

*In* DEFENCE  
*of* LAND *and*  
LIVELIHOOD



COASTAL COMMUNITIES AND THE SHRIMP INDUSTRY IN ASIA

CONSUMERS' ASSOCIATION OF PENANG • CUSO • INTER PARES • SIERRA CLUB OF CANADA

*In* DEFENCE  
*of* LAND *and*  
LIVELIHOOD

*Faris Ahmed*

*This booklet is the result of a documentation project undertaken jointly  
by CUSO, Inter Pares, Sierra Club of Canada, and the Consumers'  
Association of Penang, and their partners in the South and North.*

*It is accompanied by a photo exhibition.*

### *Author's acknowledgements:*

I am grateful to many people for opening my eyes to this issue, and deeply indebted to the NGOs, village committees, peoples' organizations, farmers and fishers who led me to the story. This booklet is a result of their strength and dedication.

This project could not have been successful without the valuable support and hospitality extended by our Asian partners and friends. In particular I would like to thank the staff of CUSO Thailand, Yadfon Association, Nijera Kori, UBINIG, Inter Pares (Dhaka), PREPARE, Gram Swaraj Movement, LAFTI, Orissa Krushak Mahasang, International Collective in Support of Fishworkers (ICSF), Consumers' Association of Penang (CAP), the Penang Inshore Fishermen's Welfare Association (PIFWA), Third World Network, CUSO Indonesia, KONPHALINDO (Indonesia), Yayasan Hualopu (Indonesia), Oxfam UK/I (Vietnam), the Small Fishers' Federation of Sri Lanka, the Sri Lanka Canada Development Fund, and Christian Aid (UK). In Canada, thank you Debby Coté of CUSO and Peter Gillespie of Inter Pares who supported me from far away and answered my sometimes bizarre requests.

Additional comments on the text by Meena Raman, Khushi Kabir, Alec Bamford, Jim Enright, Alfredo Quarto, Debby Coté, Maureen Johnson and Alex Gillis were greatly appreciated.

Research, writing and photographs: Faris Ahmed  
Editorial team: Peter Gillespie, Angela Rickman, Faris Ahmed  
Photographs scanned by Alternatives, Montreal  
Design: Allegro Design, Gatineau, Quebec  
Printed in Canada by: Imprimerie Gauvin

ISBN: 0-9699660-1-6

Distributed by:

Sierra Club of Canada  
1 Nicholas St., Suite 412  
Ottawa, Canada K1N 7B7  
tel: (613) 241-4611  
fax: (613) 241-2292  
e-mail: sierra@web.net



Consumers' Association of Penang  
228 Macalister Rd  
Penang 10400 Malaysia  
tel: 4-2293511  
fax: 4-2298106  
e-mail:  
elawmalaysia@igc.apc.org

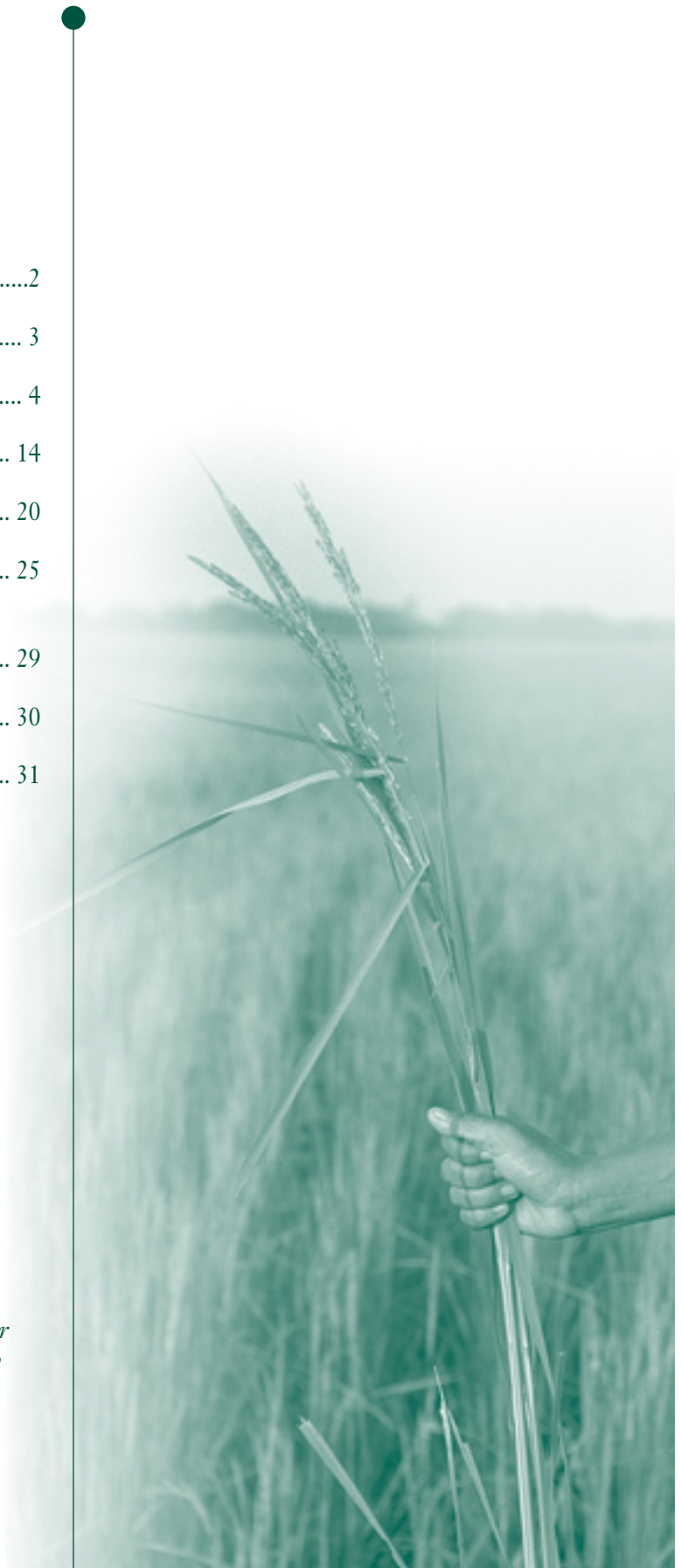
© 1997 Sections of this booklet may be reproduced for educational purposes, with acknowledgement of source.

The financial support of the Environment and Development Support Program of the Canadian International Development Agency is gratefully acknowledged.

## TABLE OF CONTENTS

Shrimp: The Deadly Cash Crop .....	2
Community Resistance: The Stories from Asia .....	3
India: Development for Whom? .....	4
Bangladesh: The Desert in the Delta .....	14
Thailand: Time to Close the Global Casino? .....	20
Malaysia: Corporate Gain at Public Expense .....	25
People's Organizations Rally in the South and North .....	29
Shrimp Facts and Figures .....	30
Bibliography .....	31

*Dedication: To Karunamoi Sardar, who died defending her village against the shrimp industry in Khulna, Bangladesh on November 7, 1990.*



# SHRIMP: *The Deadly Cash Crop*

“Think of it this way”, says Mohamad Ibrahim, gazing across the embankment on to water-logged, saline shrimp fields in Cox’s Bazaar, Bangladesh. “A cow eats here, in our fields. We take care of it. But you in the rich countries, you are the ones who are milking it!” Ibrahim, 90, is one of the oldest residents of Badarkhali village, and in his lifetime he has seen a drastic transformation of his home from dense mangrove forest to barren, unproductive shrimp fields.



In the late 1980s, widespread disease wiped out most of the farms in Taiwan, forcing the world’s leading exporter of shrimp to take a closer look at the long-term consequences of commercial aquaculture. The Government of Taiwan subsequently took measures to drastically curb shrimp aquaculture in the country.

In a matter of 15 years, shrimp aquaculture has become a US\$9 billion industry, active in over 50 countries. Most of the countries of Asia have witnessed an explosive growth of shrimp farming along their coasts, as it has emerged as the single most valuable marine species that can be raised using existing farming technology. Globally, farm-grown shrimp represents about a third of all shrimp production while the rest is caught at sea by commercial trawlers. The share of farmed shrimp is expected to double in coming years.

As recently as a decade ago, shrimp was a luxury item relished by western consumers. Today, fuelled by rising consumer demand and increased production, it has become a cheap, readily available product, finding its way on to the menu of even the corner restaurant.

Commercially-grown shrimp is extremely lucrative, extremely risky and extremely destructive. It has been vigorously promoted since the early 1980s by multilateral development banks, UN bodies such as the FAO and UNDP, governments and commercial interests around the world. More than 80 per cent of the world’s cultured shrimp comes from Asia, where it is among the leading exports. The first Asian countries to undertake commercial aquaculture on a large scale were Taiwan, China and the Philippines. Since then, they have experienced serious problems with disease and contamination, and in some cases total collapse of the industry. Pollution, environmental destruction, coastal deforestation, soil erosion, the collapse of fisheries, and social conflict over land are some of the common consequences of commercial aquaculture.

In search of new frontiers, the industry looked towards other countries with long coastlines and the required infrastructure to carry out shrimp farming: Thailand, India, Malaysia, Indonesia, Bangladesh, Vietnam — the choice was not limited, as cash-strapped governments extended their cooperation, and business opportunities rose dramatically as entrepreneurs were lured by the tantalizing get-rich-quick prospects.

In shrimp aquaculture, as with all risky ventures, certain ‘externalities’ had to be managed. Among them were the impact of intensive industrial activity on the coastal community; the management of large quantities of polluting effluents and saline water; the acquisition of coastal land normally used for agriculture and often highly populated; and the existence of delicate coastal ecosystems, mangrove forests and fisheries, a critical source of livelihoods for the villages along the coast. The increasing privatization of common resources has had very serious social consequences. For many coastal dwellers it has become a question of life and death: in Bangladesh, for example, over 100 villagers have been killed in conflicts related to land acquisition for shrimp culture.

Less than a decade after its introduction to Asia, it is clear that the aquaculture industry cannot manage these externalities, nor do they enter into its short-term, profit-centred calculations. The industry operates on a hit-and-run basis, typically on a five year horizon, sufficient to get a return on investment, and then move on. It is also clear that commercial shrimp aquaculture is one of the most destructive cash crops ever — a cash crop that has endangered the lives and livelihoods of millions of coastal people around the world.

# COMMUNITY RESISTANCE - *The Stories from Asia*

*The technology of intensive fish farming devalues most people and most resources, to provide value for corporations and rich consumers. - Vandana Shiva*

*I say that those who eat shrimp — and only the rich people from the industrialized countries eat shrimp — I say that they are eating at the same time the blood, sweat and livelihood of the poor people of the Third World. - Banka Behary Das*

It is hard to imagine that the demand for a tiny crustacean has caused such immense damage, destroying the lives of millions of fishers, farmers and villagers in coastal communities around the world. While the price to the consumer has actually decreased, the costs borne by coastal environments and peoples have been exorbitant — a price no one can afford, or should be asked to pay.

Nothing illustrates the devastating impact of shrimp aquaculture better than the stories, images and testimonies of the people who have been most affected but least heard by the consumer in the North. These stories are re-enacted and retold a thousand times along the coasts of Asia. They are widely known and debated —

in the villages, in the street, in the press, and in the courtrooms — where people have responded by challenging the powerful interests that have taken away their land and livelihoods. Shocking incidents of violence, corruption and greed have been matched by inspiring stories of bravery and resistance by ordinary people. Every citizen of every village on the coast of India and Bangladesh knows of someone who, through some heroic act, became a leader or a martyr for the people's movement against the industry. That poor and landless people have managed to sustain a strong movement against powerful economic and political interests is not only a sign of their desperate plight, but also of their courage in seeking justice.



# INDIA: *Development for Whom?*

It began in the mid-1980s with a US \$425 million loan from the World Bank to India for aquaculture development. The Indian government then provided massive subsidies to business investors to set up commercial shrimp farms geared primarily for export. The idea was to boost the country's export earnings, increase food production, and generate employment and earnings for communities along the coast. Rising consumer demand in the global market required mass production, in factory-style farms where shrimp is grown intensively as a monocultured crop, adding feeds, chemicals and flushing the ponds daily with huge quantities of sea water. This was in contrast to traditional shrimp and fish-raising, still practised in coastal Kerala and West Bengal, where shrimp is caught or raised in inundated fields or ponds in very small amounts along with other crops and fish.

Thus a whole *aqua-culture* was set in motion by global market forces. It comes with its own logic, experts and massive infrastructure — roads, jetties, canals, hatcheries, processing plants, and fences and armed guards to protect them. Equally alarming is the industry's appetite for consuming local resources: mangrove forests, rice and *ragi* (finger millet) lands, water from the sea as well as fresh groundwater, fish that could be used to feed people goes into fishmeal for shrimp, the huge demand for shrimp seed to stock ponds leads to massive shrimp fry collection — a highly wasteful activity which has seriously hurt fish-stocks and biodiversity along the coast.

