

PAC RMI INC.

A RESIDENT DOMESTIC CORPORATION OF
THE REPUBLIC OF THE MARSHALL ISLANDS

PARTNERSHIP:
IMPLEMENTATION OF NEW TECHNOLOGIES
FOR SUSTAINABLE DEVELOPMENT

PAC

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**Sustainable Sea Cucumber Aquaculture
in the
Marshall Islands
and
Small Island Developing States**

Why Sea cucumbers?

- **Food Security**
 - Very High in Protein
- **Valuable Asian Delicacy for thousands of years**
 - Huge existing demand for dried sea cucumber
 - Anti-Arthritic and Aphrodisiac
- **Anti-viral & Anti-Bacterial**
 - Component in patented HIV/AIDS treatment
- **Showing success in fighting Cancer**
 - Indications of slowing spread of cancer
e.g. Breast Cancer
- **A Supplement promoting health and virility.**



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Financial Viability

- **The global trade in sea cucumbers is currently approximately \$250,000,000 per year**
 - The market is supplied primarily by wild caught sea cucumbers but solely extractive fisheries are unsustainable and many species are being driven into local extinction
 - Demand is greater than ever but wild stock are depleted
- **PAC'S farming strategies and resource management plan is more productive and sustainable.**
 - PAC RMI Inc., in corporate cooperative partnership with Municipal governments of six atolls, and Iroij, have the largest sea cucumber farms by area in the world; over 1,123mi²
 - Comparatively, in the Dailan Province, China largest sea cucumber farming region, had merely 30mi² of farms under cultivation in 2003
 - This economy of scale will allow PAC RMI Inc. to produce regular substantial harvests

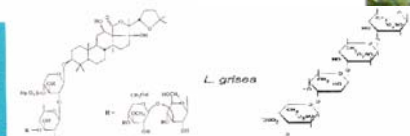
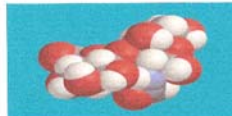
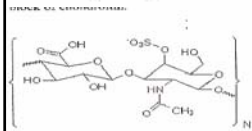
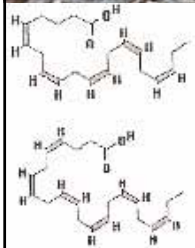
MARKET

PAC

MARKET

Financial Viability

- **Sea cucumbers are now known to contain useful bio-pharmaceutical components. This gives PAC RMI Inc. a tremendous value added development opportunity**
 - Included in a patented treatment for HIV from Japan
 - Showing usefulness in cancer treatments
 - Recently discovered to be potentially useful in Malaria
 - Known to fight arthritis for thousands of years in Asia
- **As a major producer of sustainably farmed and therefore reliable sources of sea cucumber, PAC RMI Inc. expects to become a leading supplier of raw material to the developing pharmaceutical industry**



