LONDON -- It is one of those small ironies of Canadian life that our Fisheries Minister, the Honourable Loyola Hearn, has lived all his life in a lovely cod-fishing village with the suggestive name of Renews, Nfld.

Fish, which provide jobs to 200 million people around the world and are the principal source of protein for a billion of us, are supposed to be one of the world's great renewable resources. Unlike trees, which take generations to grow back, or oil, which takes millennia, fish should be able to keep on reproducing, forever - and there are enough of them to feed everyone in the world.

In Renews, the fish didn't renew. The fishery collapsed in the early 1990s, throwing tens of thousands of people out of work, and the cod haven't come back. Mr. Hearn, like his counterparts in dozens of other fishing nations, now has the job of preventing this tragedy from happening again.

But which tragedy is he trying to prevent? There's the tragedy of the fish, which dwindle and disappear as we catch them too fast: According to solid research data produced by Canadian scientists last year, 29 per cent of the world's fisheries have already collapsed, and a similar number are on the verge of doing so. And there's the tragedy of the fishermen, who lose their livelihoods and cost their provinces a major source of revenue if we can't help them fish faster.

To prevent one tragedy, you create the other. Support the fish and you damage the fishermen, and vice versa. It's a puzzle that the world so far has failed to solve.

But this week I met another Canadian, from another coast, who has managed to crack it. After a decade of work in the obscure but fascinating field of bioeconomics, Vancouverite Ussif Rashid Sumaila has found the link between stocks of fish and pools of money, which could save both fish and fishermen. It's a solution that requires the co-operation of every nation, but it could turn fishing back into a worldwide industry that lasts forever and provides food for everyone.

I met Mr. Sumaila as he made his way to Geneva, where he presented his ideas yesterday to leaders and members of the World Trade Organization.

Mr. Sumaila was born in the north of Nigeria. After earning a doctorate in economics in the very fishy land of Norway, in 1995 he joined the renowned Fisheries Centre at the University of British Columbia - a place most famous for its director, biologist Daniel Pauly, who pioneered the methods for measuring the world's fish stocks. It was his work that determined last year that a third of the world's fisheries have collapsed.

Mr. Pauly had told the world what was happening to the fish. But nobody had really answered why. That was where Mr. Sumaila came in.
"I realized at a certain point that if we can get the roots of the economics linked to the biology," he told me, "we can get to the bottom of the problem of decline. I had been doing studies of individual nations and individual species of fish, but when I got to Vancouver, Pauly told me, 'You know, you can keep on doing those little models, but what we really need is an entire global model of the problem.'"

His field, bioeconomics, had been invented in the 1950s by two Canadians, Scott Gordon and Anthony Scott. Their model, still being used in the industry, showed that fisheries should be self-sustaining: When stocks get low, or fuel prices get high (boat fuel is the main expense in fishing), then fishing should be less profitable, getting people out of the business and allowing stocks to replenish. Obviously, this wasn't working. But why?

To find out, Mr. Sumaila spent a decade building up two huge databases, using hordes of research assistants travelling the world. One database showed the price of each type of fish in every nation since 1955; the other showed exactly what each country's fishermen were being paid for. This, combined with Mr. Pauly's fish-stocks databases, allowed him to see why the fish were disappearing.

What he discovered, and documented in a series of fascinating research reports last year, is that the self-balancing nature of fishing is thrown out of kilter by the widespread government practice of giving fishermen subsidies for boat building and, especially, fuel. This money, which he described as "bad subsidies," are exactly equivalent to the scale of overfishing - the subsidies make the difference between a renewable resource and a dying resource.

Not only that, but fuel subsidies, he discovered, are responsible for the continuation of the most devastating practice in fishing, bottom trawling, which tears up the sea and destroys species. Countries pay $152-million a year in fuel subsidies to trawlers, which accounts for 25 per cent of their income. And the profit they make is only 10 per cent.

"Without subsidies," he concluded, "the bulk of the world's bottom-trawl fleet [would] operate at a loss, thereby reducing the current threat to ... fish stocks."

Without "bad" subsidies, which amount to $20-billion a year worldwide, there would be fewer people in the fishing business around the world. But Mr. Sumaila concluded that this process would actually give the world more fish.

"There is a potential to actually increase the catch if we can agree to reduce the scale in the short term," he said, "and avoid subsidizing the industry too much in the long term."

It seems like an ideal solution. Governments don't like paying taxpayer subsidies to industries - they do it because they believe that without them they'll lose the industry and its political support.

But to do it, all nations would need to end their fuel subsidies at once.

Canada is the 10th-worst offender in the world, giving $256-million a year in bad subsidies to its fishermen. We have, in effect, decided to continue the tragedy of the fish in order to stave off the tragedy of the fishermen.

We could solve both problems, if we agree to end fuel subsidies in the WTO talks. It's an idea that should have appeal to conservative governments: After all, Mr. Sumaila has discovered a case where free trade will protect a vital resource, while protectionism and government spending will destroy it.

You would think that Loyola Hearn, a Conservative, would like the sound of that. But so far his government has been silent on this issue. We'll see how it plays in Renews.