

This paper contains no report of research done. Rather it introduces a tentative hypothesis on what is happening to the peasant and his world. This hypothesis draws upon the thinking of historian Arnold Toynbee and anthropologist Robert Redfield, but only where their ideas are confirmed by this writer's observations of conditions and processes in the world peasant society over the past 20 years. These years were spent as a working reporter, mostly in Asia, but also in Africa and Latin America, and the past 8 of them were largely spent in peasant villages.

There are many ways of looking at the peasant. Besides the perspectives of the historian and the anthropologist, there are those of the specialist in agriculture, the economist, the student of religion, the political ideologue, or the creative writer. Most of those who write about peasants are scholars who, except for anthropologists who actually go and live in villages, are fairly remote from the peasants they write about. In contrast, a journalist who studies peasants has no special academic preparation other than the training of his craft; he is engaged in a kind of portraiture which he tries to make as honest and accurate as he can. Very generally speaking, he comes to the peasant with few intellectual preconceptions. The journalist is essentially an expresser, not a thinker, and his work is likely to be thin on ideas. This is what should give it its distinct and corroborative value.<sup>1</sup>

At the same time, no one, not even the journalist, can study the global peasant predicament for many years without the disparate parts starting to add up into something, however vague, resembling a generalized thesis. One of the many fundamental differences between the peasant and ourselves is that the peasant, if he thinks of the future, assumes it will repeat the past, just as it has always done. In contrast, we in the West are future-minded. We know that poor, traditional people who might be called peasants now number about three out of four of us and that there are projected to be twice as many 30 years from now.

We cannot resist speculation about what will happen then. On the one hand, there are optimistic forecasts; the Hudson Institute guesses mankind will become tremendously rich and the peasants will become people like ourselves, each with a solar-powered car and TV. On the other, there are the pessimists who warn us we will run out of essential nonrenewable resources, pollute the biosphere, perish from failures of the neuro-endocrine system caused by stress, simply stop reproducing, run out of energy, be decimated by a mutant virulent strain of virus or bacterium, indulge in mass suicide like the lemming, or blow ourselves up.

The underlying assumption about the future in this paper will be that the rate of change for the rest of this century — the next 22 years — will not

accelerate too much more spectacularly than it has over the past 23. I have known peasants for most of this period whose lives have hardly changed at all. Dr. Norman E. Borlaug, to whom I am indebted for his assistance on agriculture in preparing this paper, told me recently that only 10 to 15 percent of the world's peasants have as yet been affected by the transfer and adaptation of Western farm technology that really began in the 1960s. He said, "There is a lack of comprehension of how complex agriculture is, especially among national political leaders and among intellectuals in the West." And the West has completely failed to impose Christianity, the core of its culture and, in ascetic Protestantism, the philosophical underpinning of its technology, upon the East.

Things cannot remain the same for the peasant; the rate of population growth guarantees that. Yet I think when we try to define and describe what is happening to the peasant, we must be careful to stick to the concrete realities of the peasant world as it exists today.

Toynbee, writing in 1946, gave us a good starting point, putting the peasant firmly into a historical context:

*This neolithic peasant is the last and mightiest sleeper, before herself, whom the West has waked. The rousing of this passively industrious mass of humanity has been a slow business. Athens and Florence each*

*flashed her brief candle in the drowsy sleeper's eyes, but each time he just turned on his side and sank to sleep again. It was left to the modern English to urbanize the peasantry on a large enough scale to set the movement traveling around the circumference of the Earth. The peasant has not taken to this awakening kindly. Even in the Americas he has contrived to remain much as he was in Mexico and the Andean Republics, and he has struck new roots in virgin soil in the province of Quebec. Yet the process of his awakening has been gathering momentum; the French Revolution carried it to the Continent; the Russian Revolution has propagated it from coast to coast; and though today there are still some fifteen hundred million not yet awakened peasants — about three-quarters of the living generation of mankind — in India, China, IndoChina, Indonesia, Dar-al-Islam and Eastern Europe, their awakening is now only a matter of time, and, when it has been accomplished, numbers will begin to tell.<sup>2</sup>*

These words were written a year after the Second World War ended and before Eastern Europe became communist, the Chinese and Indochinese revolutions succeeded, the attempted Marxist-Leninist revolution in Indonesia failed, and the more recent shift of global wealth to the oil producers. Yet even 32 years ago Toynbee already felt the gravitational pull of sheer population would draw the center of human affairs away from New York to some point equidistant from Europe-North America and India-China, perhaps somewhere in the neighborhood of ancient Babylon, or, further north, to some locus between Russia and China.

Toynbee's massive *A Study of History*, which identified 21 civilizations and recorded their geneses, growth, breakdowns, and disintegrations, published in 1954, followed by a generation Oswald Spengler's *Untergang des Abendlandes*. In his work predicting

*The author shown with South Vietnamese peasant in Saigon, 1967.*



*The author shown as he conducts his first village study — India, 1959.*



*After 18 years, the author continues his study of peasants (Cairo, 1976).*



*The author shown with Mauritian fishermen, 1969.*



the decline of the West, which came out in 1919, Spengler said that civilizations—like the seasons—rose, developed, declined, and foundered in conformity to a fixed timetable. He offered no explanation of this; it was simply a law of nature. Toynbee generally agreed with Spengler but went on to suggest the possibility, based upon his study of the rise of Christianity in the decaying Graeco-Roman civilization, that new forms of the great Eastern religions might rise again to defeat the technologically superior West on a spiritual plane.

Toynbee felt the decline of the West was by no means predestined; the West could save itself if (1) in politics it established a constitutional cooperative system of world government; (2) in economics found working compromises between free enterprise and socialism; and (3) in the life of the spirit put the secular superstructure back onto religious foundations. Toynbee's central point was that, in the five centuries since Columbus reached America by sea from Spain and Vasco de Gama India from Portugal, the West had unified the earth as never before with its technology, but had failed to spread its religion. He believed the majority of mankind was suffering from the same spiritual starvation that led to the rise of Christianity amid the disintegrating Graeco-Roman civilization. Toynbee asked, "Is something like this historic denouement of the Graeco-Roman story going to be written into the unfinished history of the world's encounter with the West? We cannot say, since we cannot foretell the future. We can only see that something which has actually happened once, in another episode of history, must at least be one of the possibilities that lie ahead of us."

Christian thinkers generally accepted Toynbee's analysis. Reinhold Neibuhr wrote that

... as Toynbee points out, the failure of civilizations always involves



*With Charan, Punjab, India, 1970. something more than mere weakness of age. They perish because they make mistakes in meeting some new challenge or complexity of history. Every civilization makes some fatal mistake in the end and perishes.... It is Toynbee's great merit to see this element of tragic destiny in history where Spengler sees only the organic growth and decay of historical organisms.*

Neibuhr speculated how this might happen:

*Modern technical civilization may perish because it falsely worshipped technical advance as a final good. One portion of the technical society may harness techniques to the purpose of destruction and vent its fury upon another portion of civilization, which has grown soft by regarding comforts, yielded in such abundance by a technical age, as the final good.<sup>3</sup>*

Such warnings continue to be heard. In 1976, writing in a special survey to observe the American bicentennial, Norman Macrae, the deputy editor of *The Economist*, observed:

*The two great empires that have ruled the first two centuries of industrial advance—the British in 1776-1876, and the American in 1876-1976—have handled the task*

*of world leadership surprisingly well. But the Americans on the eve of 1976 are showing the same symptoms of a drift from dynamism as the British did at the end of their century in 1876.*

*World leadership is therefore liable to pass into new hands quite early in 1976-2076.*

Macrae felt, if we were lucky, these new hands would be Japanese. For, he wrote:

*There is a danger that the Americans, with all their power for dynamism and good, may be about to desert what should be their manifest and now rather easy destiny of leading the rest of us towards a decent world society and an abundant cheap lunch. If they do, the leadership of the world may be yielded from American to less sophisticated hands at a perilous moment.... Will America continue to believe in economic growth? Half the world will remain hungry if it does not, and that half-world may blow us up.<sup>4</sup>*

Anthropologists, the Western scholars who have lived in Eastern peasant villages in the largest numbers, have also endorsed the Toynbee analysis, most notably Robert Redfield. In an article co-authored with Milton Singer in 1954, Redfield speculated:

*The conception of progress is itself an idea shaped by and expressive of one culture and one civilization, that of the recent West. What Toynbee and others have called the "Westernization" of the world may be the spread of only parts of the ideas associated in the West with the word, "progress."*

*Not without investigation can it be safely assumed that the spread of Western ideas from the cities carries into the countryside a new and Western value system emphasizing hard work, enterprise, a favorable view of social change, and a central faith in material prosperity. In the cases of some of the peoples affected by modern urbanization these values may already be present. In other cases the apparent spread of progress may turn out, on closer examination, to be a return to ancient values, different from those of the West. Nationalist movements are in part a nostalgic turning back to local traditional life. We shall understand better the varieties and complexities of the relations today between city and country as we compare the values and world views of the modernizing ideologies, and those of the little and great traditions of the cultures and civilizations that are affected by the modern West.*

*It may be that such studies will discover greater "ambivalence" in the mood to modernize than we, here in the West, acknowledge; that the progressive spirit of Asia and Africa is not simply a decision to walk the road of progressive convictions that we have traversed, but rather in significant part is an effort of the "backward" peoples to recover from their disruptive encounters with the West by returning to the "sacred centers" of their ancient indigenous civilizations.<sup>5</sup>*

If one accepts the thinking of Toynbee, Neibuhr, Macrae, Redfield, and others like them, and, based upon my own experience in the peasant world, I do, then one

must accept the probability that something of enormous importance is going on in this world that we do not know about. Today, as one flies from one identical concrete-and-glass jet airport to another, taking identical taxis to identical concrete-and-glass hotels, all part of a cosmopolitan global network of communications, trade, and technology, it is evident that the West's secular culture has become universal among all the world's educated elites. It is equally evident that this Westernization goes down only so far and stops and that, with the current bleak outlook in energy and biological resources, is unlikely to penetrate much further. Western science has yet to come up with the industrial and agricultural technique to feed and employ enough peasants so as to give them the economic basis to become something other than peasants. Recently in Berkeley Dr. George M. Foster, one of the pioneers in peasant anthropology, told me, "Peasant studies today have come to an end." Dr. Foster felt we were entering a post-peasant era with anthropology focusing instead upon linguistics, formalism and symbolism, modernization, religion, migration to cities, and economics. I disagree. I believe the peasant is awakening, as Toynbee predicted, but that he is staying a peasant.

