

**SMALL IS BEAUTIFUL (IF ENORMOUSLY PROBLEMATICAL)  
IN NORTHEAST BRAZIL**

by Richard Critchfield

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Aid to the world's poor, like hell, has been approached along a road strewn with good intentions. It has never been a serious question of whether, but how. Industrial development, green revolutions, better trade terms for primary producers, multilateral over bilateral aid, more effective birth control, or simply more aid itself, have all seemed like the partial answer.

A remarkably generous, if not nearly generous enough, transfer of resources to the poor countries during the past two decades has undoubtedly prevented a good deal of misery and suffering. Yet, like the Red Queen, they still have to keep running desperately fast merely to stay in the same place. It is not surprising that development planners, every few years, seize on a new idea in hope of finally making real progress.

Recently in Rome, Dr. John A. Hannah, just about the oldest American hand in the aid-giving business (since Point Four), and who now heads the World Food Council, told this writer he sees no hope unless future aid goes directly to the Third World's two million villages. He said, "We simply cannot solve the world food problem without direct assistance to the small farmer." He envisaged the United Nations' new billion dollar agricultural development fund going mostly for credit facilities, research and extension, fertilizer, and intermediate technology for one- to five-acre cultivators. Dr. Hannah was voicing a now familiar theme: one hears the same kind of talk from the World Bank, AID, FAO, and UNDP. Both the Ford and Rockefeller Foundations have initiated new projects abroad to establish how to formulate strategies to help the poor directly, both in their villages and, when uprooted, in city slums. Third World leaders such as Egypt's President Anwar al-Sadat and the

Philippines President Ferdinand E. Marcos talk of creating decentralized "agro-industrial complexes" to bring new job opportunities to the countryside.<sup>1</sup>

Clearly, the "small farmer," who is perhaps more accurately described as a peasant, or villager, is the man of the hour in development aid.

The philosophy of helping villagers directly with modest capital, knowledge, and simple technology was most clearly stated by British economist E.F. Schumacher in his 1973 book, *Small is Beautiful* (Harper Torch books, TB 1778). Its basic thesis Schumacher states succinctly:

The heart of the matter, as I see it, is the stark fact that world poverty is primarily a problem of two million villages, and thus a problem of two thousand million villagers. The solution cannot be found in the cities of the poor countries. Unless life in the hinterland can be made tolerable, the problem of world poverty is insoluble and will inevitably get worse. (p. 182)

What these villages need, Schumacher argued, is a different kind of technology,

a technology with a human face, which, instead of making human hands and brains redundant, helps them to become far more productive than they ever have before. (p. 145)

Failing this, Schumacher warned, "There is no answer to the evils of mass unemployment and mass migration into the cities.... The whole level of rural life needs to be raised," he went on, and this requires "the development of an agro-industrial culture, so that each district, each

community, can offer a colourful variety of occupations to its members.” (p. 192)

Schumacher concluded: (pp. 178-179)

1. The “dual economy” in the developing countries will remain for the foreseeable future. The modern sector will not be able to absorb the whole.

2. If the non-modern sector is not made the object of special development efforts, it will continue to disintegrate; this disintegration will continue to manifest itself in mass unemployment and mass migration into metropolitan areas; and this will poison economic life in the modern sector as well.

3. The poor can be helped to help themselves, but only by making available to them a technology that recognizes the economic boundaries and limitations of poverty—an intermediate technology.

4. Action programmes on a national and supranational basis are needed to develop intermediate technologies suitable for the promotion of full employment in developing countries.

These few quotations from Schumacher’s work, of course, grossly oversimplify his thesis. They are offered to refresh the reader’s memory and to explain my reasons for selecting Guapira, a village in the state of Bahia, in Northeast Brazil, as a concrete illustration of the problems he defines so clearly. I will also offer examples of various action programs under way to put the above principles into practice.

Small is beautiful; but rural development remains an enormously complicated business. Indeed, the very phrase, “rural development,” is itself a handy catchword for the huge complex of problems facing the world’s two million villages. Yet Northeast Brazil, perhaps more clearly than most other regions in the Third World, provides an almost classic example of what Schumacher is talking about.

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When people think of persistent pockets of poverty in Latin America their minds often turn to Northeast Brazil. A region twice the size of France, it has about a third of Brazil’s 110 million people. Many are descended from African slaves brought to work its sugar plantations in the sixteenth and nineteenth centuries. But sugar degraded much of the land and manioc, the other principal crop—as I shall discuss later—seems to carry with it a harsh and backward way of rural living. Some 60 per cent of Brazil’s people, most of them descended from Europeans, live in the south, in and around the two great cities, São Paulo and Rio de Janeiro, and such agriculturally rich southwestern states as Rio Grande do Sul. They enjoy 80 per cent of Brazil’s national wealth, compared with 14 per cent for the northeastern third of the population and 5 per cent for those living in the vast, almost empty interior of the Mato Grosso plateau and the Amazonian jungle, one of the earth’s last great unsettled regions.

Any visitor to São Paulo and Rio is impressed by great cities at least superficially as advanced as any in the United States, the result of an explosion in economic development since the early 1960s. In contrast, some of the rural villages of the northeast, especially in years of drought, are as poor as any to be found in Java or Bangladesh.

Historical accident is largely to blame for the development of Brazil’s dual society. Much of the sugar wealth was shipped back to Portugal and the rest helped to build up inefficient service industries in the northeast cities, particularly the two largest, Recife and Salvador, where life revolved around the town houses of sugar magnates. The coffee wealth of the south came much later and, coinciding with the industrial expansion of Europe and the United States, was invested in the beginnings of Brazilian industry. This dual society has produced what Schumacher calls the “process of mutual poisoning,” whereby “successful industrial development in the cities destroys the economic structure in the hinterland, and the hinterland takes its revenge by mass migration into the cities, poisoning them and making them utterly unmanageable.”

In Brazil this works two ways. First, there has been a steady migration of unskilled labor from the Northeast to the South, mostly to São Paulo. Within the past ten years, the growth of govern-

ment-aided, capital-intensive industries around Recife and Salvador has stimulated the second major migration in the Northeast, away from the villages to these two cities. Today, 80 to 90 per cent of all youths between the ages of 18 and 25 leave their village homes to seek city jobs, leading to an actual decline of the rural population in the surrounding states of Pernambuco and Bahia.

Salvador alone, with a population of just over one million, is growing at the extraordinary yearly rate of 7 per cent. In the slum of Nordeste de Amaralina a recent survey conducted by the Federal University of Bahia found that just under 60 per cent of the inhabitants had been born in rural areas but had migrated to the city. Amaralina's 60,000 people represent only 6 per cent of Salvador's population.

Yet only 50,000 new jobs have been created in all of northeastern industry in the past 25 years and most of the annual pittance of \$30 million in regional aid goes to capital-intensive industries. Studies show that most of these 50,000 jobs were for highly trained workers and technicians, a majority of them southerners or foreigners. Lacking any skill but cultivation of the land or, for the girls, making *farinha* flour from manioc, most of the new young immigrants from the Northeast turn to the kind of tertiary employment that keeps them from starving but contributes little either to the country's development or their own acquisition of skills and confidence: street vending, petty hawking, shoe shining, errand running, waiting tables, loading on the docks, and laboring in construction. The girls almost invariably become housemaids (*empregadas*), earning about \$40 a month, plus their room and meals. Life is harder for the young men who have to pay for food and shelter from salaries rarely more than the \$58 a month legal minimum wage (\$76 a month in the South).

Even so they are better off economically than back home in the villages. The 1970 census strikingly revealed the scale of poverty that still exists in Brazil, much of it rural: the 40 million men in Brazil in 1970 bought only 18.5 million pairs of trousers, 25 million pairs of socks, and 25 million shirts.

In most cities, the new *favelas*, or shantytowns, are a long way from the centers of employment and buses are overcrowded. The Amaralina slum study in Salvador showed that daily trips of 5 to 20 kilometers to work were commonplace. Sanitation can be rudimentary or nonexistent; in Recife and Salvador about 400 people die of meningitis every year and another 400 of malnutrition. City budgets are small; São Paulo spends about 30 times less per inhabitant than New York and Salvador four times less per inhabitant than São Paulo. The infant mortality rate in São Paulo in 1974 was 84 per 1,000 births; in Salvador it was three times that number.