MODEL

Capacity Building

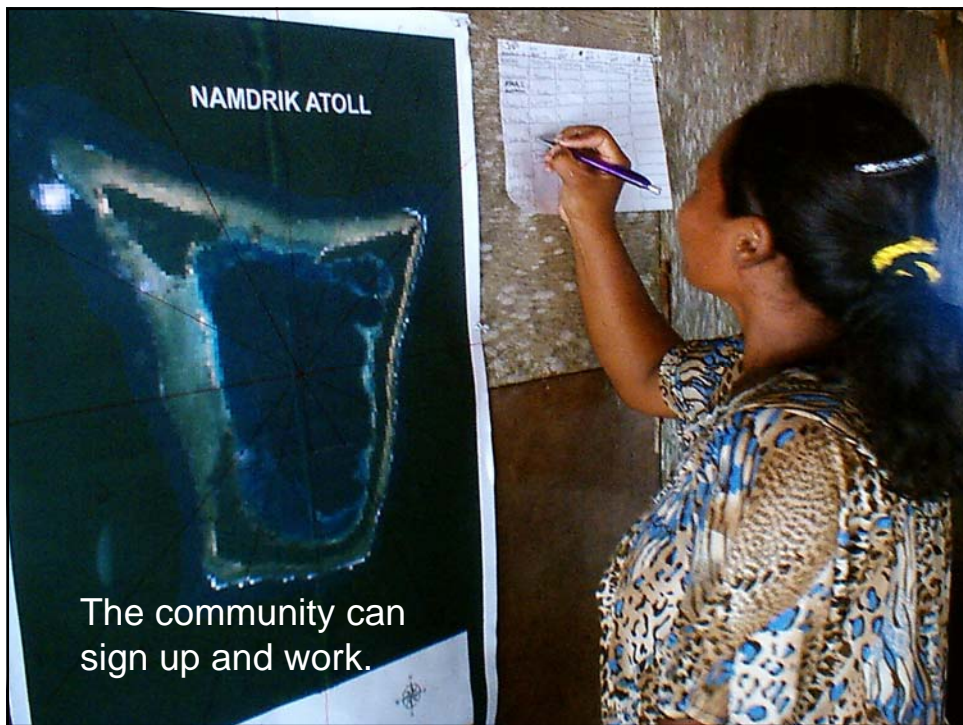
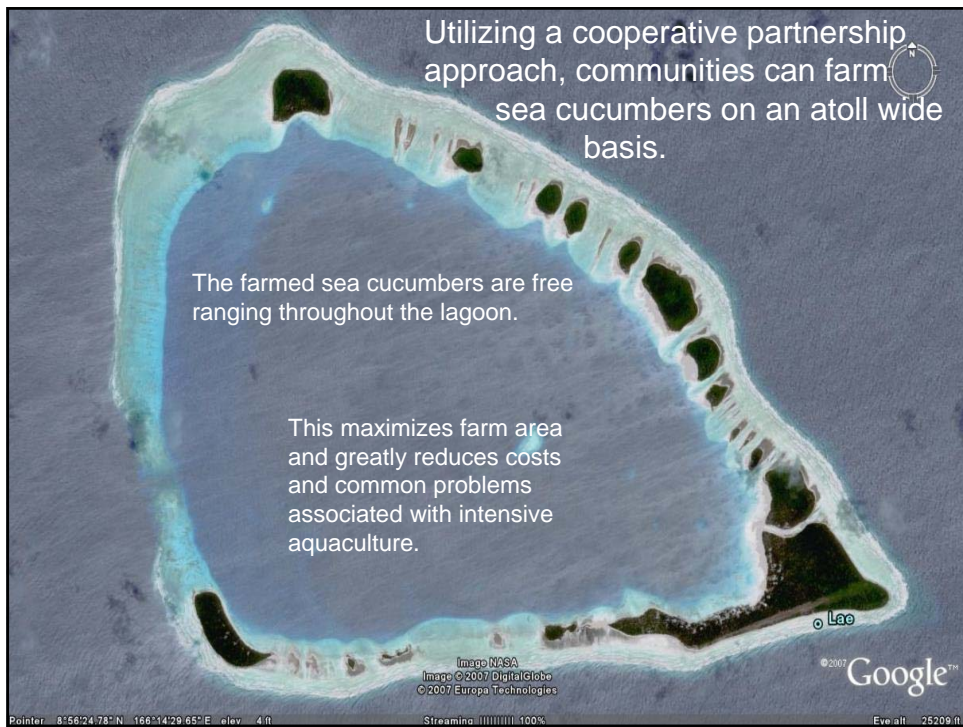
Immediate Results:

- **Creates much needed jobs for outer islands communities in aquaculture providing cash income to meet daily needs**
- **Create supplemental earnings for entire communities through sustainable harvests supplementing other cottage industry**

Long term Results

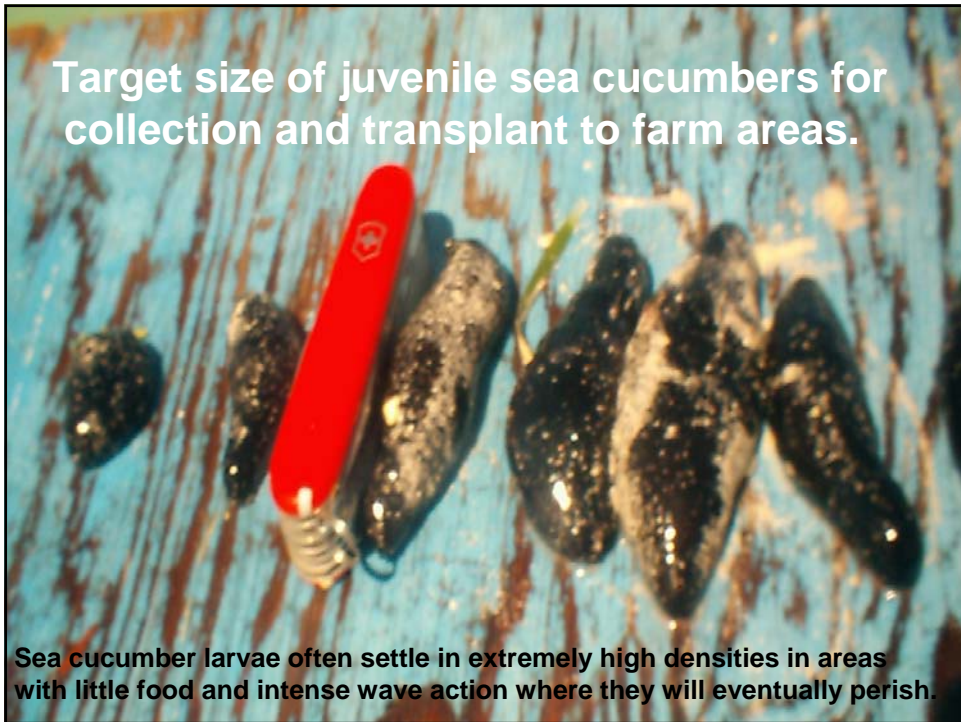
- **Increase economic and social security through cooperative ownership and PAC'S Employee Stock Ownership Program**
- **Protect and propagate terrestrial and marine ecosystems sustainably and profitably there by creating new industry**
- **Apply adaptive technologies to buffer climate change locally**