Only a decade after it began, it is apparent that shrimp aquaculture has had a devastating impact on the Indian coast, where more than a quarter of its people live. When the so-called Blue Revolution comes to the village, it can destroy everything and almost everyone in its path. After five to ten years of intensive production, the land will have turned from a productive green to a brackish blue, to an arid brown, to a saline and worthless grey.

## *Supreme Court Takes a Step Towards Justice*

Responding to this destruction of their livelihoods, landless and impoverished coastal dwellers took their struggle for justice to the streets, to state-level bodies and finally to the courtroom. In December 1996, the Supreme Court of India passed a landmark decision ordering the closure of all commercial aquaculture operations within 500 metres of the high tide line, and of those that had converted agricultural land into shrimp farms. Invoking the Polluter Pays principle, it also instructed the industry to bear all the costs of rehabilitating the coastal environment, and to compensate all persons affected by damage to the coastal zone.



The precedent-setting Supreme Court decision was based on a cost-benefit analysis by the National Environmental Engineering Research Institute (NEERI). A team of scientists conducted a long-term, cost-benefit analysis, taking into account the actual and hidden costs of commercial aquaculture to the land, forests, and ecology of the coast, and to the people living there. NEERI concluded that “the costs of ecological and social damage far exceed the benefits that accrue out of coastal aquaculture activities”. The institute calculated that for every \$1 profit earned by the industry, \$4 were being lost by the people, the coastal ecology, and therefore the country as a whole.

The Supreme Court decision was widely hailed as a victory for the coastal people of India, an act of justice long overdue. If the conditions and criteria outlined by the Supreme Court were adhered to, then all aquaculture activities along the coast would have to be closed down by March 1997. Traditional aquaculture, as practised in places like Kerala and West Bengal, could continue as it has for centuries.

However, the victory was short-lived, as the powerful forces that back the industry were quick to respond. As their only recourse in the face of a final decision by the Supreme Court of India, the industry lobbied to push through an Act of Parliament which would nullify the decision. The Aquaculture Authority Bill was passed in April 1997, which makes aquaculture a permissible activity within the Coastal Regulation Zone, 500 metres within the high tide line.

The Act set in motion a national furor and a series of actions by the coastal communities, activists and NGOs who were fighting on behalf of the coastal people. Hunger strikes, sit-ins, and peaceful protests were carried out by thousands of people who came to Delhi from coastal villages to demonstrate their discontent. With the subsequent filing of new petitions and legal challenges, the case has once again been reopened.

---

“THE CURRENT PRACTICE OF THE INSTALLATION OF COASTAL AQUACULTURE FARMS WITHIN 500 METRES OF THE HIGH TIDE LINE VIOLATES THE FUNDAMENTAL RIGHTS TO LIFE AND LIVELIHOOD OF PEOPLE IN THE STATES AND UNION TERRITORY INSPECTED BY THE TEAM.” - NEERI REPORT TO THE SUPREME COURT.

---



## ANDHRA PRADESH: REFUGEES OF PROGRESS

It's a bizarre scene. A tanker rolls awkwardly across a narrow path to the Nellore coastline, bringing water to the people of Kurru village. Yet the entire area is covered with water, so much that one can barely see the muddy road. In the aftermath of the November 1996 cyclone that wreaked havoc on this coastal community of Nellore district, all one can see are water-logged shrimp ponds and former rice fields — all abandoned and unproductive.



The people of Kurru and surrounding villages are true refugees of development. The intended beneficiaries of this 'development project', they are the worst affected by it. They are desperately aware of the profound changes experienced in this coastal community since the so-called Blue Revolution engulfed Nellore district: they have lost their land, their homes, their fishing rights, their common property, and have had to move to another location because Kurru had become unlivable. Tankers now bring potable water to this community — a ration of two buckets per family per day.

Commercial shrimp aquaculture was started in India in the name of people like Kantamma and Sitalakshmi, who live in nearby Ramachandrapuram village. Kantamma, 32, a community leader, wistfully watches the pouring rain from her house. "What do we have left here?", she says. "We lost our *ragi* and rice lands, our food, our income, our buffaloes, we're like an island surrounded by shrimp farms". Adds Sitalakshmi, 36, secretary of the *Mabila Mandal* (women's committee), "You see this water everywhere, we cannot drink it - we cannot even touch it, because it's given us skin diseases from the salt and the

chemicals in it. The wells are also poisoned. If we want drinking water we have to go to another village to get it."

Once known as the Rice Bowl of the region, Nellore has become an industrial belt of aqua-factories, the land dug up and salinated for shrimp ponds. What was once lush and green, is now a concrete coast with sludge-filled reservoirs, canals for water supply, and huge jetties resembling highways that go right into the sea. Expensive jeeps carrying engineers and businessmen can be seen negotiating gingerly along makeshift roads, through the high-security barbed wire fences and gates erected to protect the fortunes of the investors, who live in the comfort of the city. Meanwhile, the area is out of bounds for the coastal people who lived here for generations, kept their fishing boats along the coast, and fetched firewood and fruits from the mangrove forest.

"We used to be able to live by growing *ragi* and rice, and catching fish", says Sitalakshmi. "Now, the land is taken over or poisoned, and all the fish are gone. We can't even go to the sea, because the shrimp farms have blocked the way."

"It was a military kind of action", recalls Jacob Dharma Raj of PREPARE, an NGO working with the coastal poor in the region, "having even sentries with guns posted at the gates. Nellore and Prakasam coastal roads, which were rickety earlier, were now lit up with sodium vapour lamps, and had fancy jeeps plying incessantly to and fro. All this was a shock to the people". The prices of land and essential goods skyrocketed. Traditional lands and common property, where fisher and farmer co-existed, became private property, leading to competition for resources.

Andhra Pradesh is the most serious victim of the Blue Revolution. Of all the states of India, it offers the most enticing prospects to investors: 150,000 hectares of brackish water land, of which over 50,000 hectares has already been taken over, mainly by large companies, for shrimp production. National bodies such as the Marine Products Export Development Authority (MPEDA), government banks, the various departments of fisheries, agriculture, and other investors seized the opportunity. They were the forces who brought the Blue Revolution to the Indian coast.

## *The Coastal Poor Began to Organize*

Faced with a total loss of income, daily conflict in the village, and inhuman living conditions, the coastal poor and landless of Nellore began to organize. Even as new ponds were being dug, fisherfolk held rallies along the coast. Talking to other leaders, it was easy to see the entire coastal population had been robbed of its means of survival — mostly by illegal means. Many heads of the various *Kappu Sangams* (community associations) had been bribed or threatened by the shrimp industry's thugs.



FISHERS OF RAMACHANDRAPURAM ARE TRYING TO SURVIVE

A groundswell of dissent began to emerge against the industry's unjust practices in Nellore and Prakasam districts. The women, who were most affected by the invasion of shrimp culture, became much more vocal and the *Mabila Mandals* began calling for the industrialization to stop. Women were tired of having to walk miles to fetch water and fuelwood.

Since the fishermen had lost all their income, the women were further burdened with providing income for the family. Some were even forced to work in the shrimp industry, performing tasks of the most menial variety: cleaning and maintaining the ponds, and peeling and processing shrimp. Yet women became the central force in the movement.

“In a sense the women did what the men couldn't do”, says Jacob Dharma Raj. “They depended more on the land, they collected water and firewood, they were hassled

by the armed guards patrolling the area day and night. They were more hurt by the shrimp industry. Now they're strong and organizing against shrimp.”

## *The Movement Gained Momentum*

The movement gained momentum and attracted the attention of others. In Nellore district, village organizations were assisted in their work by PREPARE, who supported the struggle of the coastal communities through solidarity, training in organizing and leadership, legal advice, and bringing their plight to the attention of the national and international media. To help document the damage, experts were brought to the coast beginning in 1994, including environmental analysts, physicists, lawyers and activists. These well-known personalities brought credibility to the cause of the people, and more importantly furnished the movement with valuable data to be used in legal actions against the industry.

Community associations such as *kappu sangams* began regular monitoring of violations and illegal activities of the shrimp operations, and informed the authorities. Heightened media coverage and support from other activists gave them strength. Meanwhile the villagers took to the streets. Protest marches brought out thousands of coastal fishers and farmers, many of whom conducted hunger strikes and peaceful demonstrations outside government offices in Andhra Pradesh.

To the shrimp industry, it was evident that this people's movement was gaining sufficient force to challenge its power. Incidents of violence, clashes with police, and arrests were daily occurrences on the coast — but the way they were dealt with made it clear that even senior politicians and bureaucrats were in the hands of the aquaculture industry. Police routinely arrested and detained protesters, court cases were filed and went on far too long. Justice was never brought upon the rich and powerful.

In December 1994, villagers observed Black Day in Nellore District to protest the arrest of Chittibabu, a prominent journalist who had exposed the problems caused by a local shrimp farm owned by an affluent individual. It was the height of the people's movement against the industry. The event was followed by a People's Tribunal, where villagers gathered to testify and speak out against the injustices caused by the aquaculture industry, and to discuss resistance strategies.

The increasing momentum and publicity created by the coastal movement could not be swept aside. In May 1995, the Supreme Court of India issued an interim order to cease all aquaculture activity pending a detailed investigation of the issues and claims involved in this now highly volatile industry. This would allow the Court to compile further evidence and information on the environmental damage and social disintegration caused by shrimp aquaculture. The Court commissioned a series of environmental impact studies, including the NEERI Report, and in December 1996 it passed the decision ordering the aquaculture industry to close down.

But the plunder has never stopped, despite the court order. Since the police, bureaucrats and business people are all involved, no one can stop the shrimp farms. The struggle to save the coast continues. When it comes to the future of the shrimp industry, Appa Rao of PREPARE is pessimistic. "Nobody will close the farms. They will be very hard to stop, because they are now multi-millionaires."

## TAMIL NADU: LAND, FREEDOM AND SELF-RELIANCE

*"Land belongs to God — it belongs to all or none. Nobody created the land, so why should anyone claim to possess it? Air, water, sunshine, forests, hills, rivers and the earth are part of our planetary heritage. No one group or individual has a right to own it, possess it, spoil it, pollute or destroy it."* - Satish Kumar, Sarvodaya Diary

Throughout history, people have fought for the right to till the land, and this is perhaps nowhere more true than in India. The country's greatest freedom fighters, Mahatma Gandhi and Vinoba Bhave, not only demanded independence from foreign rule, but asked the people to embrace the philosophy of self-rule – socially, economically and spiritually. The Gandhian notion of *Gram Swaraj*, or community self-reliance, contains a three-fold revolution: land to the villages, industries and economic activity to the villages, and political power to the villages.

For Sarvodaya activist Shri S. Jagannathan, land represents freedom. A lifelong Gandhian committed to the philosophy of self-reliance, Shri Jagannathan and his wife Krishnammal began a movement in 1968 called LAFTI — Land for the Tillers' Freedom. It started in Tamil Nadu State as a non-violent movement to take land from landlords and distribute it to landless peasants. In two decades of Gandhian action, LAFTI has succeeded in redistributing thousands of acres of land to poor and low-caste families.

In February 1997, 85-year old Jagannathan went for a walk. It was to be a 600 kilometre walk. In the style of Mahatma Gandhi and Vinoba Bhave, Jagannathan and supporters of the Gram Swaraj Movement embarked on a *padayatra*, a protest journey on foot, from Kanyakumari on the southern tip of India to Madras, 600 km away. They called it the People's Pilgrimage for Coastal Ecology. "In India, people walk hundreds of miles to see their guru", said Jagannathan, "Why not do it to save the people? We are asking villagers to walk for the sake of coastal ecology. This is also a spiritual act."



VILLAGERS DISCUSS SELF-RELIANCE WITH GRAM SWARAJ WORKERS

Walking and holding meetings from village to village, Jagannathan and his fellow activists discussed the problems associated with industrial development along the Indian coast: the threat to people's land and livelihoods from shrimp aquaculture, pollution, mangrove destruction, and the depletion of fish from coastal waters.

“In modern-day India we have lost all control over our villages, our own lives,” said Jagannathan. “So we are talking to people, asking them to embrace *Gram Swaraj*, self-government, which is also self-reliance, and self-discipline. It may be a high ideal, but you need to apply both the mind and heart to tackle these immense social and economic ills”. Like Gandhi, Jagannathan envisions a decentralized system that gives autonomy to the village, allowing people to make decisions based on local needs and conditions, developing a prosperous small-scale economy which safeguards their community and ecology. Such self-determination fosters the political will that would encourage villagers to resist the oppressive actions of outside industrialists and bureaucrats.

