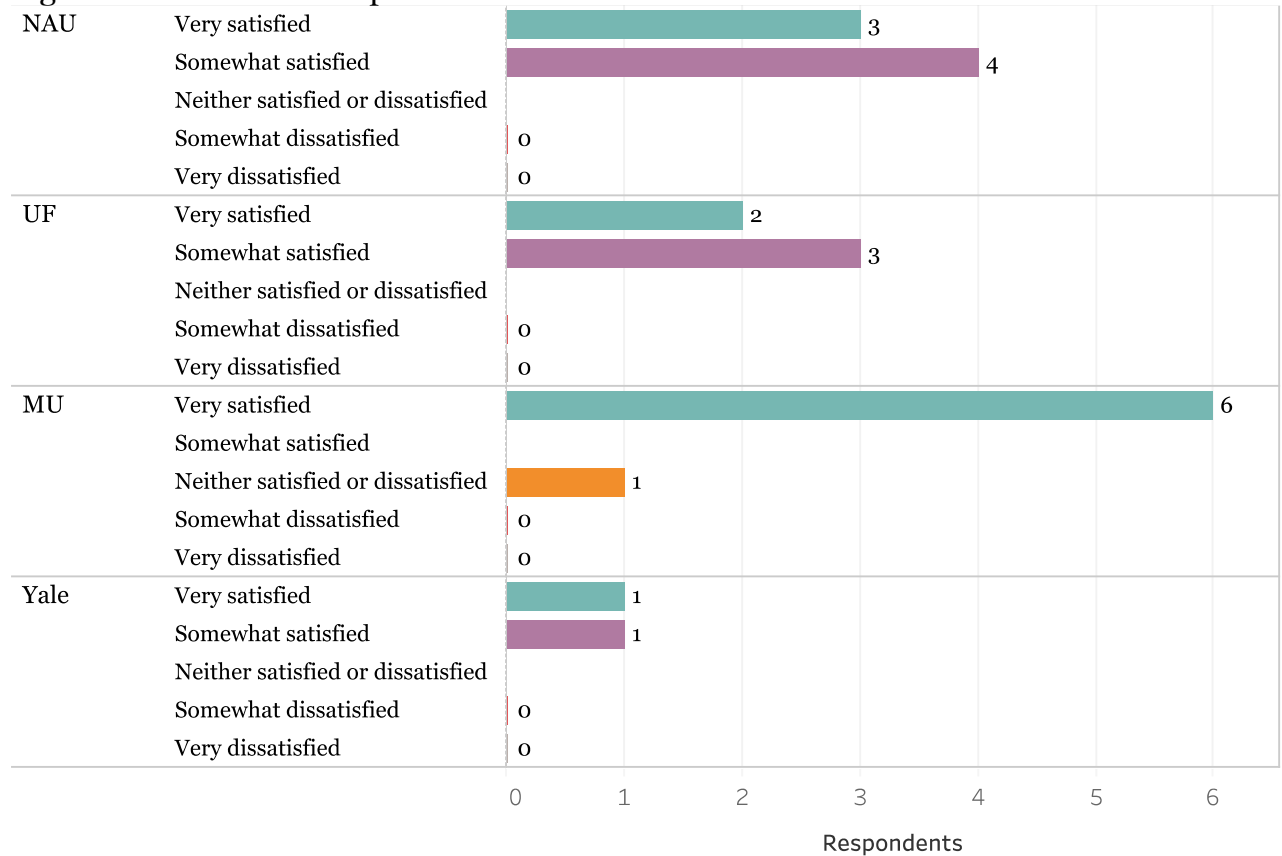
University of Missouri - Four from the students of MU described changes in gaining new (or global) perspectives in the context of research skills and knowledge. These changes helped them to see issues more thoroughly and at the same time, allowed them to increase their self-esteem. One story pointed out that learning new subjects is challenging, but it might open new opportunities. Other stories highlighted changes in personal effectiveness and human relations. Students said they became better in time management as a way to value other's time, learned to appreciate others' opinions, and learn to be adaptive when things did not go as planned. The reasons why participating students chose the above changes expressed the importance of having a global perspective and interdisciplinary aspects in looking at environmental issues in Indonesia.

Yale University - Stories from students at Yale emphasized changes in self-realization and transformation on professionalism. Mainly on how the student viewed the importance of inclusiveness of local involvement, which changed the student's approaches to environmental issues. The student also said the importance of having a paradigm shift, particularly on how this CUF program could transform its scholars to have the qualities of capable professionals.

Participants' perceptions on their CUF experience per university

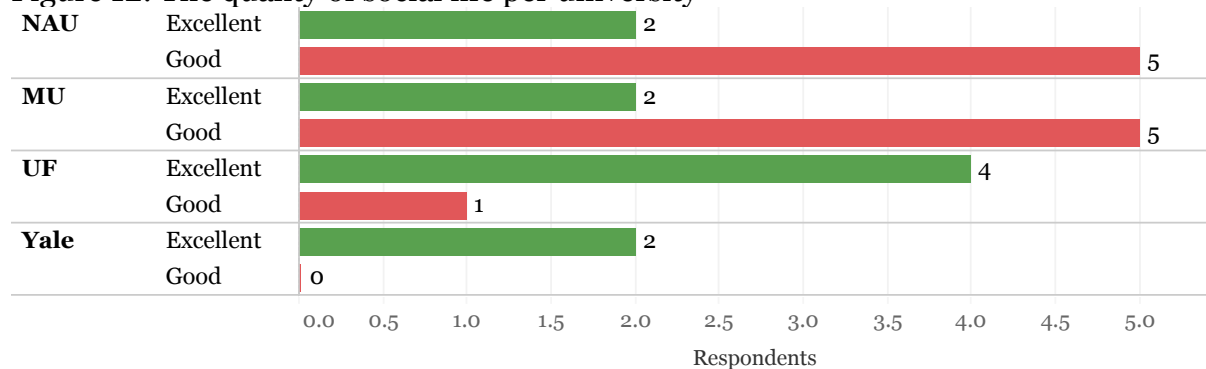
In term of CUF's overall experience, most of respondents from MU (6 students, n=7) were 'very satisfied'. However, one student was 'neither satisfied nor dissatisfied', due to challenges in adjusting to the advisor's expectations, adjusting to a new environment, language barrier, and how CUF was being organized. The student said that there should be a clear and detailed guide from CIFOR/USAID on what they expect from the scholars. Participants in the other three universities felt 'very satisfied' and 'somewhat satisfied' of their overall experience.

Figure 11: Overall CUF experience



There were also differences in perceptions among universities for *the quality of social life* and how helpful their *academic advisors* were.

