



USAID BIODIVERSITY
Conservation Enterprises
COLLABORATIVE LEARNING GROUP

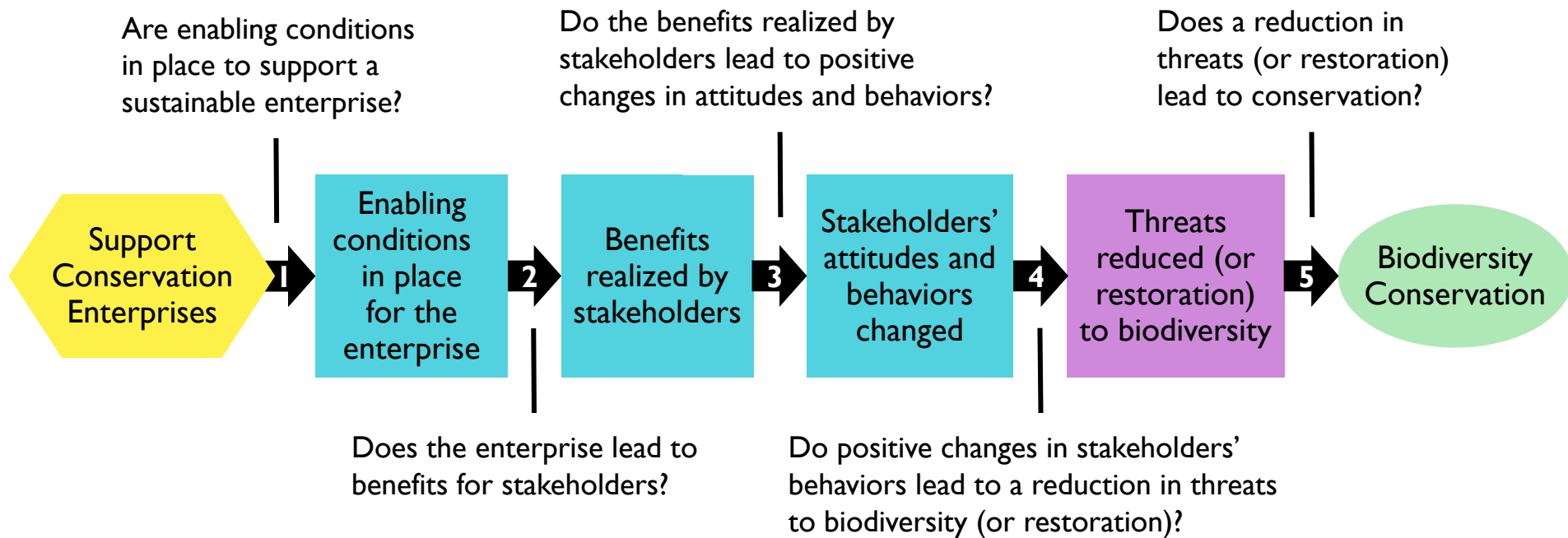
Measuring impacts of conservation interventions on human well-being and the environment in Northern Cambodia

Dr. Henry Travers and Vaneska Litz
January 19, 2023



USAID'S CONSERVATION ENTERPRISES THEORY OF CHANGE:

Learning Questions Examine Assumptions in the TOC



USAID Cambodia Environment Program



TODAY'S SPEAKERS



Dr. Henry Travers
Senior Research Associate,
Department of Biology
University of Oxford