The inundation of the cities can also be seen in Brazil's sudden transformation from a largely rural economy to an urban one. In 1940, 69 per cent of Brazilians lived in the country, the rest in towns. In 1970, 56 per cent lived in towns, the rest in the country. Although rural Brazilians still have extraordinarily large families—I ran across peasants with as many as 35 to 38 children—urbanization has apparently led to some reduction in the birthrate, from 43.4 per 1,000 in 1960 to 38.4 in 1970. The strong incentives for villagers to have large families, particularly for cultivating manioc, which is labor intensive, do not exist in the urban slums. Thus, the reduced birthrate has nothing to do with family planning. The Brazilian government, strongly supported in this matter by the Roman Catholic Church, has steadfastly refused to make contraceptives widely available or allow birth control to be taught in the schools.

If life in the sun-baked, drought-prone interior or the Salvador *favelas* becomes unbearable, a young man can always make the three-day, 2,000-mile bus trip to São Paulo, whose industry seems to have an unquenchable hunger for cheap, unskilled, northern labor. There his standard of life will almost certainly rise.

In Bahia, for every 1,000 persons, there are 5 cars, 5 telephones, 12 hospital beds, and 23 places of higher education; its people consume 58 kilograms of cement per person, 140 kilowatts of electricity, and 48 per cent get purified water. In São Paulo, there are 45 cars, 56 telephones, 12 hospital beds, and 114 places of higher education for every 1,000 inhabitants; its people consume 180 kilograms of cement, 970 kilowatts of electricity, and

85 per cent get clean water supplies. The strain on São Paulo's infrastructure—sewage, water, electricity, transport—is now close to breaking point, even for the lucky ones with money. In the villages of rural Bahia none of this infrastructure has ever existed.

The village I will describe, Guapira, is a two-hour bus ride from Salvador. But you have to walk three hours more unless you go by horse, donkey, or can hitch a ride on a truck; there is no public transport. Nor sewage, nor water, nor electricity. Bathing is a choice between a schistosome-infected stream or hauling water at one of the few houses fortunate enough to have deep wells. Without electricity, everyone goes to bed around eight o'clock; and sanitation means heading into the snake-infested bush.

Virtually every family in Guapira has two to six children living in Salvador (the majority) or São Paulo. The village population is composed

mainly of children, middle-aged parents, and a few elderly people. Both parents and migrating children repeatedly gave the same reason for the exodus to Salvador: to escape the hard village labor and because the city had more "advantages."

And it is true that Salvador, like Recife to the north, is an alluring city. Brazil's first capital—from 1549 to 1763—it faces the Baía de Todos os Santos, an enormous placid bay scattered with islands, and the city is a museum of colonial art and architecture, as well as a decaying monument to the grandeur of the old sugar civilization. Both Portuguese and African cultural influences are preserved in much purer form than elsewhere in Brazil. Fully half of Salvador's slightly more than one million people are mulattos, the largest concentration of Afro-Brazilians in the country.<sup>2</sup>

Salvador's large mulatto population gives the city much of its charm. African elements are expressed in the food; *capoeira*, a fighting dance;

Most drinking water comes from streams—many infected with schistosomes.



*candomblé*, a religious cult of West African origin, which synthesizes African beliefs and deities with those of Catholicism; and, perhaps most important, the highly rhythmic samba danced during the all-night *festas* from December through February and the five-day pre-Lenten carnival (*carnaval*), which in Salvador is the most erotic in Brazil.

Salvador is also a city of the young, with an actual majority of its people 18- to 30-year-olds straight from the rural countryside. Since the villages in the interior possess an austere traditional Latin culture, these youths experience a shattering release from surveillance and restraint when they arrive in the city. Unlike villagers in Egypt or Java, for instance, who cluster together in Cairo and Jakarta and keep close village ties, retaining much of their rural culture, the Salvador immigrants make an almost complete break with their villages and disperse throughout the city, the girls generally to the homes of the rich and middle classes to work as maids, the boys to the worst slums. Few visit their villages more than once or twice a year, even if they are only a few hours away by bus. An exception is the *feira* in São João in June and, for a smaller number, Christmas. Girls tend to return home to be married.

As a result, Salvador has a great deal of sexual promiscuity. Couples making love in public can be seen in parks and darkened sidestreets every night. Salvador has a very high crime rate; in the villages crime is almost nonexistent.<sup>3</sup> The same is true of the most flagrant forms of prostitution and homosexuality; neither appears in the villages. A city that offers beaches, football, plentiful cheap rum and beer, *festas*, sambas, and *amor* at every turn, where a sizable wealthy class lives in the most conspicuous luxury and the blatant inequities create a de facto tolerance toward crime, has a peculiarly fevered, electrically charged atmosphere. The party never seems over.

Family, property, and status, which hold village life together, are all undermined in such an atmosphere. This writer has not seen such a sharp cleavage between the cultures of village and city anywhere else.

One pretty girl in Guapira, asked whether she preferred the village or Salvador, replied, "Salvador, by ten thousand times." Her mother, asked

separately, found life in Salvador dreadful; she said that every time she went to the city, after a few hours of walking around to enjoy the sights, she was more than ready to return to the village.

Schumacher himself has recognized the allure of the city and written,

The all-pervading disease of the modern world is the total imbalance between city and countryside, an imbalance in terms of wealth, power, culture, attraction, and hope. The former has become overextended and the latter has atrophied. The city has become the universal magnet, while rural life has lost its savour. Yet it remains an unalterable truth that, just as a sound mind depends on a sound body, so the health of the cities depends on the wealth of the rural areas.<sup>4</sup> p. 191

This is, of course, not purely a modern development; migration from the countryside and the disintegration of the agricultural base played an important role in the downfall of such great cities as Susa, Babylon, and Rome. When Schumacher says he sees no answer to the problems of mass migration and mass unemployment "unless the whole level of rural life can be raised," he is speaking in a prophetic tradition that goes all the way back to Abraham.

The problem is acute in contemporary Brazil. Agriculture is its single most important economic sector: it provides 80 per cent of Brazil's exports, 20 per cent of its GNP, and employs 45 per cent of its labor force. Agriculture is also the most technologically backward sector. Although the high acidity of Brazil's soil badly needs applications of both lime and fertilizer, and although consumption doubled in the 1960s, less than 5 per cent of Brazil's farmers use fertilizer today. This neglect has only begun to be corrected in the past two years by Brazil's current president, General Ernesto Geisel.

Let us turn now to what Schumacher rightly calls the "heart of the matter," the village.

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Driving inland from Salvador on the coast is rather like moving rapidly from Florida through



Land preparation in Guapira.

Iowa to Montana. Brazil is hot and humid in summer, October through April, but is not truly tropical: even in the jungles along the Amazon, the temperature rarely reached 100 degrees Fahrenheit. So that while the coast, with its dependable rainfall, is green and luxuriant, one soon is in a country of hilly uplands, plateaus, and low mountains covered with patches of savanna, woodland, and cultivated fields. Despite densely foliated jaca and mango trees, bamboo thickets, elephant grass, and the occasional monkey or parrot, the landscape curiously resembles the back country of the American Midwest. Further in from the coast one enters a region of recurring calamities of flood and drought and, an hour or so later, the immense and arid *sertão*, so dry few cattle can survive and it is given over mostly to raising goats.

The village of Guapira is situated halfway between the coast and the *sertão*; its land, as in most of the cultivable portion of the Northeast, is used for a shifting cultivation of food crops and the pasturing of animals. In Guapira, as in most of Bahia, the staple food crop is manioc (known as *mandioca* in Portuguese and as cassava in the United States).

