

# INTERNATIONAL ECONOMIC TOOLS FOR CONSERVATION

HUMBOLDT STATE UNIVERSITY ARCATA, CA



# **COURSE REPORT**





#### BACKGROUND

CSF's flagship two-week Economic Tools for Conservation course is well known for being an intensive boot camp in economics for environmental professionals. For more than 20 years, participants in this course have learned to use economics to be more strategic and successful in their work. They have also experienced a transformational shift in how they view environmental issues, and the relationship between economics and the environment. Our course graduates use what they learn with CSF to make a tangible difference on the ground in their home countries.

This course also represents a unique opportunity for conservation professionals from all over the world to come together, share experiences and strategies, and build a global network of colleagues. Our alumni stay in touch for years, visit one another, celebrate career successes, and collaborate on projects.

"We often think of the economy and the environment as separate issues that are opposed to each other. Sometimes, we do see them as inherent parts but struggle to find the proper harmonization. The Economic Tools for Conservation course helped me to build a bridge between market forces and natural resources, to re-think their relationship, and learn about solutions that sustainably integrate economic growth with conservation. In only two weeks, the course provided me with a wide overview on natural resource economics, from microeconomic principles to ecosystem services valuation methods and cost-benefit analysis of projects and public policy. The lessons learned were enhanced by the interexchange among students from all over the world. After the course, I am increasingly convinced that we need to keep advancing this cultural change in the way we conceive the relation between the economy and the environment, and that this change is possible. At my current position in WWF Paraguay, at the department of Sustainable Production, Markets and Finances, the knowledge acquired on conservation economics will be deployed to revise and improve our technical approach, and design concrete tools/solutions aimed at harmonizing economic dynamics with environmental needs."

-- Sara Costa, World Wildlife Fund, Paraguay



#### **INSTRUCTORS**

Experts in environmental economics with extensive field experience and an understanding of realworld conservation challenges join CSF each year to teach Economic Tools for Conservation. Our instructors are drawn from CSF staff as well as leading academic and international institutions such as University of Wisconsin-Madison and the University of Hawai'i. We worked closely with four instructors to develop the training materials for the 2019 course:



**David Johnson** University of Wisconsin



Kim Bonine Conservation Strategy Fund



John Lynham University of Hawai'i at Manoa



Aaron Bruner Conservation Strategy Fund

"I was stuck in a teaching and research orientation that led me to reading from books, papers, and reports. This course made me realize that at some point a teacher also needs to sit in class and be taught and experience how studentship feels. The course has adjusted my teaching models and even language; I now know the simplest and most understandable means of transferring this information to my students! Cost-benefit analysis is a very important part of my work and I have gained much more confidence in undertaking such a study and drawing effective conclusions from it. The course has added more value to my entire profession."

-- Neema Kitasho, Sokoine University of Agriculture, Tanzania



#### **PARTICIPANTS**

This course is designed for people at the forefront of conservation challenges, including managers of conservation programs and protected areas, directors of non-governmental organizations, and representatives of government agencies. Participants come from a variety of disciplines, such as biology, forestry, law, anthropology, and economics. Previous training in economics is beneficial, but not essential. Participants must be proficient in spoken and written English.

In 2019, we hosted a total of 15 participants from 12 countries and 14 different organizations. They were a mixed group of NGO practitioners, academics, and government staff.

