

**Strengthening Private Sector Participation for
Infrastructure in the Pacific Region
17-22 November 2008, Brisbane, Australia**

**Case Study:
Raja Ampat Pearl Farming Concession
West Papua, Indonesia**

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A Development Challenge for Small Island States

- Conservation of biodiversity-rich habitats is a challenge for small island states pursuing economic development
- Many traditional avenues of natural resource development, such as logging, fishing, mining, and large-scale agriculture, provide short-term economic benefits but can be detrimental to the environment
- How can island states protect ecologically important habitat, while still achieving economic development goals?

Source: Commonwealth Secretariat/World Bank Joint Task Force on Small States *Small States: Meeting Challenges in the Global Economy*. (Washington DC: 2000) pp. i-ii.

Seeking Sustainable Development

- One solution is to identify and develop sustainable industries, which will create income and development opportunities without environmental degradation
- However, local communities may be unable to develop sustainable industries on a scale which will serve as a catalyst for growth, due to:
 - Lack of capital
 - Lack of technical expertise, and
 - Lack of technology
- Further, remote indigenous communities may be reluctant to accept advice, direction, or even participation, from “experts” from other cultures.

Pearl Farming



- Pearl Farming is an example of a sustainable industry. A recent study in the Journal of Shellfish Research found that pearl agriculture presented no serious environmental risks; the primary risks were the introduction of disease during the seeding process, the attraction of other fauna by the large quantities of oysters, and introduction of exotic organisms.¹

- However, establishing a successful pearl farm requires:
 - Expertise
 - Capital Investment
 - Technology (e.g. laboratory equipment and x-ray scanners)
 - A stable environment with appropriate climate and water conditions, and
 - A four-year timeframe between initial investment and first harvest.

¹ "An Assessment of the Environmental Impact of Wild Harvest Pearl Aquaculture (*Pinctada Maxima*) in Western Australia" by Fred E. Wells and Peter Jernakoff, Journal of Shellfish Research, April 2006.

Raja Ampat

- The Raja Ampat (Four Kings) Islands is an archipelago comprising over 1,500 islands, to the northwest of New Guinea, in the West Papua province of Indonesia.
- The four largest islands are Misool, Salawati, Batanta, and Waigeo.
- This area is one of the world's richest habitats for marine diversity, including over 1,000 fish species, over 500 coral species, and 700 mollusk species.
- This remote environment appears to be ideally suited for pearl farming.



Waigeo, The Cultural Context

- In the mid-1990's, an Australian pearl company investigated a possible pearl farm location off the island of Waigeo.
- The potential location was in waters claimed by two small Kawe villages, Salio (population 150 in 1997) and Selpele (120).
- Kawe, the native language, has no written form. Indonesian is spoken only to "outsiders."
- No single person or group has the authority to negotiate for a village; the Kepala Desa (Village Headman) cannot obligate the village. Decisions are reached by community consensus, and are subject to change.
- There is little understanding of long-term relationships, or contracts.
- Family groups are central, and outsiders are viewed as suspicious.



The Contractual Dilemma

- In the cultural context, purchasing the desired site, or entering into a traditional rental/lease agreement, were not viable options.
- The Australian firm began community consultation, and came to the conclusion that the only way to secure a viable long-term agreement was to create a sense of community involvement and benefit.
- Although a contract would be generated and signed, the community would perceive itself to be bound by consensus, not by the written word.



The Solution: A Public-Private Partnership

- In 1997, the Australian firm entered into concession agreements with the two communities. (Sea concession agreements were also required from the regional and national governments.)
- Each concession is for a coordinate with a 500 meter radius. Seven such concessions were signed, for a total of 525 hectares.
- For each concession, the contract is 30 years.
- The concessionaire has the right to operate pearl oyster farms and to harvest the pearls.



The Solution: A Public-Private Partnership

- Because of the cultural context, the concession agreement was designed to integrate the concessionaire into the community.
- There was a modest up-front payment of \$40,000 (US).
- Because oysters rely on the sea environment, the firm hired locals to act as “rangers” to patrol the concessions and deter activities which could be detrimental to the oysters. This provides employment and has improved the health of the local reefs and overall environment by stopping the customs of fishing with dynamite and poison.
- The firm hired a full-time, village-based community relations officer, and the project management dedicates at least 25% of its time to community relations.

The Solution: A Public-Private Partnership

- The firm also began a broad array of initiatives designed to create a sense of it being an integral part of the community including:
 - Providing free medical care
 - Generating electricity
 - Facilitating transportation
 - Providing a community house for school children
 - Providing a scholarship program
 - Sponsoring market trade
 - Supporting community security, and
 - Ad hoc efforts, such as schoolhouse and church repairs, and supporting religious festivals



The Solution: A Public-Private Partnership

- This PPP has been a commercial success, and has, for now, achieved acceptance in the communities. By 2000, the project had 600,000 oysters in various stages of development, and harvested 36,000 pearls.
- The rangers, and their reduction of nonsustainable fishing practices, have improved the environment. The oysters used by the pearl farm come from an Indonesian hatchery, and are not taken from local oyster beds.
- On October 25, 2000, a boatload of thieves raiding the farm shot and killed one worker, and wounded another. This was the second attack within three days. After briefly considering abandoning the PPP, the firm doubled its security, and the Indonesian government established a security presence.



Lessons Learned

- Public-private partnerships can be used to create economic growth in an environmentally-friendly manner. They can serve as a catalyst for conservation in settings where establishing a park or preserve is not feasible.
- Private management has strong incentives to achieve tangible conservation goals on the ground, cooperate with local resource users, generate income, and be cost-effective.
- In establishing a partnership with members of a culture with no contracting tradition, the PPP must be structured with careful consideration of cultural values and context
 - Visible activities may be more effective payment than cash
 - Local employment opportunities should be maximized
 - Constant communication and on-site presence serve to minimize problems