The pilgrimage also served to raise awareness of the December 1996 Supreme Court decision against shrimp culture. Jagannathan was the main appellant, launching the case on behalf of the coastal communities. “Of course we welcome the court’s decision, one that should spell death to the industry”, he said. “But now we are clamoring for its implementation. The people have to actively participate in the decision, set up committees, be alert and vigilant. Only this will make the implementation successful, otherwise the industrialists may escape”. Jagannathan was worried that an implementation body, to be set up by the court by January 15 as spelled out in the decision, had not been created. “This non-implementation is an affront to the judicial system, in fact it constitutes contempt of court”, he said. Every day, he was in contact with lawyers in Delhi urging them to pressure the government into action. Meanwhile, in protest he had gone on a partial fast, having just one meal a day.



PEOPLE'S PILGRIMAGE BEGINS IN KANYAKUMARI (JAGANNATHAN IS 3<sup>RD</sup> FROM THE LEFT)

## *Rice Bowl Converted into Shrimp Ponds*

Nagai Quaid-e-Milleth district, Tamil Nadu's 'rice bowl', is where LAFTI began 20 years ago, and where acute poverty and landlessness is still a source of serious conflict. A highly fertile and productive district for rice cultivation, Nagai Quaid-e-Milleth is now in the hands of aquaculture investors. Land prices here shot up ten-fold between 1992 and 1994 as 150 aquaculture companies jostled to take over the land. In Sirkali taluka (sub-district) alone, more than 1,100 hectares of land were taken over for shrimp farming.

Commercial shrimp production, for Jagannathan, “is not an aquaculture problem, but out and out a serious land problem — the worst of its kind. The problem is not of local landlords but of big industrialists from the capital cities, occupying large chunks of land extending 500 to 1,000 acres. Not only does this throw the landless labourer out of employment but commits the national crime of converting fertile and cultivable land to salty desert where no blade of grass will grow in a few years.”

Tamil Nadu State was an easy target for industrialists eager to make fortunes from shrimp. Of its 1,000 kilometre coastline and 56,000 hectares of brackish water area, little had been exploited for aquaculture until the 1990s. With government support, bank loans and massive subsidies, the Pink Goldrush began here as well. The expansion of the industry was largely unregulated, and land acquisition for shrimp production increased dramatically, as did land prices and incidents of conflict.

In the villages of Thanjavur, Peronthottam, Thennampattinam, the stories of easy money that inspired the aquaculture explosion, have only translated into stories of lawlessness and misery for the people. Here, most of the state's elite have major investments in shrimp farms, throttling the villages with barbed wire. With the local administrators and police in their pockets, nothing could stop them — except the *Satyagrahas*.

“When we go on a *Satyagraha* [peaceful protest], it is often the women who lead”, says Krishnammal, 75. “We march to the spot with prayers and slogans, we stand in front of the bulldozers and earth movers that dig the ponds. With folded hands, we appeal to the operators to stop. We sing songs of resistance. Some even go as far as to prostrate before them, pleading with them not to

dig up the land”. In Peronthottam village, during a *Satyagraha* by 300 women, Gram Swaraj worker Leela and village leader Kanyamma lay down in front of huge bulldozers as they were about to start digging, pleading with them to “crush us before you crush the land”. The machine operators hurled insults, and then mud, at the women. Finally, police intervened and arrested some of the activists. Sufficient uproar was created that the construction of ponds could not continue.

“Women feel injustice more because we are generally the sufferers”, says Krishnammal. “So when there is an issue touching our lives, we react with strength”. A recipient of the Padmashri — India’s highest honour for social work — Krishnammal has worked tirelessly to organize hundreds of non-violent protest actions against shrimp farms. With Gram Swaraj workers, she organized a series of *Satyagrahas* which successfully blocked the digging of new shrimp ponds and compelled the state to pass legislation to regulate this activity. Furthermore, aquaculture companies have stopped purchasing new land; in five villages some have even withdrawn their operations.

“The day I got here, the village was smouldering”, recalls Krishnammal, sitting with a family of landless peasants in Thennampattinam village. “It was October 1994. We had organized a *Satyagraha* against the shrimp companies in this area. While most of the people were away, police invaded the village and set fire to everything. It was a horrible scene. Thirty-four houses were burned down. Then they arrested 60 villagers on false charges and kept them in jail.”

“I arrived in the village early the next morning on a bicycle”, she says. “I was shocked to see that the police were having a feast! I just started to get people together, and we started building a shed. The police immediately stopped us and said they would again destroy everything we built. But we ignored them. I started cooking for 70 people — I ended up staying here one and a half months. I kept doing what I had to do.”

“Another time, I was suddenly surrounded by angry thugs, and they said they would set fire to me”, says Krishnammal, a diminutive 5 feet. “But I remained calmly seated as they ran around me, bringing sticks and petrol. They just stared at me and I stared at them. Finally they left”. Krishnammal is no stranger to such incidents, nor is Jagannathan, who has also been arrested

on false charges. They are both very particular in insisting on non-violent action. “Gandhiji said non-violence is truth”, says Krishnammal. “When we struggle in a non-violent way we are able to express our inner strength and willpower.”

“It is easy to have a violent revolution, but very difficult to have a non-violent revolution”, says Jagannathan. “These people are almost used to being attacked and beaten. But still they resist peacefully”. Veerasamy, Secretary of LAFTI and from the ‘untouchable’ caste, has been chased, assaulted with sticks, had stones thrown at him, and been charged, arrested, and jailed several times. False criminal charges and court cases against him continue.



KRISHNAMMAL. “WOMEN FEEL INJUSTICE MORE BECAUSE WE ARE GENERALLY THE SUFFERERS”. “SO WHEN THERE IS AN ISSUE TOUCHING OUR LIVES, WE REACT WITH STRENGTH”.

Many villagers spend considerable time appearing in court, defending themselves against false charges. “The cost of court cases is killing us”, says Kanyamma, 64. “Whenever someone goes to court they cannot work that day, then they have to pay bus fare and buy food”. “It’s better to stay in jail, at least we have food and shelter”, says Gunesevara, 40 who spent 25 days in Trichy jail.

Bhoodan Day, April 18, approaches. It is a historic day in the struggle for land — Vinoba Bhave asked feudal lords to give gifts of land to landless peasants on this day. “That day we will take our ploughs and dig up the land! We will go in groups of 50 villagers”, declares Kaliaperumal, 62, a village leader. Their protests are peaceful but the desperation in their voices is unbearable. How long will they survive like this?

“We are ready to go anywhere for the struggle”, says Kaliaperumal. “If Jagannathanji tells us, 300 people in this village will go on a *dharna* [sit-in] outside the government assembly. If we have to, we are ready to fast indefinitely”.

## ORISSA: PROTECTING A LAKE, SAVING A LIVELIHOOD

*The convention ... calls upon the affluent countries to boycott prawn imports for consumption of this luxury item, which is nothing but the blood, sweat and livelihood of the common people of the third world countries. The convention further calls upon the commercial prawn industry to immediately quit the coast and allow the common people to make their honourable and respectable living.* - From the Paradeep Charter, passed unanimously at a massive convention of farmers, fishers and people's organizations in Paradeep, Orissa, 1995.

Banka Behary Das is puzzled. A former state minister and one of Orissa's most respected politicians, Shri Das, 72, is now a community leader working with the coastal people of Orissa. “Why do we have to grow shrimp”, he asks, “when we cannot even afford to consume it? I say to the people of USA, Japan and Europe: you are responsible for 75 per cent of shrimp consumption. You have the coastline, the capacity to produce it, and the desire to consume it. So why don't you grow it there? Why do you bring disaster to *our* coast?”

In 1984, Shri Das, a Gandhian activist, established Orissa Krushak Mahasang, a grassroots environmental organization of fishers and farmers who were threatened by several government schemes to develop the coast. Orissa's coastline contains several fragile ecosystems including Chilika Lake and Bhitara Kanika Wildlife Sanctuary, habitat for an immense variety of flora and

fauna — including mangrove forests, migratory birds, dolphins and sea turtles. At 1,150 square kilometres, Chilika is the biggest brackish water lake in India, designated under the Ramsar Convention as a wetland of international importance. About 100,000 people live in the fishing villages surrounding Chilika Lake, and depend on it for their livelihoods. Small-scale shrimp culture, using traditional techniques, has been practised here for centuries.

Das has been the main force behind several community efforts that successfully challenged the government and corporations in Orissa. Save The Coast Movement brought together concerned coastal dwellers to block massive tourist development that would have changed the face of the entire coast. Save Bhitara Kanika Movement was launched when people were alarmed that the fragile mangrove forest of Bhitara Kanika Wildlife Sanctuary would be threatened by developers under a government proposal to eliminate its protected status. However, the people's most impressive triumph came in 1992 over Tata, one of India's biggest industrial houses. When Tata and the State government initiated a joint scheme to develop semi-intensive shrimp culture in Chilika Lake, the fisher and farmer community responded with state-level conventions, and the Save Chilika Movement was born. Public pressure finally forced Tata to abandon the proposal, and prompted the Orissa High Court to prohibit commercial shrimp culture in Chilika Lake.

Orissa Krushak Mahasang turned its attention to the alarming rate at which shrimp culture operations were damaging the coast. The Government of Orissa estimates that along the 480 km coastline, commercial shrimp farms occupy 6,000 hectares — but according to Das the figure is closer to 20,000. “Most of these farms are blatantly illegal”, he says. “They acquired the land illegally, they constructed the ponds illegally, most of them are illegally owned, and practically all are operating unlawfully, since they have converted agricultural lands for shrimp aquaculture — not to mention their impact on the coastal environment and people.”

---

“THEY ARE OPERATING AS IF THEY ARE ABOVE THE LAW”

---

The aquaculture industry, says Das, has been operating without any concern whatsoever for the laws and regulations of the country — as if they are above the law. “The Environmental Protection Act, the Coastal Regulation

Zone, the Wildlife Protection Act, Forest Conservation Act, Water Act, the Revenue laws, the Land Ceiling and Land Reform laws, these have all been blatantly violated”, he says. “But the administration backs the shrimp industry because they control money power, muscle power and sometimes political power directly or indirectly.”

The shrimp industry has maintained a reign of terror and violence along the coastal villages of Orissa, Andhra Pradesh and Tamil Nadu, introducing large amounts of money, arms, alcohol and social conflict to the villages. Perhaps nowhere is this more apparent than in Adhuan, a coastal fishing village in the lush rice belt of Orissa. The 500 people of Adhuan were plagued by shrimp culture for several years and villagers were continually hassled. Investors were acquiring land illegally through bribery and extortion, mangroves had been illegally cut, and the environmental destruction and pollution had hurt fish stocks. The fisher community was suffering and tensions were high, as there had been several protests against the shrimp farms. “It was an atmosphere of total fear”, says Bhikary Malik, a village leader.

---

“IT IS NO USE ASKING MORAL QUESTIONS OF FINANCIAL INSTITUTIONS.”

---

Then in January 1995, an incident shocked the people of Orissa: without provocation, police fired into a crowd of villagers during a peaceful demonstration against the shrimp industry. Two men were killed and many wounded, and panic engulfed the village. Today, Savitri Malik stands at the very spot where her husband Gopal was gunned down by the police. She is struggling to feed her six children. “I just wish for peace, and for this terrible injustice to end”, she says. “But it will only end if these criminals are driven out of here.”

Ironically, Adhuan has a long history of struggle: in 1942, it was a village of strategic importance during the fight for Indian independence. A monument nearby commemorates another incident of unprovoked violence, when British administrators ordered police to fire into a peaceful demonstration against the Raj. Twenty-nine villagers were killed. “Fifty years later, we are still fighting for independence”, says Ganesh Bagudev, a village leader. “I too am the son of a freedom fighter. This is a place with a strong history of resistance.”

In Ganjam district, a fisherman holds up a juicy tiger prawn to the camera. Chilika prawn is considered to be of the highest quality available anywhere, a coveted commodity for connoisseurs. But it comes with its price. One tiger prawn here sells for Rs.30 — about one US dollar. “No one here eats tiger prawn”, says Ramesh Chandraswain of Orissa Krushak Mahasang. “It’s a lot of money for the villagers; they are very poor. If they had thirty rupees they could buy cheaper food in the market.”



SAVITRI, WHOSE HUSBAND WAS SHOT AT THIS SPOT

There is food — *luxury* food — being grown everywhere: in the shrimp ponds, in Chilika Lake itself, in the nearby fields which once grew rice. But the fisher community is devastated, and the daily catch is reduced to almost nothing. In villages like Langaleswara and Gajapatnagar, where there is nothing to do, the mood of depression and anger hangs heavy in the air. “We are by nature fishermen, and always have been”, says Batakrishna Behera, 32. “We still go out every morning, catching anything, even the smallest fish to put in our stomachs. We may catch two, four or ten rupees worth. Otherwise we go to sleep

hungry.” The fisher community is grieving not only a lost livelihood but also a source of tradition, identity and culture.