First Name	Last Name	Country	Organization	Job Title
Anna	Harvey	United States	PADI	Master Scuba Diver Trainer
Anthony	Ndikumulimo	Tanzania	Catholic Diocese of Rulenge Ngara	Executive Secretary
Carolina	Proaño-Castro	Ecuador	Fundación Futuro	Executive Director
Celia	Harvey	Costa Rica / USA	Monteverde Institute	Research Affiliate
Ernesto	Ortiz	Peru	Peruvian Society of Environmental Law	Advisor to MINAM
Jeneen	Garcia	USA	Global Environment Facility	Evaluation Officer
Luna	Latimer	USA	Mid Klamath Watershed Council	Director
Melissa	Carmody	Chile	Wildlife Conservation Society	Karukinka Natural Park Coordinator
Navil	Argamont Akiyama	Bolivia	FONABOSQUE	Finance Director for Programs & Projects
Neema	Kitasho	Tanzania	Sokoine University of Agriculture	Assistant Lecturer
Nestor	Ortiz-Perez	Colombia	Ministry of Environment & Sustainable Development	National Consultant for Amazon Vision Program
Pilar	Velasquez Jofre	Guatemala	WWF	Fisheries & Marine Conservation Technical Officer
Sandra	Bias	Philippines	Dept. of Environment & Natural Resources	Senior Ecosystem Management Specialist
Sara	Costa Garay	Paraguay	WWF	Project Officer
Sopian	Hidayat	Indonesia	CSF - Indonesia	Analyst



#### CURRICULUM

Our Economic Tools for Conservation course gives participants a solid foundation in economic theory combined with tools, exercises, games, and case studies relevant to the real world challenges they face. The course covers economic fundamentals, natural resource economics, valuation of ecosystem services, environmental policies, communication and negotiation techniques, and hands-on experience with cost-benefit analysis of projects and policies.

#### Table 1. Course Topics

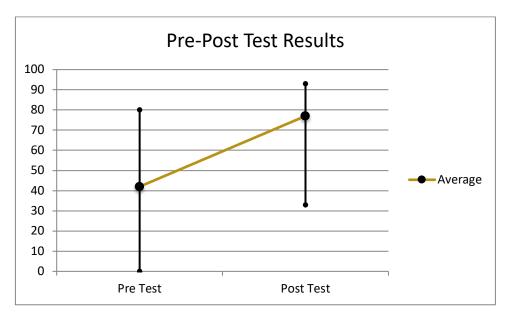
<b>David Johnson</b> University of Wisconsin Madison	<b>Microeconomics</b> Key Concepts, Economic Models, Experimental Market Game, Competitive Markets, Trade Theory, Welfare Economics, Supply & Demand Analysis, Market Failure, Externalities, Public Goods	
<b>John Lynham</b> University of Hawai'i at Manoa	Natural Resource Economics Non-renewable Resources, Forest Economics, Common Pool Resource Management, Fisheries Economics & Policy, Experimental Game Theory, Regulatory Approaches, Marine Reserves	
Kim Bonine CSF	<b>Environmental Policy &amp; Incentives</b> Market & Policy Failures, Voluntary Instruments, Command & Control Instruments, Economic Incentives, Policy Evaluation Criteria, Economics of Illegal Behavior, Policy Design Exercise	
Aaron Bruner CSF	<b>Environmental Valuation</b> Ecosystem Services, Valuation Overview, Stated Preference Methods, Survey Design, Market, Revealed Preference, Benefit Transfer Methods, Exercises, Valuation Analysis Design	
Kim Bonine CSF	Cost and Benefit Analysis: Process & Scope, Analysis Perspectives, Financial Cash Flow, Economic Analysis, Indicators of Feasibility, Sensitivity & Risk Analysis, Excel Model, Case Study Group Exercise & Role Play	





## **TEST RESULTS**

We conducted a knowledge test before and after the course to determine the participants' level of improvement. Participants scored an average of 42% correct on the pre-test and 77% correct on the post-test. Without exception, every participant made a positive improvement, meaning no one had a post-test score that was lower than his or her pre-test score. This highlights the leaps in knowledge our participants gain through our unique style of training.



## **COURSE EVALUATIONS**

The 2019 international Economic Tools course was our highest rated course in the past 5 years. We received glowing evaluations, and 100% of participants reported that they would recommend the course to a colleague. Below are the evaluation results, with each component rated on a scale of 1-5, with 5 being the highest.

Overall value of the course	4.86
Overall quality of instruction	4.79
Organization and coordination	4.86
Class modules (average for all modules)	4.68

"The two-week course on Economic Tools for Conservation was a blast! I learned that economics for the environment gives you another point of view and also the capacity to be able to defend it with accurate numbers."

-- Ernesto Ortiz, Ministry of Environment, Peru