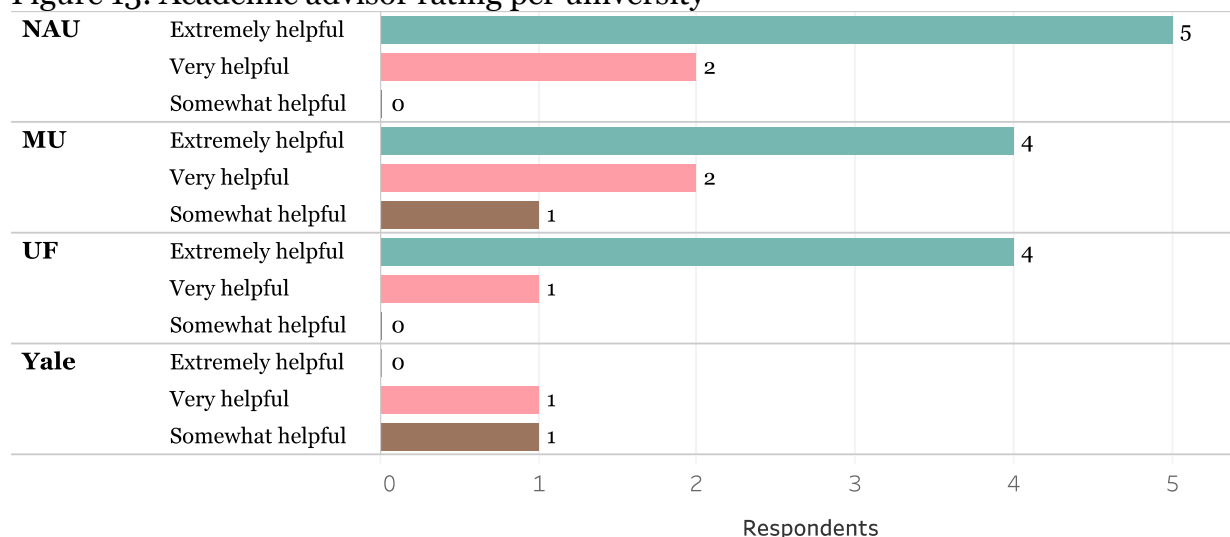
Figure 12: The quality of social life per university



Respondents from Yale felt their *quality of social life* was 'excellent' because of peer support and programs to facilitate students' work-life balance. Most students (4 out of 5 respondents) from UF also gave 'excellent' rating. Meanwhile, most respondents from NAU and MU felt it was 'good'.

Results on how helpful their *faculty advisors* were show the opposite where most respondents from NAU, UF, and MU felt their advisors were 'extremely helpful' and the respondents from Yale gave lower ratings as shown in figure 12 below.

Figure 13: Academic advisor rating per university



In trying to understand what factors contribute to differences in students' experiences, we compared four university programs as detailed below.

[NAU, College of the Environment, Forestry, and Natural Sciences \(CEFNS\) - School of Forestry \(SF\)](#) offers a Master of Science in Forestry (MSF) with emphasis area in Ecology, Evolution and Conservation Biology. It requires 32 semester credit hours, at minimum, with the following breakdown: 6 hours of: forestry seminar series (1), research methods (3), and pro-seminar (2); 6 hours of graduate level courses with significant content in statistics¹⁶; 12 hours of elective coursework with at least 6 hours of formal coursework¹⁷; at least 8 hours of thesis. The first cohort CUF students took 38-39 credits in total with an average of 9 credit hours per semester. The student's major advisor is a tenure-track faculty or a Research Professor working full time in the School of Forestry.

[UF – College of Agricultural and Life Sciences](#) offers MS degree with 23 different majors. CUF fellows were spread into three different majors which are [Forest Resources and Conservation](#), [Wildlife Ecology and Conservation](#), and [Soil and Water Sciences](#). Students need at least 30 credits to graduate with minimum 12 credits for major/program courses, 6 credits for thesis, and 12 other credits.

- (1) MS – Forest Resources and Conservation under School of Forest Resources and Conservation (SFRC) offers courses in ecological, economic, and social aspects of natural resources. In total, there were five CUF students in SFRC, four graduated already, and they took similar courses on research planning, facilitation skills adaptation and management, power and environment, introduction to applied statistics, introduction to information system/GIS, conservation planning, and community forest management.

¹⁶ Students need to take at least 6 hours from these options: Applied Ecological Data Analysis (3), Statistical Methods I (3), Statistical Methods II (3), Multivariate Statistical Methods (3), Categorical Data Analysis (3), Experimental Design (3), CCJ 614 Research Statistics (3) OR Quantitative Analysis (3), Quantitative Biology (3). Source: <https://nau.edu/forestry/wp-content/uploads/sites/140/GradHandbook170602.pdf>

¹⁷ The elective coursework requirement can be partially met by completing the Ecology, Evolution, and Conservation Biology (EECB) Emphasis: Concepts in Ecology (3), seminar course (1), and 6 credit hours of graduate-level courses selected from each of two of the following groups: quantitative, physiological/population/community, and ecosystem/global.

- (2) MS in Wildlife Ecology and Conservation, Department/School: Wildlife Ecology and Conservation (WEC) focuses on wildlife biology and ecology, natural resources management, and conservation. It offers various courses ranging from conservation biology to wildlife and agriculture. A complete list of courses for WEC can be found in the WEC's page¹⁸. Two CUF students graduated from this school, one with concentration in tropical conservation and development and one without a concentration.
- (3) Soil and Water Sciences (SWS) Department offers MS in Soil and Water Sciences with specialization in ecology, environmental science, hydrologic science, soil science, and in interdisciplinary areas including biogeochemistry, ecology, geographic information systems, hydrologic science, tropical agriculture, turfgrass management, and wetland science. A complete list of courses is available in the department's page¹⁹.

12 other credits can be taken from the College of Agriculture and Life Science courses²⁰ or any alternative courses based on advisor's approval. UF-CUF students went to three different schools/departments (SFRC, WEC, and SWS) and as 12 credits were major related courses, they took different classes. However, some students in SFRC, WEC, and SWS took community forest management. Also, some SFRC and WEC's students took courses on research planning, introduction to applied statistics, introduction to information system/GIS, conservation behavior, conservation planning, and conflict management. Other than that, courses were tailored based on individual needs as approved by their faculty advisors.

MU, College of Agriculture, Food & Natural Resources (CAFNR) – School of Natural Resources (SNR) offers a Master of Science (MS) in Natural Resources with emphasis area/concentration in Agroforestry, Fisheries and Wildlife Sciences, Forestry, Human Dimensions of Natural Resources, Park Recreation and Tourism, Soil, Environmental and Atmospheric Science, and Water Resources²¹. All of CUF students chose the Agroforestry emphasis area which requires at least 30 credits to graduate with four mandatory courses: 1) Agroforestry Theory, Practice and Adoption (Agroforestry I); 2) Ecological Principles of Agroforestry; 3) Agroforestry Economics and Policy; and 4) Agroforestry for Watershed Restoration. In addition, 15 of 30 credits should be a mid or upper level graduate courses, and a maximum credit for thesis is 12, including research, problems, special investigations, and special readings.

Yale School of Forestry and Environmental Studies (F&ES) offer a Master of Forest Science (MFS) for those interested in working in forest-related topics and Master of Environmental Science (MESc) for those who wish to work on non-forest related environmental issues. MFS/MESc is a 48-credit program where students should complete at least 24 formal courses²² and at least 12 credits for thesis. All admitted students are required to participate in a three weeks summer orientation module (MODs). MODs has three goals: 1) to introduce students to basic system analysis techniques; 2) to build F&ES community spirit; and 3) to introduce students to the landscapes where this activity requires a fieldtrip in forested landscape in

¹⁸ See http://gradcatalog.ufl.edu/preview_program.php?catoid=12&poid=5011&returnto=2648

¹⁹ See http://gradcatalog.ufl.edu/preview_program.php?catoid=12&poid=5010&returnto=2648

²⁰ See <http://gradcatalog.ufl.edu/content.php?catoid=12&navoid=2626>

²¹ See <https://snr.missouri.edu/graduate-studies/>

²² For a full list of F&ES courses, see <http://environment.yale.edu/courses/>

Connecticut²³. The MODs courses are urban ecosystem analysis, land measure and spatial analysis, and ecosystem measurement. Students are also required to take a mixed-methods for social science research course or a natural science research methods course in their first semester. F&ES does not require a tenure-track faculty or a full-time professor to be the student's major advisor. One of the CUF fellows in F&ES has an adjunct professor as the student's main advisor. CUF students plan and design their individual research with their major professors with inputs from their thesis committee. As they conducted the fieldwork in Indonesia in the summer after end of year 1, they were ahead of the normal F&ES timeline.