Some knowledge of manioc cultivation is the key to understanding Northeast Brazil. More than anything else it determines the village way of life and the urban migration of the young. Manioc is a poisonous weed that may contain dangerous amounts of prussic acid. Though native to Brazil, it is believed to have first been cultivated by the Mayans in Yucatan. After the discovery of Brazil by the sixteenth-century navigator, Pedro Alvares Cabral, the Portuguese penetrated the country. They found no high Indian civilization such as that found by Spaniards in Mexico and the Andes, but rather scattered tribes who lived by cultivating manioc and sweet potatoes on patches of ground cleared by burning.

Manioc soon became the staple diet, supplying the carbohydrates (it has almost no protein) for both owners and slaves on the early sugar plantations. It takes 12 months to grow, has a curious immunity to insects and pests, and only needs to be weeded four times between planting and harvesting. After a year the tuberous roots are dug up and the poison removed by a complex refining system of peeling and grating, then pressing the pulpy mass that is produced and heating it by pushing it back

and forth over large wood-fueled ovens. This was done on the plantations in special houses built for the purpose called *casas da farinha*, *farinha* being the manioc flour produced. It has the consistency of sawdust and is the main food of most poor people in the Northeast (all Brazilians today consume *farinha* but, in the prosperous South, it is used more as a condiment and sprinkled on beans, rice, macaroni, and so on). The peelings are fed to cattle and pigs.

Manioc roots can also be made into breads, tapioca, laundry starch, and even alcohol. Experiments are under way in Brazil to see if the alcohol can be economically used to fuel car engines as an alternative to gasoline. If this succeeds, and the price of manioc rises, living standards could be improved in the Northeast.

Fortunately, manioc is not Brazil's main agricultural crop. Bahia produces one-third of the manioc grown in Brazil and Brazil produces one-third of the world's production. Coffee, of course, is number one, followed by cotton, sugar, cocoa, beans, corn, and rice. Meat, especially beef, is much cheaper and more abundant in Brazil than in most countries. While fruit is also abundant, fresh vegetables, by tradition rather than necessity, since they grow well, are hardly eaten. (Tourists quickly discover that a salad in a restaurant may cost \$2 or so and that few vegetables ever come with a meal; instead one finds macaroni, rice, and potatoes all heaped on the same plate, with an enormous piece of meat. In his classic study, *Casa Grande e Senzala*, published in English as *The Masters and the Slaves*. Gilberto Freyre tells how plantation owners often ate much worse than the slaves, consuming only carbohydrates and meat while the slaves grew their own vegetables. This peculiar dietary tradition has been carried into modern times by wealthy Brazilians.)

In Guapira village, each of the more prosperous villagers has his own *casa da farinha*. Here, at least two, and sometimes three or four days each week, all the women and children of his family slave away peeling, grating, pressing, and heating the manioc roots to produce *farinha* or flour. This drudgery keeps the children home from school at least half the time, and condemns the women to hard labor every day except Sunday (for they have to catch up on washing, housecleaning, drawing water, and



Peeling manioc in the *casa da farinha*.

looking after cattle, chickens, and pigs the other days of the week).

In this writer's opinion, shared by others, manioc cultivation alone is enough to explain the exodus of the village youths to Salvador, both to escape the drudgery involved and, since most reach adulthood only semiliterate, to try to get even the most primary schooling in the city.

The complex refining system could be rendered less labor-intensive. Modern machinery in the form of rasps, special shaking or rotating sieves, and settling tanks does exist and is used in towns where the tuberous roots are processed for commercial purposes. Adult men have generally been liberated from the *casa da farinha* by the introduction of small gasoline engines during the past decade (previously the grater had to be turned by two men or draft animals). But in the male-dominated village environment, with its Latin emphasis on *macho* authoritarianism, neither the women nor the children have much say and the old labor-intensive system persists.



Another alternative would be to find a substitute crop to provide a staple diet. Wheat grows well in Bahia's soil, but because of the uncertain rainfall and the periodic droughts and floods, is considered too big a risk. Maize is also grown, but only on small plots for family consumption during the June Feast of São João.

It may not be stretching things too far to argue that manioc is the root of all evil in Northeast Brazil. It is certainly responsible for the harshness of the villagers' lives, particularly the women's. It must be blamed for the persistent semiliteracy or illiteracy of both sexes and the flight by youth to Salvador and São Paulo.

Indeed, one questions whether in a manioc-based rural society Schumacher's "level of rural life" can ever be made sufficiently attractive to keep people on the land. Northeast Brazil is not overcrowded. Most farmers in Guapira village cultivate only a fraction of their land. The principal limitation on crop production is not land, but how many family members one has to produce flour and remove the poisonous element from the manioc in the *casa da farinha*.

The incentive to have as many children as possible is very great. Curiously, no one seems to try to keep the grown-up youth from leaving. Most parents seem resigned to their children's flight once they have reached 18 or so. But family size in Guapira is enormous, far surpassing anything in this writer's experience elsewhere. Ten, 12, or even 20 children are commonplace. Earlier I mentioned one man with 38 children. The last six were by a third wife; the two previous ones had died. A conspicuous number of Guapira's women suffer from varicose veins, apparently the result of hard work and constant pregnancies. Since these can clot and cause heart failure, it could explain why so many husbands seem to be married to second or third wives, having outlived the others.

The three main diseases in Guapira, as elsewhere in the Northeast, are tuberculosis, schistosomiasis (40 per cent of the adult rural males), and *chagas*. The last, rather gruesomely, is carried by a black insect, a *barbeiro*, which resembles a cockroach and lives in the palm-thatched houses of the poor (more prosperous rural Brazilians roof their houses with tile or *atap*). A bite from this insect, provided

one is infected with its feces, can lead to a slow decline in health and death 10, 15, to 20 years later when the lungs fill up with phlegm. There is no known cure.

Despite these hazards, life expectancy in Guapira is 62 and, as the reader will see from their photographs, its inhabitants appear to be a muscular, physically robust lot. There are a few families, however, whose members are evidently suffering from worms, malnutrition, or some debilitating disease.

The village is a very old one, by Brazilian standards, and until this century was known as the Village of the Skull, for it was once the lair of bandits who waylaid travelers and murdered them (rather like the *thugees* in India). The grandfather of a present inhabitant renamed it God as a Child (*De Deus Menino*), which it was called until Isaac, a local politician, gave it its present Indian name of Guapira 16 years ago.

Most of the houses are hidden by treelines, or are down in wooded hollows, but some 20 or so are scattered along a rutted dirt road. Here are the village plaza, an old wooden church, four *vendas* or small shops that sell a few basic commodities but mainly serve as taverns, a cemetery, cockpit, and school. This last, built in 1958, offers four grades but has never been certified. Neither of the two village girls who teach there has gone beyond the fourth grade. If anyone wants to pursue his education, he must take a placement test in town and frequently has to begin all over again.

The village mudbrick houses are plastered and painted in pastel colors and most of them have red tile roofs, though a few of the poorest ones are simply thatched with palm branches. With palm, mango, jaca, rubber, banana, flamboyant, and jasmine trees shading the gardens, the village has a pleasant aspect. Now and then a truck or a Volkswagen—Brazil's most common private car—will roar past, raising clouds of dust. Most of the local men ride horses or donkeys, and it is a common sight to see them wearing sandals with spurs laced to their ankles with leather thongs.

The villagers are superstitious. As in much of rural Brazil, there are tales of buried treasure, gold



hidden by Portuguese priests centuries ago. It is said that the spirits of the priests will someday appear in dreams and disclose the hiding place. Guapira is also said to harbor a *lubishome* or werewolf, a villager of unknown identity, who on the night of the full moon during Lent will creep about naked, taking the form of a wolf from the waist up, to attack anyone he catches alone in the fields. It is also rumored that one village woman once slept with a priest and, in punishment, on certain nights is transformed into a headless donkey and must run to seven villages before dawn.

A priest comes to the village church to hold mass only four times each year. The last to visit scandalized the village by delivering a sermon on the evils of having sexual intercourse with donkeys or chickens; abuses not unknown in rural Brazil. Funerals are held in the graveyard with one of the villagers saying a simple prayer. Afterward, as is the custom, the head of the grieving family stands all the male mourners to free drinks of rum at one of the taverns. This assures a good turnout for funerals.

