

Feature

Development

A Glimmer of Hope for Fast-Track Land Reform

SINCE independence in 1946, agrarian reform in the Philippines produced no more than token results.

Today's Corason Aquino administration has transferred more land than all its predecessors combined. But its Comprehensive Agrarian Reform Programme (CARP), widely considered as vital to the country's future, has become bogged down during the past 18 months.

History indicates that the Philippines, which has the fastest-growing population in Asia, faces continued unrest and danger to democracy unless agrarian reform is accelerated.

The spirit and intent of land reform is in land redistribution and the equitable distribution of wealth," said Undersecretary for Agrarian Reform Dorothy Tadeo, "but the latter can also be achieved by other kinds of agrarian reform measures."

than had been redistributed over the precious 20 years. Of that total, 293,427 hectares were distributed in 1990 alone, to 172,556 farmer beneficiaries.

Philippine landowners are predictably opposed to agrarian reform. Silverio J Berenguer, secretary-general of the Council of Agricultural Producers, Inc. (CAP), a landowner pressure group, insisted

Occidental, who had neglected to take care of their own people. It was obvious that to Mr. Lopez, a true believer in the traditional feudal-type system, these malefactors had betrayed a sacred trust.

Under CARP, peasant beneficiaries will get a mandatory three hectares each of Lopez's land upon redistribution. He himself will get only a mandatory five hectares; each of his children over 15 will get three hectares.

Because of legal complexities, land reform is like long-distance running by Rex Burns

that the stereotypical absentee landlord was now a virtually extinct species.

"Landowners these days are very much involved in agriculture," he said. "They live on their farms, because they have to be there."

Every the most hard-headed proponent of agrarian reform would probably sympathise with sugar grower Richard Lopez, who owns an 800-hectare spread in Batangas. Mr. Lopez spoke convincingly of the on-going measures he had taken to ensure the welfare of his workers.

He is irate at those landlords in, for instance, Negros

There are those on both sides of the fence who question the draconian nature of some agrarian reform law provisions.

Nowhere is landowner opposition to agrarian reform more evident than in the sugar-growing central province of Negros Occidental, where the Aquino administration last year introduced a "fast-tracking" strategy for CARP. According to Violeta Gonzaga, an academic working for the Institute for Social Research and Development at the University of St. La Salle, the institute initially convinced Governor Daniel Lacaon of the need for fast-tracking.

He then took up the case with President Aquino, who authorised pilot fast-tracking in Negros Occidental. It has since become a national model.

In 1991, the Negros programme aims to redistribute

20,000 hectares of land to 12,000 beneficiaries. But it lacks the staff. There is legal harassment of beneficiaries and agrarian reform officials. There are a faulty land registration system and faulty titles. Processing of documents is extremely slow.

"Basically, the real problem is systemic," said Ms Gonzaga.

She expressed hope that Negros Occidental's forthcoming share of the 13.5 billion pesos released by Manila would make the government's Landbank, which handles the financial aspects of agrarian reform, move faster.

Stalled payments for land voluntarily offered for sale by owners have slowed the pace of redistribution, she said. Given the appropriate funds, 2,000 hectares in the province could be redistributed immediately, and a further 24,000 hectares would follow shortly thereafter, she said.

Citing the legal complexities of land reform, she compared it to long-distance running. "If there are NGOs that are committed to agrarian reform, it will succeed, she claimed. "But if left to the government alone, it will fail."

Judging by the experiences of other countries, notably in Latin America, the cost of failure could well be loss of democratic freedom. History provides reasons for agrarian reform supporters to hope that the Aquino administration's recent release of substantial funding for CARP indicates a genuine determination to quickly get the programme running at full steam.

—Depthnews

IFAD Stresses Women's Role

Unless the vital and growing role of rural women in food production is given direct and priority attention, sufficiency in food will prove difficult to achieve

ROME: The role of women in food production should not be ignored if food security is to be achieved.

"If the underutilised capacity of small and marginal farmers, the landless and rural women could be harnessed, they could become a powerful engine for self-reliant development," said Idriss Jazairy, president of the International Fund for Agricultural Development (IFAD) at the 17th ministerial session of the World Food Council in Helsinki, Finland.

It is a mistake, he said in his address which opened the session, to limit investment for growth only in high potential areas. Not only does this bypass the rural poor living in less advantaged regions, but "their wasted talents are a tragic loss" both for themselves and their countries.