Summary of four graduate programs comparison

Total credit required to graduate : The credits requirements to graduate seem higher in Yale (48 credits at minimum) compared to the NAU, UF, and MU (30-32 credits). However, in terms of non-thesis course work, four universities require at least 24 credits, meaning the load for coursework was more or less the same. On average, the first cohort students who already graduated took 38 credits, including thesis.

Coursework : • NAU has specific requirements for statistics and quantitative related courses (6 mandatory courses and elective courses are also offering statistics related subjects) compared to the other three universities.
• MU has mandatory courses focusing on agroforestry: 1) Agroforestry Theory, Practice and Adoption (Agroforestry I); 2) Ecological Principles of Agroforestry; 3) Agroforestry Economics and Policy; and 4) Agroforestry for Watershed Restoration; CUF students took at least one course in statistics.
• In UF, students were spread into three different departments (SFRC, WEC, and SWS). There was no mandatory coursework (other than seminar), and courses were tailored based on consultations with their academic advisors (at least 12 credits for major related courses, and 12 electives).
• Yale has a mandatory summer orientation where students took urban ecosystem analysis, land measure and spatial analysis, and ecosystem measurement. Other than that, students have to choose either a mixed method for social science or a natural science research method. CUF students also took at least one statistic course.

Grade point averages : NAU, UF, and MU apply letter grades, and Yale uses a Pass-Fail system based on the professor's subjective overall appraisal of the student's work. In Yale F&ES, there were no grade point averages, class rank, nor are numerical equivalents assigned to grades²⁴. Even though NAU, UF, and MU used letter grades system, the appraisal of students' work also depends on the Professors, where some Professors use a different numerical range to assign, for example, a grade A (e.g., > 90 = A, >93 = A).

²³ See <http://environment.yale.edu/mods>

²⁴ See <http://environment.yale.edu/2017-2018/student-handbook/academic-regulations-and-policies.php>

New students' orientation	: Yale has a three weeks mandatory orientation to equip new students with basic analysis tools and for bonding with their peers. NAU, UF, and MU had 1-2 days of orientation for new students.
Major advisor	: Only NAU stated in its graduate student handbook that the major advisor should be a full-time professor or a tenure-track faculty. In MU, there were changes of advisors because the professors were moved to a different position, moved to another organization, or because the students changed their research topics.
Student distributions	: NAU, MU, and Yale have CUF students in one schools/department. Meanwhile, in UF (CALS), CUF students were spread into three different schools. As CUF cohort system was also designed so that students can support each other for courses, this purpose can only serve CUF students in UF-SRFC (5 students), wherein WEC and SWS, there were only two and one students in each school.

Other than the program design and student distribution, the general characteristics of CUF students, their personalities, and their relations to their advisors might also contribute to the differences. On average, students who had higher scores on their English proficiency and GRE tend to adapt faster to the new academic system and living conditions compared to those who scored lower. However, this is not always the case, as students' motivations also contribute to their successful outcomes. The relationship between students and their advisors is also a key factor in the differences in their experiences.

Sub-question 2.2: What lessons are there from the Forest Fellowship model that CIFOR should consider in developing their overall capacity development strategy?

Selection of candidates: This fellowship targeted applicants that had already worked in areas related to forestry, environment and natural resource management in Indonesia. This target group, the working conservation professionals, represents Indonesians who have shown their motivation to work in conservation and natural resources management, particularly in rural Indonesia, and have collected many valuable data for their future research. However, this group also consists of people who did not have proficiency in the English language to be accepted in the graduate program in the United States, and furthermore, to be successful in those programs.

The cohort system: Students were placed in a cohort with the expectation that the bonding will last until they graduate. Students and faculty members appreciated this system as the cohort was seen as a support system to help the students adjust to new living conditions and a different academic system. However, some students said CUF fellows did not have frequent interactions with each other once the semester started. They hoped to be able to interact more during and after completing their study to help each other and to share ideas to collaborate in the future.

English proficiency and other foundation courses: Some students did not have background knowledge or foundational knowledge in a few areas that were critical for their degree. They ended up needing to take additional courses before they could move forward. Some students, although their English proficiency scores met the university's requirement, also struggled to be able to operate at the graduate level.

Fieldwork:

Time allocation - the fieldwork was done in the summer after the second semester for 2-3 months, on average. Collecting data in a relatively short period also has its challenge due to logistical difficulties such as but not limited to the processing time of research permit, the weather that affects the mode of transportation, and the plan for long distance travel. Also, some of the faculty advisors had limited knowledge of the research that was conducted in Indonesia.

Funding allocation - CIFOR allocated up to US\$ 2,000 to support the fieldwork. We found that the total costs of the field work for most students exceeded the allocated amount, and a few students needed less, depending on their research topics and the duration of the fieldwork. Some schools committed extra funding for students to fund their fieldwork. Yale made it explicit in the LoA with CIFOR that they will cover up to US\$ 5,000 per student and other schools have research and travel grants that are accessible for students.

Some faculty advisors did not come to Indonesia - university partners agreed to have a faculty advisor accompanying his/her student during the fieldwork and to set aside funding to cover the faculty member travel costs during the fieldwork. However, not every student conducted this work with his/her faculty advisors, for various reasons. The absence of faculty advisor gave an additional challenge for the students compared to those who were being accompanied by their advisors.

Duration of the fellowship: Many faculty members expressed that 21 months, the time allocated for the program is not sufficient. Our data shows that only 38% (5 students, n=13) of the total first cohort students graduated in twenty-one months and less than 70% of students graduated in two years. On average, the first cohort students needed 23 months to complete their study. The reasons for the extension vary from the more extended data collection period due to student's research subject to a longer time for writing the thesis.

Communication between CIFOR, university, and students: There was confusion with regard to the duration of the study, where CIFOR expected the students would complete their education within 21 months while the faculty advisors and the students had the impression that it would require them at least 24 months. Both parties realized this matter when there was a visit from CIFOR's personnel to the schools, but some students could not manage to graduate by May 2018, because they realized this expectation quite late and did not plan accordingly.

The role of CIFOR advisors: CUF was designed where CIFOR scientists can work with faculty members to advise students. As CIFOR scientists have more experience in Indonesia's forestry and conservation context, CIFOR advisors advise by helping develop projects for students' fieldwork in Indonesia, providing students with opportunities to participate in CIFOR or its partners' research projects, or reviewing research proposal and thesis. However, having an advisor in CIFOR was only optional and not mandatory. Therefore, some students who had active interactions with their CIFOR advisors said it helped their fieldwork research and furthermore, the thesis writing process.

Sub-question 2.3: What should be done differently, if CIFOR implements a similar model in the future?

Selection of candidates:

- We would recommend CIFOR to have two pools of applications, one for those who have adequate English capabilities and the second for those non-traditional students who had work in the field and had less exposure to English and therefore need help with their English proficiency scores.
- The first pool of applicants will apply to universities following the existing admission processes.
- The second pool would consist of applicants who fulfilled all other requirements but had very low IBT/IELTS scores, i.e., those who scored 70 for IBT and 5.5 for IELTS. To help the second pool improving their English proficiency, we would recommend CIFOR to fund an English language preparation program in Indonesia. The duration of this program would be six to twenty-four weeks, depending on the level of English proficiency of the students. Once the candidates have completed this program, they could apply to universities and follow the existing admission process.
- Another recommendation option for the second pool would be for CIFOR to assess the possibility of having a three-year program of fellowship where the first year would be dedicated to English acceleration. This option can include a component where the candidates train with an NGO, a U.S. Forest Service, major conservancy organizations, or with the university in the United States. The candidates would perform an entry level job, for example as a research assistant, a junior researcher, a field technician, or an enumerator, for those organizations where they would need to practice English daily on that job and have a little exposure to some forestry and conservation issues. CIFOR could assess the possibility to work with university partners at an early stage to recruit this group of candidates with conditional acceptance offer from universities. An assessment of whether the candidates would also need to take English for the academic purpose would also be required.