It is astonishing to think that shrimp was introduced to the coast in the name of food security. It has resulted in the loss of local food, mangrove forests, rice lands, and an almost total collapse of the fisheries. For this community it is a question of survival. The World Bank and FAO didn't talk about this, says Das, but “it is no use asking moral questions of financial institutions.”

Fifty years after India's independence, the people of Orissa are still fighting the forces of oppression. “Yes, we fight against the multinational companies and their neo-colonialism”, says Das, “but this is also a fight against nationals. I fight against injustice, no matter if it is a foreign businessman or my brother who commits it”.

The fishers and farmers of the coast have also taken this injustice seriously. Villagers in Chilika Lake decided to take matters in their own hands, and the result was the powerful Chilika Bachao Andolan (Save Chilika Movement). When they were able to wrestle Chilika Lake from the Tatas, they gathered more strength to confront the shrimp industry. The *Rail Roko, Rasta Roko!* (Block the Trains, Block the Roads!) movement for civil disobedience began with a handful of fishers and farmers, and

turned into a state-wide resistance movement. In June 1994, thousands of men and women from the surrounding villages of Ganjam District descended upon the six strategic intersections along Orissa's coast where a national highway meets a national railway route. The villagers proceeded to sit in peaceful *dharnas* across these intersections. With the authorities helpless, they succeeded in blocking this key route between Madras and Calcutta on which hundreds of vehicles and trains pass every day. This peaceful disruption of national affairs received widespread media coverage and much attention was paid to the plight of Chilika's fisher community.

But the people had more to say. In October 1995, a massive convention of fishers, farmers and landless labourers produced the Paradeep Charter calling for an international boycott of shrimp by affluent countries. In language reminiscent of India's independence movements, the Charter demanded that the shrimp industry ‘Quit the Indian Coast’, and that the government strictly enforce the laws and regulations that applied to shrimp aquaculture. It was a strong show of force, and gathered support in other Indian states as well as internationally.

“It is remarkable that the people were able to achieve this in a peaceful way”, says Das, who is a strong advocate of non-violent resistance. “Not even a single pelting of stones has taken place.”



VILLAGERS RE-ENACT HOW THEY BLOCKED THE TRAINS TO PROTECT CHILIKA LAKE (BACKGROUND)



# BANGLADESH: *The Desert in the Delta*

## KHULNA: INVASION OF THE BAGDA

In a field, on an island, near a river, Karunamoi was killed.

The date was November 7, 1990. Around nine that morning in Horinkhola, a remote island village in the Khulna delta, news came that a notorious industrialist had come to take over the fields for shrimp farming. He landed with an army of over 100 men in seven boats. They positioned themselves around the embankment, and then rushed on to the island, firing guns and throwing home-made bombs.

Of the men and women of Horinkhola to arrive at the scene, unarmed Karunamoi was one of the first to confront the attackers. For her bravery, she got a bullet in the head. She died instantly.

That day is brutally etched in the minds of the people in the Khulna delta. “The whole village was stunned by this open act of violence. Over a hundred of us were injured”, recalls Abdul Malik Sardar, 47. “I was hit by a bomb, here on my shoulder. I’m lucky to be alive”. Abdul Kasim Torofdar, 42, says “The police eventually arrived, but they were more interested in hiding the evidence! We saw them covering up the bloodstains with dirt. The next day they came and arrested *us* for causing this brutality!”

Years later, Karunamoi’s murderers have still to be brought to justice — even though everyone knows who they are. Villagers have built a monument to mark the spot where she was killed. In the ensuing years, Karunamoi has become a symbol of resistance and bravery for the villagers of the entire Khulna region — a hero for the anti-shrimp movement not only in Bangladesh but in other countries with similar stories of violence.

Bangladesh, like India, is highly suited for shrimp cultivation along its southern coast, where the major rivers Padma (which originates in India as the Ganges), Meghna and Brahmaputra weave their way across the flat country and meet in a fertile delta. This is one of the largest river systems in the world, with a vast network of estuaries, tidal flats, salt marshes, mangrove forests, islands and beaches. It is incredibly rich in biodiversity, aquatic life and very fragile ecologically.

In Bangladesh, traditional shrimp cultivation has existed for centuries, inter-cropped in rice fields with other fish. Commercial shrimp aquaculture was introduced to Bangladesh in the late 1970s and early 1980s by multilateral banks — the World Bank and the Asian Development Bank — and the government. By 1994, farm-raised shrimp was Bangladesh’s third largest export, worth about US\$325 million. About 120,000 acres of land have been converted for shrimp farming, mainly *bagda* (tiger prawn). Though officials of the government and multilateral projects such as the \$36 million Shrimp Culture Project don’t say it publicly, they admit privately that aquaculture has had serious environmental and social impacts. The people of the coastal communities tend to use stronger language to describe the impact: For them it is a total violation of their human rights. More than a hundred people have been killed in land conflicts related to shrimp in the last ten years.



HORINKHOLA RALLY: IN MEMORY OF KARUNAMOI

In Khulna, Karunamoi's death galvanized an already strong people's movement against the shrimp industry. Horinkhola and the surrounding villages have been declared a "Shrimp-Free Zone", and every November 7, thousands of landless peasants gather here in a show of solidarity with this community's resistance against the shrimp industry. In other areas of Khulna, people's *shomities* (committees) are also strong – they are fighting to take back their land, and want to create more shrimp-free zones.

---

"WE DEMAND AN END TO THE VIOLENCE AGAINST OUR PEOPLE, OUR WOMEN"

---

In November 1996, the rally in Horinkhola attracted 15,000 landless people from the Khulna region, as well as prominent activists, politicians and journalists from across the country. Among the many local leaders speaking here was community leader Urmilla Rani. "Today we demand that all *ghers* (shrimp farms) be completely stopped. We demand an end to the violence against our people, our women. We demand that the businessmen and government stop punishing us poor landless people so that they can enjoy luxuries. And we demand that the murderers of Karunamoi be arrested."

Urmilla, 32, is an active member of Horinkhola's numerous landless committees, and one of its many strong and articulate women. "Now the shomities are really mobilized and united", she says. "We are fighting with one voice against not only the shrimp farms, but other problems like discrimination against the landless, and discrimination against women."

The shrimp mafia has ruled Khulna for over a decade, spreading crime and violence in the coastal villages. There have been serious human rights violations here, especially against women. "Here, the women are at the bottom", says researcher Nilofer Ahmed. "They collect dung, leaves, wood, but they can't even do that now since the trees are gone. And because of that they can't even go to the 'toilet' in the fields, as the armed guards are always watching from the bamboo watchtowers surrounding the shrimp ponds. They think the women are going to steal their valuable shrimp. They constantly harass the women, and there have been many cases of rape and assault."

In nearby Kalhjar Chowk village, Kallani Mandal walks across an embankment surrounded by huge, water-logged ponds used for extensive shrimp culture. "Rich people took over this land for shrimp cultivation", she says. "In some cases, if they couldn't bribe or threaten their way into acquiring the land, they would simply inundate a neighbour's field with saline water at night, making it useless for anything else. Then it was easy to negotiate a price. It was the most cruel of tactics."

"There is nothing left for the villagers", says Kallani. "After ten years of shrimp culture, the trees are dying, we can't get fruit or fuelwood. We can't grow vegetables, as they don't grow in saline conditions. We can't rotate our crops like before, and the land doesn't support any cattle because they can't graze anywhere. So we have no milk, no dung for fuel, no ducks or chickens."



FARMERS OF HORINKKHOLA DECLARED IT A SHRIMP-FREE ZONE

"Shrimp farming has had a devastating impact on biodiversity here", says Khushi Kabir of Nijera Kori, an NGO working with landless people throughout the country. "There are no winter crops anymore — they used to grow pulses, oil seeds, and vegetables seasonally along with rice. The collapse of cattle-raising has had serious economic and nutritional consequences. And the massive shrimp fry collection has meant the disappearance of many types of fish we used to see here before".

“Somebody has made a profit, destroyed the environment, taken away their livelihoods”, she says. “That is intolerable in itself. But I would also ask, what have they given us? Where are the profits? Have they been used for anything in the area, for schools or health centres?”

Khushi Kabir and Nijera Kori have been working with people’s movements across the country since 1980. “In the case of shrimp, it is the Khulna people who themselves resisted this invasion into their community and their lives”, she says. “We came in to strengthen the movement, add voice and support to it. And we provide legal assistance because it is so easy to suppress a people’s movement by bribing the police and filing false cases. We can also help raise awareness of this issue, both here and abroad. This is not merely a local problem, it is a global problem, so we have to address it at all levels.”

For Kabir, shrimp farming does not make sense morally or economically. “Producing luxury food in huge quantities, at the expense of our coastal poor, and making it affordable to overseas consumers — that doesn’t make sense. Our priority is to produce food for our own people.”



FISHERS OF KHULNA

Social activists all across Asia call aquaculture the ‘rape and run’ industry, says Kabir. “Because, at least other types of ‘slash and burn’ cash crops can be regenerated, and the land can be utilized for something else. But in the case of shrimp, there’s no going back. The destruction is complete and irreversible.”

Circumstances such as these have made the people of Khulna strong and articulate in defending their rights. They know that they belong to a larger movement. “Karunamoi gave her soul not only for her people, but for all those hurt by shrimp farming in Khulna,” says Urmilla, who lives near Karunamoi’s monument, and considers her a spiritual mother. “We are very proud of what we have done; it is a great achievement for us, and an example for all of Khulna. Some people who in 1990 were against us, now support our struggle. Now we should mobilize people across the country, and tell people all over the world that shrimp farming should be completely stopped”, she says.

“Freedom will come if our voice is heard.”

## COX’S BAZAAR: DISASTER STRIKES THE SAME PLACE TWICE

“It was here that the cyclone hit.” Tito points to an embankment about 30 metres from where he is standing. “Now, imagine a 15 foot tidal wave coming right over here. It swept away everything in its path.”

Everyone in Badarkhali village remembers that night of April 29, 1991, when a vicious cyclone slammed into the southern coast of Bangladesh, destroying everything in its path. Badarkhali village in Cox’s Bazaar district was one of the worst hit. More than 700 people died, most of them women and children who were washed away by the tidal wave. Around 20,000 people, most of the area’s population, were left homeless. “So many people lost a loved one that night, some people lost their entire family”, says Rafiqul Haq ‘Tito’. “The whole village lost their livestock, their boats, nets, houses, everything. Some people survived by climbing coconut trees and just hanging on.”

While the people of Badarkhali have learned to live with the constant threat of cyclones, they are reeling from another disaster that has been slowly engulfing them: shrimp aquaculture.

In Cox's Bazaar district, 40,000 acres of land have been converted for commercial shrimp aquaculture since the late 1970s. Thousands of shrimp ponds, extensive as well as semi-intensive, have come up in the last 20 years in an area that once used to be dense mangrove forest. The Government of Bangladesh, to increase foreign exchange and to put 'waste' land to better use, began the wholesale transfer of public land to private investors — most of them rich, influential residents of Dhaka. Large-scale clearing and conversion to shrimp ponds continued in the 1980s. So much forest was cut that the 'worthless' trees were simply burned. Salt production, a traditional industry of the Chittagong area, also intensified as the forest was cleared.

The major players behind the push for commercial aquaculture were the Government of Bangladesh, and international financial institutions. In 1984, IDA (the World Bank's development lending facility) started the \$36 million Shrimp Culture Project, with the involvement of the government and the UN Development Program (UNDP). The Asian Development Bank (ADB), also began a fisheries project in the area in 1982.

With the money came the Pink Goldrush. There was a huge scramble to acquire land, and large areas of the Chokoria Sunderbans were cleared for shrimp cultivation. "The Forest Department was the original 'owner' of the 21,000 acres of mangrove land in Chokoria. They allotted it to the Department of Fisheries and then the Department of Land — they sat together and planned how to destroy our forests", says Tito. "Then as if our own government wasn't bad enough, outsiders came in. In 1983, the World Bank started shrimp aquaculture in Chokoria. The rush for land began, and people began to sub-lease their land to others. To supply the shrimp fields, things like fry-catching took hold using destructive pushnets. Before, *bagda* (tiger prawn) was available, but cheap — nobody counted it or dug up the mangroves to grow it. But after shrimp cultivation began it became like gold!"

This is the original Shrimp Frontier, complete with stories of wild bandits, rampant corruption, senior politicians and investors steeped in scandalous money-making schemes and dubious land deals. The money that was made has never been seen, and the whole region has turned into a saline desert, a highly unlikely scenario for a wet country like Bangladesh. Most shrimp fields, productive for some years, were ravaged by uncontrolled viruses that

attack the ponds and kill the entire shrimp crop within days. All that remains now is silence and sludge. Down river, there are some run-down buildings — now eerily deserted — which were once the offices of the Asian Development Bank and World Bank shrimp aquaculture projects.