Throughout the East today there exists a vague, generalized feeling that there is something hollow, a spiritual vacuum, at the heart of Western civilization; over the years it has been expressed to me in interviews with such otherwise pro-Western leaders as Jawaharlal Nehru, Tran Van Huong, Anwar al-Sadat. At the same time the great Eastern religions themselves have lost their hold on the urban educated elites. In the cities of the East there is no evidence of any purposeful spiritual revival developing to challenge the West. The Far Eastern, Hindu, and Islamic religions, if one looks only to the cities, would themselves seem to be in deep trouble. However, as Toynbee reminded us, it is the civilizations *in extremis* that have produced the greatest religious leaders, most of whom were of humble rural origin. Sumer, in its last gasp, gave us Abraham; Babylonia, the Hebrew prophets. Jesus and Mohammed emerged from the disintegrating Graeco-Roman and Syrian worlds. If history is our guide and the West really is in decline, we had better look to the peasant villages of the East.

Let me offer this hypothesis:

The peasant has been awakened by the West. The West has offered him



*The peasant as refugee — age and youth in Nepal*

two main ways to modernize (Westernize): industrialization-urbanization and Marxist-Leninist revolution. Both have partially failed the peasant, the first by not supplying enough jobs, the second by not supplying privately owned land and sufficient incentives. Disillusioned, disappointed, and confused, the peasant may be expected to respond in two ways: (1) through sporadic violence and (2) through seeking new meanings to his world and to his life. This suggests he may retreat into the cultural fastnesses of his own spiritual heritage, the Islamic, Hindu, or Far Eastern civilizations, or possibly, as in the case of the South American Indian, into currently almost extinct civilizations. This may mean the rise of new religions or the revival of the great religions, not necessarily and probably not among the educated elites, but arising from the peasant himself.

This is a sweeping hypothesis indeed. I offer it simply because a subject of such magnitude becomes intelligible only to our ability to comprehend it as a whole. This hypothesis is intended to be loosely defined, a focus of attention rather than a lid on a box. I do not think that any one definition of the peasant's predicament today arises

inevitably from the facts. The difficulties of framing such a hypothesis are admitted.<sup>6</sup>

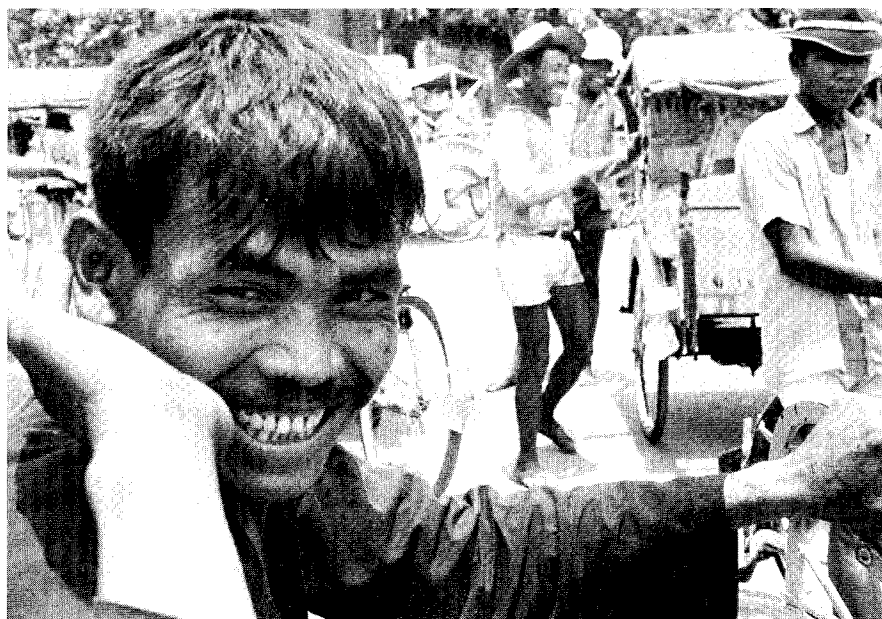
When we look at the world today we find the West occupies only a small part of the earth's habitable surface and numbers only a minority of the earth's people: Western Europe (370 million), North and South America (240 million and 336 million), and the outlying footholds of South Africa (26 million, mostly black African), Australia (14 million) and New Zealand (3 million). Japan, with 114 million, always defies categories; it has Westernized so zealously it will shortly beat the West at its own game and become the richest per capita country of all; it could also become the noncommunist world's next leader should America default. Apart from Russia (259 million) and Eastern Europe (108 million), the overwhelming majority of the earth's people live in predominantly peasant-populated countries, 2.5 billion of them in Asia and another 423 million in Africa.

In all the 260 or so countries of the world there are Westernized elites. These elites have not only adopted the material technique of the West (the industrial system), and not merely the externals of our culture (trifles like films, shirts, and

trousers), but also our social and political institutions: the Western status of women (now fighting for its life in a dozen Eastern countries), the Western method of education, and the Western machinery of parliamentary government. Even the East's main political weapon against the West, Marxism-Leninism, is a Western export, a fanatical Christian heresy which took a leaf from the book but left out the heart of the doctrine.

But subtract the numerically small Westernized elites of Afro-Asia and add the peasants of Latin America and the peasant underworld of Europe and Russia, and you have well over three of every four persons alive. Most of them, except for the declining number of African Christians and the Latin Christians, are influenced by one of the three surviving ancient civilizations: Islam, Hinduism, and the Far Eastern (whether Confucian, Buddhist, Taoist, or — let us now add — Maoist).

Both the Book of Genesis and modern scholarship put our first peasants in the land between the Tigris and Euphrates Rivers of present-day Iraq. "And it came to pass as they journeyed from the east, that they found a plain in the land of Shinar,"<sup>7</sup> or what was discovered in the 1920s to be ancient Sumer. Recently archeologists have found evidence man cultivated wheat along the Nile as early as 13,000 B.C. And in southwestern Iran I have visited archeological sites of villages dating back to 10,000 B.C. It is very possible the first agricultural settlements were in Egypt, since it was from the African jungles that man first left the apes to walk erect on the plains between one and two million years ago. A still more widely accepted theory is that man first became a shaper of animal and vegetable life around him, rather than a mere predator upon it, around 11,000 to 9,000 B.C. on the Central Asian plateau. Here, north



*Peasantization of the city — peasant migrant in Jakarta.*

of the Zagros and Anatolia mountains, wild wheat, barley, sheep, and goats can still be found. It is also generally accepted that women, the collectors—as early men were the hunters—invented agriculture. (Dr. Borlaug likes to refer to the “Neolithic woman” who started it all.)

What is firmly established is that with the retreat of the glaciers and progressive drying up of the valleys of the Central Asian plateau, animals gradually descended into newly formed grasslands and onto the Mesopotamian plain, and men followed them. In recent years strong evidence has been uncovered that irrigation was probably first invented in what is now Iran’s province of Khuzestan and that this allowed men to “journey from the east” and settle along the Tigris and Euphrates. Once on the plain, men diverged into two distinct life styles: hunters, who found field labor little to their liking and adopted instead the arts of the herdsmen (Abraham was one of them), and the first sedentary peasant farmers, whose food surpluses made possible the first towns and then the rise of urban civilization.

Since American social scientists really began systematically to study the peasant about 30 years ago (Redfield made the first peasant village study, in Mexico, in 1926-27), they have disagreed about just who is a peasant. The one generally accepted definition is that of A.L. Kroeber: “Peasants are definitely rural—yet live in relation to market towns; they form a class segment of a larger population which usually contains urban centers, sometimes metropolitan capitals. They constitute part-societies with part-cultures.”<sup>8</sup>

Redfield agreed and contended that a peasant could not exist without some relationship to the city his food surplus had created; hence before the rise of Sumer and like civilizations the peasant was not a peasant but a “primitive cultivator.” Some have argued it is not a city but the state that is the decisive criterion



*Egyptian woman.*

in deciding who is a peasant and who is not. Some include fishermen and village craftsmen as peasants, others do not. Indeed, one cannot get very deep into reading anthropology, particularly in the past decade, before peasants begin sounding like bees or ants, social insects whose institutional life follows unvarying scientific laws.

If we do we cannot be too precise. The important relationship for the peasant is with his civilization. Both cities and states are rather subordinate and ephemeral political phenomena in the lives of civilizations; cities and states appear and disappear; villages endure (some I have studied have been continuously inhabited for five to six

thousand years.) Western civilization may well be alive in its villages long after the United States has gone off the map like the Austro-Hungarian Empire. Most nation states today are not whole societies but arbitrarily insulated fragments of them. Toynbee has even described civilization as “a movement and not a condition, a voyage and not a harbor.”<sup>9</sup> And Will Durant has reminded us that all the elements of civilization now exist in every but the most remote and primitive of the world’s two million villages: the making of fire and light, the wheel and other basic tools; language, writing, art, and so on; agriculture, the family, and parental care; social organization, morality, and charity.<sup>10</sup> In terms of



