

- Sweet corn offers the largest profit and has the steadiest market of all field crops.

GREEN REVOLUTION IN CENTRAL LUZON

A green revolution is sweeping peacefully and profitably across the gently rolling plains of Central Luzon, long the rice bowl of the Philippines.

Rice is still the principal crop of the hardworking farmers who till the area's rich, fertile soil. In fact, since the introduction of IR-8 less than two years ago, followed by rapid transition from traditional to modern farm practices under the helpful supervision of college-trained technicians, Central Luzon farmers are producing more rice today than ever before.

At the same time, however, they are dramatically boosting their income—some as much as ten-fold—and greatly improving their living standard by growing and marketing a wide variety of vegetables and field crops. Some farmers are receiving better returns from

the sale of mungo beans, sweet corn and string beans than they are earning from IR-8 production, even though yields are several times greater than rice varieties they used to plant.

Interestingly, explain agricultural technicians, the introduction of IR-8 largely accounts for the revolutionary development in vegetable farming taking place in Central Luzon.

Since IR-8 is short-maturing, they point out, the wet crop is harvested in November, at the end of the rainy season and almost two months in advance of traditional varieties. Early harvesting enables the farmer to plant vegetable seeds sooner, permitting the seed to germinate quickly and the plant to develop rapidly in the soil's high moisture content.

Furthermore, the residual effect of the generous appli-

cation of fertilizer which IR-8 requires, invigorates vegetable growth. Only sweet corn needs additional fertilizer.

Still another factor is the willingness of farmers to care scientifically for their crops controlling insects and plant disease. They learn the importance of such care while growing IR-8 under the Agricultural Guarantee and Loan Fund (AGLF) program, supervised by agricultural credit technicians of the Central Bank of the Philippines.

The purpose of the AGLF is to provide crop loans, without collateral and at a modest interest rate, principally for tenant and leasehold farmers whose main source of credit has been the notorious money lender. Loans are arranged through privately-owned rural banks and are carefully supervised by credit technicians who advise the borrower on proper land preparation, pest control, fertilizer use, and other measures essential for maximum crop yield.

The most successful Central Luzon vegetable ventures, in fact, are those of

the 400 farmers of Mexico, Pampanga, who since December 1966 have obtained more than a half million pesos in loans under AGLF financing from the Rural Bank of Mexico to cultivate 1156 hectares of high-yield rice varieties.

During the 1967-68 dry season, only 300 of the 1156 hectares were planted to rice. The balance was in vegetables and field crops, such as grain sorghum, soybeans, and corn. In early January, to discourage the planting of rice because of water shortage and to promote vegetable growing, the bank stopped granting rice loans until the next wet season.

Best promoters, though, are farmers themselves who have discovered undreamed wealth in the raising of vegetables between rice harvests. For many, vegetable sales have meant the difference between bare subsistence and profitable farming. The difference between grinding poverty and relative affluence.

Take 37-year-old Pedro Dizon who leases 12 hectares

in Barrio San Juan. Before he began planting IR-8 he cultivated one hectare of string beans during the dry season, netting about ₱400. This season, from one hectare and without adding any fertilizer following his IR-8 harvest, Dizon netted ₱4700 from the sale of two crops of string beans.

This, added to his mongo bean and palay sales and excluding five hectares of IR-8 destroyed by Typhoon Welming last November which were replanted, gave him a net profit of more than ₱13,000 in 1967. From his earnings, Dizon made a down payment of ₱6000 on three residential lots in San Fernando, the provincial capital. That he had a net loss of ₱318 from his farm operations in 1966 underscores his spectacular success.

Says Florante Salvador, Central Bank agricultural credit technician who has worked closely with Dizon since Dizon got his first loan under the supervised credit program: "Pedro used to be quite a gambler. He'd disappear for several weeks at a time. Now he doesn't want

to leave his fields. He says he intends to keep his 12 hectares under cultivation the year 'round. He'll be able to because all of his land is irrigated by the Abacan River even during the dry season. Besides rice and beans, he wants to try sweet corn, peanuts and picnic cucumbers."

While not all of Mexico's string bean growers have been as successful as Dizon, many have done very well. Barriomate Leonardo Mal-lari, Sr., boosted his profit from ₱240 to ₱1700 since he began growing string beans after his IR-8 harvest. Another San Juan resident, Gregorio Pineda, saw his earnings jump from ₱300 to ₱850. And Teofilo Dizon of Anao, who earned ₱350 from one hectare of string beans before he began planting IR-8, netted ₱1300 from one-and-a-half hectares this season.

