

# Economic incentives motivate human behavior change



Conservation approaches based on economic incentives seek to make conservation a viable and attractive choice for resource users. Economic incentives encourage local resource users to adopt sustainable behavior that conserves biodiversity and natural habitat while enhancing livelihoods.



**BUYOUTS**



**CONSERVATION AGREEMENTS**



**ALTERNATIVE LIVELIHOODS**



*Buyouts reduce pressure on habitat and resources by removing harvest capacity.*



*Conservation agreements compensate resource users for giving up unsustainable practices.*



*Alternative livelihoods replace unsustainable activities.*

# Buyouts, conservation agreements, and alternative livelihoods provide economic incentives

Economic incentives differ in the way that they affect resource use. Three approaches to providing economic incentives to conserve natural resources are buyouts, conservation agreements, and alternative livelihoods. These approaches are tools used by conservation investors (e.g., nongovernment organizations, government, private sector) to engage resource users (e.g., local residents, fishers, developers).

TYPE OF INCENTIVE			
<b>DEFINITION</b> <b>Reward</b>  <b>Behavior change</b>	Purchase of resource rights or equipment.  Reduce harvest levels.	Direct compensation for behavior change.  Halt ecosystem-damaging activity.	Income or subsistence from new livelihoods.  Halt reliance on unsustainable resource use.
<b>MECHANISM</b>	Reward compensates for reduced harvest capacity. Enforcement maintains the change.	Reward provided only if behavior changes.	Reward follows when alternative livelihood becomes economically viable.
<b>REWARD</b>	Usually cash.	Social benefits (e.g., health, education, transportation). Cash.	Income or consumption of goods from new livelihoods.
<b>MAINTAINING CHANGE</b>	Government agencies must continue to provide monitoring and enforcement.	Conservation investors must ensure continued monitoring for compliance and delivery of benefits.	Resource users must continue to engage in new activities and avoid unsustainable resource use.
<b>COST STRUCTURE</b>	Large, initial cost. Ongoing enforcement cost.	Ongoing cost of benefits and monitoring.	Cost of training, technical assistance, and initial funding for new livelihoods. New activities designed to become self-sustaining.
<b>ESSENTIAL FOR SUCCESS</b>	Well-defined access rights over the resource. Effective enforcement.	Long-term commitment from conservation investor.	Becomes and remains more profitable than unsustainable resource use.
<b>EXAMPLE PROJECT</b>	Purchase and retire fishing licenses to reduce total harvest in an area.	Cover annual teacher salaries as long as no-take zone is observed.	Provide skills-training and start-up funds for ecotourism venture.



Twenty-seven cases were selected to examine the role of economic incentives in driving behavior change. Three of the studies are highlighted below.

**Type of incentive:**  
**Buyout**

*Morro Bay, California, USA*



**Challenge:**

Bottom-trawling, causing habitat destruction.



**Incentive:**

The Nature Conservancy purchased six federal trawling permits and four trawling vessels.

**Conservation action:**

A network of no-trawl zones in approximately 1.5 million hectares of ocean.

**The future:**

Plan to lease back the permits to fishers, restricting them to sustainable harvesting methods.

**Type of incentive:**  
**Conservation agreement**

*Laguna San Ignacio, Mexico*



**Challenge:**

Coastal development, threatening gray whale habitat.



**Incentive:**

International Community Foundation provides US\$25,000 for small-scale development each year the community complies with the agreement.

**Conservation action:**

Protection of approximately 48,500 hectares of gray whale habitat.

**The future:**

The contract between Ejido Luis Echeverria and nongovernment organizations is permanent, including monitoring by a third party, Pronatura.

**Type of incentive:**  
**Alternative livelihood**

*Kubulau, Fiji*



**Challenge:**

Overfishing and unsustainable methods, resulting in fishery decline.



**Incentive:**

Kubulau communities collect dive tag fees from tourism operators, which fund management activities and community benefits.

**Conservation action:**

With support from the Wildlife Conservation Society and others, communities maintain a network of 13 marine managed areas to protect dive sites.

**The future:**

The Kubulau communities intend to become more directly involved in tourism enterprises.

# Designing an incentive approach



To choose sustainable management and conservation of marine biodiversity and natural habitat, resource users and decision makers need to see tangible rewards for changing resource use behavior.

- Incentive-based conservation approaches all recognize that potential loss of income and access to resources must be offset.
- Project design must consider links between incentives and behavior to draw on strengths of each approach.
- Buyouts and conservation agreements in many instances will need to incorporate alternative livelihood investments into the overall strategy.
- Some buyouts provide ongoing rewards, thus resembling conservation agreements.



- Formal enforcement and rule of law are critically important for buyouts.
- Acute threats require a direct incentive response—a buyout if possible, or else a conservation agreement.
- In sites with weak regulatory context, buyouts will not be possible.

- Agreements can overcome enforcement challenges relating to buyouts and alternative livelihoods.
- A community must be able to act collectively as an effective counterpart in a conservation agreement.
- A conservation agreement should not be pursued if desired behavior change cannot be monitored, as there will be no way to determine whether reward is justified.

- Market requirements for alternative livelihoods are often demanding; private sector involvement can help meet those requirements.
- External financing should not be needed once the livelihood activity becomes self-supporting.
- When unsustainable activities are very profitable, competitive alternatives may not exist.
- Alternative livelihood projects can face a challenge in demonstrating clear links to conservation outcomes; such outcomes must be defined and monitored.

## Lead Authors

Eduard Niesten (Conservation International)  
Heidi Gjertsen (Conservation International)

## Project Leads

Giselle Samonte (Conservation International)  
Leah Bunce Karrer (Conservation International)

## Science communication team

Tim Carruthers and Jane Hawkey (Integration and Application Network)

## This publication is funded by:

Gordon and Betty Moore Foundation  
National Fish and Wildlife Foundation

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Government or the National Fish and Wildlife Foundation. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Government or the National Fish and Wildlife Foundation.

## For further reading:

This summary draws from the full report, [Niesten E, H Gjertsen \(2010\) Economic Incentives for Marine Conservation. Conservation International, Arlington, Virginia, USA](#)

Curtis R, D Squires (2007) Fisheries Buybacks. Blackwell Publishing, Oxford

IMM (2008) Sustainable Livelihood Enhancement and Diversification—SLED: A Manual for Practitioners. IUCN, International Union for the Conservation of Nature

The Nature Conservancy & Conservation International (2009) Practitioner's Field Guide for Marine Conservation Agreements. Washington DC

## For more information:

Giselle Samonte  
gsamontetan@conservation.org  
1-703-341-2400

Conservation International  
Science and Knowledge Division  
2011 Crystal Drive, Suite 500  
Arlington, VA 22202 USA

[www.science2action.org](http://www.science2action.org)  
[www.conservation.org/mmas](http://www.conservation.org/mmas)



[www.ian.umces.edu](http://www.ian.umces.edu)

CONSERVATION  
INTERNATIONAL



## Photo credits

Cover photos (left to right, top to bottom): © ARC Centre of Excellence for Coral Reef Studies/Marine Photobank; © CI/photo by Heidi Gjertsen; © CI/photo by Heidi Gjertsen; © Rebecca Weeks/Marine Photobank  
Inside photos (left to right): © Mike Baird/flickr/Creative Commons; © istockphoto; © istockphoto