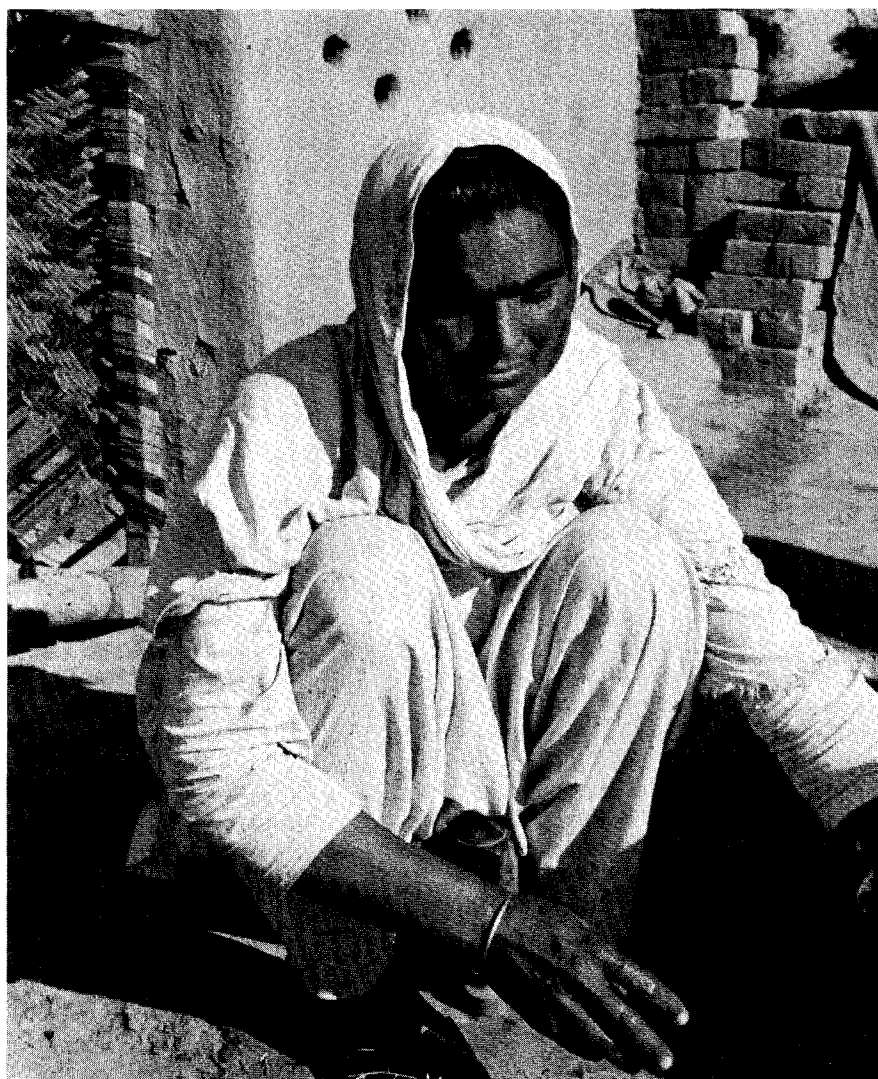
durability, the village has been man's most successful social institution.

Agriculture, the economic basis of peasant life from the very beginning, has been of three basic types:

1. *Slash-and-burn*, where virgin land is cleared of grass, bush, or forest, a hoe is used and fields are planted until yields decrease; used by fairly primitive people such as the Mayan Indians of Yucatan, the Hanunoo tribe of the Philippines, or the Yako of Eastern Nigeria, it has rarely supported more than 150-250 persons per square mile. It can be highly destructive by removing the natural vegetation and has played a role in such disasters as the Luzon flood of 1972 and the movement of the Sahara southward in the Sahel.

2. *Irrigated*, either in arid zones that receive less than ten inches of rainfall per year, as in the Nile Valley or Punjab Plain and Indus Valley, or in alluvial fans in tropical areas where water-seeking crops like rice are grown, as in the Gangetic Plain, the lower Yangtze Valley, or the Red River and Mekong Deltas. Because irrigated agriculture requires much labor and can support dense populations, it was the basis of the earliest civilizations. Either rivers or ground water are tapped for a permanent water supply and the land is permanently cultivated. It has so far not worked in the tropical lowlands of the Americas. In Sumer in 2500 B.C. it was believed to support about 50 persons per square mile; today it supports about 1,800 in rural Java and Bangladesh, 1,980 in China's Yangtze Valley, 2,300 in Egypt's Nile Delta and, the world record, close to 5,000 per square mile in a few areas of north-central Java. (Maximum urban density today is 200,000 per square mile in parts of Cairo, 80,000 in much of Calcutta, Jakarta, and New York.

3. *Dry-land, rain-fed*, based upon the plow, which first appeared in Sumer and Egypt's irrigated agriculture around 3500 B.C. The plow made dry-land, rain-fed cultivation on a large scale feasible and led to the rise of Europe; land



*Punjabi woman.*

can be cultivated either permanently or left to fallow from one to three years. If holdings are very small, dry-land agriculture is extremely hard to modernize. In preindustrial Europe it was never able to support more than 30 to 100 persons per square mile.

The first villages on the Mesopotamian plain, which practiced slash-and-burn hoe cultivation, were extremely stable social units, surviving pretty much unchanged for the span of 4,000 years between about 8000 and 4000 B.C. The invention of irrigation and the plow quickly shattered this stability, leading, in a relatively short space of time, to a surplus food supply, the emergence of towns and

cities, a rapid expansion of population and—in Mesopotamia—a decline in the absolute number of villages. Intercity warfare began almost with the first Mesopotamian temple communities, along with the construction of defensive walls, the abandonment of small, outlying villages, migration to ever-larger urban centers and the rise of soldiers, organized armies, and generals, and then kings and sovereign states. Gradually, small, family-sized farms of free men living in peaceful anarchy were replaced by larger estates, farmed with the economies of scale by serfs and, later, slaves captured in war. Like the first temple communities, most of history's greatest urban civilizations—Pharaonic Egypt,

China and Japan under the seventh century T'ang dynasty and the Fujiwara clan, Mexico under the Mayas and Aztecs, France under Louis XIV, on up to Stalinist Russia and Maoist China — practiced something close to modern state socialism, with heavy taxation of the food-producing peasants.

In Europe, the disintegration of traditional peasant society began with the introduction of heavy mold-board plows and the manorial system of farming these made possible, starting around 1000 A.D. It was hastened when calculations of price and profit in the medieval cities began to introduce modifications in crop rotation and methods of cultivation. The death blow to traditional peasant agriculture came in the eighteenth and nineteenth centuries with the gradual introduction of modern farm technology and the treatment of lands, rent, and labor as commercially negotiable properties. As mounting debt blanketed the villages of Europe, millions of peasants migrated to North America in the century after 1820; their descendants make up the majority of Americans today.

Another agricultural revolution followed in the United States from 1890 to the 1950s. The creation of land grant colleges and a countrywide agricultural extension service led to a great accumulation of basic research. A tremendous upsurge in American farm production resulted, at first due to farming virgin lands on the Great Plains, but starting in the 1930s, due to newly developed seeds, irrigation, mechanization, and the massive application of chemical fertilizer. Today modern agriculture is characterized by year-round cultivation, crop rotation (introduced in Flanders around 1600) and fertilizer (manure was first used in Europe around 1400, chemical fertilizer in 1761), plant and animal breeding, introduction of new crops from other parts of the world, and use of machinery, such as the cast-iron swing plow, threshing machines, reapers,



*Peasant economics — planting rice in Bangladesh.*

machine drills, combines first with horses, then steam, and eventually combustion engines. Howard Hjort, United States Department of Agriculture economist, told me in November 1977 he feels the American agricultural revolution has about spent itself because of rising costs.

Such agriculture is no longer largely to feed a family, but a business enterprise for reinvestment and profit. Most crops are produced for sale, not for home consumption. In modern agriculture, we also find a large amount of specialization, as in dairy farming or specialized horticulture, to produce vegetables, fruit, seeds, or flowers.<sup>11</sup>

Man's great agricultural breakthroughs then have been instrumental in creating the first urban civilization in Sumer, the spread of civilization throughout the Middle East, the eventual rise of Europe and later the United States, and the eventual imposition of Western civilization, both in technology and culture, upon the world's great cities in rich and poor, communist and noncommunist countries alike.

Historically left almost untouched have been the world's two million

peasant villages. What promises to be the greatest agricultural revolution of them all really began just a little over a decade ago. In an appendix to this paper I shall provide something of an inside story on the beginnings of the so-called Green Revolution, based upon information from Dr. Borlaug, Lester Brown, former Secretary of Agriculture, Orville Freeman, Hjort, and others. The main story is familiar: India, Pakistan, and Mexico almost doubled wheat production, enabling average annual harvests in the poor countries to rise from 49 million tons in 1961-1965 to 75 million tons in 1971-1975, a rise of 50 percent.

Recent gains have come in Latin America, Tunisia and Algeria, and Turkey, mostly in wheat. No such revolution has yet occurred in rice and maize, man's other two leading staple foods, largely because holdings are on a much smaller scale, the technology has not been as fully developed, and it is harder to apply. Don Paarlberg, for many years the U.S. Agriculture Department's senior economist, believes world food production can probably expand as fast as population growth during the rest of





*Pakistani peasants (near Khyber Pass).*

this century, not enough to alleviate chronic hunger but enough to avoid mass famine. Dr. Borlaug agrees. He said, "The technology and potential to expand production is there to keep things pretty much as they are." Hjort agrees, with the qualification that future expansion of food production will come in Africa and Asia, not in the Western countries. Lester Brown also goes along with this with the added observation that a decline in present levels of petroleum production in eight more years or so will also lead to a shift to local sources of solar-based energy, creating a dramatic realignment of world power.

Dr. Borlaug had two main concerns: (1) record harvests in North America could once more lead to "dumping," the former practice of unloading American surplus wheat on poor countries either as gifts or at long-term concessional prices (this in turn would tempt many political leaders to use the cheap wheat to feed their cities while continuing to ignore agriculture, thus setting the stage for a much worse crisis later on); (2) it is extremely difficult to reach the small one-to five-acre peasants who

make up about 80 percent of the world's cultivators with modern technology. Dr. Borlaug agreed with this writer's observation that few governments today have the competence to modernize agriculture; he named Pakistan's Ayub Khan and India's Indira Gandhi as two of the few really competent leaders we have had when it came to agricultural policy.

But Dr. Borlaug, who spent the summer of 1977 touring rural China, puts China ahead of the list in adapting American farm technology (though even China had to import a record 9.5 million tons of wheat in 1977). China's fairly secret Green Revolution began when it imported several hundred kilos of experimental Mexican dwarf wheat seed from Pakistan and Australia in 1971. In both 1973 and 1974 China imported 15,000 tons of the Mexican seed. "Agriculture has the highest priority in China," Dr. Borlaug told me. "Both in production and distribution. India still has a serious problem of distribution. It has something like 40 million tons of wheat on hand since the last harvest, but people in Calcutta and Bombay are still going hungry. In China, food goes to everyone

equitably. I've never seen a hungry person in China."