English proficiency and other foundation courses: CIFOR to work with the university partners to provide training to equip new students with the foundational courses, including English for academic purposes. An early assessment based on students' English proficiency and GRE scores could be useful to determine whether students need this training.

Fieldwork:

- CIFOR and University to have a funding committee, a panel consisting of CIFOR personnel and/or faculty advisors. Instead of giving each student up to a maximum amount, the board would decide the funding allocation based on the proposals the students submitted, without exceeding the total amount allocated by CIFOR (US\$ 2,000).
- CIFOR to formalize the requirement of faculty advisors to visit students' field sites in Indonesia in the contract with the university and communicate to university partners that having the faculty advisors accompany students is mandatory. In cases where the faculty advisors could not go, the university/school should assign another member in the students' thesis panel to visit the students' fieldwork in Indonesia.
- We would recommend active participation of CIFOR advisors or any other advisors that have knowledge of Indonesia's forestry/conservation sector to help the students to prepare their fieldwork. CIFOR would need to assign personnel from CIFOR or partners' organization or assess the possibility to collaborate with local universities in Indonesia, to provide this option.

Active role of CIFOR advisor:

- We recommend CIFOR to facilitate the coordination between CIFOR/ICRAF advisors with faculty advisors from the beginning, as CIFOR and ICRAF advisors could provide knowledge about research in Indonesia or suggested field sites in one of their projects.
- CIFOR could use the students' updates to monitor the students' progress, to mitigate the risk of not achieving the program's output. CIFOR advisors could have a more active role in advising the students and coordinating with the faculty advisors. The student progress report is an early indication whether the academic challenges that students face will hamper their completion of the study or not and the discussion between advisors will help the program to take action as early as possible to help the students overcome those challenges.

Orientation for successful candidates in CIFOR: CIFOR to include the CUF alumni to seek input on what material should be given in the future orientation program. Also, to invite alumni as speakers in the orientation program and have a sharing session in a dialog setting between the CUF graduates and the new incoming students. Involving alumni will also strengthen the network of CUF fellows that will help them in their future career goals and increase the likelihood for collaboration to support Indonesia's natural resource management.

Duration of the fellowship: Only 38% of the first cohort (5 students, n-13) graduated on time. Therefore, we would recommend CIFOR to do further assessment of the average time needed for students to graduate in a full-time thesis-based master's program in the U.S., particularly those who required field research abroad. The assessment should also focus on graduates' programs that have similar majors with CUF.

Communication between CIFOR, university, and students: We would recommend CIFOR to produce a CUF handbook detailing the expectations and rules of the program. This would give a clarity to students on rights and responsibilities that could help them to plan their study.

Strengthening the CUF alumni network: CIFOR to facilitate a network of alumni. This would benefit the new upcoming students as the alumni would be able to share their experiences with the future students. Having a network of alumni will also strengthen the relations between participants in their careers and allow them to have many opportunities for interacting, for sharing ideas, for starting joint projects, and for helping each other career aspiration. All of these would increase the likelihood of the outcomes of the project, to have graduates becoming diverse well-connected professionals, capable of influencing debates in national policy networks.

Establishing a link with GOLS' research and engagement component: As CUF is part of a larger project with existing objectives, outcomes, and resources, it would benefit CIFOR and the students if CUF was well connected to the GOLS' research and engagement component. Students could benefit from having active CIFOR advisors working on the GOLS project that have the expertise on the subject and could give feedback on student's research. Students could also conduct their fieldwork at the GOLS' sites, expanding their network in Indonesia through GOLS'

partners, and produce research as part of the project's deliverables (info brief, poster, or journal article).

KEQ 3: Does the model represent good value for money?

We reviewed the expenses for 22 CUF funded students. The table below provides average cost per student per university, for two full academic years, rounded to the nearest USD 100.

Figure 14: Average costs per student for two academic years

Items	NAU	UF	MU	Yale
Tuition fee and other mandatory fees*	24,000	29,000	30,000	46,700
Living costs	29,200	34,100	39,200	32,000
Book allowance	2,500	2,100	2,100	1,000
Settling in allowance	5,000	5,000	5,000	5,000
Fieldwork	2,000	2,000	2,000	2,000
Total	67,700	72,200	78,300	86,700

*) Including health insurance

On average, the cost per student for two academic years is US\$ 76,200 where Yale has the highest average cost per student due to its tuition rate.

Reduced tuition rate – All university partners applied a reduced rate for the tuition fee which helped CUF to send more students. The reduction rates varied from using a resident rate²⁵ for NAU, UF, and MU and almost 50% tuition cut for Yale. NAU waived \$14,000 non-residency tuition fee per Academic Year²⁶. UF waived out-of-state fee \$17,394 per Academic Year²⁷. MU waived non-resident fee \$11,434 per Academic Year²⁸. Yale waived \$20,065 tuition fee/student/academic year²⁹. Yale F&ES also committed to provide summer research fund (\$5,000/scholar) and \$7,500 to F&ES faculty member(s) who will travel to Indonesia during the summer of 2018 to visit the scholar's field sites and provide advice on their research project. NAU, UF, and MU also agreed to cover their faculty members' travel cost to Indonesia.

Living cost allowance – This is a monthly allowance to cover housing, dining, and personal expenses. In calculating the monthly stipend, CIFOR used the university's cost of attendance guidance. CIFOR's rate for living expenses is approximately in the range of 98-100% of the estimated costs provided by the NAU, UF, and MU but only 85% for Yale. CIFOR paid the living allowance for fall, spring, and summer (when students conducted their fieldwork in Indonesia), at least for 24 months, despite some students graduated earlier. CUF fellows still received the living allowance (e.g. for June and July 2018) after they graduated in May 2018. In some cases, where students needed more than 24 months, CIFOR covered their living allowances up to 29 months.

²⁵ NAU, UF, and MU have two types of tuition rates, one for the state residents which is lower and one for out-of-state residents. International students fall into the latter category.

²⁶ We estimated the 2016-2017 graduate tuition and expenses using the 2018 rate <https://nau.edu/admissions/tuition-and-cost/tuition-expenses/>

²⁷ See <https://www.sfa.ufl.edu/cost/graduate-costs/>

²⁸ See <https://financialaid.missouri.edu/cost-of-attendance/graduate.php>

²⁹ See <https://environment.yale.edu/aid/tuition/>

Book allowance (2% of the total project costs, USD 41,200) was allocated for all required books and supplies during the period of study, using the university's rate as the maximum, and paid based on actual cost. NAU, UF, and MU budgets around USD 1,000 per academic year and Yale budgets USD 500. NAU's students' average costs for book and supplies were higher than the budget as it also included five laptops. CUF's book allowance was quite generous compared to other scholarship/fellowship program³⁰, where book allowance is paid once at the beginning of the study period, and the amount is much lesser.

Settling in and contingency allowance (5% of the total project cost, USD 120,000). This allowance was intended to help students to settle in and adjust to a new environment and living conditions, customarily paid at the beginning of the study. CIFOR gave the settling in and contingency allowance twice, totaling USD 5,000 per student. The amount that CIFOR paid to students for this allowance was very generous, compared to other programs. We do not find any supporting argument that this kind of allowance should be paid every year.

