

A brief Analysis of the Global  
**Seawater Cultured Pearl Industry**  
(Past, Present, Future)

as presented at  
the European Gemmological Symposium  
in Berne, Switzerland  
on June 5<sup>th</sup>, 2009

by

**Andy Müller**  
Kobe/Japan

Ladies and Gentlemen,

Think of pearls, think of Nature, Mystique, Emotions, Excitement, Beauty, Illusions and Dreams.

Let us not destroy these dreams. But when we look at the production, and distribution, we are looking at the other side of the coin, which is the professional side.

We talk about a commodity. We talk about a highly competitive industry in a free market system, not based on illusions, emotions and dreams. We face complex problems in both production and marketing and talk hard facts such as economies of scale, market forces, market shares, imbalances between supply and demand resulting in price volatilities, stock management and rotation, cash-flow, return on investment, profit and loss.

Within our Seawater Cultured Pearl Industry, we have witnessed the development of three different industries, working quite independently from each other.

The “three industries within one industry” are basically separated by the different oyster species producing different pearls in different geographical locations:

**Akoya** pearls from the *Pinctada fucata martensii* oyster farmed in Japan (and minor production areas in China, Vietnam and Korea).

**South Sea Pearls** from the **black**-lipped *Pinctada margaritifera* oyster farmed in French Polynesia (Tahiti) and other minor producing areas as later mentioned in this report.

**South Sea Pearls** (SSPs) from the **white and gold**-lipped *Pinctada maxima* oyster farmed in Australia, Indonesia, the Philippines and Myanmar (and minor producing areas in Sabah and PNG).

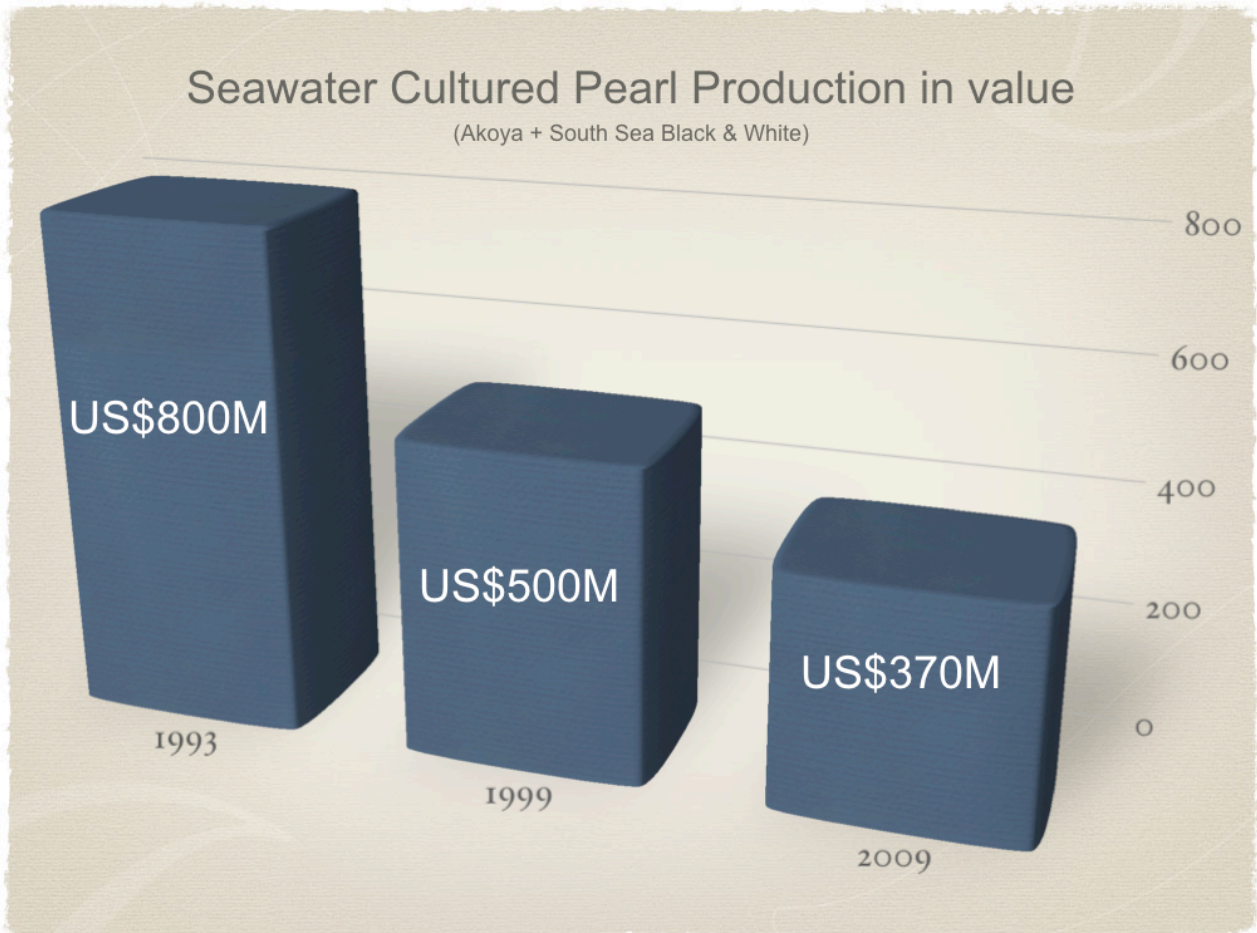
They basically run on different tracks. But when it comes to marine science and biology, farming methods, systems and techniques, these three industries often overlap. And they all face similar situations and problems when it comes to the marketing, where they are in direct competition.