The villagers are intensely superstitious about their crops and plant manioc only on certain days after a full moon; yams are planted December 8, one of the feast days of the Holy Virgin. A spirit known as the Mother of the Gold is said to inhabit a nearby low mountain; villagers claim to have seen her making an annual pilgrimage to the sea, moving by "like a comet" as the earth trembled and a sudden wind howled.

Men do the marketing each Thursday, either riding into the river town of Maragojipe on a truck piled high with sacks of *farinha*, or walking the distance of 20 kilometers behind pack animals. Since what social life there is in Guapira revolves around getting drunk in the village taverns, few women are to be seen in the plaza. An exception is Sunday when, in good weather, the girls dress in their best and go in a crowd from house to house, carrying São Roque, the village's patron saint. It is a gay sight to see them moving down the paths in their yellow, red, and pink dresses, moving in a solemn procession behind the plaster saint in his glass box, waving banners and singing. On Sundays

Unloading at Maragojipe market.





Maragojipe market. The sailboats will carry produce into Salvador.

and saints' days, there are also football games, cockfights, and gambling over dominoes or cards. Another pastime is to gather around one man who reads aloud one of the cheap penny novels written in verse that can be bought at the Maragojipe market. A group of men, beer bottles on the bar before them, will listen raptly as one reads in a sing-song voice some cowboy romance such as "The Truth About Love and the Two-Edged Sword." "He laughed so hard his pants fell down," the reader will say and somebody will burst out in a guffaw, "Was he wearing anything underneath?" Or the villain having been dispatched, the rich landowner will tell the hero, "Take my daughter, take the land, take the cows, even take my old lady." At this last there will be a great roar of laughter and shouts for another round of beer.

The village seems changeless but is not. The first gasoline engine to free men and draft animals from the *casa da farinha* came in 1960. The first deep well to provide a family with clean water in 1964. The first tractor for hire in 1970. The first truck in

1972. Insecticide in 1972. Chemical fertilizer for manioc, April 1976. The first television set (run by a car battery), September 1976.

A few of Guapira's men have credit at banks in town and can guarantee loans for their poorer neighbors (9 per cent yearly interest on crop loans). Many of the villagers belong to the government's voluntary pension and medical insurance plan, *Funrural*, paying 50 cents a month to get back \$35 monthly in retirement benefits after age 65. Theoretically the medical insurance covers everything, but there is always a long waiting list at the government hospitals.

In *Small is Beautiful*, Schumacher constantly emphasized the importance of seeing things in human terms. When this happens, he wrote, "communications problems become paramount."

Who are the helpers and who are those to be helped? The helpers, by and large, are rich, educated (in a somewhat specialized

sense), and town-based. Those who most need help are poor, uneducated and rurally based. This means that three tremendous gulfs separate the former from the latter: the gulf between rich and poor; the gulf between educated and uneducated; and the gulf between city-men and country-folk, which includes that between industry and agriculture. The first problem of development aid is how to bridge these three gulfs. A great effort of imagination, study and compassion is needed to do so.... Poor peasants cannot suddenly acquire the outlook and habits of sophisticated city people. If the people cannot adapt themselves to the methods, then the methods must be adapted to the people. This is the whole crux of the matter. (p. 181)

Yet it is precisely when we finally examine Schumacher's ideas in human terms, that is, in terms of individual poor villagers, that we run into trouble.

This is because the human race is so terribly idiosyncratic and, yes, individualistic. It is full of unpredictable strengths and weaknesses. Traditional wisdom goes hand in hand with the most arrant superstition. Supernatural explanations are often commonly preferred to modern, scientific logic. Some men are strong, others weak, some healthy, others sick, some energetic, others lazy. Each man has his own inherited values, his own design for living. He has his own peculiar, unique, and often surprising, fears, hopes, worries, and aspirations.

Political leaders in the poor countries often do not know their village people as well as they should. But most of them know them well enough to throw up their hands at the complexity of modernizing their traditional sector. The temptation is great to try shortcuts to agricultural advance through big state-run mechanized farms (Iran and Sudan come readily to mind.) These usually turn out so costly and of such marginal importance when it comes to total agricultural output that they are forced to come back to the small farmers in the end.

It is no accident that it has taken us more than 20 years finally to pay attention to the small farmer. Other kinds of development are so much easier.

Schumacher says a great effort of "imagination, study and compassion" is needed to bridge the gap in communication between these people and ourselves (the helped and the helpers). As the late Oscar Lewis once pointed out, we may have a great deal of information about the geography, history, economics, politics, and customs of the world's poor villagers, but we know little about *them*. How they think and feel, what they worry about, argue over, anticipate, and enjoy. Or, as Barbara Ward more dramatically put it a decade ago, under the pressures of population the global village environment has changed so fast and become so unfamiliar it has become "a new political country, unexplored, ominous, planetary in scale, and, conceivably, bordering on the end of time."

To illustrate, let us take a random sampling of ten individuals in Guapira village:



DUGA

Short-statured, restless, energetic, and enterprising, Duga, 43, is Guapira's most progressive farmer and its natural leader. He cultivates only 12 acres of the 50 he and his brother inherited from their father, but this is still the largest manioc farm in the



Duga and his family.

village. Duga's family earns and spends an average of \$50 a week, its economic mainstay being two 50-kilo sacks of *farinha*, or manioc flour, sold for \$21 to \$26 each at the weekly market in Maragojipe. Duga owns eight cows, a horse, and three pigs. He also grows and sells such seasonal crops as yams, watermelon, tobacco, cucumbers, sweet potatoes, squash, tomatoes, peppers, peanuts; and has lime, mango, avocado, and jaca trees. Besides his wife, Dona Benedita, and five of their six children who remain at home, Duga also supports the household of his mistress, Dona Olga, and her five children. The principal innovator in Guapira, Duga bought the first gasoline engine to power the manioc grater in his *casa de farinha* in 1960, was the first to hire a tractor to plough his manioc fields in 1970, and introduced chemical fertilizer, insecticide, and the first deep well to supply

clean drinking water. He is one of the few villagers considered a good credit risk at the local agricultural bank. Duga never had any desire to migrate to the city, saying, "I like to be my own boss." His oldest son, Eleandro, 19, works in a factory in Salvador. Duga expects his other four sons will all eventually migrate. "I'd like to keep them by my side," he says, "There's plenty of land for everybody here. But they have more advantages when they are employees in the city. It's better for them. If they want to go, they can." Duga has \$3,000 saved and hopes to buy more land, a truck or tractor, and build a new house. He eats meat twice a day and, a heavy drinker, spends \$5 to \$10 a week on liquor. A tireless, stern, hardworking man, Duga lends himself to Schumacher's ideas more than anyone else in Guapira.



**DONA BENEDITA**

A spunky realist with a gift for endurance, Duga's wife, Dona Benedita, wants above all to see her children educated. One morning when the three youngest boys returned from school after half an hour, saying the teacher had gone off to get paid, Dona Benedita gave a heavy sigh and said, "You had to stay home to peel manioc yesterday, there's no school today, and tomorrow we pick peppers. It's finished!" Each morning Dona Benedita rises at 5 A.M. to milk the cow, start the fire, and prepare breakfast of hot milk, coffee, bread, plus rice and meat left over from the day before. Then she at once cooks the large noon meal she will reheat whenever Duga returns: beans, two kinds of meat, sliced tomatoes, rice, macaroni, squash or sweet potatoes, and sweetened coffee.<sup>5</sup> By now—it is still not 8 A.M.—she must leave for the *casa da farinha* where she spends three or four days a week preparing manioc flour. Technically, three of Duga's 12 acres of manioc and other crops belong to Dona Benedita to earn money for clothes ("As soon as I buy a new shirt for one of the boys, the next's has worn out"), cooking utensils, and a few household decorations such as a plaster statue of São Roque, Guapira's patron saint, and a framed placard saying, "God Bless This House." Life for Dona Benedita is unremitting toil.