Value for money

CUF has successfully selected 26 and funded 22 Indonesian students to a graduate training program in the U.S. Twenty of the CUF-funded participants (n=22) have completed their study, returned to Indonesia, and now work in the targeted sectors. Graduates have better positions compared to their previous jobs or work in larger institutions that show improvement in their careers. Based on the MSC story collections, students valued the improvement of their research ability, personal development, and networking. Most of these stories highlighted changes in students' perspectives on how to approach an issue through multiple and global lenses, coming from their experience of adjusting to a new academic system and living conditions, and interacting with international peers. CUF students took courses in topics related to environment and natural resources management, including courses that will help to design research and development interventions, as well as negotiation, communication, and conflict courses that will be likely to help them to participate in policy dialogs. As individual changes from a capacity development program often affect other levels of capacity development (Palenberg, Rauniyar, & Thangata, 2017), graduates will be likely to bring their CUF experiences to their current and future jobs. Through interaction with their colleagues, they might contribute to positive changes in their institutions and furthermore, in their community.

Other similar scholarship programs, e.g., Fulbright and USAID that send Indonesian students to graduate schools in the U.S., have an average estimated cost of US\$ 70,000 to US\$ 76,000 per student for two academic years. CUF is at the high end of this range, with an average cost of US\$ 76,200 per student. CUF, however, has a specific field of study which is not the focus of the other scholarships. USAID-PRESTASI has a field of training in environment and natural resource management but focusing on the energy sector and water and sanitation. Also, other scholarships do not have mandatory

³⁰ We did a general comparison between CUF other scholarship programs such as USAID-PRESTASI, Fulbright, and LPDP. All these scholarships offer a master's degree opportunity for Indonesian students to the U.S. We only compared general allowances and not all the part of the scholarship. Fulbright's books and settling allowance is \$1,300-\$1,500 and paid once before the student departed to the U.S., USAID-PRESTASI gives \$350 for settling in allowance, \$800/year for books and supplies, and \$1,500 for computer and software.

fieldwork in Indonesia. Due to its unique characteristics, we only compared some elements of CUF and other similar awards.

In general, comparing the benefits and expected value that CUF fellows would contribute to the long-term, CUF has good value for money with some recommendations for a future program. We suggested CIFOR compare the amount of 1) book and 2) settling in and contingency allowance with similar fellowship programs. The book and supplies allowance could be limited to US\$ 500/year, considering the library facilities and access to journals in the U.S. graduate schools. The settling in and contingency allowance was given to students to help them settle in a new place, for example, the cost of buying furniture if the housing is not furnished, the security deposit as the landlord or landlady may require a security deposit amounting to one month of the lease. This could also be used for temporary accommodation before finding a permanent place. The settling in and contingency allowance can be limited to US\$ 700/student and paid one time at the beginning of the study. CIFOR could also limit the living allowance, up to the month when the student graduate or maximum 24 months, whichever is sooner.

Figure 15: Suggested cost of attendance per student for maximum 24 months

Items	NAU	UF	MU	Yale
Tuition fee and other mandatory fees*	24,000	29,000	30,000	46,700
Living costs	28,900	33,000	38,300	36,000
Book allowance	1,000	1,000	1,000	1,000
Settling in allowance	700	700	700	700
Fieldwork	2,000	2,000	2,000	2,000
Total	56,600	65,700	72,000	86,400

Average cost per student for 24 months US\$ 70,175 with equal distributions to each university. As some students managed to graduate on time (21 months) and CUF placed more students in NAU, UF, and MU, the average cost per student would be lower (US\$ 60,000-US\$ 67,000). By applying this cost-saving, CIFOR could allocate the savings to activities that are more directly supporting the output of the program (e.g., establishing alumni network, facilitating cohort gathering and collaboration, publishing journal articles) or to fund two additional students.

4. Conclusions

In terms of achievement, CUF has realized its specific objective and its end-of-program outcome, where selected students obtained academic training and conducted individual research in Indonesia. All students of the first cohort returned to Indonesia, 85% (11 fellows, n=13) completed their study, and now work in sectors related to natural resources management.

Overall, participants had positive experiences and valued the opportunity to work with experts, learn from their peers, and grow in personal development. Fellows felt CUF had contributed to improve their research and social skill set, broaden their perspectives, enhanced their effectiveness, and expanded their networks. Participants believed all of these experiences are valuable to equip them to contribute to Indonesia's environmental challenges. There were differences in students' experiences as a result of variance in graduate program designs, students' relationships with major advisors, and students' motivations.

CUF average cost per students is at the high end of other scholarships' range. However, considering CUF unique characteristics that could not be found in other programs and the long-term expected value that CUF fellows would contribute, we concluded that CUF provided a good value for money.

While CUF has achieved valuable results, there is room for improvement for CIFOR future educational investment. This evaluation recommends CIFOR to consider the following:

1. Evaluate the choice of university partners to ensure the best possible alignment with CUF goals.
2. Applying a different mechanism of selecting candidates with a specific target of beneficiaries.
3. Facilitating a more active interaction among cohorts to strengthen the bond between them.
4. Assessing the possibility to work with universities to provide need-based pre-academic training.
5. Formalizing the requirement for faculty advisors to visit students' fieldwork sites.
6. Encouraging a more active role of CIFOR advisors and facilitate the coordination between CIFOR advisors and faculty mentors.
7. Establish a link between CUF with the GOLS research and engagement component.
8. Adjust funding priorities to activities that more directly support the outcomes of the program and make adjustments to decrease: i) the book allowance; ii) the settling in and contingency allowance; and iii) the students' living cost.

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Annex 1: Document review

Type	No	Documents
Project proposal	1	GOLS' proposal
Donor report	2	Report #1 October 2015 – March 2016 ³¹
	3	Report #2 October 2015 – September 2016
	4	Report #3 October 2016 – March 2017
	5	Report #4 March 2017 – September 2017
	6	Report #5 October 2017 – March 2018
Trip report	7	Bethany Davies, Washington DC, 26 – 31 April 2018
	8	Diny Hartiningtias, Flagstaff, AZ, 16 Aug 2017 – 14 May 2018
	9	Diny Hartiningtias, Washington DC, 27 - 30 April 2018
	10	M. Nurhuda Nugraha, Washington DC, 27 - 30 April 2018
	11	Andika Putraditama, Flagstaff, AZ, 23 August 2017 – 31 May 2018
	12	Andika Putraditama, Washington DC, 27 April 2018 – 29 April 2018
	13	Caroline Tasirin, New Haven, CT, 31 July 2017 – 23 May 2018
	14	Caroline Tasirin, Washington DC, 27 Apr 2018 – 30 Apr 2018
	15	Bruce Mecca, New Haven, CT, 31 July 2017 – 9 May 2018
	16	Bruce Mecca, Washington DC, 27 Apr 2018 – 30 Apr 2018
	17	Dayu Soraya, Columbia MO, 9 Aug-2017 – 17 May 2018
	18	Dayu Soraya, Washington DC, 27 - 30 April 2018
	19	Dienda Hendrawan, Columbia, MO, 10 Aug-2017 – 16 May 2018
	20	Dienda Hendrawan, Washington DC, 27 - 29 April 2018
	21	Dorin Kusumawardani, Columbia MO, 9 Aug-2017 – 17 May 2018
	22	Dorin Lida Kusumawardani, Washington DC, 27 – 30 April 2018
	23	Ernawati Apriani, Flagstaff AZ, 16 Aug 2017 – 14 May 2018
	24	Ernawati Apriani, Washington DC, 28 – 30 April 2018
	25	Shafia Zahra, Washington DC, 28 – 30 April 2018
	26	Lely Puspitasari, Flagstaff AZ, Aug 16, 2017 – May 13, 2018
	27	Lely Puspitasari, Washington DC, April 27-30, 2018
	28	Mohamad R. Ridlo, Gainesville, FL, Aug-2017 – May 2018
	29	Mohamad R. Ridlo, Washington DC, 27-Apr-2018 - 30-Apr-2018
	30	Amanda Dwikarina, Washington DC, April 27-30, 2018
Project outputs	31	Fact sheets, presentations, info briefs, journal and blog articles, videos, and internal documents.