Vaneska Litz
Chief of Party
USAID Morodok Baitang

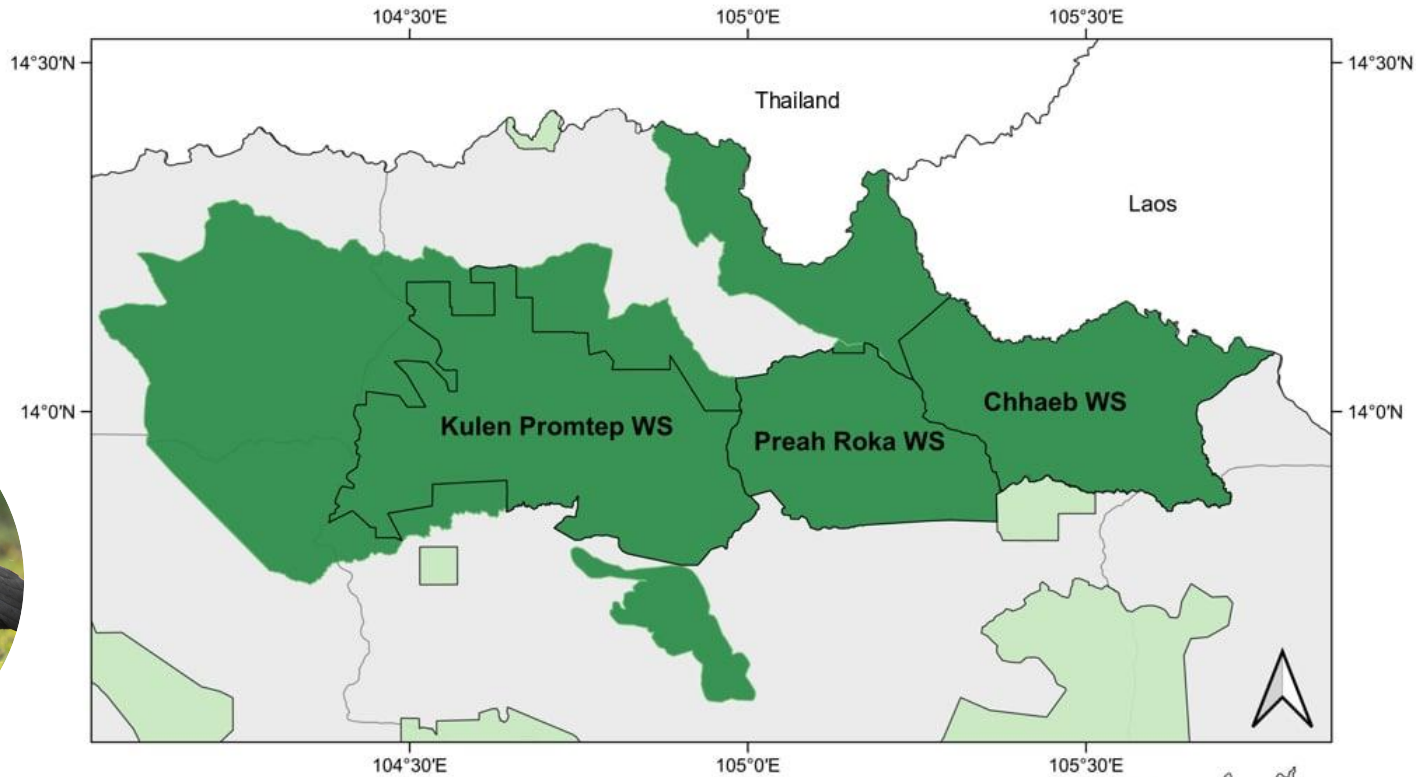
IBIS Rice

IBIS Rice is a conservation enterprise launched by WCS in northern Cambodia in 2009 to allow **people, wildlife, and nature to coexist and thrive**.

- Farmers supported to produce organic jasmine rice.
- Participant farmers receive up to 60% premiums on the sale of their rice.
- In return, they sign conservation agreements to adhere to protected area rules and land use plans.



Introduction



Northern Plains Project Area

0 20 40 km



- NPL REDD+ Project Area
- Target Protected Area Boundary
- Cambodia Protected Areas
- Provincial Boundaries
- International Boundary



Introduction



CWS GAZETTED

2002



BIRD NEST
PROTECTION

2005



IBIS RICE

2009

1993

KPWS
GAZETTED



2005

ACTIVE PA
MANAGEMENT



2008

ECOTOURISM



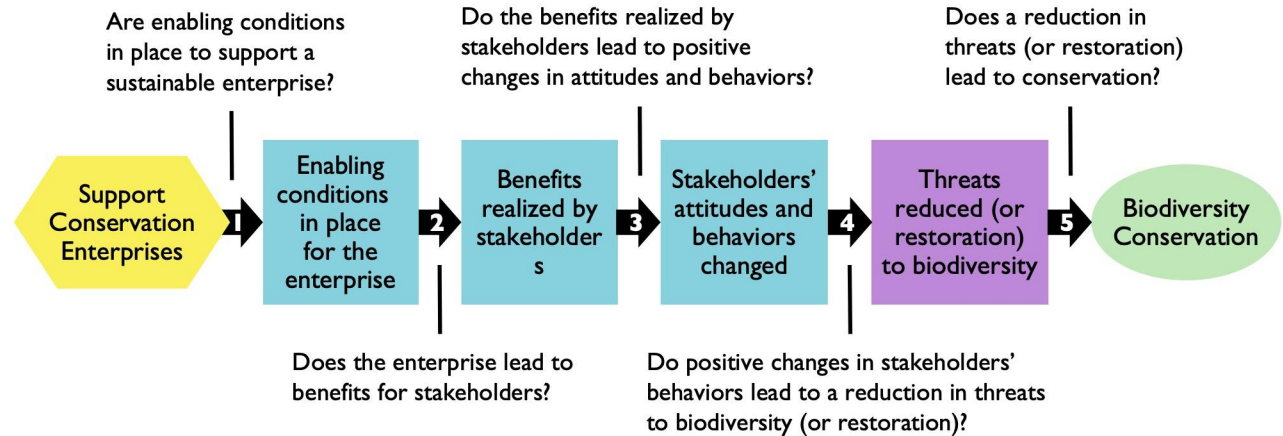
សំ វ៉ាសនា ខ្សែស៊ីម៉ង់ត៍ ធ្លុង
SAM VEASNA CONSERVATION
TOURS