"I should wash clothes every day," she says, "but there is no time." Yet small changes have come. The introduction, into Guapira of laundry detergent two years ago, she says, has made washing much easier. She is very proud of a new gas oven Duga bought her, the only one in the village. Her present ambition is to buy a wardrobe so "I'll have a place to keep my clothes." (At present they are stuffed in old cardboard suitcases.) That Duga maintains the household of a mistress is a deep mortification for Dona Benedita, who never mentions it; whenever Dona Olga comes to make flour in Duga's *casa da farinha*, she stays in the house and avoids meeting her. Dona Benedita is very close to her children since they work together all day long and she is forever reproofing or praising them, trying to shape their characters. She is much respected among the neighbor women and very generous to poorer villagers, giving them food when Duga is not at home.



**PEDRO**

The oldest of Duga's sons remaining at home, Pedro, 16, is the first literate in the family. (Dona Benedita was deeply shamed

in a recent local election since she cannot write her name and hence vote; Duga never attended school since there was none in Guapira when he was a boy, but he has taught himself to read. He still cannot write, except for his signature.) Pedro attended the village school for six years, finally completing the fourth grade. "There were weeks," his mother says, "when Pedro could only be spared from work one or two days. If he had gone every day, he would know more things." As Pedro has an aptitude for mechanics, Duga would like to buy a truck and make Pedro the driver, in this way keeping him at home. Duga is a strict father and Pedro is not allowed to join other boys of his age at the village taverns in the evenings. He is expected to work just as hard and steadily as his two parents. But Pedro secretly confides that he is just waiting until he is older to escape to Salvador and an easier way of life.



**NANINO**

Duga's younger brother, Nanino, 40, is a lazy, shiftless, and perhaps physically ill man who cultivates only one acre of manioc and is a poor provider for his wife and nine children, all of whom appear to be suffering from worms and malnutrition. Duga earns

extra income working as a mechanic or carpenter for others for about \$6 a day; Nanino, who must buy the manioc flour his family mainly lives on, hires himself out as a field laborer for \$2 a day, although he and Duga together own 50 acres. He has several cows. One Sunday Duga, after spending the morning digging up manioc tubers for the coming week, found Nanino loafing in a village tavern. Nanino said the ground was too hard and dry to dig manioc and besides it was Sunday. "Yesterday was a saint's day and you didn't work," Duga told him. "Today you say it's Sunday. Tomorrow I suppose you'll be sick. This is a beautiful situation. Why don't you work more and improve yourself?" Nanino, totally illiterate, is deeply superstitious and is forever digging in a banana grove near the church, hoping to find buried gold. His weekly income is about \$10; Nanino's family, like perhaps as many as half the villagers, eats meat only on Sunday. A pleasant, affable, rather handsome man, Nanino and his brother Duga show how two individuals can have the same environment and heredity and turn out completely different. Any strategy to help the small farmer has to reckon on the village world being full of both Dugas and Naninos.



**BENEDITO**

A handsome 29-year-old, Benedito is one of the few young men in Guapira who likes village life and has chosen to stay at home.



An energetic man, he cultivates eight acres on his holding of 25 acres and also runs a small *venda*, or general store, which, in the evenings, is the most popular village tavern. There is no divorce in Roman Catholic Brazil and when Benedito's wife left him, he formed a common union with another village girl for some years, until their baby died, and she, too, went away. Some of the villagers call Benedito "Sour Orange," because he is careful to whom he extends credit at his shop. Every other Monday afternoon Benedito holds a cockfight at a cockpit next to his *venda*. Literate and more sophisticated than the other villagers—he reads newspapers and listens to the radio—Benedito finds his village way of life more satisfying than any other and seems remarkably content. An innovator like Duga, but more easy-going and possessing a sense of humor, Benedito also uses insecticides and chemical fertilizer, has a kerosene-fueled refrigerator to cool beer for his customers, and is increasingly growing less manioc in favor of orange trees and cattle, of which he has ten.

wages. Manu's major concern is that a neighboring family has gone to court to try and force him into marriage with their daughter, claiming he seduced her in the woods some months ago and made her pregnant. "I'll go to Salvador," says Manu. "It's the only way to escape this marriage." But he stays on in the village. Of great physical strength, but totally illiterate, Manu, in truth, fears city life and that he might get drunk and into trouble. Neither he nor Benedito plan to go to Salvador for the five-day pre-Lenten street carnival that is famed throughout Brazil, saying there will be "fights and killings" and it is "too dangerous." Instead both plan to spend Carnival at a *brega*, or brothel, in a nearby town.

Benedito and Manu cutting yams.



MANU

Benedito's daily laborer, Manu, has land of his own but prefers not to cultivate manioc himself but work for others for day







JOÃO

A landless laborer, João, 41, has become one of the poorest men in the village since his conversion to the Pentecostal church a few years ago. Though his house is very neat and clean, with a small flower garden, and he dresses better than most of Guapira's men, João has become obsessed with religion and neglects his work, no longer cultivating his own manioc patch. A gentle, earnest, and cheerful man, João is forever relating stories from the Bible. "People keep insisting we Pentecostals are crazy," João says, "because we talk about the second coming of Jesus. And they make jokes about us. But the same thing happened with Noah's Ark. People didn't believe the words of Noah when he spoke of a big rain. And when they tried to go to the Ark, the angels locked it and took the key away. And the people drowned. The same thing that happened with the Ark will happen with the coming of Jesus. And he will come suddenly." João survives and manages to feed his wife and two children (who, unlike him, are Negro) by earning \$2 to \$2.50 a day, working in other people's fields.



DE NOITE

A huge Negro who is the village comedian, De Noite (whose name means "At Night") rents his eight acres to another man for \$100 a year<sup>6</sup> (a standard rate) and instead earns his living, \$80 a month or so, selling *cachaça*, the locally brewed crude rum, to the *vendas* or small hut-like taverns that line the roads in Northeast Brazil. Until Brazil's November 1976 local elections, De Noite also earned \$20 a month from the municipal government in the nearest town of Maragojipe, ostensibly for sweeping out the town plaza every day (something he was never seen to do). He lost this job after the election. He had gotten drunk at a campaign rally and called the eventual winning candidate for *prefeito* or mayor a "queer." For days after the election, De Noite sat under a tree in the village plaza, brooding on this setback to his fortunes and speaking to no one. He lives with one of Guapira's two young school-teachers, having left his wife (and grown children) in Maragojipe. A humorous, philosophical man, De Noite loves to shout and abuse poorer villagers who still drive

pack animals into the weekly Maragojipe market, while he rides by in style atop a truck loaded with *farinha* sacks and men. "Ave Maria!" he will roar in his deep bass voice. "Don't you know how to drive animals, man? Watch out, you devil!" Then he will burst into laughter. "Look at those idiots!" But adding, "We are the real idiots, riding up here and risking our lives." Once Duga caught De Noite stealing pig feed from the village's government allotment and, riding his horse to De Noite's house, revolver in hand, High Noon-style, Duga prepared for a showdown. De Noite backed down in the face of the small man's fury. "I've got all my family here to support. Why do you want to come riding up here like that? I apologize."