³¹ Based on the reporting period stated in the project document

Annex 2: List of interviews

Informational Interviews

No	Name	Position
1	Steven Lawry	Director of Equity, Gender and Tenure research program
2	Rogier Klaver	Team Leader, Project Management and Coordination
3	Made Dwi Astuti	Senior Project Officer
4	Suci Eka Ningsih	Senior Accountant
5	Rahayu Koesnadi	Program Secretary

Semi-structured Interviews

No	Name	Organization	Role
1	Kristen Waring	NAU	Professor, School of Forestry
2	Paul Beier	NAU	Regents' Professor, School of Forestry
3	Peter Z. Fulé	NAU	Professor, School of Forestry
4	Yeon-Su Kim	NAU	Professor, School of Forestry
5	Allan Bacon	UF	Assistant Professor, Environmental Pedology
6	Holly Ober	UF	Associate Professor of wildlife ecology and wildlife Extension specialist
7	Martha Monroe	UF	Professor and Associate Director, School of Forest Resources and Conservation
8	Benjamin Knapp	UF	Associate Professor, College of Agriculture, Food & Natural Resources (CAFNR)
9	Chung-Ho Lin	UF	Research Associate Professor, College of Agriculture, Food & Natural Resources (CAFNR)
10	Jillian Collins	UF	Director of sponsored student programs
11	Michael Gold	UF	Research Professor, College of Agriculture, Food & Natural Resources (CAFNR)
12	Shibu Jose	UF	Professor, The School of Natural Resources; Interim Associate Dean, Office of Research and Extension; Interim Director, Agricultural Experiment Station
13	Erik Streed	USAID	Forestry Advisor
14	Diny Hartiningtyas	NAU	Student, cohort 2
15	Sheherazade	UF	Student, cohort 1
16	M. Rois Ridlo	UF	Student, cohort 1
17	Thalita C. Pingkan Sumampow	NAU	Student, cohort 2 (PRESTASI)
18	Dayu Soraya	UM	Student, cohort 2
19	Caroline Tasirin	Yale	Student, cohort 2
20	Amanda Dwikarina	UM	Student, cohort 2 (PRESTASI)
21	M. Nurhuda Nugraha	UM	Student, cohort 2 (PRESTASI)
22	H. Ajie Dewanto	UM	Student, cohort 1
22	James Roshetko	ICRAF	ICRAF advisor
23	Yves Laumonier	CIFOR	CIFOR advisor
24	Himlal Baral	CIFOR	CIFOR advisor

Annex 3: Semi-structured interview guide

Part 1: Information on Participating in a Study

Description of the study and your participation

You are invited to participate in a study led by the Center for International Forestry Research (CIFOR). CIFOR-USAID Fellowship (CUF) is a capacity development program that provides master's degree opportunities for highly qualified Indonesian candidates to study forestry conservation, natural resources management, and related disciplines in the United States. In this study, the CIFOR evaluation team will synthesize feedback on participants' experiences in the fellowship to improve the program as well as to provide an assessment of the program's value.

Your participation would involve answering some questions about your experience supervising the participants in this program, which will be asked by a member of the study team. If you agree, the study team may audio-tape the discussion. Any information you supply will only be available to the evaluation team. All information collected will be de-identified and stored in secure servers in line with CIFOR and USAID's data management policies. The amount of time involved will be no more than one hour for an interview.

Your participation in this study is entirely voluntary. You can choose not to participate, and you can stop participating at any time. You will not be penalized in any way if you decide not to participate or withdraw from the study at any point in time.

Potential risks or discomfort

We do not foresee any risks to you from participating in the study. However, given the sample size and the nature of the program there is a possibility that you will be identifiable from your interview data. If there are any questions that you prefer not to answer, or if you would like to stop the interview before it is finished, you should feel free to let the interviewer know. The interviewer will try to address any concerns you may have about the interviews.

Potential benefits

There are no direct benefits to you from participating in this study. However, there may be benefits to your community by assisting in the study, as this may help to improve the program provided by other research/developmental agencies.

Protection of confidentiality

The study team will not use your name, address, or any other personal information. If you wish, the team also will not use direct quotes of yours. If you have any concerns about your privacy, please let us know.

Contact information

If you have any questions or concerns about this study or if any problems arise, please contact:

Sinta Lestari

Email: hl.lestari@columbia.edu or hlestari@gmail.com

Phone: +1.646.591.4728

Part 2: Semi-structured interview guide

Introduction

Good morning [interviewee]. Thank you for taking the time to talk with me today. My name is Sinta Lestari; I am a consultant assisting the Center for International Forestry Research (CIFOR) in the CIFOR-USAID Fellowship (CUF) program evaluation. The purpose of this study is to synthesize feedback on participant's experiences in the fellowship program to improve the program as well as to provide an assessment of the program's value to the funder, USAID.

We are interested in hearing about your perspectives on the CUF fellowship program and any experiences you would like to share with us related to this matter. All ideas and comments are welcome; we value your candid opinions. I am hoping to take about 40-60 minutes of your time to learn about your work and your project(s) in this fellowship program.

Before we begin, may I ask your permission to record our discussion to capture your ideas fully? The recording, to which only the evaluation team will have direct access, will be de-identified and securely stored. However, if you would rather not have the interview recorded, please let me know, and I will not record it.

At any point in time if you would like to stop the interview, please feel free to let me know. The information that I collect on this topic will be used in the final evaluation report; however, if you prefer that we do not use your name, we understand entirely.

[If the interviewee is not interested in participating, stop, say thank you, but do not continue.]

Do you have any questions for me?

Questions:

1. Could you please tell me about your involvement in this fellowship program? How you came to be involved? And more detail about your roles?
2. In your opinion, what are the components that made up the program?
 - What strategies, interventions, and tools were used by [university/school] in this fellowship program?
3. Which of these strategies, interventions, and tools would you consider to be key program components? Please explain.
4. In your opinion, what are the key components to the achievement of successful outcomes for the students? Please elaborate - What worked well?
5. In your opinion, what should CIFOR and [the school] do differently next time? Please explain why.
6. Do you think there were co-benefits for the university particularly for the School of Forestry by participating in this fellowship program? and if so, what were they?
7. Was there any significant change that [name of the student] experienced as a result of their participation in this fellowship? Please elaborate.
Probes: In your opinion, what was the most valuable experience to the participating students?

8. Were there any networking events or professional development programs for the students? If so, how do these programs help and inspire the students with their future career goals?

Probes: what effect, if any, do you feel the fellowship program had on Indonesia's sustainable resources challenges? Please elaborate.

- How does the effect relate to the student's future career aspirations?

Closing [estimated time 5 – 10 minutes]

- Is there anything more you would like to add?
- Do you mind if we include your name in our report?
- Do you have any suggestions for anyone else I should contact who might be of relevance to this study?
- Do you mind if we follow up if there is any other information, I want to confirm with you?

Thank you again for your time.