The limitation of the Green Revolution so far—and the adaptation of Western farm technology is still just beginning—is that it is based upon a genetic phenomenon. Thirty years of research—in Japan, the American Pacific Northwest, Mexico, and the Philippines—went into producing new, carefully selected strains of wheat, maize, and rice which can safely absorb up to 120 to 180 pounds of nitrogen per acre. Traditional tropical strains could do this, but the resulting heads of grain were too heavy for the thin stems of the old varieties and fell over near harvest time. This increased tolerance for fertilizer, combined with a quicker maturation period—only 120 days compared with 150 to 180 for older species—made the new seeds two or three times more productive, provided they got enough fresh water as well as fertilizer. From the mid-1960s, many of the largest countries in the Third World have been able, except for the occasional year of bad weather, to keep food production slightly ahead of population growth.

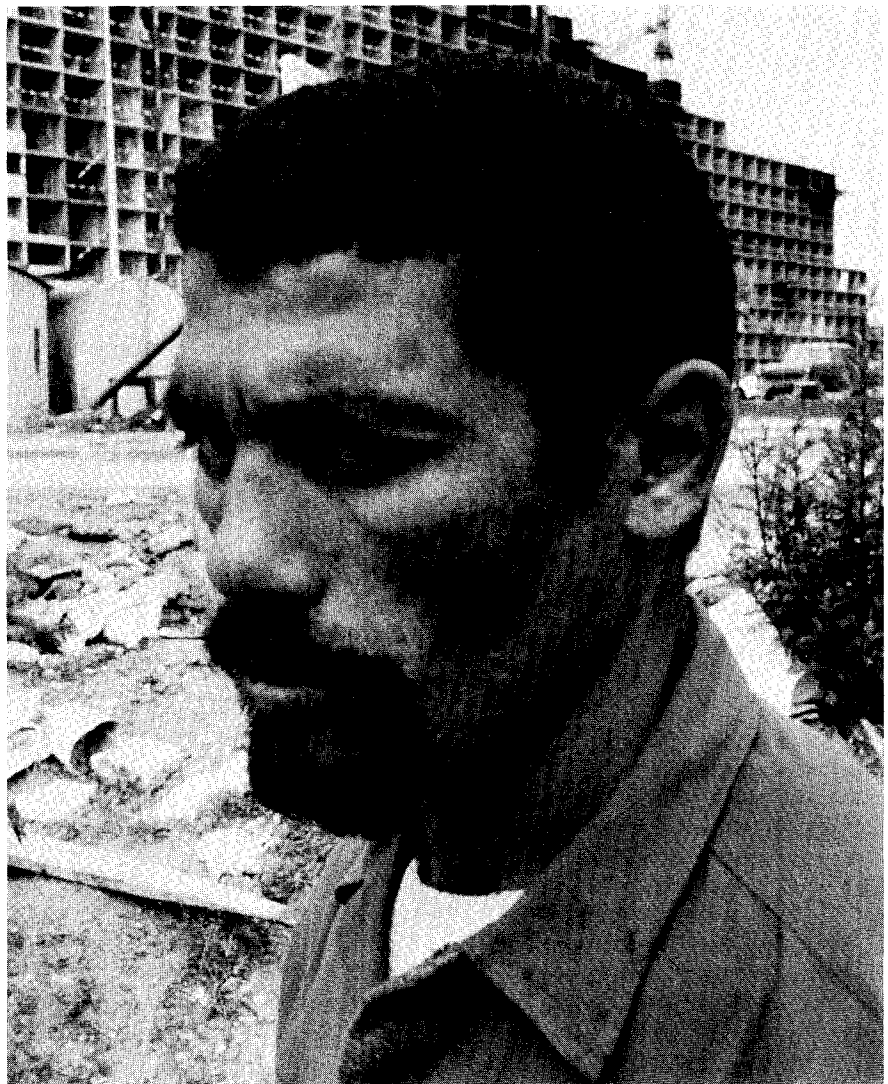
A major constraint, according to Dr. Borlaug, is getting governments to set the right policy priorities. Often, he said, the agricultural science is there, but leaders have been unwilling or unable to stimulate production for lack of trained men to show the cultivators how to plant, how to fertilize, and how to control weeds and insects. Dr. Borlaug said: "The peasants are a disorganized majority. And any politician who wants to stay in power tries to keep the organized city minority happy with cheap food. Farm prices are held down. In terms of transferring agricultural technique, it just doesn't work."

Walter Lippmann warned about this toward the end of his life, saying that

*... the number of people who need to be governed and are involved in governing threatens to exceed man's capacity to govern.*

*This furious multiplication of the masses of mankind coincides with the ever-more-imminent threat that, because we are so ungoverned, we are polluting and destroying the environment in which the human race must live. ... The supreme question before mankind—to which I shall not live to know the answer—is how men will be able to make themselves willing and able to save themselves.*

As René Dumont has written, agricultural technology is simply a way of improving the natural environment with the result "the stage of development of any rural economy can be estimated by noting the degree to which the natural environment has been changed and the techniques employed to this end."<sup>13</sup> By this yardstick, in the main, in 1978, except for areas of irrigated arid-zone farming, the peasant's natural environment has hardly been changed at all. The peasant is thus still a peasant. From what he grows on his land he must feed and clothe his family and produce a surplus to feed and clothe people in the city too. In 1960, the average peasant had about six and a half acres on which to feed his own family of six



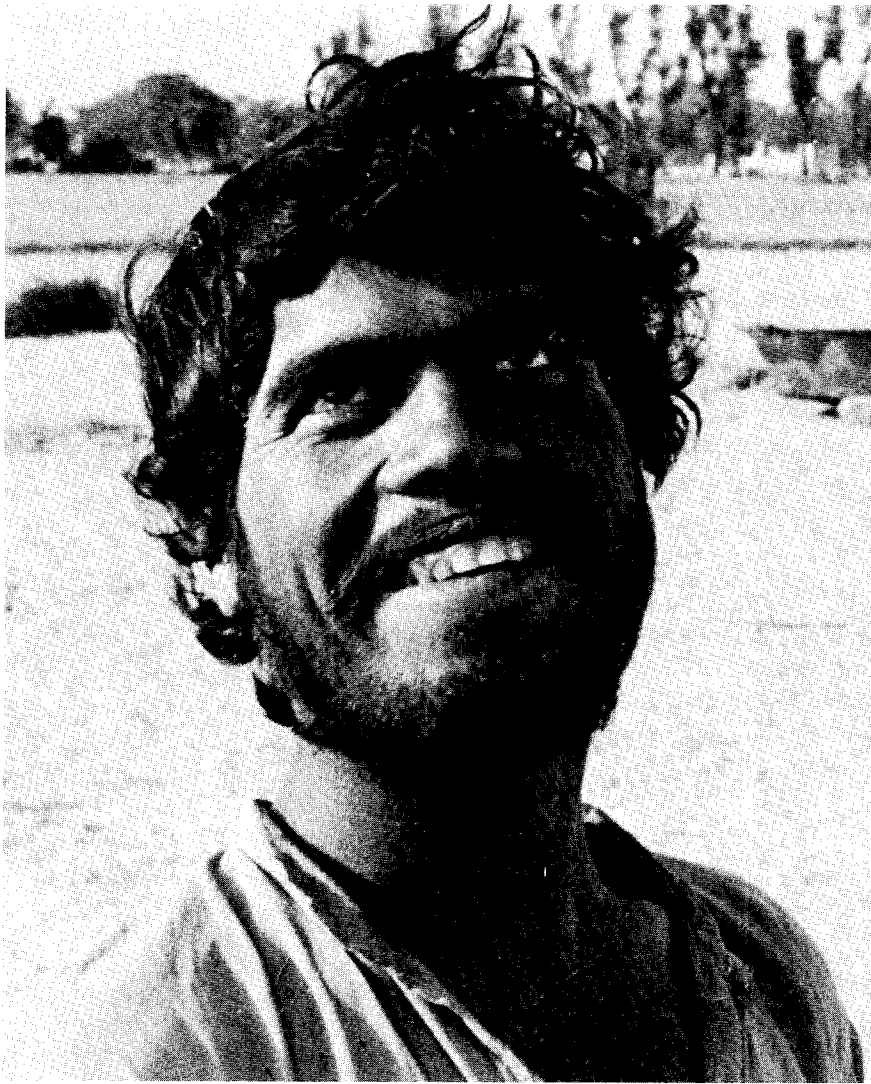
*The peasant as criminal—Morocco.*

and just over two and a half city people. By 1985, this average acreage will go down to five and those in the city dependent on it will increase to four. (It takes 3.2 billion tons of food to feed 4 billion people for one year.)

The peasant's aim is to use his resources—land, labor, water, and sun, and what technology he possesses—to maintain his family. He will try to pass his land to his children, either leaving it to his eldest son, as in primogeniture, or, more commonly, he will be expected, or required by law, to divide his land among his children. As village populations redouble, each family holding gets smaller and the peasant's life more difficult. He may try to push his younger sons

into other occupations or give his daughters a money dowry instead. When all else fails, he must send them, or allow them to go, to the city.

The greatest risk of deepening disorder today lies, of course, in this peasant migration to the cities. Before turning to urbanization, let us take a brief look at some of the peculiar characteristics of peasant social organization. Peasant culture is based upon group living; cultivation is labor intensive and hands outside the family are often needed for planting, weeding, and harvesting. The peasant ethic of mutual help takes many forms (and, as I shall argue later, is probably the origin of the Golden Rule.) There can be voluntary labor exchanges,



Indian peasant.

such as *gotungroyung* in Java or the wheat harvesting parties in the Punjab (the host wines and dines everybody in exchange for a day's labor), validated by custom and ceremony. In Mexico one finds what Foster called the *dyadic contract* (dyadic means in pairs), where peasants, based upon a common, informal understanding, exchange goods and services with other family members, neighbors, *patrons* of superior power, or even supernatural beings. Another concept of Foster's, also based upon his Mexican experience, is the *image of limited good*,<sup>14</sup> in which peasants behave as if such things as "land, wealth, health, friendship and love, manliness and honor, respect and status, power and influence,

security and safety" existed in finite amounts and are always in short supply. There is some truth in this; land, the basis of the village economy, can be subdivided but not increased.