The global Seawater cultured pearl industry is very small in relation to diamonds, or other industries employing over 10,000 people producing higher value merchandise.

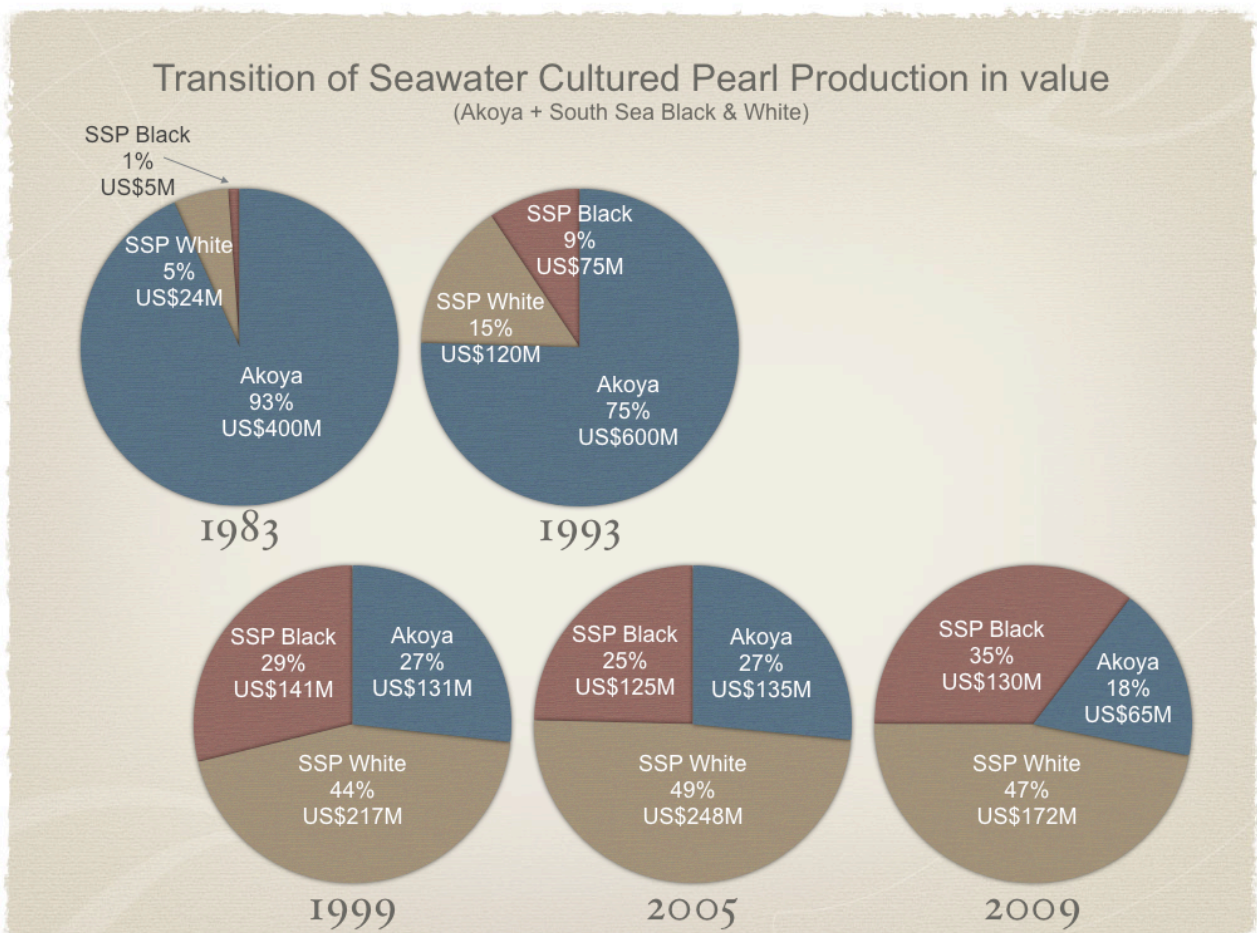
What comes as a surprise to most is that the global industry has dramatically shrunk in value over the past fifteen or sixteen years. We talk in terms of values ex pearl farm (the value the farmers are getting for their produce by selling it to the wholesale trade):

From an estimated 800 million dollars in 1993, it dropped to approximately US\$ 500 million in 1999 and for 2009, we estimate it at approximately US\$ 370 million.

In terms of value, this is less than 50% when compared to just sixteen years ago!



But one must analyse the three industries separately, as they have developed quite independently from each other over decades.