Annex 4: Most significant change stories collection guide

Background to share with your interviewee:

CIFOR would like to collect some stories about what has changed for students as a result of their participation in the Forest Fellowship program. These stories will be collected and analyzed in a participatory process involving both participating students and project staff. The process will be an opportunity for students to reflect on their experience and share their perspectives on the value of the Fellowship program.

After the workshop process, the collected stories and results of the participatory analysis will be used as part of the internally led evaluation of the Forest Fellowship program. The evaluation will be shared with donors, host institutes and summary information will be likely made available online and to a wider network of CIFOR's research partners.

The workshop process and the evaluation will not use students' names without consent, but students should be aware that given the size of the program and the other identifying information collected, it will be highly likely that they will be identifiable from their stories. CIFOR does not foresee any negative consequences for students from being identified, but we wanted to make this possibility transparent.

Interview Details

Name of storyteller*:

Student cohort of the storyteller:

Host institution of the storyteller:

Name of person recording story:

Location of the interview:

Date of interview:

Is the storyteller happy for their story to be used for external purposes?

Is the storyteller happy for their story to be used for external purposes?

*(If they wish to remain anonymous, don't record their name but please capture their host institute and cohort)

QUESTIONS

1. What has changed for you as a result of your participation in the Forest Fellowship program? List a few things that come to mind:

2. We have been talking about a number of changes (refer to list above), from your point of view, which do you think is the MOST significant change. Please try to describe this change in the form of a story:

Beginning (situation before the change)

Middle (what happened):

End (situation after):

3. Why did you choose this change in particular? e.g. Why was it significant for you?

Annex 5: Most significant change stories summary

The following are the stories collected and captured during the Focus-Group Discussions in Washington DC, back in April 2018. These stories show in a narrative way how the project impacted on changes on the participants' development as step towards the achievement of the project objectives.

Table 9: Most Significant Change Selection Process

Group	Themes	The most significant story
(1) Purple 1	<ul style="list-style-type: none"> • Self-realization of own's role in society and respect local knowledge • Acknowledge the limitations, more realistic, good support system • More interaction, open minded, explore out of the comfort zone • Priority management, broader perspective, more strategic thinking • Improve technical skill set, find the expertise 	<p>Story title: Awareness to avoid Messiah complex</p> <p>Student cohort that the story is from: 2nd</p> <p>Why this story was selected as the most significant: It is more significant than getting technical skill sets but goes into a more philosophical understanding of own's role in the society. The person realized that to change society for the better, one must avoid the Messiah complex, and one must listen carefully and respect the local.</p>
(2) Purple 2	<ul style="list-style-type: none"> • Broader perspective and more ideas • Community skill (in expressing yourself) • Stay positive in the face of struggle • Persistence in the face of difficulty • self-discipline • Better managed of time • Skepticism to enlightenment for research methods • Acknowledging my limitations • Greatest self-confidence • Respect others • Found my purpose 	<p>Story title: Finding my purpose</p> <p>Student cohort that the story is from: 1st</p> <p>Why this story was selected as the most significant: Difficult to find a purpose in your life. Having a purpose gives you the drive to overcome your limitations.</p>
(3) Yellow	<ul style="list-style-type: none"> • More focus on objectives • More open minded • Being respected of diversity • Being more professional • Proactive in career • Legitimacy as a scientist • Critical thinking • Structured thinking • More collaborative (non-hierarchy) • Being responsible of time and self 	<p>Story title: Being the best version of yourself</p> <p>Student cohort that the story is from: 2nd cohort</p> <p>Why this story was selected as the most significant: Because the changes are clearer and can relate to diverse Indonesian culture. If you want to make</p>

Group	Themes	The most significant story
	<ul style="list-style-type: none"> • Stop procrastinate • Adding new expertise • Embrace your limitation • Not hesitate to ask for help • Appreciative of other's contribution • Offering help • More self-conscience (decisive) 	an impact, you have to change yourself first.
(4) Green	<ul style="list-style-type: none"> • Improved interdisciplinary skills and perspective • Embraced many roads to Rome • Improved networking experience • Implementation in future or current career • Appreciate cultural differences better • Shifted expectations • Better understand on learning process • Learned ground knowledge about social in forestry context • Recognize your passion of interest in science • Balancing professionalism and personal life 	<p>Story title: Embracing Many roads to Rome</p> <p>Student cohort that the story is from: 1st</p> <p>Why this story was selected as the most significant: The story resonates our personal perspectives, addressed between social and natural sciences. The story tells us that after following this program, we can think broader to examine the specific context.</p>
(5) Pink	<ul style="list-style-type: none"> • Open minded in term diversity • Ability to develop personal communicating skill • Improve critical thinking • Become more resilience to challenge • Gaining learning persistency • Improving skill on making priority management • Involve in a positive competitive learning environment • Adaptation on different learning style and environment • Gaining new technical knowledge 	<p>A chronicle of a little girl</p> <p>Student cohort that the story is from:</p> <p>Why this story was selected as the most significant: The story about this scholar not only cover the improvement or academic knowledge or technical forestry knowledge, but the scholars experience difficulties in catching up with learning phase in here at the first time, and she somehow finds a way to survive and stood up for what she wants. So, she also learns to develop personal soft skill such as priority management and observing emotion. This kind of learning process really shapes her into not only a qualified scientist but also a better person.</p>
(6) Orange	<ul style="list-style-type: none"> • Expanding professional networking • Break the limit • Integrating multiple disciplines into more comprehensive study 	<p>Story title: Discovering a new way of thinking by studying abroad</p> <p>Student cohort selected the story: 2nd</p>

Group	Themes	The most significant story
	<ul style="list-style-type: none"> • Learn how to process the information become more valuable for community • Decision maker to her research and study • Personal independent 	<p>Why this story was selected as the most significant: Because other stories talk more about personal changes, but this person relates to professional improvement that along with the goal of the program. We like the story because this person can think more in professional life means he already overcome a personal difficulty.</p>

Annex 6: Web-based survey

CIFOR-USAID Fellowship Evaluation

As part of the Forest Fellowship program evaluation, we would like your feedback about your experiences as part of this program. This information will help us improve CIFOR's post-graduate student support programs in the future.

Your participation in this survey is voluntary and your answers are confidential. The data collected in this survey will not be shared with anyone outside of the evaluation team and all results presented in the evaluation report will be aggregated and de-identified.

The survey will take about 4-10 minutes to complete. By completing this survey, you consent to participate in the evaluation activity. Thank you for your time.

CONTACT:

If you have questions at any time about the study or the procedures, you may contact Sinta Lestari at h.lestari@columbia.edu or hlestari@gmail.com

You may print a copy of this consent form for your records.

Required

Email address *

Please select your choice below. Clicking the “Agree” button indicates that you have read the consent form below and voluntarily agree to participate. *

- ☐ Disagree
☐ Agree

1. Please rate your graduate experience

A. Overall, how satisfied or dissatisfied are you with your experience at this fellowship? *

Mark only one oval.

- ☐ Very satisfied
- ☐ Somewhat satisfied
- ☐ Neither satisfied or dissatisfied
- ☐ Somewhat dissatisfied
- ☐ Very dissatisfied

B. How would you rate your pre-departure orientation in Bogor? *

Mark only one oval.

- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Very poor

C. How would you rate the quality of your social life overall at this university? *

Mark only one oval.

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Terrible

D. How helpful is/was your academic advisor(s)? *

Mark only one oval.

- ☐ Extremely helpful
- ☐ Very helpful
- ☐ Somewhat helpful
- ☐ Not so helpful
- ☐ Not at all helpful

E. How valuable is/was having a cohort* at your graduate school experience? *)
Cohort refers to your group of CIFOR fellow(s) at the same university *

Mark only one oval.