Nor is it enough simply to focus on poor regions — too often credit, services and technology go primarily to the local elite. "Unless investments are carefully designed to reach the poor, they could even have the perverse effect of worsening income distribution," he noted.

A third danger, Mr. Jazairy pointed out, is that of ignoring the vital and growing role of rural women in food production. "Unless they are given direct and priority attention, food security will prove difficult to achieve."

Half of IFAD's projects in 1984 included specific components for women. In recent years, the proportion has exceeded 90 per cent.

Some projects, he explained, are aimed solely at women while others have women as primary beneficiaries. A third approach is to "mainstream" poor rural women by ensuring that they receive an appropriate share of project benefits, whether these are assets or services.

Mr. Jazairy noted that "the challenge before us now is to go beyond rhetoric and to evolve specific instrumentalities that will translate the growing policy consensus into effective means to reach the poor." Among the most important IFAD projects have been credit programmes specifically for poor farmers, the rural landless and women.

A recently approved project with women as specific benefi-

ciaries to the US\$25 million Smallholders' and Women's Rural Credit Project in Pakistan. The project, which brings savings and credit services to the most destitute households, takes special steps to ensure that women have access to the loans. Women mobile credit officers are fielded to bring financial services and advice directly to village women.

Other examples of successful lending projects assisted by IFAD include that of the Gramscen Bank in Bangladesh which has given collateral-free loans to over 400,000 poor entrepreneurs, 83 per cent of them women. The Small Farmers Development Project administered through the Agricultural Development Bank of Nepal has a female participation of over 15 per cent.

Mr. Jazairy cited one of the Fund's pioneering initiatives, the Special Programme for Sub-Saharan Africa which link poverty alleviation and environmental preservation.

The programme designed and funded 27 projects in 20 countries since 1986. It completed its first phase costing US\$300 million.

An appeal by African members to raise another US\$300 million for the second phase has received a response from Kuwait, which announced a US\$15 million contribution. Also pledged were US\$40 million by France, US\$18 million by Belgium and US\$10 million by the Netherlands.

Since its establishment in 1977, IFAD has mobilised over US\$11 billion to finance 298 projects for the rural poor in 93 developing countries.

—Depthnews

The government's ten-year target to 1997 is 10 million hectares, including public lands and forested areas. It extended the scope of agrarian reform so that all privately held agricultural land is subject to CARP, in theory commencing with the large landholdings.

As in other nations worldwide, inequitable land distribution in the Philippines has spawned insurgency. The communist rebellion in Central Luzon in the 1950s was a revolt of the landless. The current communist insurgency also promises "genuine land reform."

In the late 1960s, disaffected intellectuals fled the Marcos regime's repression in Manila to link up with landless peasants, and founded the communist New People's Army (NPA). Their insurgency has continued to simmer and flare for more than two decades, and again their root grievance

Such alternative measures — production sharing, profit stock transfer — have proven controversial though, with critics charging that they represent loopholes in the agrarian reform law whereby landlords can evade true land reform.

The most well-known example of stock transfer supplanting actual land redistribution is on the Hacienda Luisita property in Central Luzon — owned by the family of President Aquino himself. Implementation of the stock transfer option there sent an unmistakable message to both proponents of land redistribution and landlords: owners can conceivably keep their land.

Still, the Aquino administration has since 1987 redistributed 600,000 hectares to the landless, six times more

A bridge 30 kilometres long and held up by great concrete or steel piers is being planned to link Africa and Europe, continents long separated by history and geography. It would be the longest bridge in the world.

The idea of building a fixed link across the Straits of Gibraltar between Spain and Morocco has been dreamt about for decades and studied seriously for 11 years. Now engineers with the Spanish and Moroccan commissions examining the plan say it will work.

"We're sure from the technical level that the project is feasible," said Nagib Ben Chekroun, head of the Moroccan side of the team.

King Hassan II of Morocco is even more certain. "There will be a profitable link by the year 2000," he told a European magazine group. "It will unite what geography divided," he said, emphasising that a bridge could help Morocco's bid to join the European Community.

The King is a bit ahead of his engineers. Experts with the commissions created in 1980 to study the idea have completed exhaustive investigations on most aspects of the project. Their proposal will be finalised in early 1993. With two years for implementation and another eight to 10 for construction, it could be more like 2005 before the two continents are finally joined together.