Mutual dependency means peasants live as members of a group, if not a crowd. As Henry Habib Ayrout described the life of an Egyptian fellah:

*In the fields, as tenant or owner, he toils with his family; as a day laborer he works in a gang. Within the limited confines of the village, he lives and works more in the open than in his house. Nowhere is there privacy. The women fetch water in groups, children swarm everywhere; the daily life is collective and*

*communal. The village or its quarter, not the house, makes up the entity, a community more important in many ways than the family or clan.*<sup>15</sup>

In rural India many goods and services flow through the caste-based *jajmani* system, in which mutual dependency is institutionalized; weavers, barbers, blacksmiths, water-carriers, barn-cleaners, and other specialized village occupations are paid annual amounts of grain fixed by custom; these landless workers not only get a share of each harvest but have the right to collect fuel and fodder anywhere in the village undisturbed.<sup>16</sup>

Once outside the village, as when marketing in the nearest town, the peasant makes decisions in terms of money values; he drives as hard a bargain as he can and is completely dominated by self-interest, in contrast to the nonmonetary calculations he usually puts on economic transactions back home in the village. Prices respond to supply and demand and are established by haggling. Goods are sold both directly to consumers and to middlemen. Yet even at the market, the peasant likes to find regular patrons among the town merchants, a personalization that is mutually beneficial. Economically, the peasant is a man with little capital or prestige. He gets credit by asking a patron for a loan, by being a regular client with the same merchant, by paying high interest to a moneylender, or by giving away some part of a perishable crop or slaughtered animal in return for a future reimbursement in kind. He saves by working for others to incur future obligations from them; he may hide money in his house. Or he may engage in reciprocal gift-giving. The modesty of his credit and saving systems have to be measured against their endurance as the main economic institutions of most of mankind the past 10,000 years.

When a peasant grows a crop, his first priority is to feed his family. The bulk of his diet is wheat, rice, maize, sorghum, millet, cassava, or



*The peasant as descendant of aboriginal Indian — Mexico.*

potatoes. Invariably, he suffers some degree of malnutrition. He will do better as a Latin American (2,530 calories per day), than as an African (2,250), or as an Asian (2,160). The hungriest countries are Indonesia (1,790), Algeria (1,730), Haiti (1,730), and Upper Volta (1,710); the best fed people the Americans (3,300), the Russians (3,280), and the Europeans (3,150).

Once his family's calorie intake is supplied, the peasant must grow enough to sell to earn money for (1) seeds, livestock feed, and to replace his tools; (2) religious ceremonies, or marriages, funerals, and festivals; and (3) taxes or, if he has a landlord, rent. The peasant's dilemma is that he has created the food surpluses on which cities depend. He has to balance his family's needs with the need for money for tools, religion, and rent, the three ways the city draws off his surplus. (In Maoist China, as will be discussed in Part II of this Report, the state tried in the 1950s to maximize this surplus by doing away with religion, using tools in common, and even regulating

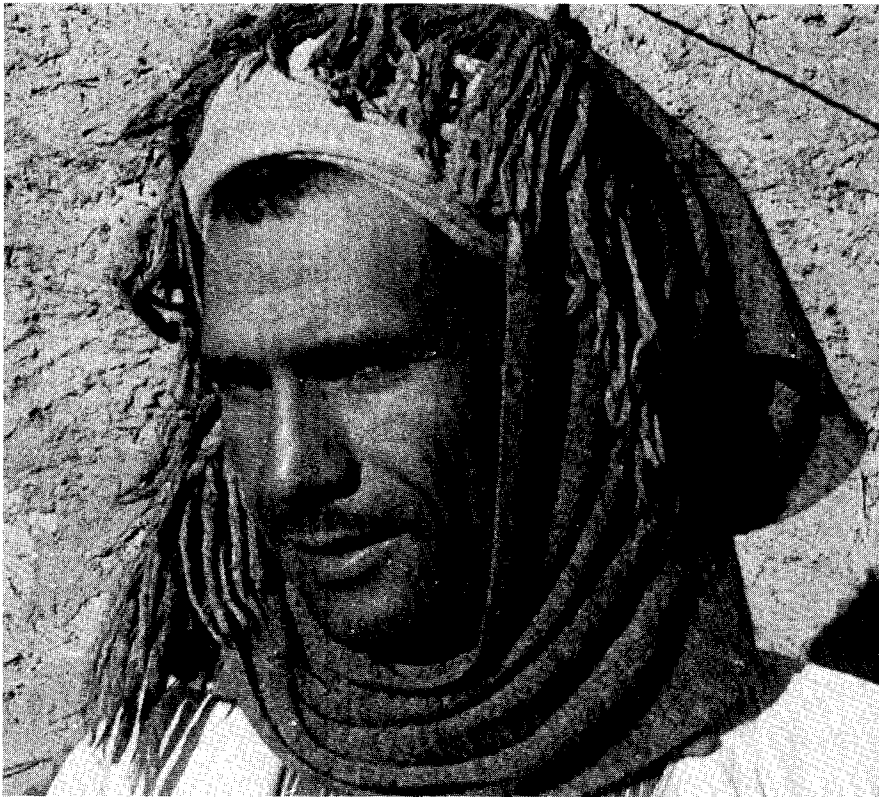
food given families through common mess halls; the savings thus generated going to the state.)

If there is not enough food to go around, the peasant can eat less or grow more. What is increasingly happening today is that he eats more grain and sells more of his higher value fruit, vegetables, meat, milk, eggs, and poultry to the city. But in bad times, if the city does not send troops to commandeer his crops, he is better off; with his few acres and hoe, oxen, or donkey, the peasant can always eat everything he grows and cut off the surplus to the city. It is this resilience that explains the long life of villages in relation to the shorter lives of cities and states.

Rent can be of four kinds, which Eric Wolf<sup>17</sup> has described as forms of *domain*: (1) feudal or patrimonial where land passes down from the lords to heirs who exercise power over both peasants and land; (2) prebental, when land or income from it is granted to officials by strongly centralized states, rather

like the "livings" that used to be given European clergy (Nehru's grandfather was given a large holding in Uttar Pradesh by the last Moghul court in this fashion); (3) mercantile domain, when land is viewed as the private property of its owner, absentee or not, to be bought and sold for profit (a major obstacle to agricultural modernization in many countries); and (4) administrative domain, when the land belongs wholly to the state, as in Russia or China, or the state retains partial control over it, as with some million acres Nasser redistributed in the 1960s in Upper Egypt or Mexico's postrevolutionary *ejido* land, which passes from father to son but cannot be sold, rented, or given to others to work.

The extended family is another peculiar and almost universal peasant social institution; it is common for several generations and the wives and children of several sons to share the same household. Nuclear, or conjugal, families do occur in peasant villages but usually only if land has become extremely



*Egyptian peasant.*

scarce, peasants have become individually paid daily wage laborers, temporarily in frontier societies such as Brazil, or, as sometimes in northern India and Pakistan, when a peasant modernizes and becomes a farmer so that he, his wife, and children with machinery can either farm for themselves or hire labor when needed. Large, extended peasant families tend to be autonomous; if they do enter into nonkinship alliances with other households it is usually on a short-range basis. But, powerless, the peasant is always seeking to broaden his kinship or quasi-kinship alliances; in China, if families prospered, they formed a *tsu* or clan; in the Latin world there is the *compadre* relationship when two adults agree to sponsor the child of one of them as a way to formalize a friendship.

The peasant lives under constant pressure; from the weather, from friction within the large, congested households, from his gossipy, prying neighbors, from outside pressures such as the state

demanding a larger surplus or conscripting his sons, or from the fluctuation of the world grain market. Then pressures affect peasants unevenly: the locusts eat the crop of one man, not his neighbor's; one man has fewer children and more land, another only daughters, still another has a better wheat harvest one year than the next. Time and chance are randomly democratic. But the scarcity of land and the ever-increasing demands of the growing cities for more food are the most common and intense pressures; for them the peasant has no answers.

\* \* \* \* \*

A peasant who migrates to a city often has to journey through time as well as space; the traditional village survives; the traditional city is almost extinct. By this I mean the kind of preindustrial city the peasant originally created with his surpluses. Gideon Sjoberg's description of such a city in 1955, given here in condensed form, retains its validity in many parts of the world today.<sup>18</sup>

*The preindustrial city is a marketing center and a center for handicrafts. It fulfills political, religious and educational functions also. It is usually limited in size by the amount of surplus food available from unmechanized agriculture and by dependence upon human and animal transport and little way to store food. Streets are passageways for people and animals, houses low and congested with bad sanitation. Ethnic groups live apart in separate quarters; there is rigid social segregation. There are streets for particular trades: goldsmiths, money lenders, butchers, tailors. "Outcaste" groups live in the outskirts. The city's center is not a "business district" but a mosque, temple, cathedral, royal palace, or fortress.*

*The economy is based upon human and animal energy. Most artisans make and sell their wares at home; there are few middlemen. Each occupation, from merchant to servant, has its "guild." Fixed prices are rare; haggling to settle bargains the rule. Adulteration and spoilage are common. There is no system of accounting and credit.*

*At the top of the class structure is a literate elite, or literati, which both controls and depends upon the masses. It enjoys power, property, and prestige, its position legitimized by sacred scripture, such as the Vedas for Hindus, or the Koran for Muslims. Social mobility is rare. Slaves, beggars, and other "outcastes," including itinerant entertainers, traveling merchants or foreigners, stand outside society. Marriage is a prerequisite to adulthood, arranged by families. Children, above all, sons, are so valued, polygamy, concubinage, and adoption are accepted to insure them. Women of the elite stay in their houses, subordinate to males. Lower class women are more free and follow peasant custom. Eldest sons are privileged.*

*Religion permeates daily life. Magic, divination, faith healing and the exorcism of demons are common. At periodic public festivals, the literati who interpret the sacred*



*scripture are given high status. Formal education is restricted to males of this elite. Teachers may also be honored. Elite tradition is transmitted to the masses through the verse and song of story tellers. Students are expected to memorize, rather than evaluate and initiate. The literati runs the government, educational, and religious institutions and exacts tribute and preserves law and order through a police force or the army. There is a court system to enforce custom and the law of sacred scripture, there usually being no other. Speech, dress, and bearing convey status distinctions, ethnic origins, occupations and position in society.*

This is a very useful description of cities, or parts of cities, like Kabul, Luxor, Fez, Benares, Damascus, Jogjakarta, medieval Cairo, Old Delhi, and Lahore, but not Bombay, Calcutta, Manila, Jakarta, Rio de Janeiro, Bangkok, or Singapore. The difference seems to be the latter group all came into being during the past century as ports of colonial exchange of local natural resources for Western capital and consumer goods. Jakarta, for instance, now a city of 6 million, was just a sleepy port of 400,000 inhabitants 40 years ago, a Dutch colony on the edge of tropical jungle. In its oldest sections you can still see the canals, short bridges, and little houses with brown-tiled roofs and diamond-paned windows built to remind the Dutch of homes left behind in Holland.