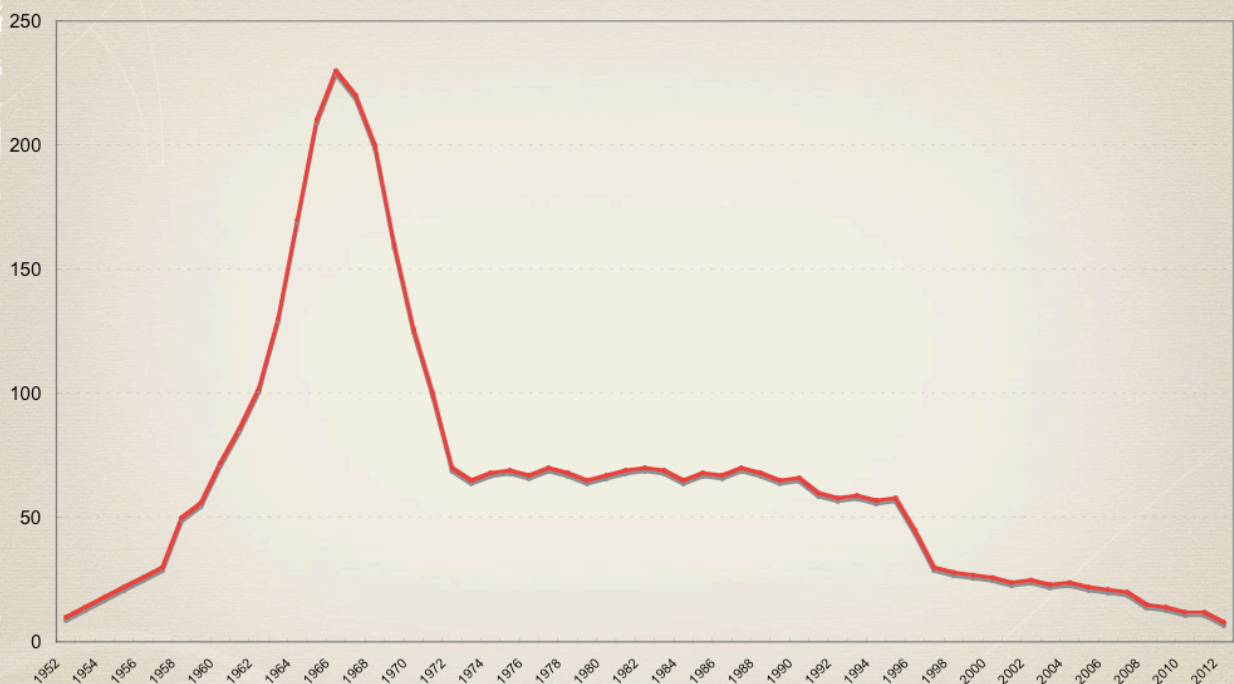


Let's start with the **JAPANESE AKOYA** pearls, which have a hundred year long history.

Pre-WWII production peaked out in 1938, with a recorded volume of 1 tonne. After the war, production resumed again in 1952. Soon after, it was declared an "Industry of National Importance", shifting into overdrive, bringing in much needed foreign currency.

<b>1952</b>	<b>10 tonnes</b>
<b>1957</b>	<b>30 tonnes</b>
<b>1958</b>	<b>50 tonnes</b>
<b>1963</b>	<b>130 tonnes</b>
<b>1966</b>	<b>230 tonnes</b>
<b>1972-1990</b>	<b>70 tonnes</b>
<b>1991-1995</b>	<b>60 tonnes</b>
<b>1997</b>	<b>30 tonnes</b>
<b>2000-2007</b>	<b>25 tonnes</b>
<b>2008/2009</b>	<b>15 tonnes</b>
<b>2010/2011</b>	<b>12 tonnes (estimated)</b>
<b>2012</b>	<b>8 tonnes (estimated)</b>

Akoya Cultured Pearl Production in weight (ton)



As we saw in a previous chart, Japan produced 600 million dollars worth of akoya just 16 years ago. Today, it is down to an estimated 65 million dollars (with high estimates at 70 million).

Japan's akoya production peaked out in 1966, with approximately 230 tonnes, and a market share of close to 100 percent (monopoly!). It never managed to recover. Today's production, estimated at 12 to 15 tonnes, is just about 6% of what it was back in 1966.



Japan, the founding nation and the very pioneer of the cultured pearl, having run a monopoly for decades, seems to breath its last oxygen. Many must be asking WHY?

There are three reasons, listed by order of importance:

- First : **COMPETITION** (South Sea, Tahiti, FWP)
- Second : **COST** of production
- Third : **POLLUTION** of the sea

(Some of my colleagues might also mention the "Image and Quality Problem", a very controversial argument we don't need to enter now).

Competition, only partially self-inflicted by the Japanese themselves, is by far the most responsible culprit. When consumers were offered an alternative to the akoya, they jumped on it!

The cost factor too, is very important. Like in any other Japanese export orientated industry, the exchange rate played a major role. During the first 25 years of akoya production after WWII, salaries were low, and one dollar bought 360 yen. Today, salaries and costs are high, and one dollar buys less than 100 yen. This costing problem coincided

with the increased competition from pearls farmed abroad, with the result that the sustainability of the entire Japanese akoya pearl industry is now questionable.

The problem of sea pollution also plays a certain role, but is of least importance. Today's sea conditions are less favourable, thus adversely affecting the health and sturdiness of the oysters.

The much talked about productions of akoya pearls farmed by China, South Korea and Vietnam are usually over-rated and exaggerated. These productions never posed a serious threat to Japan. The stories around them were often far-fetched and inflated, and most of the time out of context. In many cases, they were the brainchild of sensational journalism.

The obvious question is: How will the future hold for Japan as a pearling nation?