While the official position is that a bridge and tunnel are both being considered, the favoured plan is a 30-km suspension bridge between Cape Malabata, near Tangier, in Morocco and Cape Palma in Spain. In places the distance across the Straits is shorter — for example, nearer Gibraltar it is only 15 km — but the water is deeper there. For engineering reasons, shorter is not necessarily better.

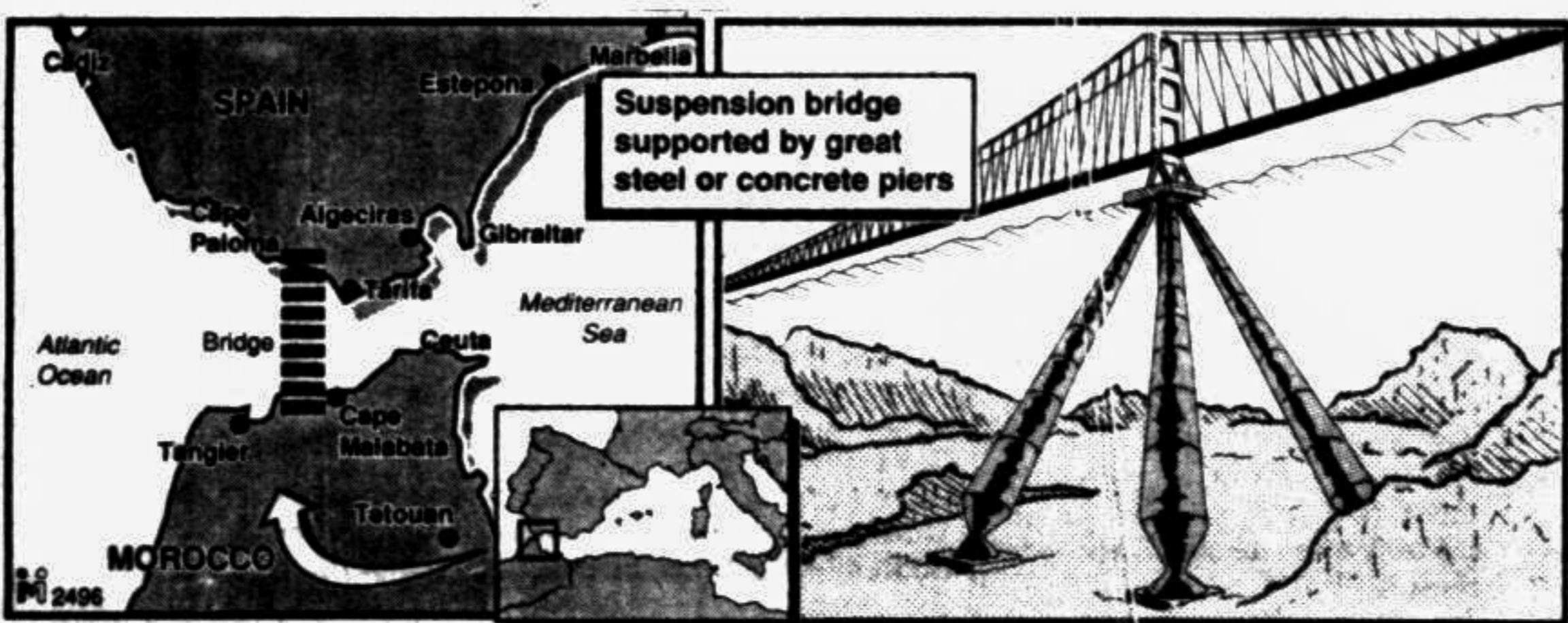
The proposed bridge, estimated to cost \$10 billion, would be held up by steel or concrete piers, spaced 2,000 metres apart to allow ships to pass through. Spans would be shorter near the shore.

The plan has been in the works more than a decade. King Hassan and King Juan Carlos of Spain agreed in Fez in 1979 that their countries should co-operate on it. In 1980, the Spanish-Moroccan Joint Committee was formed and two state-owned companies, the Spanish Company for Studies of a Fixed Link Across the Straits of Gibraltar (SECEG) and the National Company for Studies of the Straits (SNED, Morocco) were created.