Credit technician Salvador said the municipality's 30 hectares of string beans should net producers an average of ₱1700 per hectare. He estimated an average per hectare profit of

₱850 for the 500 hectares of mungo beans under cultivation.

Among outstanding mungo bean producers are Leonardo Franco, San Juan, and Epifanio Tolentino and Pastor Miranda, both of Anao. Franco had an income of ₱1250 from two hectares compared to ₱340 from one hectare of mungo beans before the land was used for IR-8. Tolentino's earnings were more striking. From two hectares and a profit of ₱260 before IR-8, he doubled his mungo bean earnings although he planted only one hectare. Miranda's profit went from ₱200 to ₱530 from one hectare as he increased yield from five to twelve cavans.

Sweet corn has Mexico farmers most excited. Even though it is more costly to grow than most other vegetables, sweet corn offers the largest profit and maintains the steadiest market. Two contractors competed for Mexico's entire production. The representative of a canning company offered to contract for 20,000 ears a week.

At season's peak, one contractor purchased Mexico's total output, about 60,000 ears a week. He paid the farmer 10 centavos an ear and furnished cellophane sacks into which the unhusked ears were placed immediately upon being picked so as to preserve their freshness. Most of the corn was distributed to Manila supermarkets, Clark Air Base and the U.S. Naval Station at Subic Bay.

"We figure it costs about ₱400 for seed, fertilizer, insecticides and labor," said Vergara, "to produce a hectare of sweet corn. Gross returns on the investment are about ₱1500, or a net earning of approximately ₱1100. This is a better return than most farmers are earning on the production of IR-8 rice."

Primo Mandani planted one hectare of Hawaiian Sweet on his farm in Cawayan. He sold 14,000 ears for ₱1100, had ₱291 in production costs, for a profit of ₱809. He was still harvesting when the data was collected.

Mateo Garcia, Anao, netted P913 from the sale of 17,000 ears of UPCA Hybrid 801, and like Mandani was still harvesting when data was obtained.

So profitable have been the bean and sweet corn harvests of Mexico farmers that many are using proceeds from vegetable sales to pay off bank loans incurred for last year's rice planting. A number were unable to meet their obligation when more than 20 per cent of the rice crop was destroyed by Typhoon Welming.

"This experience," says Salvador, "has taught them that they should not depend on a one-crop economy. Their vegetable crops have been good insurance against a disastrous rice crop."

Mexico farmers, particularly the 400 who have benefited from the rural bank's supervised credit program, maintain they owe most of their success to the faith and understanding of Miguel Vergara, President-Manager of the Rural Bank of Mexico, and the technical skill and encouragement of Florante

Salvador. At the same time, Vergara and Salvador stress that their program would have failed had it not been for the willing cooperation of the farmers who were eagerly responsive to change once they were shown how to improve their farm operations.

There is reason to believe Mexico's quiet revolution is just beginning. Vergara and Salvador have plans for developing a bustling provincial farmers market where farmers from all of Pampanga could bring their produce and contract for its sale to canners and representatives of Manila supermarkets. They want to increase the planting of field crops, improve and greatly expand fish, livestock and poultry production, and promote mechanization as farm earnings increase.

Mexico's greatly increased rice production and successful multiple-vegetable cropping have brought several constructive changes. For one, unemployment no longer is a problem. Those who used to head for Manila after the rice harvest because

there was nothing to do until the next rice season, have found a new profitable interest in vegetable farming. In fact, Mexico actually has a labor shortage.

The most important aspect, however, of Mexico's

awakening is the wholesomely contagious effect it is having on neighboring communities. Nothing succeeds like success. The green revolution is spreading, each day winning more Central Luzon farmers to its cause.

THE NEED IS GOVERNMENT

Government is the thing. Law is the thing. Not brotherhood, not international cooperation, not security councils, that can stop war only by waging it. Where do human rights arise, anyway — security against the thief, the murderer, the footpad? In brotherly love? Not at all. It lies in government. Where does control lie — control of smoking in the theater, of nuclear energy in the planet? Control lies in government, because government is people. Where there are no laws, there is no law enforcement. Where there are no courts, there is no justice.

— *E. B. White*