2015

5 NEW IR
VILLAGES

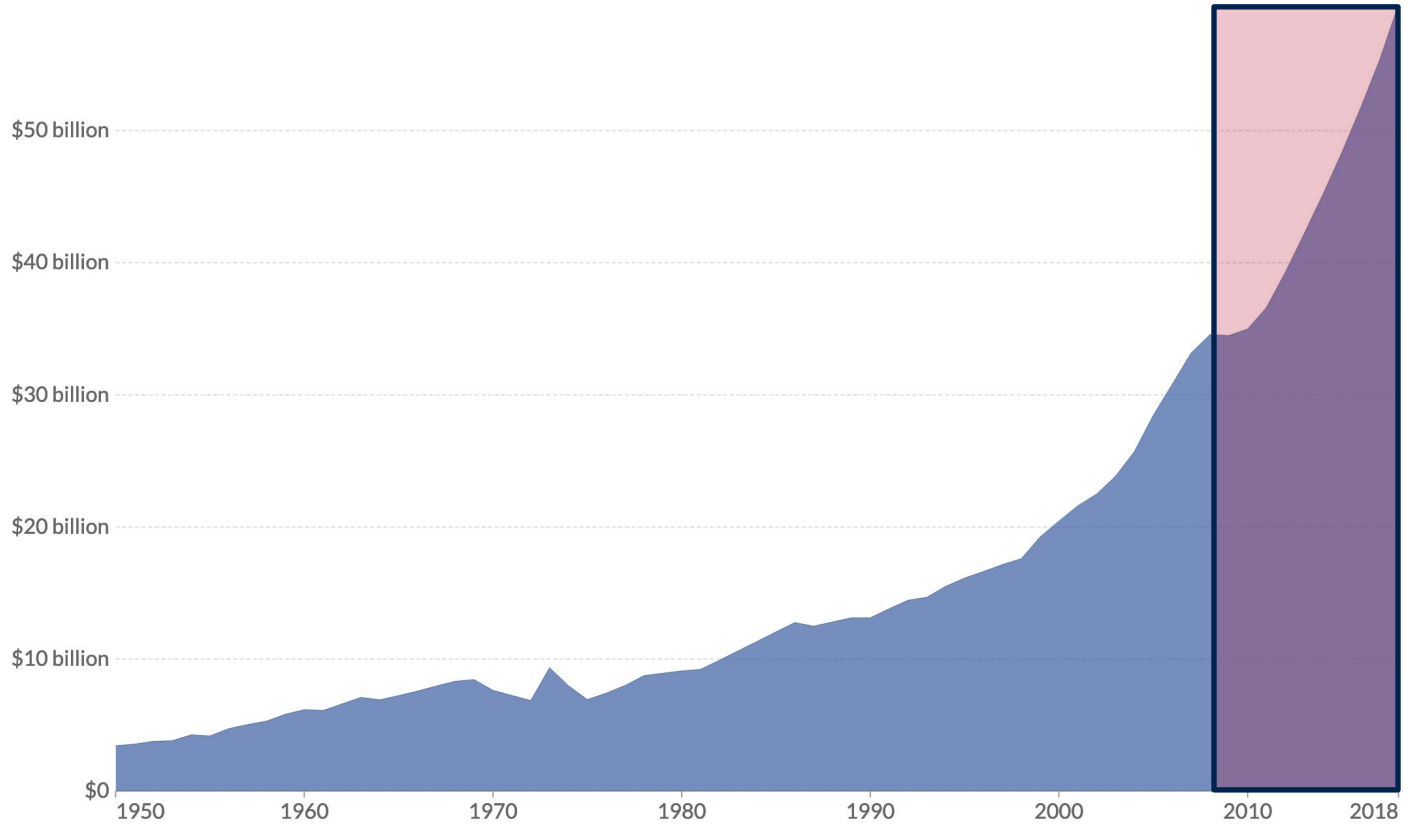


Introduction



Introduction

Cambodia has experienced rapid growth over the period IBIS Rice has been implemented



Evaluation design



Evaluation aim

Since 2008, WCS has been running a long-term evaluation to assess the impacts of the Northern Plains programme and IBIS Rice.

The main aim of the evaluation is to answer two questions:

- Does the IBIS Rice programme benefit participant farmers?
- Does the IBIS Rice programme improve outcomes for conservation?

Why do evaluations matter?

Evaluations help us to understand the mechanisms behind interventions and test our theories of change.