IBRAHIM: "THIS WAS ONCE DENSE MANGROVE FOREST"

Village elder Mohamad Ibrahim, 90, has a long memory. He has seen Badarkhali withstand many cyclones, governments and even the British Raj. When the British first distributed land in 1929 to people in Badarkhali, Ibrahim was one of the first settlers. "I remember what this area was like long ago", he says. "It was like a *baagh* (garden); this was all forest, there were birds, animals, different plants and huge trees. There were cyclones, but not like there are now — the waves were usually stopped by the forest. There were also no embankments; the mangroves acted as the embankment. There were major cyclones, for example, in 1946, and several in the 1960s. After the 1960s, the deforestation increased, and so did the intensity of the cyclones."

Along with the horror and tragedy of the 1991 cyclone came a stunning realization: Deforestation has left Badarkhali highly vulnerable to the forces of nature. The relationship between industrial aquaculture, mangroves

and survival was never more painfully clear. This community is under constant threat, living not only with environmental insecurity, but also food insecurity, income insecurity, and personal insecurity.

“It is like one disaster was not enough for us, we have to live with another”, says Tito of shrimp cultivation. “The tragedy is this one is caused by our own people”. Others concur. “First it destroyed the mangroves, then it caused unemployment. The land and forests were the source of our common wealth, common property. Now they are in the control of the rich people”, says Kulsuma, 38.

“It is a curse!”, says community leader Jahanara, 45. “You can see there’s no grazing land left in the shrimp culture area. That means fewer livestock, no milk, no curd. There is no gobar (dung) for fuel, and no fuelwood from the forest either. We have to use our straw to feed our cows, but that means we can’t compost it for fertilizer. The rivers are poisoned, there’s no fish, and there are no breeding grounds left for them to reproduce, so that means we have lost these fish forever. And thousands of species of birds that used to migrate here are also gone.”

---

“OUR CONDITION IS LIKE A FAMINE”

---

Perhaps the most severely hurt by the deforestation are the fishers of Badarkhali. Completely dependent on fishing as their traditional livelihood, now they can barely feed themselves. “Our condition is like a famine”, says Dula Mian, 45. “Our fish catch, averaged over a month, is about 2-2.5 kg a day. That’s almost nothing; it’s barely enough to eat. If we catch a little more, we can maybe sell some and buy rice. Otherwise, we cannot even eat rice.”

When the shrimp farms came 20 years ago, the fisher community could not even imagine that they would be so seriously affected. “When the mangroves were here, we would all fish in the forest where there were more fish”, says Ayoub Ali, 55. “The mangroves protected and nourished the fish, they could eat the leaves. That’s all gone now, it’s all taken over by shrimp farms.”

The fishers also got other benefits and income from the mangroves. “We could collect honey, fuelwood, leaves for making rope”, says Ali Akbar, 46. “Our cattle grazed there, so we could have milk and curd”. He can name

some of the fish that are no longer to be found in the area: Kurul, Pangash, Undura. “These fish may be still in the sea, but not here”. The fishers estimate that fish stocks are now half of what they were only two decades ago.

Shrimp culture has changed the way the fishers catch fish. The discharge from the shrimp ponds, they claim, has polluted the channels and hurt fish stocks. “Since fish aren’t easy to catch any more, we have to go far out to the sea to catch them. We need different types of boats, nets, different gear. Fishing nets are very expensive, and it is more dangerous and time-consuming to go out to sea”, says Dula Mian.



FISHERS ON THE EMBANKMENT WHERE THE 1991 CYCLONE STRUCK

“In Bangladesh it is impossible to separate farmers from fisherfolk, agri-culture from aqua-culture”, says Farhad Mazhar of UBINIG, a policy research organization in Bangladesh. “The water is the bloodline that has traditionally flowed through and linked the fields, the rivers, the estuaries and the ocean, to nourish the community with crops and fish. There is a dynamic relationship between them.”

Along with the destruction of the environment and livelihoods, shrimp cultivation has brought other social perils. The fisher community is afraid of violence from robbers and pirates who regularly come to raid the shrimp farms.

“Sometimes they attack us on the river, but we don’t have money”, says Dula Mian. “So they take away our nets and fish. We’re not safe at all, and we don’t know who these people are. They’re from outside.”

The fishers also talk painfully about their children, who are more and more drawn into shrimp culture, against their will. “Our children go and catch shrimp fry in the water, to sell to the farms”, says Dula Mian. “We completely hate this shrimp culture, so this is very hurtful to us. We would rather they go to school. But sometimes we allow them to do it, because we need the money”. UBINIG estimates that 20-25,000 women, children and men in Cox’s Bazaar are engaged in the collection of post-larvae (fry) twice a day. The use of fine pushnets means up to 500 other marine species are destroyed catching post-larvae — which translates into a direct loss in fish-stocks and income.

The fishers are angry. They used to co-exist with the Chokoria sundarbans, protecting them and gaining direct benefits from them. “Why do you ask us about shrimp”, says Dula Mian, “Why don’t you ask the rich people in the city?” Adds Ayoub Ali, 55. “We have 30 or 40 years of fishing experience, but there is still no government policy to help us.”

“We need to end this shrimp culture”, declares Akbar. “If the pesticides and chemicals stop all around us, the quantity of fish will automatically increase. It’s that simple. We just need to stop the destruction.”

### ***Nayakrishbi Andolan: A New Way of Bringing Back Old Ways***

The 1991 cyclone left the Badarkhali community shattered, but the experience has made them strong. With the support of UBINIG, they have organized a people’s movement called *Nayakrishbi Andolan* (New Agriculture Movement). They have worked hard to reclaim as much land as they can, and have embarked on a mangrove replanting program. In 1992, farmers and fishers of the Badarkhali area planted 140,000 mangrove seedlings in a 4 kilometer area. Buoyed by an 80 per cent survival rate, they replanted entire sections of the Moheshkhali channel. In 1996, another 12,000 seedlings were planted in three different areas along the channel. It has inspired the community to mobilize and protect their common

natural resources, and in the process their livelihoods. Currently, UBINIG supports a small centre in Badarkhali which includes a mangrove nursery and seed bank for mangroves as well as rice and other indigenous crops.

*Nayakrishbi Andolan* is not just about planting trees and rice, it is a philosophy based on conservation, self-reliance and the spiritual dignity humans find in daily work. “Agriculture, or *krishbi*, is not simply an economic activity”, says Farhad Mazhar. “Rather, it is a way of life. Production of food is both a material and spiritual act”. *Nayakrishbi* members now talk eloquently about things far beyond their borders: mangroves and biodiversity, pesticides and indigenous medicines, trade liberalization, population control and health issues, child labour and global economic justice.

“Modern agriculture is very harmful, due to pesticides and chemical fertilizers”, says Abdur Rahim, 45. “This is a health hazard for the community; we’re getting poisoned”. Sixty per cent of Badarkhali’s farmers have started using *Nayakrishbi* principles — growing local varieties of rice and vegetables, no use of pesticides or chemicals, multi-cropping, maintaining livestock and poultry, and conserving seeds for a community seed bank.

Farmer Abul Hussain, 62, says Badarkhali has proudly rejected the monoculture of both shrimp and rice farming. He compares the so-called Blue Revolution to the Green Revolution. “In those days, during the 1960s, high yielding IRRI rice was introduced to us. The government said it would be good for us — there was great publicity about very high yields, productivity, and even the inputs, fertilizers, pesticides, were provided free. But we have come back to the traditional *Amon* rice.”

There are small and bright seeds everywhere in Badarkhali for a grassroots movement united against shrimp cultivation, and the commodification of food production. “The community is showing forcefully that they’re fed up with shrimp culture”, says Tito. “They are creating alternatives. They want to fill all the ponds with soil and plant mangroves.”

# THAILAND: *Time to Close the Global Casino?*

*The shrimp farmers in Thailand have left behind an ecological desert. These farms are not used for shrimps, are hardly useful for other economic activities. Outside investors are enriched, local people are pauperized. Development runs above their heads — very little trickles down to them.*

Imre Csavas, FAO 1993

*The most difficult thing is claiming the right to manage the forests and waters —*  
Pisit Chansnoh

Whenever the Asian Economic Miracle is evoked, the first scene is the Big City: the economic growth, the skyscrapers, the Mercedes-Benz, the fast-food chains, and the glamour of the newly-rich.

In Songkhla, along the once-pristine Gulf of Thailand, we see the second scene: abandoned shacks and machinery, saline, cracked earth ... familiar signs that the Blue Revolution has come and gone, leaving a ghostly silence. In this global roulette, the stakes were very high. People gambled with their money, their land and took their chances. Most people lost, but some got rich. Now it's closing time for this casino.



SONGKHLA AFTER THE BLUE REVOLUTION

“Shrimp farming is like rolling the dice”, says Mr. Pratit, putting handfuls of tiger prawn into a barrel of ice. “It depends on your luck”. Pratit, 34, is one of the many unfortunate people who rolled the dice and lost. “So many people around here started their own shrimp farms. It's true that you can make 10 or 15 times more money than by growing rice. Now, after the diseases, many of them lost everything and are working for others.”

Pratit now works in a shrimp farm in Hua Sai, along the Songkhla highway, after his own farm failed. His land is now unproductive, and he lost the 200,000 baht (US\$7,000) he had borrowed from his family. But he is determined to pay it all back and start again. “I'm working in this farm to pay back my debts, but I'm going to start a shrimp farm as soon as I can. I know the risk, but it would take too long to pay back my family if I went back to growing rice. That's the way I think about business.”

This type of calculation, says Pisit Chansnoh, is based on short-sighted thinking. “It's too easy to think about it that way”, says the founder of Yadfon Association, an NGO working with the coastal people of southern Thailand. “People have to think carefully, in terms of what they need to sustain themselves as well as future generations.”

In Songkhla it is easy to find telltale relics from the Pink Goldrush. ‘Rags to Riches to Rags’ stories seem to whisper from every abandoned wooden shack, every deserted pond, and across the crusty moonscapes that now support no life at all. Stories of people who gambled with not only their future, but everyone else's as well. Aquaculture researcher Simon Funge-Smith talks of the good old days in Songkhla. “There was gold on every wrist, new trucks zipping up and down Songkhla highway, and the karaoke bars were hopping”. Businessmen and farmers heard about exorbitant profits, saw their friends driving new trucks — the ultimate status symbol — and got in line for the miracle to happen to them.

That was less than a decade ago. The atmosphere is now different, though many of the farms in the Gulf of Thailand are still operating, and determined to find a solution to their woes. Since 1993, Thailand has been

the world's largest producer of shrimp, and plans to remain so. With exports of about \$2 billion dollars in 1995, nearly double the value of the previous year, Thailand controls 40 per cent of the world market. Its aquaculture industry is based on the Taiwanese model — intensive shrimp farming with very high stocking rates, and a heavy reliance on chemicals and technology to control pond conditions and reduce the risk of disease.

Intensive shrimp farms are essentially aqua-factories that require extremely high levels of maintenance and inputs. Typically, an intensive pond in Thailand will stock 50-100 shrimp per cubic metre, and require a variety of chemicals: liming materials to regulate acidity, disinfectants and chlorines, antibiotics to eliminate bacterial problems, and pesticides. Then, the voracious shrimp are fed four times a day, producing huge amounts of feces which have to be flushed regularly. The use of large aerators with paddlewheels, three or four per pond, is also necessary to provide the overcrowded ponds with oxygen. A successful shrimp farmer monitors pH and salinity levels daily, and watches carefully for signs of the many virulent diseases that may be lurking in his waters. As shrimp have poor immune systems and stress out quickly in overcrowded conditions, the farmer has only a few days after disease strikes to salvage his crop — otherwise he along with his shrimp will go belly up.

Since most of Thailand's 20,000 shrimp farms are owned by small farmers, controlling disease and maintaining production has proved to be an enormous challenge. In 1996, Thailand's shrimp production stumbled to 160,000 metric tons, almost half of the previous year's level. Despite the latest water and pond management techniques, the industry could not control epidemics of Redbody, Whitespot and Yellowhead disease. In fact these figures are only estimates — some insiders say the actual losses are higher, and the government may be trying to save face by not revealing the real extent of the damage. A recent survey by the Network of Aquaculture Centres in Asia confirms that two-thirds of all shrimp farms in the country have suffered from disease outbreaks, and the resulting financial loss has amounted to an average US\$6,629 per hectare per year. Moreover, a 1995 study for the World Bank and the Thai Government unequivocally states: "Until now shrimp aquaculture has not been sustainable anywhere in Southeast Asia."

Intensive shrimp farming came to Thailand in the mid-1980s, with the strong backing of the government, multilateral development banks, and transnational corporations like Charoen Phakpond (CP). First, the upper Gulf Coast, south of Bangkok, became peppered with shrimp farms, and when disease became prevalent in 1989, the industry shifted its focus to the eastern coast of the Upper Gulf. Next, it moved to the southern peninsula, to the eastern side where Songkhla is situated. After virus epidemics and huge losses, the industry is relocating to the Andaman Coast, on the western side of peninsular Thailand.