Their plan goes beyond just a fixed link, envisaging a complete revitalisation of the ground transportation network in north, central and west Africa, rehabilitating roadways from Tangier east to Cairo and south to Lagos in Nigeria. It could also boost efforts by the Arab Maghreb Union of Morocco, Algeria, Tunisia, Libya and Mauritania to secure its trade with Europe.

Nagib Ben Chekroun, director of SNED, said: "It's a very symbolic idea. We're not just talking about building a bridge between two banks of the Straits of Gibraltar. The ambition of this project is much more vast, to promote overland transport between Europe and Africa."

Longest Bridge would Join Africa to Europe



than the Channel Tunnel linking Britain to mainland Europe. "We think it will have repercussions very beneficial in creating exchange — cultural, social, personal and in trade."

Present yearly traffic across the Straits by ferry is about four million passengers and 400,000 vehicles. About 210 million tonnes of cargo go back and forth between Africa and Europe, although most is bulk cargo dependent on sea travel. Excluding bulk cargo, about 21 million tonnes of goods would use the link.

Spain already has an autoroute almost all the way to Gibraltar, while in Morocco paved roadways go right to the frontier with Mauritania, through the contested Western Sahara. There are also decent roadways from Rabat to Cairo.

Geologically, the Straits of Gibraltar is on the contact zone between the African and European plates, along the Azores-Calabria seismic line. For that reason extensive seismic studies were carried out in addition to years of research on water flow, currents, wave patterns and tide, weather and geology.

The two solutions studied were a bridge on fixed supports and a tunnel, though the bridge is now favoured. A bridge would need supporting pylon pier foundations at depths of up to 500 metres. The spans between supports would have to be as long as possible so as not to interfere with shipping — probably 2,000 metres between supports.

For support, the bridge will either have concrete piers connected at the top or steel piers made of four steel legs, connected at the top in a concrete box. They would rest on concrete bases anchored to the sea bottom.

A very important factor is protection of these support piers from ships, since about 50,000 vessels go through the Straits every year. Studies are still being done on types of suspension bridges, with flexible steel towers or rigid concrete ones.

Long after all the engineering details are worked out, the problem of financing a \$10 billion project will remain. King Hassan is confident the World Bank will get involved, but clearly a project of this magnitude will be chasing private investors "as well," Chekroun said it was not yet possible to calculate the returns the bridge could make

for investors. Spain and Morocco are ready to chip in by creating good investment conditions and contributing themselves. The two-state ownership of the bridge would be secured

through a higher authority entrusted with fund-raising and setting up an executive body to oversee construction and management.

As Chekroun points out, from the investor's viewpoint,

there is a fundamental difference between this project and the English Channel tunnel, which sought extensive private investment. The Channel, as it is known, was financed on the basis of overwhelming existing traffic, more than 25 million passengers every year crossing on ferries.

Chekroun said: "Our link is one that has lots of potential, but the existing traffic is only four million or so passengers. The traffic is relatively weak today, but our studies show a great potential for increasing it, up to 10 to 13 million by 2005. Unfortunately, financiers want to talk about something that exists, not something which is going to exist."

As the Spanish writer Ibanez de Ibero put it, the Straits of Gibraltar are "surrounded by legends and dreams... at one and the same time a beloved place and a place of unease for ancient people, who believed them to be the end of the world."

In a different epoch, it is hoped this bridge will join two worlds.

—Gemin News

New Scissors for Cutting Chromosomes

INVESTIGATORS have found a new scissors for cutting large chunks of DNA exactly where they want — a new class of restriction enzymes.

Restriction enzymes, which cut DNA at very specific sites, have been the workhorses of genetic engineering for nearly two decades now and have paved the way for astounding progress in gene cloning and sequencing.

But indispensable as they are, these scissors suffer from a major drawback. Even the best among them cut big chunks of DNA into too many pieces for easy handling.

Recently, however, Michael Koob and Wacław Szybalski of the University of Wisconsin came up with a simple solution to this longstanding problem in genetic engineering when they created a new type of restriction enzymes that will cut a huge piece of DNA exactly where they want, reports the journal "Science."

Szybalski's team tried to tackle the core problem with restriction enzymes — even the best among them, referred to as "rare cutters," recognises a specific group of just eight bases and then cuts the DNA at the site.

researchers are gearing to map and sequence the very large genomes of humans and other complex organisms.