To answer this, one has to differentiate between:

Japan as:

- the leading producer nation of akoya cultured pearls
- the global Trading Centre for all kinds of pearls
- a Pearl Consumer Nation

As a Global Pearl Trading Centre, Japan is predestined to maintain its #1 position. Admittedly, more wholesale auctions are nowadays held in Hong Kong, than in Japan. But it is an undisputable fact that the largest buyers' groups at those raw-material auctions are from Japan (Kobe and Ise). Only Japan can offer these key elements in one single basket:

- Professionalism and Know-How
- Capacity
- Tradition
- Reliability
- International Customer Base

Don't get us wrong; nothing against our pearling friends from HK and China. But when it comes to "sensibility, touch and passion" for our product, the Japanese, with their tradition and history, rank first.

Another underlining fact in favour of Japan is its domestic market. Even though reduced, it still ranks among the very top in the world.

When it comes to the farming of akoya, the picture looks rather bleak.

It is our belief that at least part of Japan's akoya farmers will survive, because they are in the process of moving into a "Niche Business".

The remaining farms will be small in scale, kind of "Mom and Pop Operations". Proud of their product and origin, some will be selling their pearls with a kind of "Appellation Controlée" label. They will be operating off the mainstream, selling a specialty, a one-of-a-kind, for which there will always be a demand. If you are a pearl dealer, you better grab it! Volumes are down, prices are reasonable, and one is getting good value for money!

## Developments in and around

### **TAHITI (French Polynesia)**

As we all know, Tahiti runs a monopoly when it comes to “black pearls”. Ever since it started to produce commercial volumes in the late 1970s, it commanded a global market share (in both weight and value) estimated at between 93 to 95 percent.

Tahiti may well be the “Herculean producer of the black pearl”, but it is surely not its pioneer.

The first “black pearls” cultivated in the *Pinctada margaritifera* oyster date back to the 1920s. The Japanese farmed them for decades in their southern Ryukyu Islands, around Okinawa.

But since this black-lip oyster species is available throughout the Indo-Pacific region, many pearl farms were established in places such as the Cook Islands, New Caledonia, Fiji, the Marshall Islands, Indonesia, the Philippines, the Ryukyu Islands, as well as in the Pescadores Islands, located in Taiwan’s Formosa Strait.

Many of them are now closed, or are just limping along. The most active ones (besides those around Tahiti) are in the Cook Islands and in Fiji. Especially Fiji’s Justin Hunter is worth watching. Well aware that he can never win a numbers game with Tahiti, he wisely puts quality ahead of quantity.

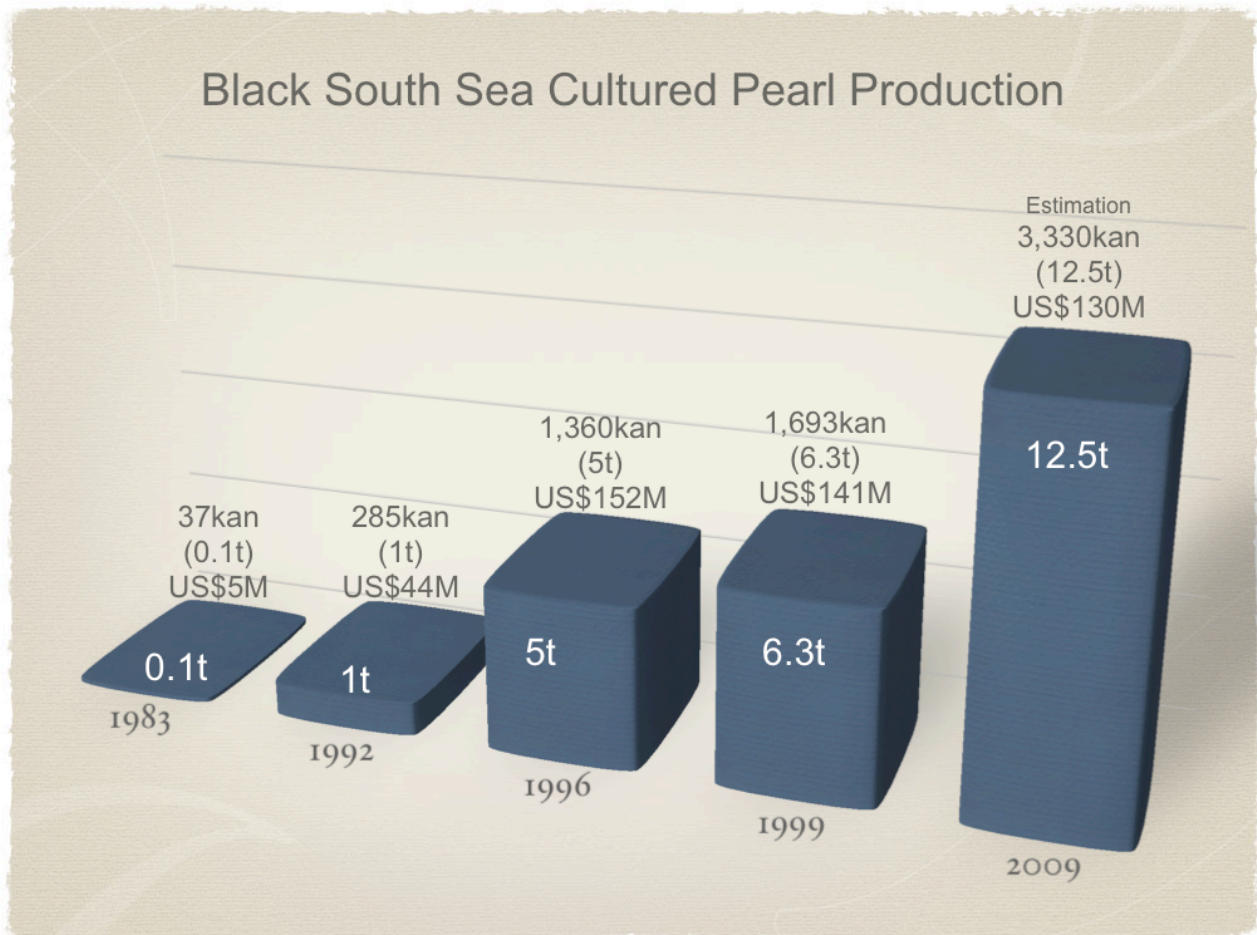
But with due respect to all those, their combined output has, and will never pose, any serious threat to Tahiti.