In Thailand, the decision to convert land to shrimp farms was largely in the hands of the individual. Whereas in India and Bangladesh, aquaculture has led to violent conflict over land, in Thailand the choice to convert was the landowner's, usually a small farmer or investor. However, conflicts and disputes have arisen when public land, often mangroves, is occupied illegally by investors for aquaculture. Coastal dwellers are helpless, though they have lived there for generations, because they don't have official title to the land. In cases where land belonged to the state, ownership is extremely hard to establish for villagers, but easier for commercial developers. "Before it was a case of, if you drop your nets in the same place for some time, that became your place, but still shared by the community", says Simon Funge-Smith. "Now, basically if you develop land for more than five years it's yours."

### *Half the Mangroves Are Gone*

The act of converting mangrove or paddy land to aquaculture may be that of an individual, but it has put at risk the common property resources and livelihoods of the entire coastal community. The 350,000 hectares of mangrove forest that existed along Thailand's 2,700 km coastline in 1961 have been reduced by half. More alarming, over 80 per cent of the Gulf Coast mangroves are gone. Though the figures are disputed, it is generally recognized that commercial shrimp and fish farming have caused over 60 per cent of the mangrove deforestation in Thailand. Charcoal and salt production, mining and tourism development have also contributed to the deforestation.



Recent studies of mangrove soils confirm that due to their high acid sulphate content, mangrove lands are not ideal for shrimp farming. “If the shrimp farms are on mangrove land, it’s because they need to be close to saline water”, says Funge-Smith, “And mangroves just happened to be in the way”. Mangrove areas have been easy to encroach upon due to corruption and the lack of enforcement. It has been a costly experience. According to a World Bank study, shrimp aquaculture has completely changed the ecology in the encroached areas. “The chance of bringing back mangrove forest to the deserted areas is absolutely nil”, the report says.

“Save our forgotten forests, or our fisheries will never recover!”, says an editorial in *The Nation*, a major national daily. Mangroves are known as the ‘bridge between land and sea’: not only do they reduce soil erosion and coastal flooding, but they act as nurseries and habitat for an immense variety of flora and fauna. The intricate ecology of the coastal forest is a direct source of sustenance for the hundreds of fishing villages in southern Thailand. “People think of them as swamps, but the mangrove forests are one of our most valuable resources”, says Dr. Sanit Aksornkaew, one of Thailand’s foremost mangrove experts. “This would be very clear if you started computing the monetary value of 74 species of trees and bushes, 72 varieties of fish, the crabs, oysters, honey, medicinal plants, nipa palm and fruits, to mention just a few. This richness and biodiversity belongs not only to Thailand, but to the people of every country — because the ecosystems are so linked.”



CHILDREN OF MOD TANOI COLLECT THE FRUITS OF THE MANGROVES

Trang, on the Andaman Coast, is historically one of the richer provinces of southern Thailand. Though it had been spared by the huge development projects that came to the Gulf Coast, it has derived its money from cash crops, particularly rubber and palm. Now, the Andaman Coast is being slowly invaded by investors — a massive \$10 billion Southern Seaboard Development Project, with port facilities and oil pipelines, is planned for the Andaman Coast. In the Trang area, several areas are opening up for more tourism development schemes, as tourists shun the polluted Gulf Coast for unspoiled areas elsewhere. This will no doubt affect the mangroves here — 20 per cent have already been cut — and the livelihoods of the small fishers who live along the coast.

### ***Protecting Community Lands from Private Hands***

As in many parts of Asia, Trang’s 55,000 small fishers are among the most disadvantaged of the province. “These people are the ones made poorer by development”, says Chansnoh. “That means they have fewer benefits and opportunities from these changes, it means less access to common property resources and less rights to manage them. They are ‘poor’ in speaking out, poor as in being easily dominated”. But that is changing.

The neighboring fishing villages of Ban Chao Mai and Ban Mod Tanoi are a great barometer of the changes ‘development’ has brought to the people of the Trang coast — and the community response to it. “We have lived here 300 years”, says Bung Hed Hawa, a community leader. “But now rich people from Bangkok are coming here and buying up the land. There are plans for shrimp farms, hatcheries, and a big tourism complex right here on our beach”. People from the village are leaving, some having collected handsome prices for their property, and others forced to leave because they couldn’t prove title to the land. But Bung Hed is firm in his conviction. “I will not move. This has traditionally been our village and our forest. The corrupt government officials and businessmen cannot take it away from us.”

The community is reeling from the severe impact of large-scale trawling in their fishing area. Trespassing in the prohibited 3 kilometre zone along the coast, trawlers have swept the waters of every form of life. The use of fine dragnets and pushnets means that nothing escapes their path — including endangered seaturtles and

dugongs (from the manatee family). Lack of enforcement by the fishing department meant that by the early 1990s, the once-bountiful sea had become all but empty of any life, and was often the place of confrontation between small fishers and big trawlers. Many fishers had left for the cities to work as day labourers — those who remained were faced with the unappetizing prospect of eating canned fish.

In 1991, Yadfon Association brought together the community of 600 small fishers, and the Small-Scale Fisherfolk's Federation of Southern Trang was formed. They agreed on regulations to stop harmful practices such as using poison or bombs to catch fish. Bung Hed is one of the community leaders enforcing these rules, and widely respected for his conservation efforts. He speaks passionately about saving the coastal ecology. "When Yadfon first told me about seagrass, I thought they were crazy", he says. "Now I'm telling others that seagrass, coral, mangroves, crabs and turtles are all very important. You can't have rich corals without the mangrove forest; you can't have crabs and fish without seagrass."



BUNG HED IN HIS BOAT WITH BAN CHAO MAI/MOD TANOI IN THE BACKGROUND

Since the fisher community has felt the impact of mangrove destruction severely, mangrove protection is one of its priorities. In Mod Tanoi, community leader Den Thaleluek stands proudly among trees as high as him, planted four years ago. "We have identified specific areas such as this, as community forest", he says. "Anyone who wants to cut them down must first consult us." Village headman Ahmad Kaeothong says that the government has

noticed the local initiatives and started helping. "At first they didn't believe we wanted to conserve the land, but now the Forest Department is helping in mangrove conservation, and the Fisheries Department is helping put in artificial reefs along the coast."

However, the government is allowing corporate interests to take away much more than it is giving to the coastal people. Forest concession permits granted to business-people are responsible for much of the mangrove destruction on the Andaman Coast. "Seventy-five per cent of the mangrove forest is under concession — only about 10 per cent is protected", says Chansnoh.

### *People Organize to Preserve and Conserve*

"It's not easy", says Pisit Chansnoh, of Yadfon's work to organize the coastal fishers and farmers of Trang. Yadfon, which means raindrop, was started by Chansnoh and his wife Ploenjai in 1985. It is one of the few local NGOs working on shrimp aquaculture. "We work with the community to give people the tools to analyze the situation, to solve their problems themselves", says Chansnoh. "Yadfon just provides information and helps organize groups into networks and federations. Then they act as pressure groups, based on their own knowledge and experience."

Yadfon's work involves dealing with the immediate concerns of preservation and the long term goal of conservation. Staff and volunteers support community groups to protect the natural resources that also protect the livelihoods of the coastal people. A campaign to protect and replant mangroves has gathered strong support from Trang's coastal community, and now all segments of society are involved — schoolchildren, village elders, Buddhist monks, Muslim leaders, and the provincial government. Yadfon has helped small fishers assert their rights, sometimes diffusing explosive situations and paving the way for broader negotiations that will also involve the authorities, government and media. "This approach makes the process more public; it forces people to be accountable and adhere to the environmental regulations that already exist", says Chansnoh.

In the longer term, Yadfon's work also involves creating alternative sources of livelihoods for fishers and farmers. Small-scale cultivation of oysters and fish, for instance, is not harmful to the ecology and encourages the community to safeguard its waters so that these animals can

flourish. The selective harvesting of nipa palm, used for mats and thatching roofs, also fetches a good price in the market. Viable alternatives provide income and dissuade people from getting involved in commercial shrimp farming.

The participation of school volunteers and youth is a key component of Yadfon's work. The 'Love Trang River' project involves large groups of schoolchildren, who organize public awareness activities to protect the Trang river from pollution. "It is important to get children involved, because their future is linked to the future of our natural resources", says Pleonjai Chansnoh. As the river flows out to the Trang coast, efforts to restore it are bringing together the inland people with the coastal communities.



THE FISHING VILLAGE OF MOD TANOI

More than 10 years of working with the coastal people of Trang has yielded some positive results. The villagers have created 10 community forests, increased their conservation efforts along the coast, and have seen their fish catch improve in recent years. "The voice of the coastal poor is stronger, but the problems still remain immense", says Pisit Chansnoh. "We are slowly establishing that this is public land and should be protected by the public. The most difficult thing is not replanting trees, but claiming the right to manage the forests and waters."

# MALAYSIA: *Corporate Gain at Public Expense*

*Shrimp aquaculture turns people's land and resources into private property, controlled by corporate interests producing for the global market. –*

S.M. Mohamed Idris, Third World Network

## PENANG: LAST CHANCE TO SAVE MANGROVES

Within metres of the barbed-wire fence around the biggest shrimp farm in Penang, Haji Saidin Hussain stands knee-deep in mud, holding mangrove seedlings in his hands. He and other members of the Penang Inshore Fishermen's Welfare Association (PIFWA), are planting the seedlings, while fighting to save the last remaining mangroves of Penang island.

"You may ask why we fishermen are planting trees", says Haji, Secretary of PIFWA. "It is because nobody knows the values of mangroves like we do — and we want to show that we are serious about preserving them."

The fisher community of Balik Pulau district, on the western side of Penang island, say the 40 hectare Penshrimp farm is a serious threat to the coastal ecology and to their livelihoods. About 100 acres of mangrove forest have been cleared for shrimp farming here since 1993 — and another 238 acres are scheduled for clearing for more shrimp farms and tourism projects. The mangroves were originally protected as forest reserves, but the Penang Regional Development Authority (PERDA) leased the land to Penshrimp for tiger prawn farming.

In a show of protest, a group of 20 fishermen is planting 1,000 mangrove seedlings directly outside the Penshrimp farm where the owner plans to build more ponds on 125 hectares. "Planting these seedlings is an expression of our discontent with the government and with Penshrimp", says PIFWA advisor P. Balan. "And it is also a symbolic act: if these plants were left alone they would last more than 50 years."

On the other side of the barbed wire fence, standing next to the shrimp ponds that reek of effluent, Penshrimp owner Tan Kean Tet watches nervously as journalists interview the fishers. His reaction to the replanting?

"It's very good." As for the mangroves that are gone, he says "I have no knowledge of that". The fishers say healthy mangroves were deemed 'wasteland' by the government, and have allowed aquaculture operations to expand in the area.

The 400 traditional fishers who live in the area depend on the mangroves, estuaries and rich mudflats to catch fish, wild prawns, crabs and cockles. "It's sad for my generation to see this kind of destruction", says Haji, 66. "There may be a day when young people of Penang won't even know what mangroves are."



FISHERS PLANTING SEEDLINGS

Shrimp aquaculture is a small but growing industry in Malaysia. From a negligible amount a decade ago, commercial aquaculture production reached a peak of 5,000 metric tons in 1993-94, valued at RM 123 million (about US\$50 million). "We went from traditional, extensive polyculture to extensive monoculture, to intensive monoculture, particularly for high-value species like tiger prawn", says Thalathiah Saidin, former head of Aquaculture Extension in the Department of Fisheries.

In its frenetic pursuit of 'developed country' status, the government of Prime Minister Mahathir Mohammad has plans to industrialize every corner of Malaysia. It

has built the world's tallest office tower, invested in huge mega-projects such as dams which will displace thousands of indigenous peoples in Sarawak, and allowed logging companies to clear large areas of the precious rainforest in Borneo. This obsession applies to aquaculture as well: the government has declared that Malaysia is to become one of the world's leading shrimp exporters, and the National Agriculture Policy envisions aquaculture becoming the second most important source of foreign exchange earnings by 2010.

Indeed, the shrimp industry's scouting reports give Malaysia rave reviews. *World Shrimp Farming 1996* says: "With its long coastlines, proven technology, excellent infrastructure, favorable climactic conditions and strong government support, Malaysia is likely to be a major producer of cultured shrimp in the coming decade". To facilitate investors to cash in on high-value species like tiger prawn, the government has provided generous financial incentives, subsidies and tax breaks to the corporate sector. State ventures also provided the necessary capital and backing required for big projects. According to the government, aquaculture not only benefits the exchequer, but is deemed the most suitable scheme to uplift the living standards of about 80,000 traditional fishers in the country.

"This is clearly a case of corporate gain at public expense", says Meenakshi Raman, a lawyer with the Consumers' Association of Penang, which lends support to PIFWA. "After the government's big push to develop the shrimp aquaculture sector, state governments and companies have rushed into it without adequately considering the impact on the environment and communities who depend on it."