Koob and Szybalski tried to develop a restriction enzyme that recognises a much longer stretch of 15 to 20 bases.

Statistically, a combination of 15 to 20 bases would show very infrequently in a huge genome. For example, a 20-base site will occur once in every trillion bases, or once in 1000 human genomes.

The essence of their approach lay in modifying the DNA so as to erase all but one of the cutting sites for the restriction enzymes they use.

The researchers call their technique the Achilles' heel cleavage. Like the mythological hero Achilles who was invulnerable to arrows except at one place, his heels, in Koob and Szybalski's technique, the DNA is rendered invulnerable to restriction enzymes except just at one site.

The scientists' first task was to select a DNA-binding protein — one that could recognise and protect 15 or 20 bases and give the researchers the high specificity that they wanted.

added to the lac repressor the yeast calls containing a synthetic lac operator, the protein quickly found the operator on chromosome 5 and bound there, covering up the two restriction sites.

Next Koob and Szybalski added an enzyme methyltransferase, which inactivates all the restriction sites — except for the two hidden under the lac repressor. Finally they removed the lac repressor and other proteins, leaving the yeast genome with just one recognition site each for the two enzymes.

When Koob and Szybalski added one of the two restriction enzymes to a mixture of all 16 yeast chromosomes, it cut only once on chromosome 5.

According to the scientists, they can use the technique to cut anywhere they want, depending where they insert the lac operator. Their technique serves as a nifty new tool for dissecting large genomes, they say.

Szybalski predicts that the technique will be extremely versatile in mapping and sequencing large genomes like the human genome in two ways.

genome which contains 150 megabases.

Other investigators are also experimenting with similar approaches to cutting DNA at unique sites.

Scott Strobel and Peter Dervan at the California Institute of Technology reported some degree of success with a chemical cleavage method tried out in yeast.

They say oligonucleotides (small pieces of DNA) equipped with an ethylene diamine tetra acetic acid (EDTA) complexed with iron (EDTA-Fe) can bind specifically to duplicate DNA to form a triple helix and produce a double-strand cleavage at binding sites greater than 12 base pairs in length.

To demonstrate that oligonucleotide-directed triple helix formation is a viable chemical approach for site-specific cleavage of large genomic DNA, the researchers targeted an oligonucleotide with EDTA-Fe complex attached at both ends towards a 20-base pair sequence in chromosome III of yeast.

Double-stranded cleavage products of the correct size and location were observed, indicating that the oligonucleotide bound and cleaved the target site among almost 14 base pairs of DNA. The findings were reported in "Science."

Growing Trade in Women and Children

Trafficking in women and children has become big business in China, run by specialised gangs and crime syndicates. Yojana Sharma of IPS reports.

have been kept secret by authorities embarrassed that such feudal practices continue to exist, making it difficult to gauge the extent of such activities.

Statistics come to light only when major sentences are meted out and even the authorities admit that cases where criminals are actually tried for the crime of trafficking in women have been rare.

However, new evidence has emerged of the growing business in rural areas since the campaign against slavery which began in 1989 was stepped up in mid-1990.

In 1989 and 1990, police found nearly 40,000 cases of women and children sold into bondage and freed 30,000 of them, according to official reports.

While previously abductions and trafficking occurred in isolated pockets in remote areas between individual peasants, the authorities say the trade has become big business run by specialised gangs and crime syndicates.

One secret Chinese government report leaked to a Hong Kong newspaper speaks

of some 65,000 member of 90,000 gangs arrested for trafficking in women in the last two years, revealing a massive underground network of traffickers on a scale never hinted at before.

In June, the official Legal Daily newspaper reported that 31 members of the country's largest known slave trade gangs were sentenced, 10 of them to death, for kidnapping and trafficking in women.

Li Linzhen and Qin Guipin, two peasants from Xinzhou in central China's Shanxi province, organised a syndicate to abduct and sell 90 women in one year, the paper said.

Women were abducted from the southern provinces of Sichuan, Guizhou, Yunnan, Guangxi and Hubei and sold in villages in Inner Mongolia and Shanxi.

Some were kidnapped from train and bus stations, hotels and dance halls. Over 20 of the women were raped. Sixty thousand dollars were said to have changed hands.

Harsh sentences have only recently been handed down in a bid to curb the growth in the trade.