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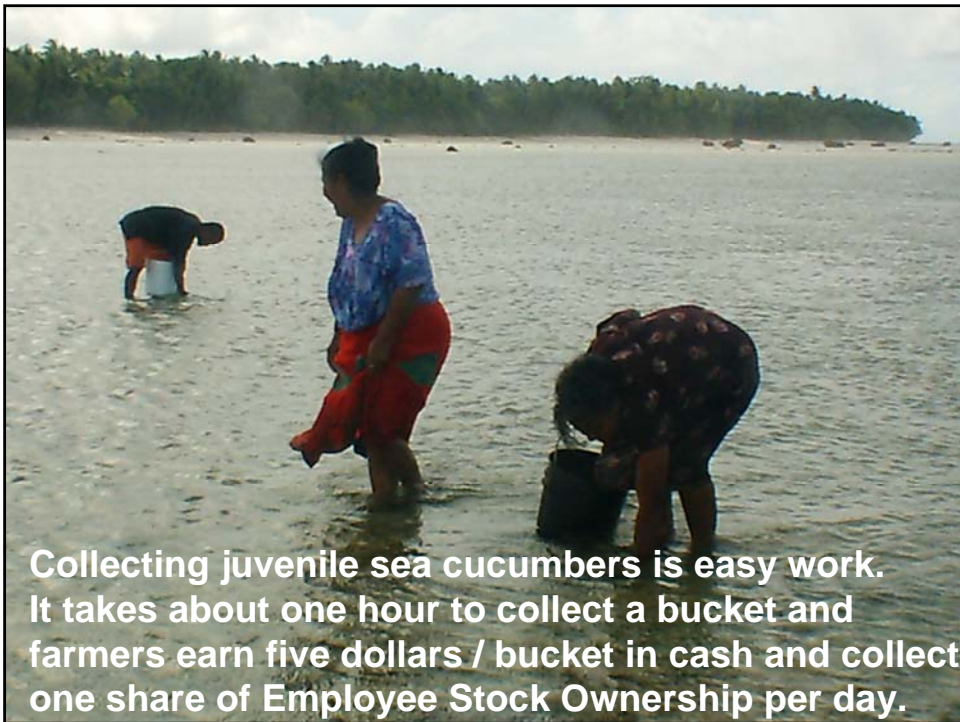
**Training takes approximately 15 minutes.
The community can train, work,
and earn on the same day.**