"The government pays so much attention to what people think of Malaysia, our office towers, our highways", says Haji Saidin, driving on an immaculate highway, featuring manicured plants and freshly-cut grass along the shoulders. "Just look at these beautiful plants, how carefully they are maintained. Meanwhile no one takes care of the forest. Thirty per cent of our mangrove forests have been lost."

### ***Traditional Fishers Fight Back***

The idea of an association for small fishers was born out of discontent with trawler encroachment, destruction of natural resources, and a dwindling fish catch. PIFWA was set up in 1988 by the small-scale fisher community of Penang, though it was not granted registration till

1994. "There was already a government-sponsored fishermen's association, supposedly to look after the welfare of all the fisherfolk, but it didn't speak for us", says Haji. "In fact the government was indirectly promoting trawlers and more concerned about increasing their income. We were concerned about our lives."

The 'inshore' area protected from trawlers used to be 12 kilometres from the shore; it went to seven kilometres, then to five, says Balan. "Our voice was never heard up there. So we started talking, organizing, creating a discussion and action group. We set up PIFWA to give fishermen a voice, to enhance cooperation in the fishing community, to promote traditional forms of fishing and safeguard it. We also had to take up lobbying and awareness activities on mangroves and small-scale fisheries."

"This has been totally a people's movement", says Balan. "We have no money, just the strength of the volunteers, and willpower. The main people in the government who said we should be banned finally called us for a meeting. They can't ignore us anymore."

Fisher Abdur Rahman, 42, lives in Kuala Sungai Pinang, minutes from the Penshrimp farm. He is an active PIFWA member, one of the guardians of the last remaining mangroves of Penang. From his boat, he points out clusters of brownish, dead trees. "They're trying to kill the rest of the mangroves, so this can be declared wasteland, and then they can build more shrimp ponds", he says. "But we will put all the effort we can to safeguard the mangroves. It's necessary to preserve our livelihoods, and we also owe it to the next generation."

"It's clear whose side the government is on", says Balan. "When we tell them the mangroves are dying or the area is polluted, they expect us to furnish proof of the destruction. We can't afford to do a scientific analysis — we don't have the money". As in many other countries, the burden of proof is placed on the victims, not the perpetrators of the environmental degradation.

Since its establishment as an association, PIFWA has taken up more sophisticated activities. "We have to think about the problems of the fishing community in a broader sense", say Haji, a tireless community organizer who exudes a gentle, defiant spirit. "That's why PIFWA takes a stand on many issues — overfishing, shrimp aquaculture, mangrove destruction, toxic dumping, dredging and tourism development in sensitive areas". Like the coastal

community of Trang, small fishers whose survival is threatened often lose their cool and confront the trawlers infringing on prohibited waters. “We discourage the fishermen, especially the youngsters, from getting emotional. We don’t want any violence.” Moreover, Haji, a devout Muslim, says his non-violent stance comes from the heart. “God has given us strength to control our emotions; we are more powerful when we do that.”

Haji is now a leading voice among fishers across Malaysia. He envisions a national fishers movement. “We are proud that a grassroots movement we started has achieved so much. PIFWA has given us a rallying voice and a platform. Excessive trawling has been reduced, there is stricter legislation to preserve mangroves and prevent pollution. These are signs that the government is starting to pay attention to the small fishers. Sometimes it doesn’t get into their heads, but sometimes they listen.”



HAJI OUTSIDE PENSHRIMP FARM

### ***The Kerpan Case: Rice Farmers Demand Compensation***

It’s a \$30 million operation — a joint venture between the Kedah state government and a huge foreign firm. The name is Samak Aquaculture, and the scheme is indeed grand: 126 one-hectare ponds over 396 hectares, canals built for drainage, a huge two-kilometre jetty to draw water from the sea, a hatchery and nursery for producing post-larvae, processing and refrigeration facilities. And that’s just Phase 1A. Phase 1B involves another 100 ponds, and Phase 2 another 500 half-hectare ponds,

a processing plant, feedmill, workers quarters and recreation facilities. There is even talk of an airstrip and golf course to promote ‘agro-tourism’.

The plans may be elaborate, but Fadzil Ahmad and the people of Kerpan village don’t fit into them.

Probably the most controversial shrimp project in Malaysia, Samak Aquaculture has a tumultuous history. It was approved as a joint venture company in 1993, and is 60% owned by a Saudi firm, 10% by the Kedah State Government and the remaining 30% by a company set up to represent the interests of the landowners and farmers. Government support for commercial aquaculture has helped companies like Samak immensely; however, the project has been plagued with problems from its inception. Disease outbreaks, legal wrangles, management problems and conflict over land have meant that, in its four year existence, the operation has lost millions of dollars, is paralyzed by court cases, and has yet to export any tiger prawn. However, as far as the people of Kerpan are concerned, the most reprehensible aspect of Samak Aquaculture is that land already owned by one group of people was expropriated by the state in order to serve corporate interests.

It started when the State government and Samak began to woo farmers and landowners in Kerpan to sell their land. Many of the bigger landowners sold their land to the project, but most of the 800 small farmers refused. In 1993 the Kedah Government invoked the Land Acquisition Act to take over 1,000 acres of paddy land in Kerpan. The Act allows the State to acquire any privately-owned lands if it deems that the development projects started there will be economically beneficial to the country.

Infuriated by the State’s actions, the people in the surrounding area quickly formed the Kerpan Farmers’ Action Committee chaired by Haji Zakariah Ahmad, a prominent leader in the Muslim community. “I was born near what is now Phase I”, says Zakariah, 68. “The paddy fields were so fertile, we hardly did much work and had a good crop every season. We could earn a decent living, and also harvested vegetables, coconuts and fruits from our land. Now, 60 acres of my ancestral land are dead because of shrimp ponds.”



FADZIL AND HIS WIFE ZAINAB, NEAR KERPAN'S FERTILE RICE FIELDS

Fadzil Ahmad, an active member of the Action Committee, had 12 *relongs* (about 9 acres) of land which was acquired by the State. “First they offered a compensation of RM15,000 (US\$6,000) per *relong*, but we said it was too low”, he says. “Then they said 18,000 to 24,000; we asked for RM50,000 — but we didn’t want to leave. Each *relong* of land is inherited by many of us and owned communally, so if we divide up the money, it’s not enough for each person. Besides, land is our only asset, and our only tradition is rice farming. If we lose them, we want long-term compensation.”

No environmental impact assessment was done for this massive scheme — though careful planning went into the project design. “Basically they plunged into the sector without adequately considering the external impacts”, says Meenakshi Raman of the Consumers’ Association of Penang (CAP). “There are 3,000 small fishers in Kuala Kerpan, and hundreds of rice farmers are affected. Just because the farm was not built on mangroves, an EIA was not legally required. So no one looked at saline water intrusion, pollution from chemical discharges, and the impact of such a large project on the water table in Kerpan village.”

In January 1994, the Farmers Action Committee asked CAP to file a legal challenge against the acquisition. Their case was successful, and in June the High Court of Kedah declared that the land acquisition by the State was invalid. Less than a month later, before the farmers had even finished celebrating their victory, the State re-gazetted the land for acquisition. A second court challenge filed by CAP on behalf of the villagers was dismissed by the High Court, without providing any

grounds for dismissal. An appeal was again filed in the court, and is still pending.

Meanwhile, Samak Aquaculture was given the green light to proceed with the construction of Phase 1A: 126 shrimp ponds. Rice farmers watched helplessly as bulldozers and heavy machinery began to tear up their productive rice paddy, during harvest season. Bystanders couldn’t bear to watch, and about 100 people gathered in front of the machines to prevent them from proceeding. Borrowing a page from non-violent protests in India, many villagers even lay down in front of the bulldozers’ steel jaws.

---

“EACH PRAWN IS A TEARDROP THAT BELONGS TO ONE OF US”

---

Azmi Jalil was one of the protesters. He was arrested along with 33 other men and women, and spent 7 days in jail. Known as the Mandela of Kerpan, he is an articulate voice among the villagers. “What is tragic about that day is we are the victims, and we were arrested for defending our rights”, he says.

Four years later, Fadzil, 44, has neither land nor money. The village is still mired in land disputes, the ponds have been dug, but disease outbreaks and management problems have prevented Samak from exporting any prawns. Not only is the company losing money, it is being sued by some of its creditors. Initially, some of the villagers may have wanted to work for Samak, given no other source of income. “But they won’t hire from the village; they’re afraid we’ll sabotage the ponds”, says Fadzil. “Last year they lost so much money they fired 120 workers.”

This long and seemingly endless battle has taken its toll on the people of Kerpan. Four years without a steady income, Fadzil has had to declare bankruptcy to stop creditors from taking everything, even his house. Many of the Action Committee members gather almost every evening in Fadzil’s house, and though solidarity keeps them strong, it is apparent they are worn out. Fisher Ismail Manap relates how his fish catches have dropped since the Samak operation was built. Farmer Aziz Mat Hassan talks of how a fence being built by Samak was to go right through his house, and of his arrest while protesting the farm. The women join in, and people talk well into the night, drinking tea. “Each prawn produced here represents a teardrop that belongs to one of us”, says Azmi, 42. “That’s how much we have suffered.”

# PEOPLE'S ORGANIZATIONS RALLY IN THE SOUTH AND NORTH

## *Linking Across Borders: A Global Movement Against Aquaculture*

“This is a global problem, so it requires global networks to address it”, says Khushi Kabir. Just as farmers and fishers have rallied together in Bangladesh to put shrimp farming on the national agenda, people’s movements in other countries around the world have organized nationally and across borders to articulate their demands.

People’s organizations all along the Indian coast — particularly in Tamil Nadu, Andhra Pradesh, Orissa, Kerala and Goa — have been working to raise concerns about the shrimp industry at the community, state and national levels. In 1995, the People’s Alliance Against Shrimp Industry (PAASI) was formed to coordinate their efforts, as well as to lobby at national and global levels. It elicited widespread media coverage, and solidarity from other activist organizations such as the NAPM (National Alliance of Peoples’ Movements). From a PAASI meeting in New Delhi emerged the International Network Against Unsustainable Aquaculture, based in Malaysia. The Network includes activists and organizations from Asia and Latin America, as well as from shrimp-importing countries such as the UK, USA, and Canada.

“We felt there was a need for collaboration and solidarity among people’s organizations in Asia and also Latin America, as well as to link with consumer groups in the Northern countries”, says Meenakshi Raman of CAP, a member of the network. “It’s the beginning of a global effort at making the consumers in the North aware of the impact of commercial aquaculture on communities in the South. We hope that consumers will begin to ask questions, to find out what is going on here, and as a result, say “no” to eating commercially grown shrimp.”

## *Shrimp Tribunal Held at United Nations*

On May 5, 1996, a gathering of over 100 activists from around the world presented an NGO Statement Concerning Unsustainable Aquaculture to the United Nations Commission on Sustainable Development. The declaration was tabled during the UN Shrimp Tribunal, organized as a ‘trial’ to document and expose the highly destructive impact of commercial shrimp farming on the coastal environment and people.

Activists representing coastal communities, including those whose stories are told in this booklet, gave testimonies at the Tribunal. They expressed strong concerns about the rapid expansion of commercial aquaculture and its adverse effects on ecologically-sensitive coastlines and communities. They urged multilateral agencies, governments, international organizations and national institutions to stop funding and promoting intensive shrimp production unless it is socially equitable and ecologically responsible.

“We are asking the industry to stop unless they can prove to us what is ‘sustainable’, said Khushi Kabir. “Because we have had enough of what is not sustainable.”



# SHRIMP FACTS

## *Production/Consumption*

- Estimated total value of shrimp produced by commercial aquaculture: US\$9 billion
- Percent increase in commercial shrimp aquaculture worldwide since 1982: 900
- Amount of shrimp consumed by the average American in 1995: 2.5 pounds
- Percent increase in shrimp consumption in the US, Japan and Western Europe in the last decade: 300
- Price of a pound of shrimp in 1986: US\$14; in 1996: US\$5
- Amount of commercially-grown shrimp in Asia vs. the rest of the world (1992): 17 million metric tonnes vs. 2 million metric tonnes
- Annual profit from an acre of commercially-grown shrimp in Tamil Nadu, assuming a 'bumper harvest': US\$31,900
- Approximate value of annual shrimp production in Bangladesh, India and Thailand: US\$325 million, \$1 billion, \$2 billion
- Total investment in shrimp aquaculture in Andhra Pradesh and Tamil Nadu states alone: US\$1 billion.