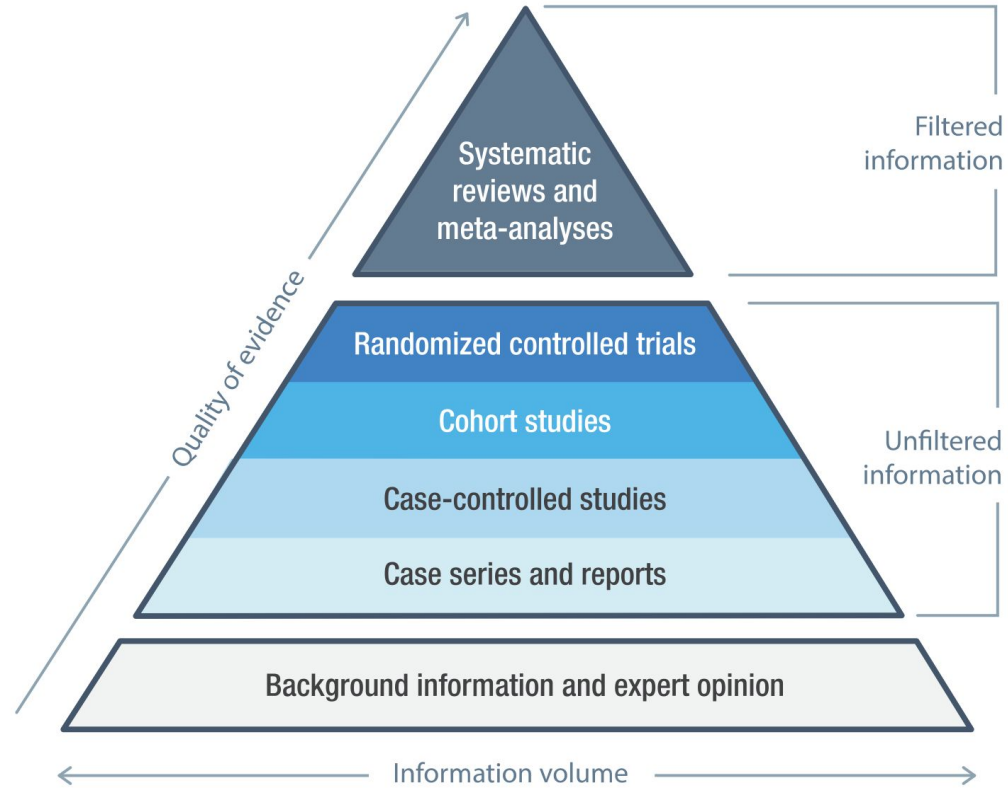
Doing 'no-harm' is more than avoiding negative impacts from imposed interventions (law enforcement, resource access restrictions, etc.). Resource and time poor people can often **not afford to participate in voluntary programmes that fail to produce expected benefits.**

Incumbent on intervention proponents to test whether those interventions work.

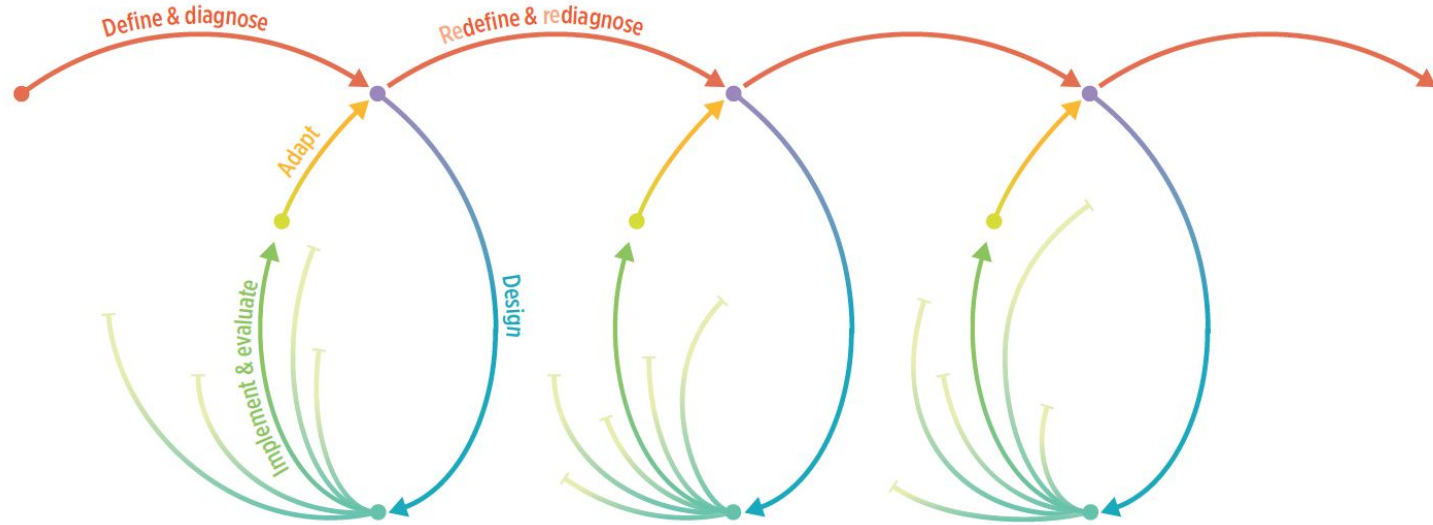
- Long-term evaluations give us the confidence that interventions are *still* working, even in a context undergoing rapid change.