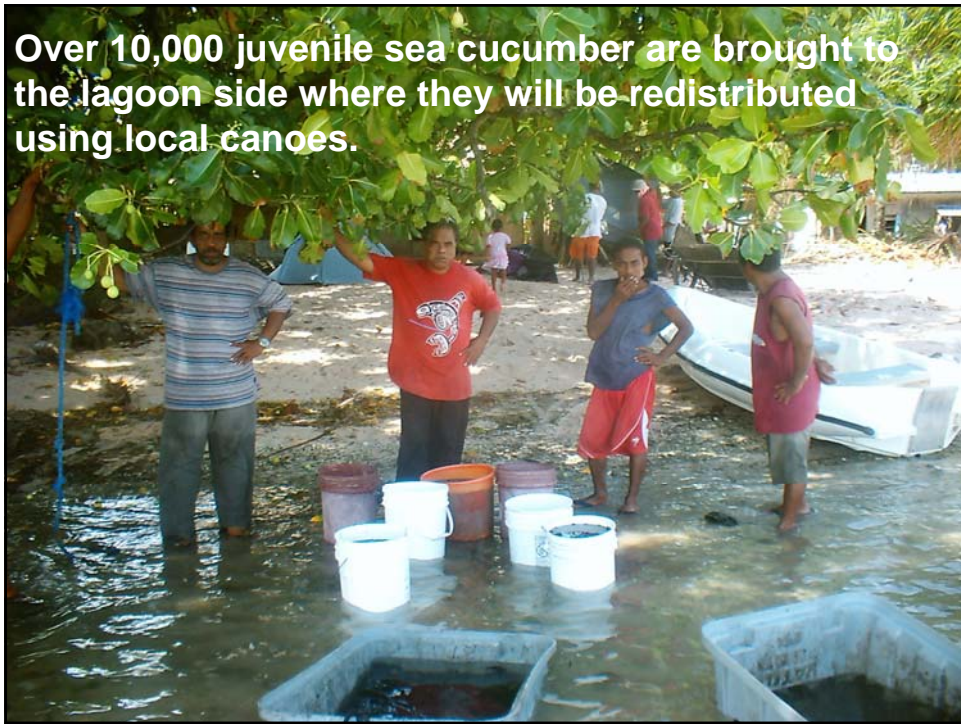
**Target size of juvenile sea cucumbers for
collection and transplant to farm areas.**

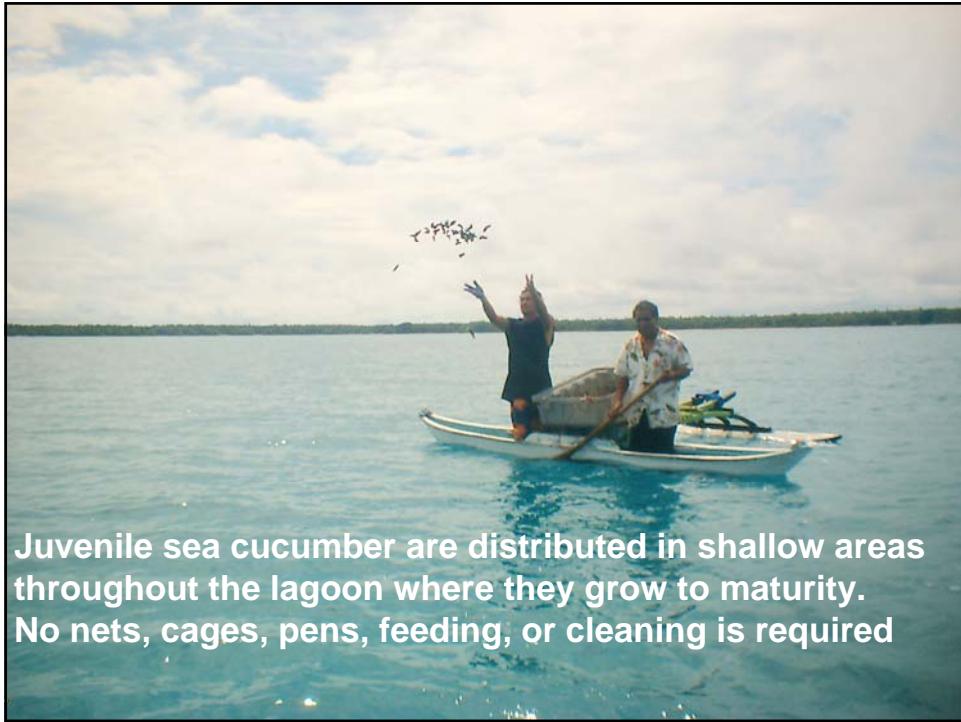
**Sea cucumber larvae often settle in extremely high densities in areas
with little food and intense wave action where they will eventually perish.**

Low tech equipment: bucket, float, mask, snorkel.



Collecting juvenile sea cucumbers is easy work. It takes about one hour to collect a bucket and farmers earn five dollars / bucket in cash and collect one share of Employee Stock Ownership per day.






Juvenile sea cucumber are distributed in shallow areas throughout the lagoon where they grow to maturity. No nets, cages, pens, feeding, or cleaning is required



New processing methods add local value to the product.



**PAC model for sustainable sea cucumber farming
be easily replicated in many
all Islands Developing States (IDS).**

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