Yet even these comparatively "modern" cities are barely part of what we would call a modern urban-industrial system; they do not command enough local savings, skills, and resources. Coming more than a hundred years after the industrialization of the West, after a further century of technological advance, their new industries provide much less untrained manual work and, with the necessity for ever-higher skills, require an investment of at least \$2,000 per worker, as opposed to \$150-\$200 in the late nineteenth century. We all speak glibly of the "industrializing



*Moroccan peasant.*

and urbanizing peasant." In fact, nine times out of ten, he is doing neither. The peasant is going to the city but he is not finding jobs in industry nor is his culture becoming urban. Instead the peasant is simply physically moving to the city and taking his peasant culture with him. Industry is not drawing him in; agriculture has pushed him out. And not only does the peasant not usually find a factory job but he confronts an educated elite with a Western culture quite alien from his own.

This is creating something quite new in history: the "peasantization" of the city.<sup>19</sup>

In economic terms, we find an actual majority of the inhabitants of

at least 5 of the world's 20 largest cities—Mexico City (3rd), Calcutta (11th), Bombay (14th), Cairo (16th), and Jakarta (19th)—are new young peasant immigrants who came straight from some rural village. Of the remaining poor country cities in the biggest 20, those in China—Shanghai (2nd) and Peking (8th)—are either communist, or those in Argentina and Brazil—Buenos Aires (6th), São Paulo (8th), and Rio de Janeiro (17th)—Latin societies without an ancient indigenous culture; both stand somewhat outside this discussion. Mexico City is borderline; unlike Brazil, a frontier society, Mexico does possess an ancient civilization which shows considerable signs of life out in its villages. Taking it—and





*Sudanese girl.*

Calcutta, Bombay, Cairo, and Jakarta—we find a similar pattern: most of the peasant immigrants, lacking any skill but cultivation of the land, turn to the kind of employment that keeps a man from starvation but contributes all but nothing either to the country's development or to their own acquisition of skills and confidence: street vending, petty hawking, shoe shining, errand running, daily labor, or in tropical Asia (where walking is sweaty), pedicab pedaling. They live in great new slum areas surrounding established urban cores, crumbling ant heaps of anxious people who survive from day to day by providing each other with extremely modest goods and services. Usually they confront a scale of misery far worse

than anything they left behind in their villages.

In cultural terms, they do not find a literati who keeps the sacred scripture but instead converts to Western culture who are frantically pursuing North American lifestyles. Toynbee coined a word for this phenomenon, Herodianism, or adopting the culture of a dominant foreign power so as to live as comfortable a life as possible in an inescapable social environment. Its opposite is Zealotism, the impulse to retreat fanatically into one's own traditional culture; we are starting to see more of this too.

This peasantization of the city is particularly evident in Cairo. Medieval Cairo with its narrow,

crowded lanes, crumbling tenements and palaces, and a thousand minarets, almost perfectly fits Sjöberg's description of the preindustrial city. It centers on Al Azhar University, the cultural center of the Muslim world, and Al Husein Mosque, where every peasant immigrant feels compelled to go to pray as soon as he arrives in Cairo. Scholarly *imams* who interpret the Koran dominate medieval Cairo's class structure, which, teeming below a gigantic wall Saladin built to keep out the Crusaders, is much like the society Sjöberg described. But immigrant peasants do not settle in medieval Cairo. There is no room as its artisans work, sell, and live in the same ancient tenements, preventing mass invasions of its newcomers. Medieval Cairo, little more densely populated than it was a century ago, has resisted both modernization and immigration. Peasants have to move into new slums around it.

In 1947 just over a third of Cairo's then two million people were born in villages; today almost three-fourths of Cairo's eight million people were. A minority are bright youths in search of education and opportunity. But most are rural Egypt's "have-nots." The typical immigrant comes by train, first stays with a relative or friend from his village and later may find permanent housing in the same neighborhood. Cairo has several hundred village benevolent associations; more important are its 8,000 coffee shops, mostly run by ex-villagers who serve the needs of the men from their villages. Lower and Upper Egypt's distinctly different peasant cultures are reflected in immigration; peasants from the Delta bring their families and, better educated, hold a wide variety of jobs. The male-female ratio is about even. Upper Egyptians go into domestic or other personal services or work in unskilled labor gangs; four of five immigrants are males. Both groups, however, recreate village life in communities on Cairo's rural-urban fringe, the Lower Egyptians on the northern side, the Upper Egyptians on the southern. These closely



*Threshing wheat (in Michoacán).*

resemble villages; streets are seldom used for wheeled traffic but serve as pathways, playgrounds, meeting places, and to tether animals.

Housing is much more congested in Cairo. Many immigrants seek the top floor of a tenement so they can make an earthen, flat-topped village oven to bake bread (and sleep upon on cold nights). A high four-poster bed with wrought-iron frame embellished with gilt remains the main status symbol, as it is in the villages. Dress changes little; men cling to the *galabiya*, or long, loose gown of the fellahin; women may discard the black veil over their high-neck, long-sleeved gown, though many mosque are campaigning among women to keep the veil. Upper Egyptian males especially, may completely reject urban life, confine their social activities in Cairo to the coffee house of their fellow villagers, and feel their "real life" begins on infrequent visits home to the village.

Even at work these immigrants cluster together; often gangs of laborers are all from the same village. Women attempt, with less success, to recreate their village social life in Cairo; births, deaths, marriages, circumcisions, and religious festivals provide countless visits to the homes of fellow village women.

What is true of Cairo is equally true of Jakarta or Bombay. Sociologists customarily hypothesize that large numbers of heterogeneous people in dense, permanent settlement in cities tend to become anonymous, sophisticated, tolerant toward change, and dependent upon impersonal relationships. Eric Fromm, David Reisman, and others have told us that the urban outlook, ethos, and personality are depersonalized, individualized, emotionally shallow and atomized, unstable, secularized, blasé, rationalistic, cosmopolitan, highly differentiated, self-critical, time-oriented, subject to sudden

shifts in mood and fashion, trendy, "other directed." The consensus of such descriptions and their wide acceptance suggests that there is some general psychological consequence of urbanization in the West. It is probably also true in developing societies where a great indigenous civilization never existed (Brazil) or has come close to being extinguished by Westernization (the Philippines). And true of the Westernizing elites. It is not true of the peasants from the Islamic, Hindu, or Far Eastern civilizations nor will it, I suggest, ever be. In cities where such civilizations are strong it is quite possible to lead a fairly circumscribed, peasant-style existence outside and in contradiction to the stream of Westernized middle- and upper-class life. Peasants in such cities actively try to recreate village social organization and to cluster together with their fellow villagers to protect themselves from the shock of anomie.



Philippine woman.

Robert Redfield and Milton Singer, writing in 1954, were particularly helpful in explaining this phenomenon of city peasantization, although most of it has of course taken place since then. They described two types of city: (1) the city of *orthogenetic transformation*, or the city of moral order and (2) the city of *heterogenetic transformation*, or the city of technical order.<sup>20</sup> The orthogenetic city, such as Peking or medieval Cairo, was the center of culture, political power, and administrative control; local religious and moral norms prevailed, and a literati interpreted sacred scripture enforced by a ruler. In the heterogenetic city, the local culture has collapsed. Its men are concerned with the market, producing goods, expedient relations between buyer and seller, ruler and ruled, native and foreigner. Priority is given economic growth; common types to be found are businessmen, administrators alien to those they administer, and rebels,

reformers, planners, and plotters of all kinds.

Redfield and Singer questioned whether heterogenetic cities (the nineteenth-century colonial ports such as Jakarta, Calcutta, and Manila) could change their cultural role now that we have entered the postcolonial age. They concluded: "They are not likely to live down their heterogenetic past, even as centers of nationalism and of movements for revival of local cultures." Like Sjoberg's preindustrial city — the orthogenetic city under another name — the Redfield-Singer hypothesis is another useful tool when it comes to trying to understand what is happening in the great Eastern cities today (for instance, it is evident that the heterogenetic cities — Manila, Jakarta, Calcutta — have far more crime than the orthogenetic ones — Delhi, Peking, medieval Cairo).

Redfield's widely accepted concept of the *little tradition* of the village and the *great tradition* of the city is also illuminating;<sup>21</sup> culture, in Redfield's view, originated in the peasant-populated countryside and flowed into the city where the literati did not repudiate the peasant values but rather systematized them. In Redfield's words:

*In a civilization there is a great tradition of the reflective few, and there is a little tradition of the large unreflective many. The great tradition is cultivated in schools and temples; the little tradition works itself out and keeps itself going in the lives of the unlettered in their village communities. The tradition of the philosopher, theologian, and literary man is a tradition consciously cultivated and handed down; that of the little people is for the most part taken for granted and not submitted to much scrutiny or considered refinement or improvement. . . .*

*The two traditions are interdependent. Great tradition and little tradition have long affected each other and continue to do so. . . . The ethics of the Old Testament arose out of tribal peoples and returned to peasant communities after they had been the subject of thought by philosophers and theologians. . . . Great and little tradition can be thought of as two currents of thought and action, distinguishable, yet ever flowing into and out of each other.*

The little and great tradition, he went on, develop institutions to promote "a common understanding as to the meaning and purpose of life, and a sense of belonging together, to all the people, rural and urban, of the larger community." Such institutions, he said, can include (1) sacred scriptures embodying the great tradition (the Torah, Bible, Koran, Vedas, Buddhist "Three Baskets," Confucianist 13 classics), literati to interpret them (rabbis, priests, *imama*, Brahmins), eminent men who embody the great tradition and mediate it to the masses (Nehru

Mao, Pope Paul), and physical places like monuments or sacred or patriotic shrines. In time a cultural gap grows between village and city as the literati transform the simple values and world view of the peasant culture to a "degree of generalization, abstraction and complexity incomprehensible to the ordinary villagers, and in doing so leave out much of the concrete local detail of geography and village activity." Generally, Redfield argued, a city-peasant cultural gap is not serious as long as both belong to a common civilization and peasant and urbanite alike share "a consciousness of a single cultural universe where people hold things sacred."