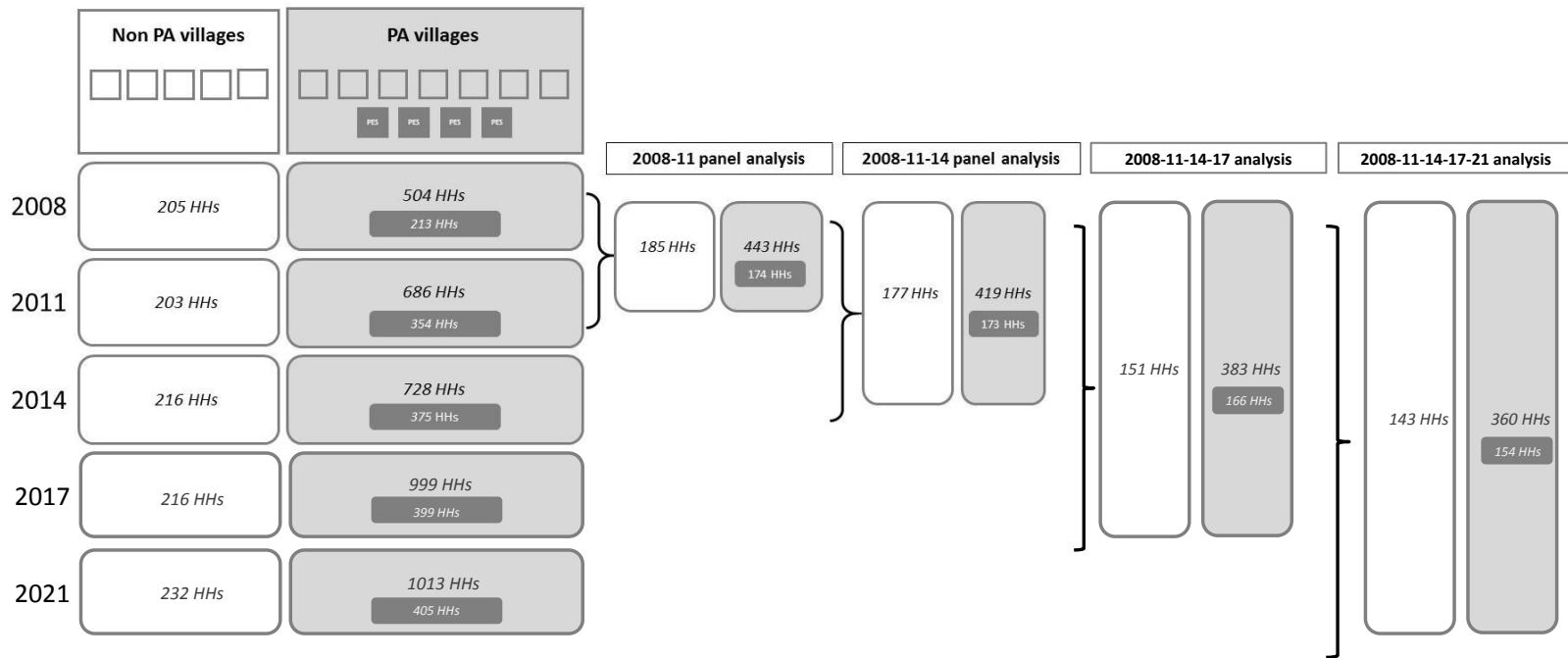
Evaluation design



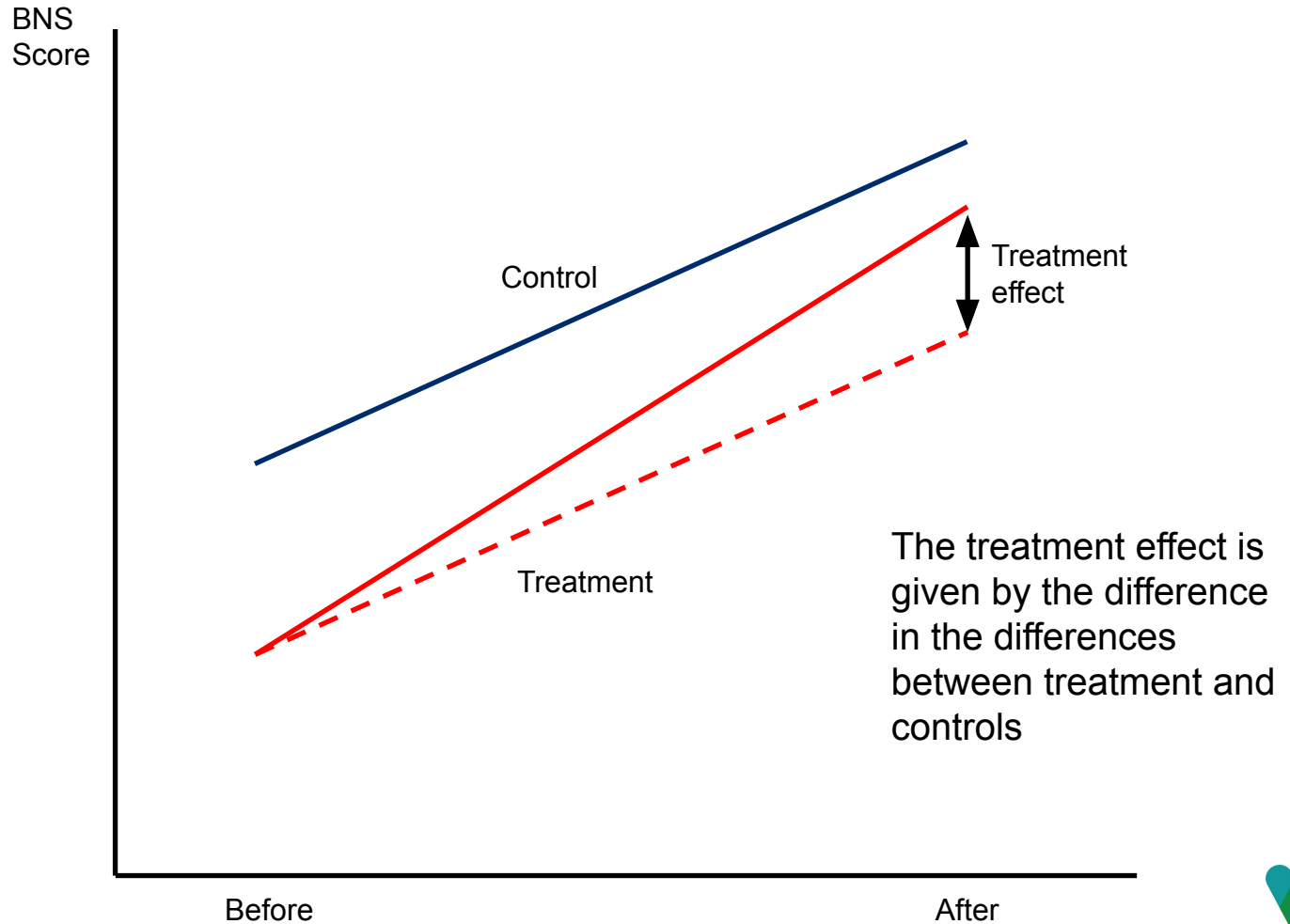
Evaluation design



Source: WDR 2015 team.



Evaluation design

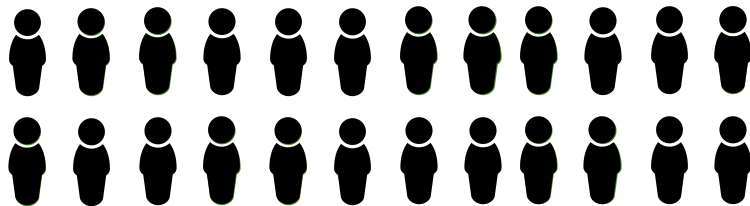


Evaluation design

Household matching allows comparisons between similar households in the control and treatment groups.

- Reduces bias
- Enables more robust causal inferences to be made

For analysis of the impact of both PAs and IBIS Rice, initial samples were significantly unbalanced.



Basic necessity score (BNS)

A multi-dimensional measure of household material wellbeing derived from access to goods and services



Annual rice harvest

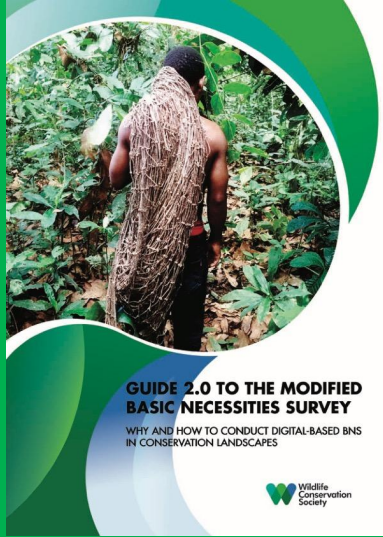
A key measure of household's productivity



Food Security

A measure of a household's ability to feed itself over the course of a year





Why use BNS?