GETULIO

Another villager with a good deal of humor, Getulio cultivates manioc but makes most of his livelihood as a trader, buying produce in Guapira and Maragojipe and taking it by sailboat across the Bay of Todos os Santos to sell in Salvador. Though

\$300 or \$400 are involved in these transactions, Getulio's profit is rarely more than \$30 or \$40 a week. Sometimes he hires a truck, fills it with jaca fruit, and takes it all the way to Brasília or São Paulo, making as much as \$500 to \$600. Once, however, he arrived in São Paulo, after a trip through three days of heavy rain, only to find all the jaca fruit were rotten. Getulio has two wives, who are sisters, and he lives with them and their mother and his six sons. Getulio's greatest concern in life is that his smallest sons, each by a different sister, were both born blind. (Though Brazil has a long history of hereditary syphilis—it is currently the theme of the most popular television soap opera—this does not seem to be the cause.) After repeated consultations, Getulio has given up on doctors and now takes his sons to whatever faith healer, fortuneteller, or *candomblé* cultist he hears about. One faith healer humiliated Getulio before a large crowd in Salvador by telling him, "You once refused to give alms to a blind beggar and he put a curse upon you. I cannot cure your sons. Go home and pray for them." Getulio is still bitter about it. He says, "That son of a bitch lied. I give alms just as much as anyone else. How can he say I am halfway to hell because I don't give enough to blind or crippled people?" Recently Getulio heard of a *cartomante* or fortuneteller in the nearby town of Cruz das Almas. He later dreamed he must go and see her. Madame Gutenberg, as she turned out to be called, was a grotesque old lady with a painted face and a cheap black wig. She took \$5 from Getulio and told him someone had put a curse upon him. She said she could break the spell but needed \$25 for magical materials and a black rooster, which she would sacrifice. When Getulio demanded to know who had put the curse upon him, she brought a glass of water and told him to look inside and he would see his enemy. Getulio looked and saw a skull, which gave him a fright until he discovered it was merely a drawing, pasted on the bottom of the glass. "That devil woman!" he now exclaims, cursing her and retelling the episode with gusto. But Getulio never gives up hope. "I hear there's a new faith

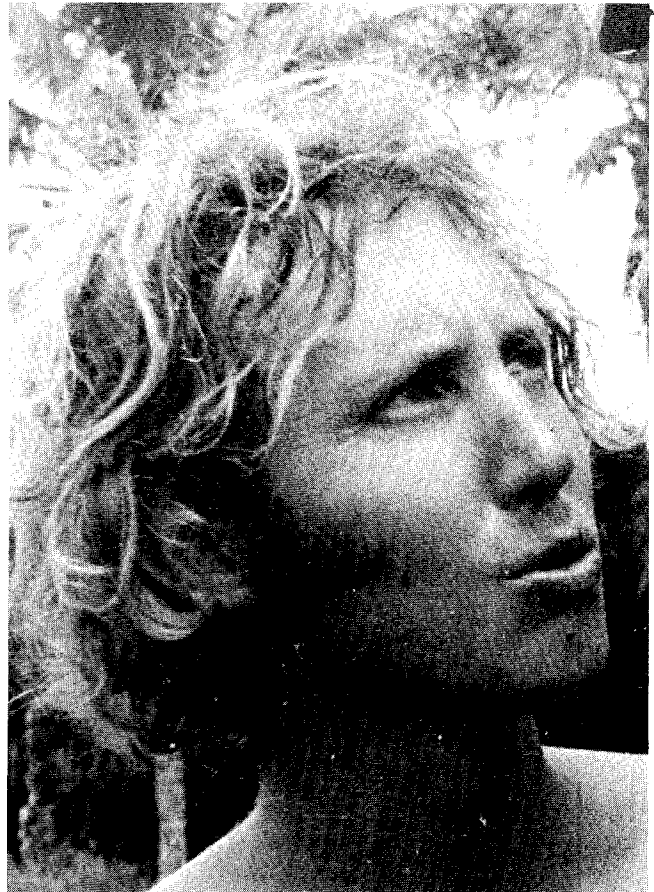
healer in Salvador," he says. "He has real power. He can exorcise demons. Those being cured rip their clothes, roll around on the floor, and try to bite people. He knows the names of all the spirits. He'll say, 'Oh, Evil One, leave this man.' He's cured ulcers, diabetes, and even cancer. I'm going to take my boys to him."



**IRENE**

All of Irene's sisters have gone to Salvador to work as housemaids, and her father has Guapira's first (battery-operated) television set. The life portrayed in shows produced in São Paulo and Rio de Janeiro is a world away from the drudgery Irene knows; like Dona Benedita she must spend half her time making *farinha*. Irene's hope is to find a husband with a decent job in Salvador and settle down in a small house in the *bairros* or suburbs.<sup>7</sup> The problem in Salvador is not to meet young men but to meet one who can either afford marriage or is seriously interested in it. The tales of pregnant girls being abandoned by their lovers in Salvador are all too familiar. At least in the village, community pressure (and the local court in Maragojipe, providing proof can be established) assures that a seduction ends in marriage and a home.

I should like to add two more to the list of Guapira's people, neither of whom are technically villagers:



**DANIEL**

Six years ago Daniel, then 23, came with the Peace Corps to Brazil from his home in Wisconsin. He has since settled down in Guapira, two years after buying, with a partner, a Brazilian professor of agronomy at the agricultural college in Cruz das Almas, a 170-acre *fazenda*, or large farm, devoted to orange trees and cattle. Since the orange trees take years to reach full production, the *fazenda* is not yet a paying concern. It survives mainly by renting out the services of its tractor to some 350 farmers in the surrounding countryside. The charge is \$7 an hour and Daniel employs a full-time tractor driver (as well as a cowboy to look after his corral and cattle).

This opportunity for the people of Guapira and the neighboring village to rent a tractor to plough their land has enabled almost everyone to double the size of their manioc fields. Duga, for instance, now has 8 of his 12 acres exclusively planted in manioc as compared with three or four acres in the past. Daniel also has 50-50 arrangements to grow peppers with Duga, tomatoes with João, and papayas with Irene's father. He is also the chief supplier (oranges, peppers, jaca fruit) for Getulio's trading operation. The presence of Daniel, the availability of his tractor, and the involvement of so many villagers in his operation has created a mini-revolution in Guapira's agriculture.



ISAAC

The son of a Syrian immigrant and himself a *fazendeiro* who also runs a profitable antique business in Marogojipe, Isaac is a former *prefeito* or mayor who has long represented the interests of the rural people. He

lost the November 1976 election by 363 out of nearly 12,000 votes cast. This appeared to reflect the growing urbanization of Maragojipe county, as the winning candidate, Antomeo, campaigned on a pro-urban platform. The night after the election results were known, Isaac returned to Guapira where he has land, and Duga, Nanino, and De Noite, plus about a dozen other men, went to see him. "They want to attack my house in Maragojipe," he said, explaining his appearance in the village. "Stay ready," Duga told him. "I want to borrow your gun, Duga," the politician said. "I already have four but I want more. I have six men guarding my house. If they come, I'll be ready to receive them!" "If you need, I'll bring my rifle!" Nanino volunteered. Huddled in the lamplight in Isaac's farmhouse, the men all tensely earnest and sitting straight-backed with their straw hats held before them, seemed like something from an old Wild West movie (which rural Brazilian life often does). As it turned out, there was no showdown. Both Isaac and Antomeo belonged to opposing factions of the pro-government Arena Party and the election was fought on purely local issues. Isaac later told me his defeat reflected a demographic shift in Maragojipe county, as more people leave the villages for the town. I asked about the lack of decent roads, any sort of rural health care, and why the village school was so primitive. Isaac blamed these on corrupt administrations in Maragojipe, saying he felt the government provided the *prefeito* with adequate funds but a lot of the money went into politicians' pockets. Corruption was so flagrant, he felt, because of the difficulty of politically organizing the rural population, especially since it was so scattered and sparsely settled. Interestingly, Isaac did not support government crop loans to farmers but instead felt the government should directly provide intermediate technology on low repayment terms, such things as small tractors, engines for the *casas da farinha*, deep wells for clean water supplies.

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If one could bring change in Guapira by waving a magic development wand, the obvious places to start would be either to replace manioc with another basic crop or install labor-saving devices in the flour-making process, improve the school and the road, dig deep wells for each family, and introduce public transport, electricity, telephones, some basic form of sanitation and rudimentary health service. A man like Duga is not truly poor—\$50 a week is not a bad cash income for a villager by global standards today—but, except for his food, he lives like a poor man because of the village's nonexistent infrastructure.

As mentioned earlier, President Geisel's government is placing new emphasis on agriculture after years of neglect. Between 1948 and 1974, Brazil's agricultural sector expanded by an annual average of only 4.6 per cent, against 9 per cent in industry. About six times as many people work the land in Brazil as in the United States, producing about eight times less. Hydroelectric power has always had a far higher priority than irrigation and, of 150,000 acres of land irrigated in Brazil in the past ten years, just over 20,000 acres were in the Northeast and over 100,000 acres in Rio Grande do Sul, Brazil's richest agricultural state. The present government is beginning to put things right: loans to farmers rose 60 per cent in 1975 and about 50 per cent in 1976.

