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CRIPPLING DISEASE IN INDIA LINKED TO PESTICIDES

by Radhakrishna Rao

INDIA, IDRC -- In early 1975, four farm labourers in the village of Handigodu, India, complained of giddiness and weakness followed by intense pains in the joints and hips. Doctors in the local hospital where the victims were admitted were puzzled. Within a week, 30 other people -- all of them from a similar socioeconomic background -- showed up at the hospital presenting the same symptoms.

Eventually, the strange condition was blamed on pesticides.

At first, the condition was thought to be a type of paralytic disorder. But a team of neurologists which conducted an initial study concluded that the problem was mainly orthopedic, that is, related to the skeletal structure. The circumstances leading to the onset of the condition, however, remained a mystery.

This strange physical disorder became known as the "Handigodu Syndrome" -- after the village in the Shimoga district where it first appeared before spreading to nearby agricultural hamlets.

Invariably, its victims end up as permanent cripples. As the disease progresses, the limbs, hips, ankles, wrists and shoulders become gradually deformed. In acute cases, the victim suffers a partial destruction of the bones. Ultimately, those hit by the Handigodu Syndrome find it either difficult or impossible to stand erect and walk straight.

Following a survey by India's National Institute of Nutrition, which blames the onset of the disease on the villagers' habit of eating dead crabs found in paddy fields, ecologists have dubbed the syndrome "Indian Minamata". Minamata is a word dreaded by medical experts and environmentalists alike. In early 1953, inhabitants of Minamata, a small town on the eastern side of the island of Kyushu, in Japan, began complaining of severe pain in the joints and hips, and of impaired vision, speech, hearing and touch. Within a couple of weeks a majority had become permanently crippled.

From these symptoms, Professor Shimanouske Katsuki, one of Japan's leading medical experts, suspected heavy metal poisoning. Ultimately, it was determined that all the patients had eaten a great deal of fish poisoned by methyl mercury discharged from a nearby chemical factory.

According to a recent OXFAM study on the hazards of pesticides in the Third World, India's Handigodu Syndrome is also traceable to the consumption of fish contaminated by residues of endrin and parthion, two deadly chemicals used in paddy fields. The OXFAM study further noted that at certain times of the year, especially during food shortages, villagers took to eating crabs found dead in paddy fields.

There were two notable changes in the region at the time Handigodu Syndrome showed up. First, landowners had stopped serving food to farm labourers as part of their wages. Second, high-yielding crop varieties that require large doses of synthetic fertilizers were introduced into the region on a massive scale. Not only were the poor labourers forced into greater reliance on the paddy fields for food, but the same fields were becoming increasingly contaminated by pesticides.

India's National Institute of Mental Health and Neuro Sciences, which has carried out a field study of villages affected by Handigodu Syndrome, found that undernourishment was pronounced among agricultural labourers, but that the syndrome was not fatal.

It remains, however, that Handigodu Syndrome, the Minamata of India, has already crippled some 600 men, women and children.

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