The wisdom of Redfield's analysis becomes evident when applied to a concrete situation. I have accompanied Egyptian fellahin immigrants to Cairo and used to be mystified by their reactions. If we visited medieval Cairo they felt natural and had a sense of belonging; as an orthogenetic city it presented a culture that merely carried forward in a systematic and reflective way the fellah's own village culture. But when we moved into modern Cairo along the Nile, with its tall modern buildings, industry, traffic, and mostly Western dress, they felt uncomfortable and alienated, even threatened. In Redfield's terms, they found themselves in a heterogenetic city "where original modes of thought have authority beyond or in conflict" with the fellahin's traditional Islamic civilization. When such a migrant stays on in Cairo he encounters a whole range of basically alien thinking: (1) money values geared to the technological-industrial order; (2) new sentiments of common cause such as nationalism, class consciousness, ecumenical religious reform, and such unfamiliar social types as the reformer, agitator, nationalist leader, tyrant, assassin, missionary, or foreign teacher; (3) an unstable future outlook (along the rural Nile the future merely repeats the past), as in reform or revolutionary movements, future myths and

future planning. The immigrant will be bombarded with future views that are optimistic, pessimistic, radically reformist, escapist, defeatist, or apocalyptic. At the same time, every day, the peasant is forced to struggle hard for a meager wage amid the most terrible conditions: congested tenements or shantytowns without sewage, clean water, decent schools, health care, or electricity. He also faces crime, outbreaks of disease, feelings of claustrophobia and, above all, alienation from the literati who once would have given him explanations and justifications. Since he can no longer look to this Westernized elite for guidance and cannot obtain or hope to obtain the economic means to Westernize himself, the peasant is likely to retreat back into the fastnesses of his familiar village culture and cling to it as long as he possibly can.

Redfield's concepts of the cities of orthogenetic and heterogenetic transformation and the little and great traditions, I have found, are sometimes crucially misinterpreted to mean that culture is largely the work of "an innovating urban elite." Redfield fortunately took pains to refute this; he said that peasant culture "does not become inert," but may possess "a greater vitality and disposition to change" than the codified urban culture. He stressed that "the processes of cultural innovation and 'flow' are far too complex to be handled by simple mechanical laws concerning the direction, rate, and 'flow' of cultural diffusion between city and country. The cities themselves are creatures as well as creators of this process."

Toynbee, the historian, predicted in mid-century that the awakening of the peasant was "only a matter of time" and that when this happened, "numbers will begin to tell." Redfield, the anthropologist, agreed and provided us with useful concepts to show how the cultural interplay between peasant and city works, or fails to work. The economists and agricultural experts have given us a fairly clear picture of what we can expect to happen in

the villages in the immediate decades ahead. All the political and economic doctrine that so absorbs us today is of Western and city origin; the idea of progress, the ideologies of nationalism, socialism, communism, capitalism, and democracy emerge from the minds of Western urban intellectuals. No religion ever has. And the states of mind of Oriental and African peasants today do not at all duplicate the minds of the exponents of these Western urban doctrines (even nationalism has never been generally accepted by the peasant, who identifies himself with older local and regional groupings).

Almost all the great religions are of rural origin: Abraham was a herdsman, Zoroaster raised cattle, Jesus was a village carpenter's son, Mohammed a shepherd and later a petty trader, and Buddha, though a Hindu prince, came from an impoverished backwater of Nepal's malaria-ridden *terai*. These religions were formed as little traditions in revolt against existing great urban traditions that had somehow failed, just as the West, both spiritually and technologically, is failing the peasant now. He is caught in the same mood of revolt; everything suggests Toynbee was right and that this peasant revolt will take on a highly spiritual character. I believe this to be the epochal event of our times and to study it we must go directly to the peasant outside the realm of our own Western concepts and their Westernized exponents among the world's urban elite. For prophets come from villages.

(January 1979)

## NOTES

1. See my "Look to Suffering, Look to Joy: Robert Redfield and Oscar Lewis Restudied," *AUFS Reports*, Nos. 7, 20, 1978, for discussion of journalistic as opposed to anthropological methods of reporting.
  2. Arnold J. Toynbee, *Civilization on Trial* (London: Oxford University Press, 1946). Also, Toynbee, *A Study of History* (London: Oxford University Press, 1957).
  3. Reinhold Niebuhr, *The Nature and Destiny of Man* (New York: Charles Scribner's Sons, 1953), pp. 303-304.
  4. Norman Macrae, "America's third century," *The Economist*, October 25, 1975, survey, p. 3.
  5. Robert Redfield and Milton B. Singer, "The cultural role of cities," *Economic Development and Social Change*, Vol. 3, 1954.
  6. Very possibly we should be more concerned that in a very few years small groups of fanatics and terrorists will probably have the capability of destroying the planet and the biophysical sciences will be able to control behavior and change personality. Yet such bizarre dangers seem less significant to me than the possibility that the East will spiritually reject the technological culture that gave birth to such dangers. As a former political journalist and war correspondent, I am conscious that it is the sensational or tragic or catastrophic events which occupy the headlines of our newspapers and the foregrounds of our minds. They loom out of all proportion when they happen but are quickly reduced to size by the perspective of time. This is true of most wars, revolutions, massacres, terrorist acts, famines, gluts, slumps, or booms. The things that make good headlines attract our attention precisely because they are on the surface of the stream of life. It is like watching a river in flood; our eyes go to the wreckage, the drowned animals, the uprooted trees, the shattered houses passing by. But of course we are aware it is the deeper, slower currents that are deciding things; it is they which will stand out huge in retrospect when the sensational passing events have dwindled, in perspective, to their true proportions.
- The same thing happens when you are flying from Delhi to Kathmandu. The nearest view of the Himalayas is not the best one. While you are actually over the mountains you see nothing but peaks, ridges, gullies, and crags. It is not until you have the mountains behind you and are looking back at them as you approach the Gangetic Plain that they rise up at you in their magnificent order—Annapurna, Machhapuchere, Everest, Katchenjunga—peak after peak. It is only then that you have a panorama of the Himalayas themselves. With these visions in mind, I believe people in the future will be able to see our times in better perspective than we can. What are they likely to say about us? They will note the beginnings of international cooperation in certain areas and some evidence that free enterprise and socialism are finding ways to work together as they grow more alike. They will probably see faint flickers of spiritual revival in the West; yet Christianity seems likely to continue its retreat. In a knowledge-intensive culture, every priest and preacher fears accusations that he is an ignorant zealot threatening people with thunderbolts and hell-fire unless they believe a Bible that is partly fairy stories or myths lifted from earlier religions. Yet it is precisely the myth and magic that the peasant needs and wants. His awakening and rejection of Western rationalism in favor of Eastern spiritualism is likely to loom up gigantically.
7. The Book of Genesis, 11:2.
  8. A.L. Kroeber, *Anthropology* (New York: Harcourt, Brace, 1948), p. 284.
  9. Toynbee, *Civilization on Trial*, pp. 55-56.
  10. Will Durant, *The Lessons of History* (New York, Simon and Shuster).
  11. One solution for Egypt's hard-pressed Nile Valley would be to go from traditional grain and forage crops into horticulture; Sadat told me last year he favored such a shift, as does a Ford Foundation agricultural team in Cairo. Dr. Borlaug feels it would be too disruptive of the Nile's age-old production system, which has not been altered by the Aswan Dam as much as most people think.
  12. Lippmann quoted from Richard Critchfield, "Feeding the Hungry," *The New Republic*, October 25, 1969, pp. 16-19.
  13. René Dumont, *Types of Rural Economy; Studies in World Agriculture* (London: Methuen, 1957), p. 1-9.
  14. George M. Foster, *Peasant Society; A Reader*, edited by Jack M. Potter, May N. Diaz, George M. Foster (Boston: Little, Brown, 1967), pp. 213-230, pp. 300-321.
  15. Henry Habib Ayrout, *The Egyptian Peasant* (New York: Beacon Press, 1963), p. 87; translated by John Alden Williams, first published as *Fellahin* in 1938 in Cairo.
  16. The Hindu caste system is not entirely the unmitigated evil Mahatma Gandhi gave us to believe it is; Gandhi's attack on Untouchability was motivated by Christian, not indigenous Hindu, religious teaching.
  17. Eric Wolf, *Peasants* (Englewood Cliffs, N.J.: Prentice-Hall, 1966), p. 453.
  18. Gideon Sjoberg, "The Preindustrial City," *The American Journal of Sociology*, Vol. LX, No. 5 (March 1955), pp. 438-445.
  19. The first one to draw attention to the phenomenon of the peasantization of the city, as far as the author is aware, was Janet Abu-Lughod, of Smith and the American University in Cairo. See her "Migrant Adjustment to City Life: The Egyptian Case," *The American Journal of Sociology*, Vol. 47, No. 1 (July 1961), pp. 22-32.
  20. Redfield and Singer, *op. cit.*
  21. Redfield, *Peasant Society and Culture* (Chicago: University of Chicago Press, 1956), pp. 68-71. See also Redfield, *The Primitive World and its Transformations* (Ithaca: Cornell University Press, 1953).