## *Environmental and Social Impact*

- Daily effluent generated from aquaculture farms in Andhra Pradesh state alone: 2.12 million cubic metres
- Estimated amount of sea water pumped into shrimp ponds in Andhra Pradesh annually: 12 billion cubic metres

- Number of litres of water (sea and fresh) required per day by Waterbase, a major shrimp company in Andhra Pradesh, for flushing its ponds: 459 million litres
- Number of days this would be sufficient for the entire city of Madras: 2
- Amount of the world's mangroves lost to date: 1 million hectares
- The drop in marine harvests corresponding to every acre of mangroves deforested: 676 pounds
- Percent of the world's mangrove forests that are under some kind of protected status: 1
- In Bangladesh, for every tiger prawn larva caught in the wild for stocking in shrimp ponds, the number of other species thrown away: 14 shrimp larvae, 21 fish larvae, 1600 zooplankton
- Estimated time required to rehabilitate land salinated by prawn culture in Andhra Pradesh and Tamil Nadu: 30 years
- Percent and number of Indian population inhabiting the coast: 25; 200 million
- For every job created in aquaculture in Bangladesh, the number of agricultural jobs lost: 10
- Earnings generated by shrimp aquaculture in Andhra Pradesh: Rs. 15 billion (US\$500 million)
- Estimated losses from environmental damage caused by shrimp aquaculture in Andhra Pradesh: Rs. 63 billion (US\$2 billion)

## *World Shrimp Production (1996)*

Country	Production (metric tonnes)	Hectares in production	Kg per hectare	Number of farms
Thailand	160,000	70,000	2,286	16,000
Ecuador	120,000	130,000	923	1,200
Indonesia	90,000	350,000	257	60,000
China	80,000	120,000	667	6,000
India	70,000	200,000	350	10,000
Bangladesh	35,000	140,000	250	13,000
Vietnam	30,000	200,000	150	2,000
Philippines	25,000	60,000	417	1,000
Mexico	12,000	14,000	857	240
Honduras	10,000	12,000	833	55
Peru	5,000	3,000	1,667	40
Malaysia	4,000	4,000	1,000	400

Source: World Shrimp Farming 1996

# BIBLIOGRAPHY

Adnan, Shapan. "Shrimp Culture Projects in Coastal Polders of Bangladesh". Dhaka, 1993.

Christian Aid. *After the Prawn Rush*. London, April 1996.

Bajaj, Dr. A.K. "A Note on Aquaculture". Centre for Policy Studies, Madras, 1995.

Bangladesh Institute of Development Studies. "Shrimp Culture and Environment in the Coastal Region". Dhaka, February 1995.

Barraclough, Solon and Andrea Finger-Stich. *Some Ecological and Social Implications of Commercial Shrimp Farming in Asia*. UN Research Institute for Social Development, 1996.

*The Daily Star*. "Save the Sunderbans". Dhaka, November 5, 1996.

Das, Banka Behary. "Prawn Attack!" *The Ecologist Asia*, September/October 1995.

Das, Banka Behary. *Prawn Culture: A Demon on the Coast*. Orissa Krushak Mahasang, 1995.

Funge-Smith, Simon. "Coastal Aquaculture and Environment: Strategies for Sustainability." Institute of Aquaculture, University of Stirling, March 1996.

Gain, Philip. "Chokoria Mangroves: Shrimp and a Killer Disease." Dhaka, 1995.

Gregow, Karin. *When the Trees are Gone*. UBINIG, Dhaka, April 1997.

Greenpeace. *Shrimp: The Devastating Delicacy*. Washington, February 1997.

Hambrey, John and C. Kwei Lin. "Shrimp Culture in Thailand". Bangkok, Asian Institute of Technology, 1996.

Idris, S.M. *For a Sane, Green Future*. Consumers' Association of Penang, 1990.

Jagannathan, S. "From Panchayat Raj to Gram Swaraj: Gandhiji's Call". Madras, 1996.

Khor, Martin. "Protests Over Shrimp Farms Spread Throughout India". *Third World Resurgence* No. 59.

Krishnakumar, Asha. "Unregulated Growth in Tamil Nadu". *Frontline*, Madras, February 21, 1997.

Kurien, John. "Industrial Fisheries and Aquaculture". Paper presented at International Conference on Globalization, Food Security and Systematic Agriculture. New Delhi, July 1996.

*Manager Daily*. "Thai Prawn Farming Reaches Dead-end." Bangkok, August 26, 1996.

MIDAS. "Pre-investment Study for a Coastal Resources Management Program in Thailand". Report prepared for the World Bank and Royal Thai Government. Bangkok, July 1995. (draft final report).

Mohan, S. Chandra. "Western Taste for Shrimp Takes Heavy Toll". *Third World Network Features*, 1994.

*The Nation*. "Urgent Need to Save Thailand's Mangroves." September 29, 1996.

National Environmental Engineering Research Institute (NEERI). "Impacts of Aquaculture Farming, and Remedial Measures, in Ecologically Fragile Coastal Areas in the States of Andhra Pradesh and Tamil Nadu". Nagpur, 1995.

NGO Statement Concerning Unsustainable Aquaculture. New York, UN Commission for Sustainable Development, May 1996.

Nijera Kori. *Profit By Destruction*. International Workshop on Ecology, Politics and Violence of Shrimp Cultivation. Dhaka, April 1996.

Quarto, Alfredo. "Penang Mangroves Fall to Shrimp Market Lures". Mangrove Action Project, 1996.

Raj, Dr. Jacob D., and Dr. Daisy Raj. *People's Movement Against Shrimp Industry*. PREPARE, Madras, April 1996.

Raman, Meenakshi. "The Impact of Aquaculture on Coastal Fisheries and Communities - A Grassroots Perspective". Consumers' Association of Penang, January 1996.

Rosenberry, Bob. *World Shrimp Farming 1996*. Shrimp News International, 1997.

Saidin, Thalathiah. "The State of Aquaculture in Malaysia". Prepared for Department of Fisheries, Malaysia, November 1996.

Seabrook, Jeremy. "Malaysian Farmers Battle Aquaculture Project". *Third World Resurgence* No. 59.

Sharma, Chandrika. "Coastal Area Management in South Asia". Paper by International Collective in Support of Fishworkers, Madras, October 1996.

Shiva, Vandana and Gurpreet Karir. *Towards Sustainable Aquaculture: Chenmmeenketu*. New Delhi, Research Foundation for Science, Technology and Ecology, 1997.

Sirorattanakul, Tanida. "Fishing in Troubled Waters." *Bangkok Post*, December 18, 1996.

Supreme Court of India. *Case Against Shrimp Culture - Final Judgement*. December 1996.

UBINIG. "Coastal Fisheries in Bangladesh: A Note on the Situation of Cox's Bazaar Area". Dhaka, 1996.

*Utasan Konsumer*. "Playing with People's Land". Consumers' Association of Penang, January 1997.

V. Vivekanandan. "Muddy Waters". *Samudra*, March 1997.

# ORGANIZATIONS WORKING ON AQUACULTURE ISSUES GLOBALLY

***Gram Swaraj Movement***  
Workers' Home, Gandhigram  
Tamil Nadu, India  
tel: 451-52035

***Orissa Krushak Mahasang***  
14, Ashok Nagar  
Bhubaneswar 751009  
Orissa, India  
tel: 674-400305

***PREPARE***  
4 Sathalvar St, Mogapair West  
Chennai, 600 050 India  
tel: 44-6357654  
fax: 44-6250315

***National Fisheries Action  
Committee***  
41/1771 Veekshanam Road  
Kochi, 682018  
Kerala, India  
tel: 484-370617/370427  
fax: 484-370914

***P.C.O. Centre***  
Spencer Junction,  
Trivandrum  
Kerala, India  
tel: 471-330408  
fax: 471-446859

***Goa Foundation***  
Above Mapusa Clinic  
Mapusa 403507  
Goa, India  
tel/fax: 832-263305

***GSNFWF***  
12 Moni Mukherjee Road  
Calcutta 700019 India  
tel/fax: 33-4404425



***Nijera Kori***  
2/4 Block C  
Lalmatia, Dhaka 1207  
Bangladesh  
tel: 2-811372  
fax: 2-813095

***UBINIG***  
5/3 Barabo Mohanpur  
Ring Road, Shyamoli  
Dhaka 1207, Bangladesh  
tel: 2-811465  
fax: 2-813065-

***Yadfon Association***  
16/8 Rakchan Road  
Tambon Tabtieng  
Amphur Muang  
Trang 92000 Thailand  
tel: 75-219737  
fax: 75-219327  
e-mail: Yadfon@loxinfo.co.th

***Consumers' Association  
of Penang (CAP)***  
228 Macalister Road  
Penang 10400 Malaysia  
tel: 4-2293511  
fax: 4-2298106  
e-mail: elawmalaysia@igc.apc.org

***Penang Inshore Fishermen's  
Welfare Association (PIFWA)***  
228 Macalister Road  
Penang 10400 Malaysia  
tel: 4-2293511  
fax: 4-2298106

***International Collective in Support  
of Fishworkers (ICSF)***  
27 College Road, Madras  
600 006 India  
tel: 44-8275303  
fax: 44-8254457  
e-mail:  
mdsaab06@giasmd01.vsnl.net.in

***Small Fishers Federation  
of Sri Lanka***  
Kurunegala Rd, PO Box 02  
Chilaw, Sri Lanka  
tel/fax: 1-663360

***KONPHALINDO***  
Jalan Teluk Jakarta No.1, Komp.  
TNI-AL  
Rawabambu - Pasar Minggu  
Jakarta 12520 Indonesia  
tel: 21-7804158  
e-mail: konphal@rad.net.id

***Yayasan Hualopu***

Jalan Dr. J. Leimena  
PO Box 97012, Ambon  
Maluku, Indonesia  
tel: 911-69983  
e-mail:  
john@ambon.wasantara.net.id

***Third World Network***

228 Macalister Road  
Penang 10400 Malaysia  
tel: 4- 226-6728  
fax: 4-226-4505  
e-mail: twn@igc.apc.org

***Oxfam UK/Ireland***

218 Doi Can St. (La Thanh Hotel)  
Hanoi, Vietnam  
tel: 4-8325491  
fax: 4- 8325247  
e-mail: oxfamuki@netnam.org.vn

***CUSO***

2255 Carling Avenue, Suite 400  
Ottawa, Canada K2B 1A6  
tel: 613-829-7445  
fax: 613-829-7996  
<http://www.cuso.org>

***Sierra Club of Canada***

1 Nicholas St., Suite 412  
Ottawa, Canada K1N 7B7  
tel: 613-241-4611  
fax: 613-241-2292  
e-mail: sierra@web.net

***Inter Pares***

58 Arthur Avenue  
Ottawa, Canada K1R 7B9  
tel: 613-563-4801  
fax: 613-594-4704

***Mangrove Action Project***

4649 Sunnyside Ave N., #321  
Seattle, Washington 98103  
USA  
tel: (360) 452-5866  
fax: (360) 452-4866  
e-mail: mangroveap@aol.com

***Greenpeace***

1436 U Street NW  
Washington DC 20009  
tel: (202) 319-2400  
[http://www.greenpeaceusa.org/  
reports/biodiversity/shrimp](http://www.greenpeaceusa.org/reports/biodiversity/shrimp)  
[http://www.greenpeace.org/  
~comms/fish](http://www.greenpeace.org/~comms/fish)

***Natural Resources Defense Council***

1200 New York Avenue N.W.,  
Suite 400  
Washington DC 20007, USA  
tel: (202) 289-6868  
fax: (202) 289-1060  
e-mail: jscherr@nrdc.org

***Environmental Defense Fund***

257 Park Avenue South  
New York, NY 10010, USA  
tel: (212) 505-2100  
fax: (212) 505-2375  
e-mail: becky@edf.org

***World Wildlife Fund***

1250 24th Street, NW  
Washington DC 20037, USA  
tel: (202) 778-9691  
fax: (202) 293-9211

***Christian Aid***

PO Box 100  
London SE1 7RT UK  
tel: (171) 620-4444  
fax: (171) 620-0719  
e-mail: caid@gn.apc.org

# *In* DEFENCE *of* LAND *and* LIVELIHOOD

COASTAL COMMUNITIES AND THE SHRIMP INDUSTRY IN ASIA

ISBN 0-9699660-1-6

A documentation project of the Consumers' Association of Penang, CUSO, Inter Pares, and the Sierra Club of Canada.

In a matter of 15 years, shrimp aquaculture has become a US\$9 billion industry, active in over 50 countries. The rapid expansion of this industry has meant that the shrimp is now cheaper and more readily available to consumers. However, the social and environmental consequences of shrimp aquaculture have been devastating for coastal communities.

In this booklet, farmers and fishers from coastal regions in India, Bangladesh, Thailand and Malaysia describe their experience with the commercial aquaculture industry. These testimonies are grim as people speak about environmental destruction, the loss of mangrove forests, pollution, the displacement of entire villages, and the conflict that the industry has introduced. Yet these stories are also inspiring, as people from coastal communities describe how they have organized to protect their environments and livelihoods, often under the threat of violence.