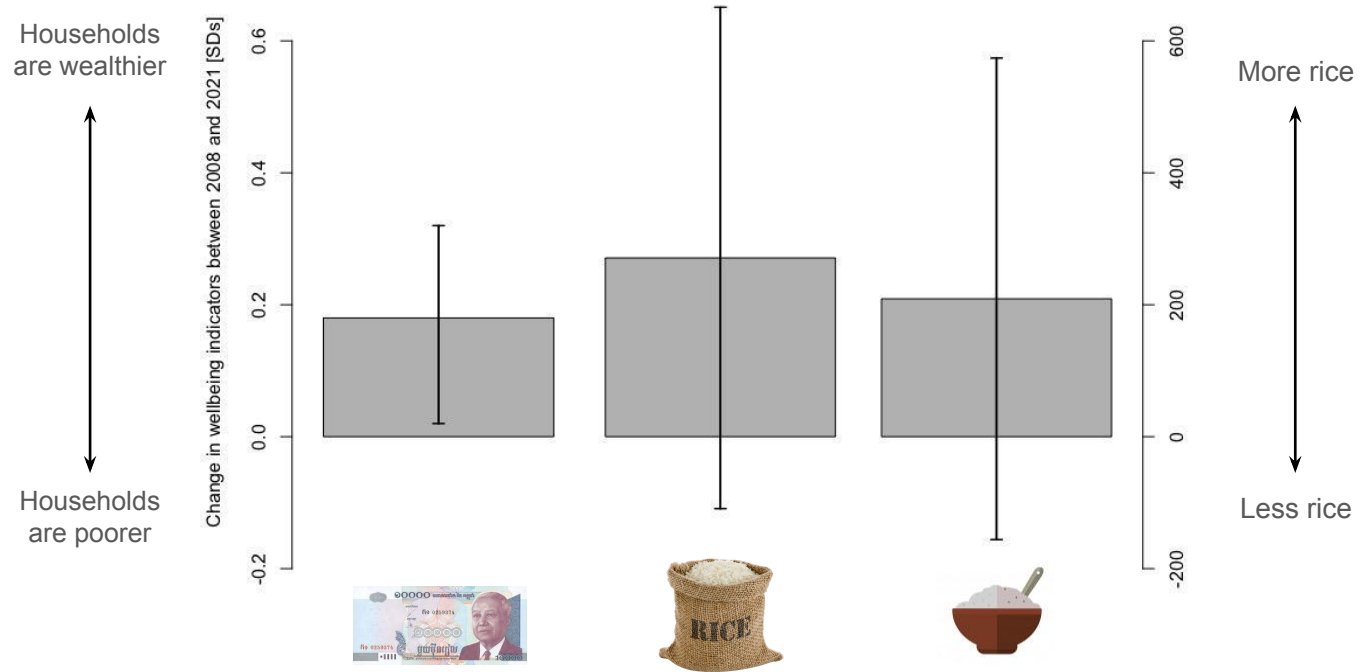
The BNS provides a participatory measure of household material wellbeing.

- Less susceptible to seasonal or annual variation than income.
- Easier to measure than more intensive indicators (income, consumption).
- Good for measuring long-term trends.

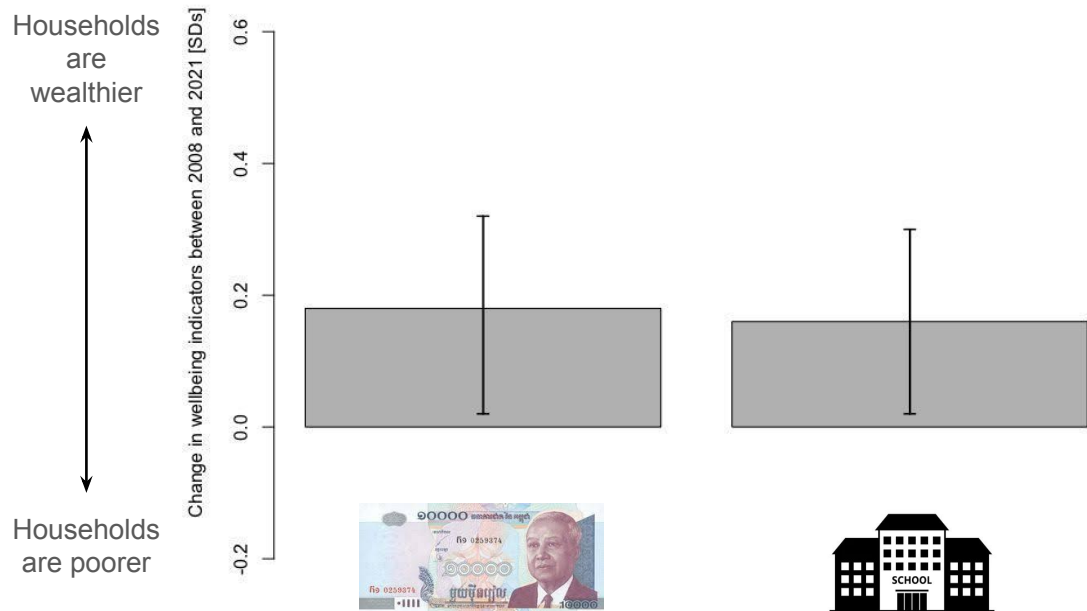
How we use it in the Northern Plains

- List of 35 items.
- Apply a 50% threshold on weights (items that less than 50% of people think are basic necessities do not contribute to household score).
- Weights are held constant over individual time periods.

