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## ABSTRACT

This World Bank (Washington, D.C.) kit is a case study designed to introduce secondary school social studies students to a project in Kenya established to strengthen small-scale industries. The kit contains a pamphlet, a booklet, a sound filmstrip, and a teacher's guide. The pamphlet, "Economic Summary: Kenya," points out the severe problems Kenya faces in raising standards of living. The booklet, "Small-Scale Industries in Kenya," examines Kenya Industrial Estates, Limited (KIE), a government-owned company set up to assist small-scale industries. It tells the story of a carpenter who wants to expand his furniture business, and of the people who help him. The important role that small-scale industries play in the process of improving living conditions is illustrated. The filmstrip, "Small-Scale Industries in Kenya," reviews the contents of the booklet. The teacher's guide contains: (1) objectives for learning; (2) 8 lesson plans; (3) the filmstrip; and (4) 12 reproducible student worksheets, including one test. Maps, tables, and black and white photographs are included. (JB)

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Small-Scale Industries in Kenya: A Case Study of Economic Development.  
Toward a Better World Series, Learning Kit No. 3.

Harriet Baldwin

Bruce Ross-Larson, Ed.

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# TOWARD A BETTER WORLD

Updated Version

Social or economic indicator	Kenya	United States
Land area	583,000 square kilometers	9,363,000 square kilometers
Population, 1981	17,400,000	229,800,000
Projected population, 2000	40,000,000	259,000,000
Proportion of population in urban areas, 1981	15 percent	77 per cent
Proportion of workers in agriculture, 1980	78 percent	2 percent
Proportion of population of secondary-school age that is enrolled in school, 1980	19 percent	97 percent
Proportion of adult population that is literate, 1980	47 percent	99 percent
Life expectancy at birth, 1981	56 years	75 years
Infant mortality rate, 1981	8 percent	1 percent
Persons per physician, most recent estimate	10,500 persons	200 persons
Daily supply of calories per person, 1980	2,078 calories	3,658 calories
Passenger cars per thousand persons, most recent estimate	8 cars	526 cars
Per capita consumption of coal or equivalent energy, 1980	208 kilograms	11,626 kilograms
Gross national product, 1981	\$7,300,000,000	\$2,946,000,000,000
Gross national product per capita, 1981	\$420	\$12,820

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After more than sixty years as a British colony, Kenya became an independent country in 1963. The Kenyans have managed political disagreements peacefully since independence and have generally had friendly relationships with neighboring countries.

More than fifty tribal and ethnic groups, with their own language and culture, make up the people of Kenya. The principal tribes—the Kikuyu in the central highlands, the Luo and Luhya in the west, the Kamba southeast of Nairobi—make their living mainly by farming. The Masai in the south and the Samburu in the north herd goats and cattle. Kenya also has people who originally came from Europe, India, Pakistan, and Arab countries. Besides the language of their own ethnic group, many Kenyans speak English. And most speak Swahili, a language that combines words from Arabic and Bantu, a group of African tribal languages.

Kenya is a bit smaller than Texas, a bit larger than France. Its landscape is as varied as its people. A narrow coastal plain with sandy beaches and tropical vegetation rises to grassland, rolling hills, and mountains. Mount Kenya, 17,058 feet high, is the second highest mountain in Africa. (Mount Kilimanjaro in Tanzania is the highest.) Northern Kenya is flat and dry. The Rift Valley cuts a deep swath 10 to 40 miles wide through the country. Kenya's wild animals—lions, leopards, zebras, giraffes, elephants, and many others—roam freely in many parts of the country.

### *The Kenyan Economy*

Kenya is a poor country with a rapidly growing population, so its problems of relieving poverty are severe. Fertile soil and a climate suitable for farming in the central and western highlands are the country's most valuable natural resources. Kenya's principal exports—tea, sugar, coffee, and pyrethrum, which is used in insecticides—are produced on large farms and small. But most farm families live on small farms that produce only enough corn, millet, and potatoes for one family, along with some milk, fruit, coffee, or vegetables that can be sold.



Bruce Ross-Larson

Most Kenyans live in the countryside and depend on the land for their livelihood. But there is little good farmland left for Kenya's growing population. Four-fifths of the land is arid or semiarid and can be used only for herding. And heavy grazing is turning even this land into a desert. Forests in the highlands and mountains have long provided lumber for building and fuel for cooking and heating. But heavy cutting is reducing forest reserves and causing soil erosion.

Kenya has few mineral resources and no heavy industry, except an oil refinery in Mombasa. The principal industry is processing food—meat, fruit, grains, sugar, vegetables, and dairy products. Kenyan manufacturers also produce shoes, bricks, cement, clothing, textiles, leather, plastics, and forest and metal products. Most large factories are in Nairobi and Mombasa.



World Bank Photo Library — James Pickereil

For its industry, Kenya needs to import oil, vehicles, machinery, and industrial raw materials—tin, for example, used in canning food. To earn money to pay for its imports, Kenya exports agricultural products and an increasing number of manufactured goods. Tourism also brings in some of the foreign money needed to buy imports. More than 300,000 foreign tourists come each year to Kenya's beaches and game reserves. But Kenya does not earn enough to pay for the many imports it needs.