During the 1980s and 1990s, Tahitian pearl production went full throttle. Pearls, after Tourism, became Tahiti’s second largest goose to lay the golden eggs. These were the happy heydays, when all flags were flying.

Here some highlights:

1972 (First recorded export)	1.5kg	US\$3.663.-
1983	139kg	US\$5.0 million
1992	1 tonne	US\$43.5 million
1996	5.1 tonnes	US\$152.4 million
2003 to 2008 (annually)	10 to 15 tonnes	US\$130 million (*)

(\*) 2003 to 2008 are very rough estimates (see reason below), whereas figures for 1972 to 1996 are accurate.



In other words: in 1996, Tahiti got more money from 5 tonnes of pearls, than it is getting today with annual production volumes that have doubled (by certain estimates even tripled). It looks as if Tahiti's pearl industry is now drowning in its own success.

What happened?

Sadly, the over-ambitious politicians running the Government of French Polynesia, eager in seeking votes for re-election, had issued farming licenses like Santa Claus throws candies to kids around Christmas time. It is estimated that at its peak time during the late 1990s and early in the 2000s, approximately 1,500 independent pearl farms were operational.

During these years, many Tahitians got the "I can do it too" virus in their blood, for which the only effective antibiotic was to give them a pearl farming license. Some of this happened in the absence of knowledge, ability or capital. But Government and banks were happy to assist.

Unfortunately, the Government was too lax to implement control of licenses, leases and quotas. The situation got out of control, resulting in a huge overproduction, with prices going downhill. After thirty years of enjoying a sellers' market, Tahiti suddenly woke up, realising that the tides had turned.

By 2007, the number of active farms had shrunk to approximately 650. By 2008, estimates run at around 550 (with 50 being medium to large in size, and 500 being small ones). But the decline continues. It is very well possible, that the number will drop to below 350 by the end of this year.



In 1996, at US\$ 30 per gram, farming was profitable. But at today's market prices, practically every pearl farm still operating in French Polynesia is running dark red figures.

This is actually quite amazing! Think of it: There is a country that runs a monopoly, producing beautiful gems that enjoy very high popularity all over the world. Yet, every producer is losing money! Something wrong isn't it!

As the prices for Tahitian pearls tumbled, the export tax (at 200 CFP/gram) became excessive in relation to the value of the pearls themselves. The result was that in recent years, considerable volumes of pearls were apparently smuggled out of the country (hence, no more accurate statistics). In October 2008, the Government abolished this export tax. But other export procedures remain in place, including a quality control system by x-ray machine.

By abolishing this export tax (rather than reducing it), the Government strangled the much-needed funds used for their very successful promotional campaigns. The "GIE Perles de Tahiti" (Martin Coeroli) had done a good job, over many years, very actively promoting Tahiti's gems. From 2003 to 2008 alone, between 6 and 9 million US\$ dollars were spent annually on worldwide propaganda.

But with the export tax totally abolished, and no alternative financial sources available, there is no more money for publicity, and the "GIE Perles de Tahiti" has now died. Came 2008/2009, Tahiti's second largest industry had not only reached the state of "chaos and disarray", it had become an embarrassment to its Government, with the world watching in disbelief.

What will the future hold for Tahiti and its pearling industry?

Basically, Tahiti has now a couple of choices:

One is that the government maintains its "laissez-faire" attitude, under the motto (or rather the excuse of) "we live in a free country and it's everybody's game". The result will be that the industry is left to open market forces, which actually translates into "elimination by nature". This would be a painful process for many. But over time, it would normalise the situation.

The second scenario is that the government takes advantage of its monopoly situation, acts swiftly and plays its cards well. Even though living in a "free country", there is nothing wrong with rules and regulations, with order, control and discipline (look e.g. at the Australian pearling industry).

If the Government is now willing to act swiftly by providing funds to support prices of latest crops, by implementing farm control and observing strict discipline, by re-introducing a reasonable export tax (say CFP40/gram, so everybody will pay and smuggling will stop), by re-considering the fees for the "négociants", by re-activating the GIE Perles de Tahiti with the resulting funds, by re-activating export customs control, by limiting further expansions of production, etc., then there is hope that Tahiti's pearl industry will once again become a well respected, trustworthy and prosperous one.

It seems the Government is actually thinking of a third scenario, introducing a "pearl centre" or "pearl house", kind of a "centralised buying and selling organisation", with a "price-control-system". Our personal opinion, based on decades long experience, makes us conclude that such system will not work, for reasons we don't need to elaborate here.

