

# MARINE MANAGEMENT PAYS

HOW FISHING COMMUNITIES ARE REAPING DIVIDENDS FROM OCTOPUS

**ONE BILLION**

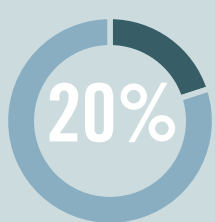
SEAFOOD IS THE PRIMARY SOURCE OF PROTEIN FOR OVER 1 BILLION PEOPLE<sup>1</sup>



**97 PERCENT**

DEVELOPING NATIONS ARE HOME TO MORE THAN 97% OF THE WORLD'S FISHERS<sup>2</sup>

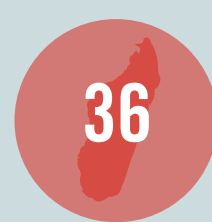
Fisheries management efforts by coastal communities can **improve catches**, **boost income**, and build **local engagement in marine conservation**, according to new research. Marine scientists from Blue Ventures Conservation spent **eight years** studying the impacts of **partial, temporary closures** of village fishing grounds to **octopus harvesting in Madagascar**.



OF A VILLAGE'S OCTOPUS HARVEST AREA CLOSED TO FISHING FOR 2-3 MONTHS



OCTOPUS IS ONE OF SW MADAGASCAR'S MOST IMPORTANT STOCKS



CLOSURE SITES STUDIED IN SOUTHWESTERN MADAGASCAR



CLOSURE SITES, IN 30 DAYS BEFORE CLOSURE

**2.4 KG**



2.4KG OF OCTOPUS WERE CAUGHT PER FISHER PER DAY

CLOSURE SITES, IN 30 DAYS AFTER REOPENING

**4.4 KG**



4.4KG OF OCTOPUS WERE CAUGHT PER FISHER PER DAY

**87% INCREASE IN CATCH PER FISHER PER DAY**

**\$1.00**

\$1.00 WORTH OF OCTOPUS LEFT IN THE CLOSURE SITES...

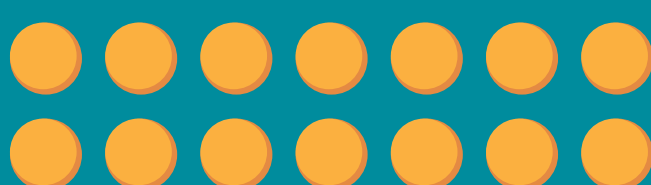
**\$1.81**

...GREW TO \$1.81 BY THE END OF THE CLOSURE PERIOD

**81% RETURN ON INVESTMENT**

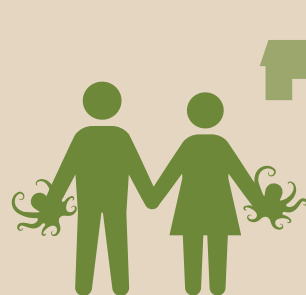


**\$597** VILLAGE INCOME FROM ALL OCTOPUS FISHING SITES



**\$1,407** VILLAGE INCOME FROM ALL OCTOPUS FISHING SITES

**136% INCREASE IN VILLAGE INCOME**



NO SIGNIFICANT DECLINE IN VILLAGE INCOME DURING THE CLOSURES



**\$2.36-4.72\***

INCREASE IN INCOME PER HOUSEHOLD PER DAY IN 30 DAYS FOLLOWING A CLOSURE



\* APPROX. 50 EXTRA PORTIONS OF RICE PER DAY\*\*

HAVING EXPERIENCED THE **ECONOMIC BENEFITS** OF THESE CLOSURES, COMMUNITIES ARE EMBARKING ON BROADER **MARINE PROTECTION EFFORTS**, ESTABLISHING **LOCALLY MANAGED MARINE AREAS** ENCOMPASSING **PERMANENT RESERVES** WHERE ALL FORMS OF FISHING ARE PROHIBITED

**SOURCES**

1: UN SOFIA REPORT 2014 | 2: WORLD BANK HIDDEN HARVESTS  
\*\*calculated as >25 cups of rice at 400 MGA each

**ALL OTHER FIGURES**

Oliver et al., 2015. Positive catch & economic benefits of periodic octopus fishery closures: Do effective, narrowly targeted actions 'catalyze' broader management? [PLOS ONE](#)