- ☐ Extremely valuable
- ☐ Very valuable
- ☐ Somewhat valuable
- ☐ Not so valuable
- ☐ Not at all valuable

F. How satisfied or dissatisfied are you with your peer-to-peer learning among the cohort which was facilitated by the fellowship program? *

Mark only one oval.

- ☐ Very satisfied
- ☐ Somewhat satisfied
- ☐ Neither satisfied or dissatisfied
- ☐ Somewhat dissatisfied
- ☐ Very dissatisfied

G. How was your fieldwork experience? *

Mark only one oval.

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Very poor

Is there anything you would like to add?

2. What are the top three skills/knowledge you gained/improved by participating in this fellowship. Please see some options below. *

Here are some options but you are welcome to add any skill that is not listed below.

Check all that apply.

Research methods

Developing research proposal

Qualitative data analysis

Quantitative data analysis

English language

Academic writing

Presentation and data visualization

Technological skills including new software or computer programs

Leadership and professional networking

3. What do you think are the key factors to students' success in this fellowship program? *

4. What was your biggest challenge(s) in this graduate training? *

5. What did you find most valuable about this fellowship experience? *

6. What changes would you make to improve the program?

7. If you had the chance to repeat your graduate experience, what would you have done differently? *

8. Professionally, where do you see yourself in 5-10 years? *

How did you hear about the CIFOR Forests Fellowship program? *

Mark only one oval.

- ☐ CIFOR's website
- ☐ Mailing list
- ☐ Word of mouth
- ☐ Other:

Gender *

Mark only one oval.

- ☐ Female
- ☐ Male
- ☐ Prefer not to say
- ☐ Other:

What year did you start the fellowship program? *

Mark only one oval.

- ☐ 2016
- ☐ 2017

Which participating university did/do you attend? *

Mark only one oval.

- ☐ Northern Arizona University
- ☐ University of Florida
- ☐ University of Missouri
- ☐ Yale University

Are you currently employed? *

Mark only one oval.

- ☐ Yes
- ☐ No

Years of working experience prior to the program *

Mark only one oval.

- ☐ 0 – 2 years
- ☐ 3 – 4 years
- ☐ 5 – 6 years
- ☐ More than 6 years

Your name (optional)

Send me a copy of my response

Annex 7: Survey respondents

In this evaluation, we used hosting institutions, time of entering the program, gender, years of experience prior to joining the fellowship, and current employment as characteristics of respondents to better understand the factors associated with students' experience. We had 100% representation from NAU and Yale, 78% for MU and 63% from UF. The total respondents of the survey were 21 students, representing 81% of total students enrolled (26 students) in the fellowship program.

Table 10: Survey respondents based on university

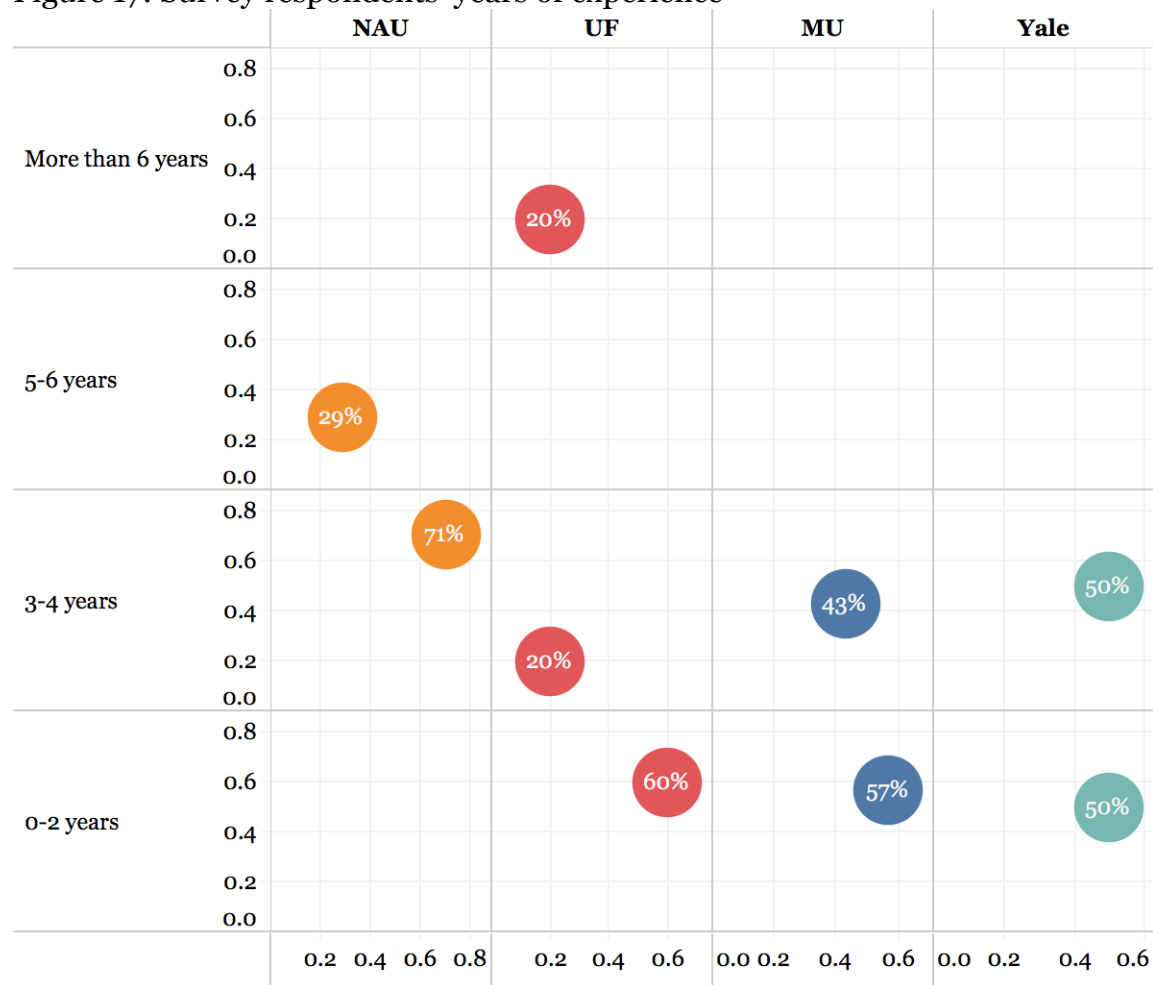
University	Respondents	Total students	Percentage
NAU	7	7	100%
UF	5	8	63%
MU	7	9	78%
Yale	2	2	100%
Total	21	26	81%

Figure 16: Survey respondents characteristic

Characteristic	NAU	UF	MU	Yale	Total
Gender					
Female	6	2	5	1	14
Male	1	3	2	1	7
Years of experience ⁱ					
0 – 2 years		3	4	1	8
3 – 4 years	7	1	3	1	12
5 – 6 years					0
More than 6 years		1			1
Cohort					
First cohort	2	5	2		9
Second cohort	5		5	2	12
Current employment					
Not employed	5		4	2	11
Employed	2	5	3		10
Total respondents	7	5	7	2	21

Of the respondents of the overall survey, 67% of respondents (14 students, n=21) were females and 33% (7 students) were males. On average, NAU's survey respondents had more years of experience compared to other universities. While respondents in UF were more spread but most of them have 0-2 years of working experiences prior to the CUF. Respondents in MU and Yale shared similar characteristics.

Figure 17: Survey respondents' years of experience



ⁱ Respondents' pre-CUF working experience related fields.