No matter what scenario will develop, the fact remains that many farming operations are in the process of collapsing as we speak. This will result in much lower production volumes, with prices re-bouncing quite drastically in the not-too-distant future. No industry that produces at a cost of 100 and sells at 50 is sustainable. Pearl traders, if you want to buy the dollar at fifty cents, better hurry up!

<<<<>>>>

Now, let's look at the **WHITE SSP** situation:

(Pearls farmed in the *Pinctada maxima* oyster in Australia, Indonesia, the Philippines and Myanmar).

History tends to repeat itself. When an industry is new and successful, it can catch fire. The produce is scarce and prices are high. Understandably, many are jumping on the lucrative bandwagon... till, at one given moment, the saturation point is reached (read over-production).

It happened to Japan in 1966/1967, and to Tahiti most recently. And it is happening to the white SSPs as we speak. Tides have turned.

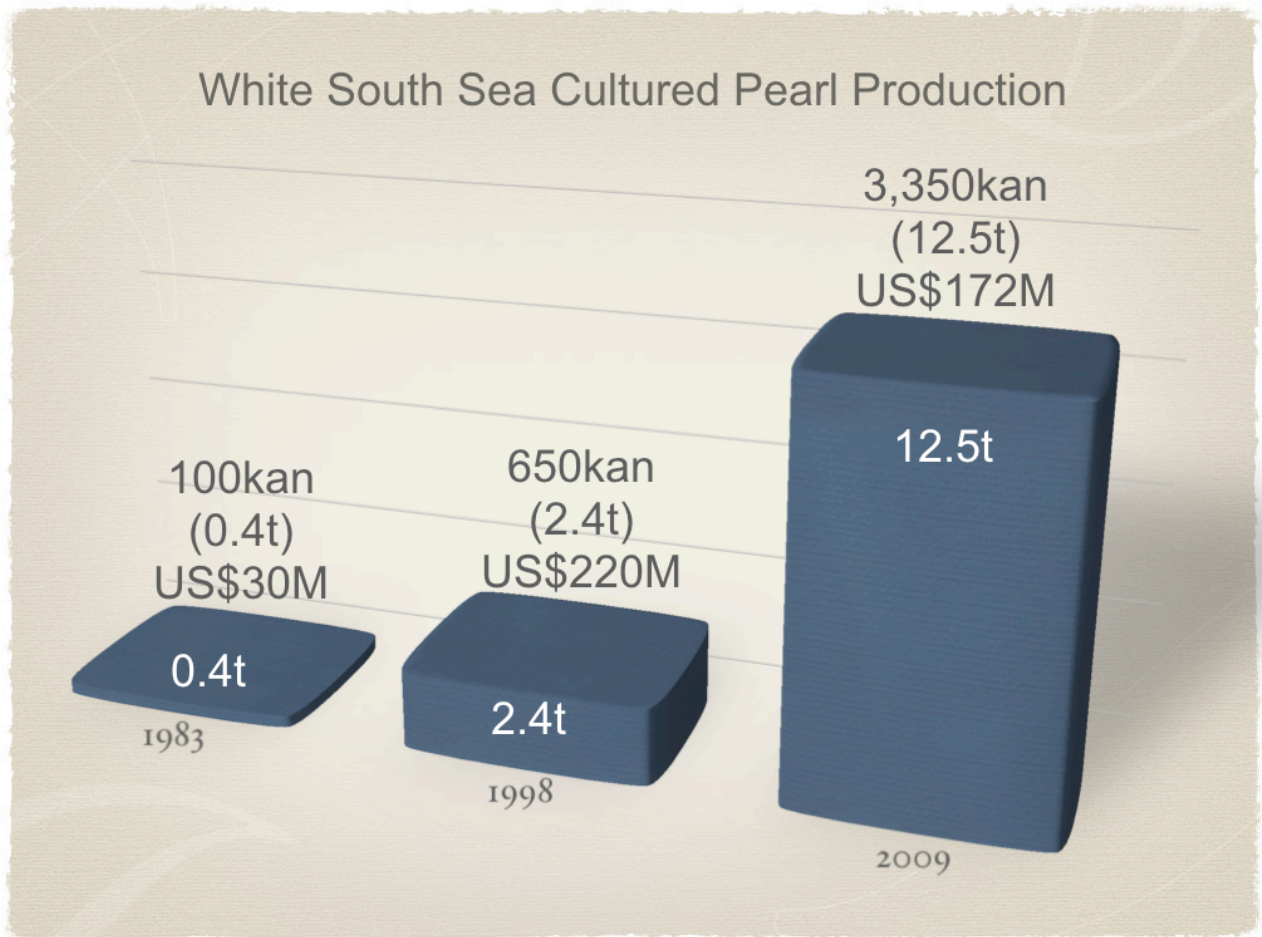
That it coincides with the present global recession makes the problem more pronounced and has a very serious impact on the industry. One can also put it into other words: It was the sudden global recession that finally brought the pot to over-boil. This "double-punch" is now rocking the industry at its foundation, as it has made heavy capital investments during recent years.

The interesting history of white SSPs goes way back to the pre-war time, when Japanese pioneers farmed them in Indonesia, and sold them under their sponsor's name as "Mitsubishi Pearls". The pre-war peak in production was reached in 1936, with a quantity of 5 kan (18.75 kilos).