Brazil's agriculture is unusually delicately balanced. Coffee production, hurt by frosts, fell about 60 per cent in 1976, and a wheat target of 3.5 million tons was missed by a fifth. Cotton and sugar in the Northeast were both damaged by drought. Soybeans, maize, and rice did well and are fast becoming Brazil's basic foodstuffs. (In eight years Brazil has gone from almost nothing to being the world's third largest producer of soybeans, with 11 million tons harvested in 1976.)

American agronomists tell me there is a chance that wheat or maize might do well in the Northeast if there is sufficient irrigation to cut down the risk of drought and if disease can be kept under control. (This is where big rather than small technology is needed in the form of plant breeding research and irrigation projects.) But as long as manioc remains the staple crop, some cheap form of intermediate technology badly needs to be found to peel, grate, press, and heat the tubers.

Guapira's school is extremely primitive, far below the village standards of rural India, Egypt, or even much of Africa. About a third of Brazil's \$1 billion a year social budget goes into education; between 1964 and 1975 literacy is officially claimed to have risen from 63 to 79 per cent of the total population over 15; the number of people who went to primary schools increased from 9 million to 16 million; and the number at secondary schools from 2 million to 7 million. But such figures mean little, for the primary schools at least, when you are talking about two shifts of classes in a single room (all four grades together), two poorly paid teachers (\$40 to \$50 a month each) who have only a fourth grade education; students who range in age from seven to 19; irregular hours (some boys spend only two or three hours a day in class and then only come half the week); almost no facilities (no water nor lavatory); and little status (a villager parks his dump truck on the school's roofed veranda and another slaughters a cow in the schoolyard every Saturday morning). At least half of Guapira's children do not attend school at all, their parents either keeping them home to work or lacking the money for school supplies and clothes. If poverty is that which stultifies the human person, then the village school alone is enough to make Guapira's people very poor.

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The most ambitious of what Schumacher calls "action programs" in Guapira's immediate region is a ten-year joint project by the Rockefeller Foundation and the Federal University of Bahia to "develop strategies and models to directly help both rural and urban poor." The Rockefeller Foundation is spending about \$1.5 million a year on the experiment, begun in 1973. (It has seven such projects currently; the others are in Nigeria, Zaïre, Thailand, Indonesia, the Philippines, and Colombia.)

The Rockefeller Foundation's role in Latin America has evolved from fighting such diseases as yellow fever and malaria in the 1930s, to training Latin American doctors and scientists in the 1940s, to combating malnutrition by supporting health care and upgrading universities in the 1960s, to a realization, in the 1970s, that by developing excellent doctors and universities you still do not reach the poor.

The Brazilian project is headed by Dr. Gabriel Velazquez Palau, a former minister of education in Colombia. Its aims, according to Dr. Velazquez, are to increase the university's participation in the community, create better health services, develop strategies to reduce the cost of food and improve its quality, develop a center for marine and environmental sciences, but, above all, to create development strategies to help the rural and urban poor directly. The Rockefeller local staff includes economists, doctors, agricultural experts, and education specialists (but no, surprisingly, sociologists or anthropologists).

Pilot projects are being carried out in the earlier-mentioned Salvador slum of Amaralina and in the rural villages around Cruz das Almas, a small market town where the university's agricultural branch is located (Cruz das Almas is about 140 kilometers from Salvador; Guapira is 20 kilometers further.) The region is settled by farmers who cultivate three to ten acres, most of it in manioc, with family incomes of \$800 to \$3,000 a year (Nanino is at the bottom of this scale and Duga at the top).

A weakness of the project, tied as it is to a city-based university, is the gulf Schumacher talks about between the rich, educated, and town-based helpers and the poor, uneducated, and rurally based people who need the help. Almost all the Brazilians and Americans involved live in comfortable apartments or suburban villas in Salvador, belong to the city's swanky clubs, send their children to private schools, and enjoy a social life among Salvador's elite. It is the same phenomenon one finds among most of the international development community throughout the Third World. The highly qualified professionals needed to do the job appear to require living standards for themselves that automatically take them out of the sphere of the people they are trying to help. This works in more conventional forms of technical assistance. But trying to develop strategies to help the poor directly represents a new departure. One is unlikely to gain much empathy for them through one's servants.

The most imaginative experiment in the Rockefeller program is a pilot project to provide management know-how and to guarantee capital loans from local banks to small businesses. Dr. Luis A. Fuenzalida, an energetic Chilean economist on the

Rockefeller staff, defines what he calls a "mini-enterprise" as one located usually in a slum, often family-owned, having annual gross sales of less than 60,000 cruzeiros (ca. \$7,000), employing less than five hired workers, and with poorly educated owners, few or no sources of institutional credit, and a desperate need for liquid capital. So far he and his staff of university students have surveyed 2,500 such businesses, helped 110 with management advice, and helped 65 more to get loans averaging \$1,260. Dr. Fuenzalida has visited and received guidance from England's Intermediate Technology Development Group, of which Schumacher is the founder.

Dr. Fuenzalida estimates the capital investment cost per extra job created in such businesses is only \$1,000, ten times less than in the capital-intensive large-scale industries the Brazilian government has developed near Salvador in the past decade. Among businesses helped have been radio, television, clock and battery repair shops, small furniture and metal craft factories, tapestry artisans, lathing shops, and retail stores. These are still a notch above the kind of tertiary employment most rural immigrants in Salvador are forced to do.

There is no comparable program for villagers, though one will soon be started. Here, the project has stuck to more traditional approaches, such as conducting research into cowpeas, beans, and other crops; and upgrading the agricultural college in Cruz das Almas (550 students) by sending some of its 51 professors abroad to earn Master's and Ph.D. degrees. There is almost no contact between the area's villagers and the agricultural college, its students (mostly rich city boys who failed to make it into medical, engineering, or other schools), or the foundation's several American consultants. Two baseline village studies have been done in Cruz das Almas country. One, a survey of 291 farmers by questionnaire, determined family size, work patterns, and various problems, and a second, to be published this year, studies the social and economic impact of oranges, tobacco, and manioc, all major crops in the region. But these are statistical, computerized studies, the sort of thing that often passes for "science" but tell you little really about the people and their real problems and aspirations.

The only village study under way at present involves a hired Brazilian girl who visits eight



At a venda.

farmers each week to collect data on their income, expenditure, and work patterns. This study, "Control and Analysis of Systems of Production," shows, for instance, that in the month of October 1976 Duga, who is enrolled in the study, made 1,255 Brazilian cruzeiros (about \$125), spent 1,026, with a net profit of 229. João, the only other Guapira man participating, showed an income of 739 cruzeiros, expenses of 340, and a net profit of 399. The accounting system used, which includes the labor of Dona Benedita and the children as an expense, just as if Duga paid them, distorts the picture. Anyone who has spent any time in the village knows Duga is one of its richest men and João one of the poorest. Yet this study is going to be taken seriously by the university, and presumably by others, in formulating strategies to help the rural poor. There is simply no substitute for direct personal contact if you really want to help poor people.

Much closer to the kind of aid Schumacher talks about has been the work done with Salvador's fishermen in the past ten years by Padre Francisco Barturen, a Spanish Basque Jesuit priest who, some years ago, helped to create the *Operação Rondon*, or Brazilian Peace Corps. An intense, humble,

intellectually impressive man, Barturen, now a Brazilian citizen, lives in the fishing settlement of Itapoa, on the northern outskirts of Salvador. When he first moved there, in the late 1960s, he had to win the respect of his fishermen neighbors gradually by sailing out into the Atlantic alone and coming back with a decent catch. After winning their confidence, he began to teach them how to improve their fishing methods (which he himself first went to study in Spain for a year) through better hooks, nets, and larger boats. Today the fishermen are confident, organized, and plan to build a pier, a shipyard, and open a school on fishing methods, to include courses on navigation and radio repair. Barturen today has enlisted the volunteer part-time help of 30 Brazilian professionals, including architects, economists, sociologists, doctors, lawyers, and nutritionists. He still lives in the fishing village.