## Appendix

## The Green Revolution; How It Almost Didn't Happen

In an interview in his office at the Centro Internacional de Mejoramiento de Maiz y Trigo (CIMMYT) near Mexico City August 5, 1977, Dr. Borlaug related what a cliffhanger getting the Green Revolution launched really was. Winning acceptance of scientific farming is not as easy as one might expect. In Dr. Borlaug's words:

"I came down here in '44; our main task then was to try and grow wheat from the Yaqui Valley at 28 degrees latitude up at Toluca at 18 degrees latitude, which meant it had to be nonsensitive to the length of day and resistant to many forms of disease. I got tired of reading that the Mexican varieties need fertilizer. Like hell they do." He told how easily farmers can lose faith in scientists. In Sonora he was trying to get Mexicans to use fertilizer when a shyster salesman sold them the wrong kind for the soil. "'Oh, my God,' I thought," Borlaug said, "'the whole fertilizer program will be set back five or six years.' I tried to find the fertilizer man, but he skipped out. Again acceptance of modern methods all hung by a thread there. Some little slip and it looks like science is a disaster. The same thing almost happened with the Green Revolution."

"Anyway when things worked out here and the time came to turn over this program, I wanted to have a crack at soybeans in the tropics. But Rockefeller said no, stick with wheat. When we got to Asia, the first thing we had to do was get a new attitude among the young scientists. They all had advanced degrees from the United States or Europe, ran around in white coats in laboratories, living in a very sophisticated, isolated scientific world, chasing their academic butterflies. I got Rockefeller to put up a modest sum of money which we gave the FAO and they found the people. We had to teach those

kids to make science and technology work so we could expand food production and teach them there could be dignity in human sweat even if you were a Ph.D. I got called back to India through Dr. Cummings (Dr. Ralph R. Cummings, who played an important role in upgrading agricultural research in India). We had just trained in Mexico our first group; there were a couple of Pakistanis and Egyptians, but no Indians. So in 1961 we went out to the research station near Delhi where Swaminathan and Joshi (two eminent Indian agricultural scientists) worked and we just had three or four rows of dwarf wheat planted. 'Do you think these seeds could be transferred to our climate?' they wanted to know. 'I can tell you in a couple of weeks,' I said, 'because some of my Egyptian and Pakistani trainees took some home.'

"Pakistan was advised I was coming and I was met by some senior scientists. We looked at all the plots; they showed us all the conventional stuff. Finally I asked, 'How are the Mexican seeds doing?' 'They're not adapted here, one of the senior men said. And that Mexican wheat

looked terrible. 'Have you fertilized and planted them decently?' I asked. Then that night the two trainees who had been in Mexico sidled up and said they wanted to show me something at daylight. Hell, I was up before daylight and waiting for a knock on the door. One of the boys told me, 'They wouldn't let us plant the Mexican seed right or fertilize it.' They had taken some of the seed to a plot the senior men didn't know and secretly grown some. And it looked marvelous. In Egypt it was much the same story; the senior scientists had refused to cooperate but our trainees had raised the Mexican wheat on their own.

"When I saw the dwarf varieties were doing fine in the tropics, I told those senior scientists, 'Why don't you get on this train? It's about to leave. If you hurry you can jump on the caboose. You can be the big heroes.' You know what they told me? 'What if something goes wrong? It's my family and my living, Dr. Borlaug. You'll go away; I have to live here.' I just went on. 'And I don't mean just catch the train. From now on, we've got to get together. No more chasing academic butterflies, research



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*Dr. Borlaug and trainees at CIMMYT in fields of dwarf wheat that contributed to the Green Revolution.*

papers, white coats in laboratories, or anything that doesn't fill people's bellies.'

'Well, it worked. In the winter of '61-'62, we planted 100 kilos of four different wheats at IARA in Delhi. Then we had to fight the extension service. How did you get it off the station? So we told the extension people we needed to do some 'micro-plot' testing on farmers fields. It was a subterfuge. We got all the research scientists — Glenn Anderson (a Canadian who is now Borlaug's deputy at CIMMYT), Swaminathan and Atwal in India and Narvais, Kureshi and Munshi in Pakistan, to plant these micro-plots in the 1962-63 season. Then we got the director of research, director of extension, and the soil fertility man — he was a big roadblock as he was against chemical fertilizer — to come to Mexico and we showed them the wheat in the Yaqui Valley. These

were Pakistanis and they spent two days at the research center. We put them in the hands of Mexican farmers. At the end, Narvais said, 'We want to put it out in 900 stations.' And Swaminathan, who is one of the world's best wheat scientists, agreed for India. India took 250 tons and Pakistan 350 tons of seed. Then Pakistan on the basis of rather large plots scattered around, decided to import 18,000 tons of seed.

'It was 1965. We planned to send the seeds on some freighter out of L.A. Then the Watts riots broke out and the trucks couldn't get to the pier. Narvais (then Pakistan's director of wheat research) was in L.A. and he finally called and said, 'We're loading and we'll be ready to leave in five hours.' Then it turned out the Pakistani check for about \$100,000 to pay the Mexican government for the seed had been incorrectly endorsed and it

bounced. So there was the government of Mexico demanding immediate payment. The seed was on the way. Mexico was yelling they weren't being paid. Then India and Pakistan went to war. I called Bucha in Rawalpindi (Bucha was then Ayub Khan's top agricultural aide) and he said, 'Don't worry about the money; it's been deposited. And if you think you've got problems; I've got problems here. Bombs are falling in my backyard.' Rockefeller kept calling from New York, demanding to know why we hadn't paid the Mexican government. I slammed down the phone and stopped taking calls. 'I won't talk to anybody from New York,' I told my secretary. Then Pakistan was afraid India would confiscate their seed as the freighter was scheduled to call at Bombay. So we cabled the ship and they unloaded Pakistan's seeds in Singapore for transshipment.

"I flew out to Pakistan and found we were only getting 20-25 percent germination from the seed. I thought the whole thing was destroyed. I told them, double the seed rate, put on more fertilizer, hang the expense. I wanted to call India but because of the war I had to go through Mexico. The seed looked miserable. Later we found out it was damaged in the warehouse in Mexico from over-fumigation. The germination rate for some of the seed was as low as 20-30 percent. I told both the Indians and the Pakistanis, 'You send top officials to supervise the inspection of the fields, bagging and loading of the seeds. We can't afford to have anything else go wrong.' Again it was all hanging by a thread. Some little slip and it looks like a science disaster. Somebody overfumigates a warehouse.

"But finally scientific agriculture is respected in Asia."

Then one day in 1970 the funeral of President Cardenas was to be held in Mexico City. It has rained the night before and Dr. Borlaug wanted to do some work in the wheat fields; he decided to skip the funeral, thinking his absence would never be missed. He was out working, covered with mud, when a car pulled up and several Mexicans jumped out and called, "Who's Borlaug?"

"I am. Now what have I done?"

"You've won the Nobel Peace Prize."

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Dr. Borlaug was not aware until I told him of the role President Lyndon B. Johnson had been playing behind the scenes. Johnson had the harsh practicality of a once poor Texan who had seen the Pedernales River Electric Cooperative transform a hard frontier; he remained an old fashioned populist. When famine in India accompanied the end of the war with Pakistan, and India appealed for emergency wheat shipments (it was eventually to get 10 million tons), Johnson sent his Agriculture Secretary Orville



*Keeping the Green Revolution going.*

Freeman to Rome to meet India's Agriculture Minister C. Subramaniam. As Freeman told me some years later, "I told Subramaniam the President has given me just one question to ask, 'Does India want to feed its people?' If the answer was positive, the wheat shipments would be forthcoming, but on a short tether basis, and in return for carrying out a list of things Johnson wanted India to do to grow more of its own food." The list included higher farm prices, much more investment in agriculture, and the steps needed to fully utilize Dr. Borlaug's new dwarf wheat varieties. Lester Brown was also involved in the administration of this "short-tether" policy, which left him with a firm conviction that

future American food aid should be tied to agricultural investment by recipient governments. Indeed, two years ago Brown, who has since left the Agriculture Department to direct the Worldwatch Institute in Washington, proposed the United States and Canada form a joint commission to work out such policies toward the Third World's grain importers. According to a senior CIA source, Johnson used the same kind of pressure on Indira Gandhi when she succeeded Lal Bahadur Shastri as India's Prime Minister. The two met alone in the White House and no records were kept of their conversation; but Johnson reportedly laid down the law on what India's future agricultural policies must be if it



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expected American wheat to rescue it from famine. Some have said Mrs. Gandhi never forgave Johnson.

During our day-long talk in Mexico, Dr. Borlaug was astonished and moved to learn of Lyndon Johnson's secret role in the Green Revolution. He felt President Carter's policies still remained untested. "Carter's always talking about human rights," Dr. Borlaug said, "but I'm just afraid this will have the wrong effect. In poor countries, city people are better organized and politicians want to keep them happy with cheap food. In terms of transferring agricultural technique, it just doesn't work."

The dilemma is a real one for most heads of government. As Pakistan's

former Prime Minister Zulfikar Ali Bhutto told me in 1974, "In economic terms I know there should be a rise in farm prices so our farmers will grow more food. But I have to think about the political repercussions. This is a wheat-oriented economy. If wheat goes up, everything goes up. If we raise the price we pay farmers for wheat, inflationary pressure would become unbearable."

Similarly the late Sheikh Mujibur Rahman of Bangladesh told me just months before he was murdered in a coup d'état, "If I have to purchase so much food outside, I have to divert money away from agricultural production. It is my most terrible problem."

One solution is to do what the Philippines' President Ferdinand Marcos did in 1972; he declared martial law, assumed dictatorial powers and then raised farm prices. But at a cost. As Marcos later admitted to me, "the bad image from martial law affected the Philippines' credit, markets, investments and sources of raw material, including oil."

Even the late Jawaharlal Nehru put top priority on providing cheap food to Calcutta, Bombay, Delhi, and Madras. In the last interview I had with him, two months before his death in May 1964, Nehru said his greatest fear for India's future was not famine but "urban revolutionary forces trying to achieve their ends by violent or subversive means." Nehru said, "By creating an atmosphere of violence and conflict in the cities, such forces may arise from any side. They can be communist, social fascists led by big industrialists or Hindu fascists. This could be prevented, Nehru felt, only "if the ruling Congress party stays cohesive and dedicated to favoring India's have-nots above all else. The mass of people must rise." But in a country where 80 percent of the people are peasants, this can only come through agricultural modernization. The real Green Revolutions are only just beginning.