One must give due credit to those who took up SSP farming after the war. We refer to Mr. Takashima who ventured into Burma in 1954, and to the legendary Mr. Kuribayashi who introduced the cultured pearl industry to Australia in 1956.

But the SSPs only moved into the limelight in the early 1980s. We estimate that by 1982/1983, the global annual production volume had reached 100 kan (375 kilos) for the first time, at an estimated price of yen 60,000 per momme (or US\$ 240 at the then prevailing rate of yen 250/dollar).

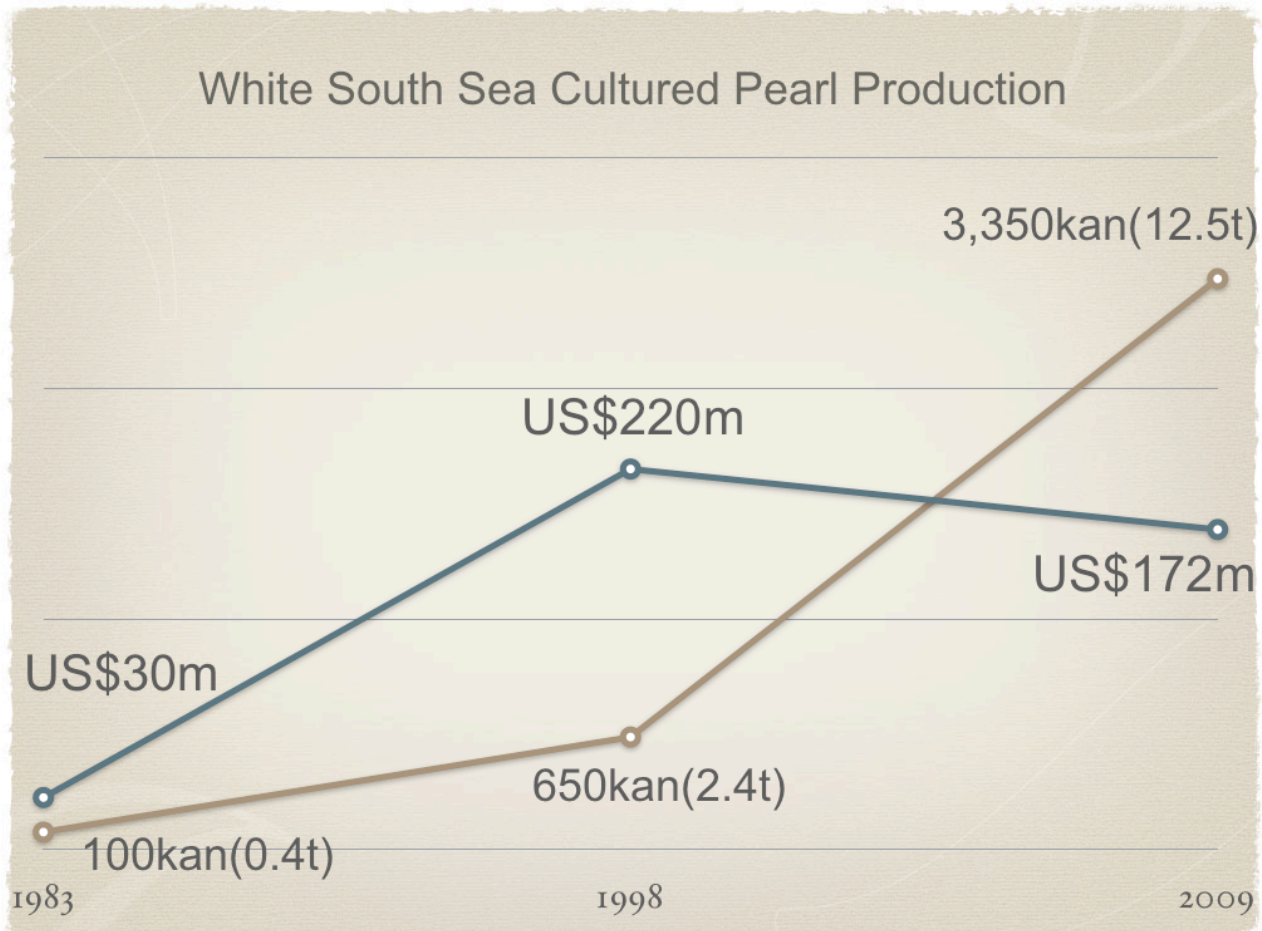
For 2009, we estimate the global SSP production to reach 3,350 kan (12.4 tonnes), at an average price of yen 4,870 per momme (or US\$ 51 at today's exchange rate). In terms of weight, this represents a 33-fold increase in the relatively short span of 27 years.



Our individual estimates are as follows:

	Kan	Kilos	Yen/mo	Total Yen (M)	Total US\$ (M)
Australia	1,250	4,700	8,000	10,000	105
Indonesia	1,450	5,400	3,000	4,350	46
Philippines	450	1,700	3,000	1,350	14
Myanmar, etc,	200	750	3,000	600	6
<b>Total (Global)</b>	<b>3,350</b>	<b>12,550</b>		<b>16,300</b>	<b>172</b>

What happened to the farmers in Tahiti is now also happening to farmers of white pearls: they are getting less money for more pearls.