Wellbeing



Wellbeing

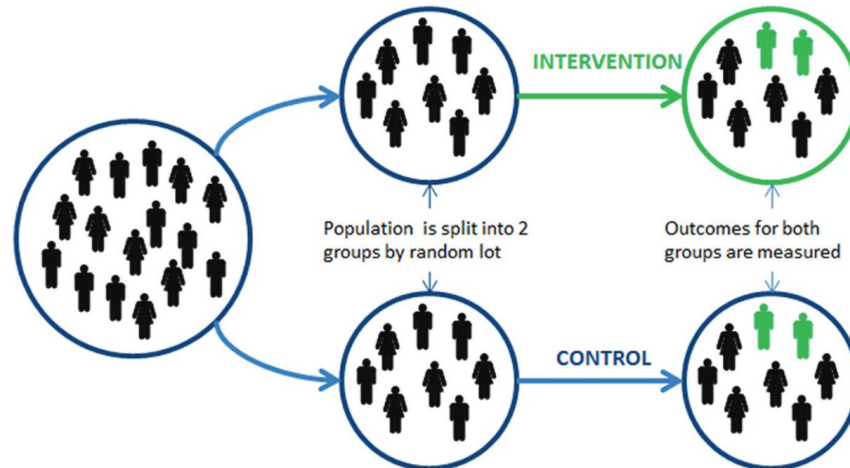


IBIS Rice farmers **increased their wellbeing by an additional 60%** compared to matched control households.

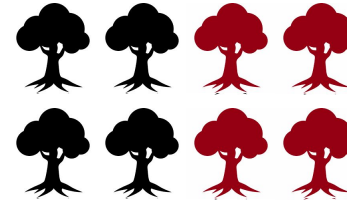
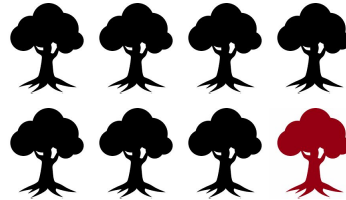
IBIS Rice randomised control trial

In 2018, we ran a randomised control trial to test the conservation impact of participation in IBIS Rice.

- All new prospective participants of the programme were enrolled.
- Participant farmers were randomly assigned to treatment and control groups.
- Only treatment farmers were able to join IBIS Rice.



Conservation



IBIS Rice farmers were **four times less likely to clear forest** than non-IBIS Rice farmers.

Lessons learned

IBIS Rice has consistently benefited participating farmers and reduces clearance rates.

But... IBIS Rice is only one piece of the puzzle. WCS puts significant investment into fostering the right enabling conditions (e.g., PA zoning, governance strengthening, law enforcement).

Long-term evaluations, such as this, allow WCS to adapt to socio-economic changes and remain confident interventions continue to have a positive impact.

However, they are not a panacea. WCS couples these quantitative methods with in-depth qualitative work to better understand social change and ongoing testing to iteratively improve interventions.



USAID MORODOK BAITANG

IBIS RICE: A Market Systems Approach
to Achieve Conservation Results

USAID MORODOK BAITANG

Project Goal

Conserve Cambodia's unique biodiversity, reduce land-based sources of carbon emissions in support of national goals, and improve accountable and equitable economic development.



USAID MORODOK BAITANG

Market Systems Approach

1

INCREASE GOODS
AND SERVICES

conservation friendly
climate smart
socially equitable



ECOTOURISM



PEPPER



BANANAS



RICE



VEGETABLES



PULSES



TURMERIC



CASHEWS



CARDAMOM



CARBON
SEQUESTRATION
REDD+

USAID MORODOK BAITANG

Market Systems Approach

2

DIVERSIFY
MARKETS

to include more players



USAID MORODOK BAITANG

Market Systems Approach

3

BREAK DOWN
BARRIERS

identify / remove obstacles
within the market



IBIS RICE: Challenges and Lessons Learned



USAID
FROM THE AMERICAN PEOPLE

Farming practices are changing and fueling deforestation

- Outmigration of youth □ labour shortages
- Increased interest and access to cash crops
- Increased access to loans
- Introduction of chemical and mechanized inputs
- In-migration of farmers from other areas accessing land



Ibis Rice Challenges

Scale

- Recruitment
- Retention

Technical

- Training
- Application

Competing interests

- Opportunity cost of labor
- Cash crops



Rethinking the Approach in a Changing Landscape



Rethinking the Approach

In areas where development is not as intense

- Scale-up quickly (critical mass)
- Focus on training and follow-up
- Get ahead of future challenges



Rethinking the Approach

- Diversify crops
- Focus on training and follow-up



QUESTIONS & ANSWERS

PHOTO: Sansom Miup Prey

35

USAID BIODIVERSITY
Conservation Enterprises
COLLABORATIVE LEARNING GROUP



TOOLS AND RESOURCES

- [CE Learning Group Site](#)
- [CE Learning Agenda](#)
- [CE MEL Framework](#)



THANK YOU!



Megan Hill
Environment Specialist,
Biodiversity Division, USAID
mhill@usaid.gov

Dr. Henry Travers
Sr. Research Associate, Univ.
of Oxford
henry.travers@zoo.ox.ac.uk

Vaneska Litz
Chief of Party,
Morodok Baitang, USAID
vaneska.litz@tetrattech.com