In Cruz das Almas itself, the lead in directly helping the villagers to help themselves has been taken by another priest, Padre Julião, a Belgian, who has just opened a two-year agricultural high school for youths 15 to 19. Each student will spend two weeks at the school and then two weeks at home throughout the course. Padre Julião's hope is



to make them good enough farmers so none will want to migrate to Salvador. It should be noted that both priests are working with very little money.

As Schumacher observed, "The best aid to give is intellectual aid, a gift of useful knowledge." Perhaps the most successful example of all local attempts to assist small farmers directly has been the case of Daniel, the ex-Peace Corpsman from Wisconsin who has settled down in Guapira. Although motivated by making a commercial success of his *fazenda*, or orange and cattle ranch, Daniel has introduced all kinds of intermediate technology into Guapira (a reverse of the old saw, "He came to do good, but did well." Daniel came to do well for himself). But by becoming an organic part of the village—his house is no better or worse than Duga's or João's—and introducing a tractor and making it available for hire to everyone; and by sharecropping with his neighbors on such new crops as peppers, papayas, and tomatoes, as well as cultivating his orange trees with the latest methods, he has given the villagers a gift of knowledge. Schumacher quotes an old saying, "Give a man a fish and you are helping him a little bit for a short while; teach him the art of fishing, and he can help himself all his life." This knowledge works both ways; Duga, especially, has taught Daniel a good deal as well. But thanks to Daniel's presence, such technology as spraying (with pesticides and nutrients), soil testing, crop diversification, double cropping, modern animal husbandry, and countless other innovations have probably come to Guapira to stay.

Aid that works seems to be aid given directly at the village level through knowledge on methods of self-help. It can be done in individual cases; both Daniel and Baturen have succeeded. But they were there on the spot, shared the lives and conditions of those they were helping, and knew each of their neighbors individually. Can this kind of thing be replicated on a large scale, the kind of "action programs on a national and supranational basis" that Schumacher calls for? The much more ambitious Rockefeller Foundation-Bahia University experiment, worthy as it is, invites skepticism because of the communication problem. (Certainly the institutions will be improved but that is not the project's declared primary intent, to develop strategies to help the poor directly.) The World Bank has even grander similar schemes, running into tens of millions of dollars. Can they be made to work?

Dr. Gabriel Velazquez, who heads the Rockefeller Foundation's program in Bahia, says,

The Schumacher approach is a needed approach. But Schumacher sought its massive propagation. To do this you need a lot of hard, sophisticated research and a lot of training of people in a new way, so that you combine some technological knowledge with high motivation and dedication. In the past the Rockefeller Foundation in Latin America tried to develop universities as real centers of academic excellence modeled upon those in the United States and England. But now we look upon excellence in teaching and research as not the final goal but rather as instruments to help us develop a new kind of university and a new kind of leader, ones which can have a real impact on the lives of the poor. We are also trying to identify key areas in government and industry that need to be strengthened, especially in the fields of economic, social, and health sciences and education. To carry out the Schumacher approach we will need to produce university graduates that somehow combine the motivation of the priest with the know-how of the technician.

Small is beautiful but small is also small. One of the most haunting images in Northeast Brazil came to me one day in Guapira when I returned from the market with some comic books for Duga's sons. A seven-year-old boy, Oswaldo, lived in a shack behind Duga's garden with his grandmother, his mother having died and his father gone off to Salvador two years before and never come back. A field laborer, in effect, since the age of five, Oswaldo was a remarkably hard-working, cheerful, humorous little boy and I brought him a comic book, too. When I gave it to him, he grinned at the Donald Duck on the cover, and rushed off to tell grandmother, "Now I can go to school!" It turned out that she had not sent him because she lacked the four or five dollars needed to buy primary readers.

Oswaldo *will* go to school because, fortuitously, communication did take place. But how often will we ever know human needs like that? Small is enormously problematical.



## NOTES

1. See Richard Critchfield, *Egypt's Fellahin, Part II: The Ant and the Grasshopper* [RC-2-'76], Fieldstaff Reports, Northeast Africa Series, Vol. XXI, No. 7, 1976.

2. In Brazil the three preferred terms are "dark," "mulatto," or "Negro." Brazil has a long tradition of miscegenation and many Brazilians have physical characteristics from each of the three main contributing groups: northern and southern Europeans, Africans, and American Indians, although Europeans (*brancos*) predominate in the four southern states. Brazil's aboriginal Indian population, which numbered some millions in the sixteenth century, were largely killed off by diseases introduced by Europeans and by Portuguese attempts to enslave them as plantation laborers; they number 200,000 at most today and, unlike those in Mexico and other Latin American countries, have less racial impact on the modern Brazilians.

3. Guapira had a small, one-cell jailhouse, used only now and then to let some unruly drunk sober up. Theft, burglary, rape, and crimes of violence are so rare in the rural Northeast, Maragojipe county had only five policemen for some 60,000 people.

4. Here Schumacher goes a little astray. Cities in Christian, and particularly Roman Catholic, countries—the Philippines is a good example—do possess more culture and attraction than the villages. Manila, like Salvador, represents the glittery good life to most Filipinos and like the Brazilian cities, deserves this reputation. But the city has not become the "universal magnet," nor village life lost its "savor" in most of the Muslim and Hindu world, particularly in Egypt, India, and Indonesia. These countries have been centers of ancient civilizations and the high culture of the traditional past tends to be much stronger in the villages than in the westernized cities. The shadow play, *gamalan* orchestras, and all-night dance and drama performances of rural Java, for instance, are missing in the ghastly slums of Jakarta. In such societies, generally, peasants only go to the city when forced by economic necessity but they retain their village ties and culture and return to their villages when and if they can. Guapira has a great deal in common with a village this writer lived in near Zamboanga in the southern Philippines: the Roman Catholic culture with its patron saints, many holidays, the observance of Sunday as a day of rest, the

secular pursuits of cockfights, gambling, heavy drinking, and the heavy emphasis given by the men to being *macho*. In rural Brazil this takes the form of unbuttoned shirts and low slung tight pants; to be *macho* in Guapira seemed to require going about with one's bare chest and abdomen, well below the navel, exposed. Rural culture in Christian societies tends to possess a shallowness not found in regions where the other great religions dominate. This may be explained by the secularization and materialism of the Christian, Western world that have accompanied its tremendous technological advances and unprecedented wealth.

5. Each week Duga's household of eight (including four young children) consumed two kilos of rice, one kilo of macaroni, five kilos of beans, 15 kilos of *farinha*, or manioc flour, three packages of salt crackers, \$1.20 worth of bread, one kilo of tomatoes, and ten kilos of meat, mostly beef, but sometimes chicken or fish. This represents a high living standard; rural Egyptian families, for instance, generally consume only one or two kilos of meat each week.

In contrast to Duga, one of the field workers employed at the agricultural college in Cruz das Almas, supported a family of eight on one-fourth of Duga's income, or about \$60 a month, and could afford to eat only dried salt pork twice a week (fresh meat was consumed on holidays like Christmas). This family had chickens and got four or five eggs a day and also raised pigs for extra cash. The man bought a plug of raw tobacco and rolled his own cigarettes, rationing himself to eight per day. His entire income went for food and he said if he earned more he would first feed his family better and second build a new house. He described his life as *dura* (hard). To pay for medicine when his wife became ill recently he borrowed \$50 from a professor at the school; he will have to pay back \$62 in 12 months.

He had built his own mud and wattle house, buying only a hundred palm branches for \$5 to thatch the roof, tying them on with twigs. He said such a roof lasts about 18 months.

6. One could rent a farm of eight to 10 acres in Guapira for \$50 to \$100 a year, depending upon the quality of the land. Land sold for \$200 to \$300 an acre.

7. If a girl has not found a husband by the age of 25 or so, she is likely to be stigmatized as an old maid.

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