As we speak, the industry is going through major adjustments with the aim to correct the present imbalance between supply and demand, to achieve price-stability and re-gain profitability. A considerable reduction in production could well coincide with the global economy coming out of recession. This will be most welcome news. But it will not happen tomorrow.

We are not in an industry where production units can be shut down almost instantly, as it is happening now, e.g. in the car industry. The lead-time in our industry is a few years.

This will be a very crucial time. We'll witness a major shakeout on all levels. Australia, the leading producer, has the best-regulated pearling industry, which makes it also the most transparent among all producer nations.

At present, total quota units in WA number 907,000 oysters (557,000 wild stock and 350,000 hatchery options). Total seeding rights this year are set at 962,700 oysters.

Gone are the days where these seeding rights were utilised to their full capacity. Gone are the days when a 15,000 quota was practically the equivalent to a "license to print money". Today, several farms, prosperous just a few years ago, are no longer operating per se.

Comes seeding time this July and August, we'll witness that all the farms in WA, without exception, are seeding less oysters.

We estimate that the total number of oysters seeded will reach 450,000 at most (our low-end estimate is 350,000). This is less than half the allowable quota, and much less than

seeded during past years. This is extremely significant, but due to the long lead time, the results will only be felt in a couple of years, at the earliest.

Indonesia's SSP industry is facing similar/same problems, and for many, it has now become a survival game. But there, the situation is less transparent. One Herculean producer, the Nusantara Pearl Group (known to market through the Concorde Auctions), is estimated to control roughly 70 to 75 percent of total Indonesian production. It is only natural that all eyes are now focusing on them, hoping to get a glimpse of how they react in today's trying times.

(One exception to the rule in Indonesia is Atlas South Sea Pearl. Atlas is extremely well managed and very efficient. The quality of their pearls is correspondingly high and cannot be compared with the Indonesian average. Atlas enjoys a very high reputation in our trade and, being publicly quoted, is the only Indonesian producer to show transparency. They deserve special mention).

We don't have too much reliable information when it comes to the Philippines but believe that they are no exception. To stay in the game, they too have to restructure. Some farms have openly admitted that their 2009 seedings will be down by 30 to 35 percent.

Myanmar lives in the past, and overseas investors who entered pearl farming contracts with the government, are now realising that it is a very lopsided deal in favour of the Burmese who don't share any risk. These overseas investors acted in good faith, some of them made huge capital investments. For them, it has become almost impossible to keep the head above the water, especially when at least 1/4 of their crops is taken away by the government... well, time will tell.

<<<<<>>>>

### **Some thoughts:**

#### **FIRST:**

While writing this speech, I was kind of warned by some very prominent pearl traders, NOT to give a bleak picture, NOT to show certain figures, and NOT to disclose recent price-developments.

While I have partially tried to adhere to this request, I firmly believe that we must not be afraid to confront the reality. I think it is unfair and unethical to hide facts about production and price-developments, etc. Most of our customers invest, and deserve to know where they stand.

Confidence is a key-issue. The more open and transparent we are, the more we gain credibility, which our industry often lacks!

Also, we must be aware that in certain countries, misrepresentation to the buyer is against the law.

#### **SECOND:**

Any industry has teething problems, goes through stages of "trial and error" and often lives in a "world of uncertainty". As the industry matures, adjustments are made.

Look at the American Automobile Industry. When it started just before the turn of the last century, many jumped on the bandwagon. By 1909, there were a total of 557 registered automobile producers in the USA. In the span of a hundred years, there were over 1,000

companies producing motorcars in America (\*). As time went on, some went bankrupt and many merged. Today, we are down to just three (all in the process of serious restructuring). But these three are now producing much more cars than the 1,000 manufacturers had ever produced together.

We observe the same with the airline industry. Today's fewer airline companies are transporting much more passengers than a much larger number of airline companies transported twenty or thirty years ago.

Don't we also observe a similar pattern developing in our small pearling industry? Don't we have now in Australia a situation where several farms, over time, were put into just two baskets (the Paspaley Group and the Autore Group), whereas previously, they were independently working and marketing? During the past years, the number of pearl farms in Indonesia and Tahiti (and possibly the Philippines) has been reduced. Yet, production volumes have multiplied.

Yes, we are presently going through a "restructuring phase", with mergers and acquisitions and, ultimately, some failures.

(\*) Philip Hillyer Smith: "Wheels within Wheels"

### THIRD:

No doubt, our industry will not only survive, it will thrive again in the not too distant future. Major re-adjustments will take some time, and for many, it's a very painful process. But most will come out of this, and blossom!

At present, the cake served to overfed and cash-strapped consumers is too large to be digested. But as consumers are developing appetite again, they will suddenly wake up, and be confronted with a much smaller cake, and the race to get a piece of it will start again! Be ready and don't miss out. It's the early birds that are catching the worms!

Ladies and Gentlemen: have confidence!  
Thank you very much!

Note: Figures for 2009, we used the exchange rate of \$1=Yen 95.

### Disclaimer:

The content of this file / presentation represent the personal opinion and estimates of the author, Andy Müller. The author will not be held responsible for any inconveniences or losses caused by incorrect estimates and /or interpretations and statements made.

© 2009, Andy Müller, Kobe/Japan

### Contact:

Address your enquiries to Andy Müller or Kayo Bryan at:  
contact@hinatatrading.com