Agriculture still provides a living to seven Kenyans in ten, but the pressure of population on the land is increasing. That is why many rural people are moving to Nairobi and other cities and towns, where they settle in slums and search for jobs. There are not enough jobs for them, however, and the few that exist require skills that most rural people lack.

## *Economic Development in Kenya*

Despite its limited natural resources, the Kenyan economy grew rapidly in the decade after independence. This growth resulted from many activities, most of them paid for by the Kenyans. But some costs were met by loans and grants from Canada, the United States, the United Kingdom, and other European countries. An oil pipeline was built from Mombasa to Nairobi. Factories were built to produce many consumer goods that previously had been imported—shoes and clothing, for example. Large areas of land that had belonged to British settlers were divided into family-size farms and sold to Kenyans. Many farmers received training in new farming methods; they also received loans that enabled them to buy land, seeds, fertilizer, and farm tools. Throughout the country, schools were built, water systems were installed, and health care was improved.

In 1967 Kenya, Uganda, and Tanzania formed the East African Community to foster trade. The economic union improved the economic prospects of all three countries, particularly in manufacturing.

But in the middle 1970s several events slowed Kenya's economic growth. Increases in oil prices and worldwide inflation forced a cutback on imports. Kenya's exports



World Bank Photo Library—Kay Chermush

declined, adding to unemployment. The East African Community collapsed, and a severe drought made it necessary to import food.

The present development plan of the Kenyan government calls for steps to help the country recover from the economic problems of the late 1970s. The goals of the plan are to increase economic growth and to reduce poverty.

The plan emphasizes agricultural production because of the rising need for food and rural jobs. Farms that grow tea and coffee for export are being improved. Dairy farming is being encouraged, and herds of milk cows are being upgraded. Farmers are learning to raise poultry and eggs. Research is under way to identify crops that can be grown in arid and semiarid areas. Herders are learning new practices, and better beef stock is being bred.

The plan also gives attention to developing modern industry, which provides work opportunities and products Kenyans need. Three guidelines have been set for manufacturers under the development plan: use local materials, produce export items if possible, and use tools and machines that provide work for many people, not just a few. Factories are being improved and new ones set up. Small manufacturing firms—those that have fewer than fifty workers and need only a small amount of money to get started or to expand—are receiving assistance. Manufacturers are trying to improve the quality of their products so that they can sell more of them abroad.

Much of Kenya's economy depends on expensive imported oil. So the plan includes efforts to increase Kenya's other energy sources. For example, geothermal power is being explored, and a new hydroelectric power station constructed. And forest reserves are being protected to ensure increasing supplies of wood and charcoal.

The plan also provides for an expansion of the government's basic services—to educate people, to improve their health, and to reduce population growth.

- More schools are being built, and more teachers are receiving training. Primary school fees have been abolished so that more children can attend school.

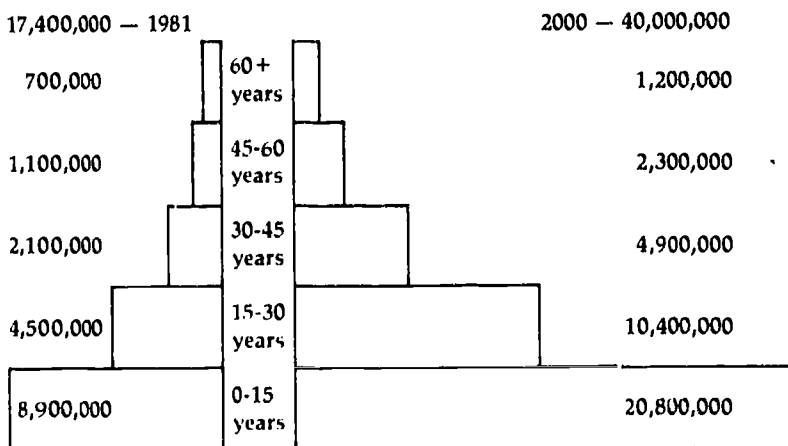


More vocational training is being offered, and a national adult literacy program is under way.

- The government is building hospitals and clinics and training doctors and nurses.
- Old water and sewerage systems in villages and cities are being modernized and new ones installed.
- Slum dwellers are receiving loans that enable them to upgrade their makeshift houses.
- The government is training workers who provide family planning services. The rate of population growth in Kenya is among the highest in the world. And that greatly complicates Kenya's efforts to increase economic growth and reduce poverty.

If incomes are to rise in Kenya and if the quality of life is to improve, Kenya must produce more goods and services and provide more jobs for its rapidly growing population. The land cannot take on many more farmers. Even so, agricultural production and rural jobs must increase—through modern farming methods, new agricultural products, and better distribution. Manufacturing also must produce more goods and provide more jobs. But it will be difficult for agriculture and manufacturing to grow enough in the years ahead to keep up with population growth—because the population is increasing so rapidly, because the pressure on the land is so acute, and because the resources for manufacturing are so limited.

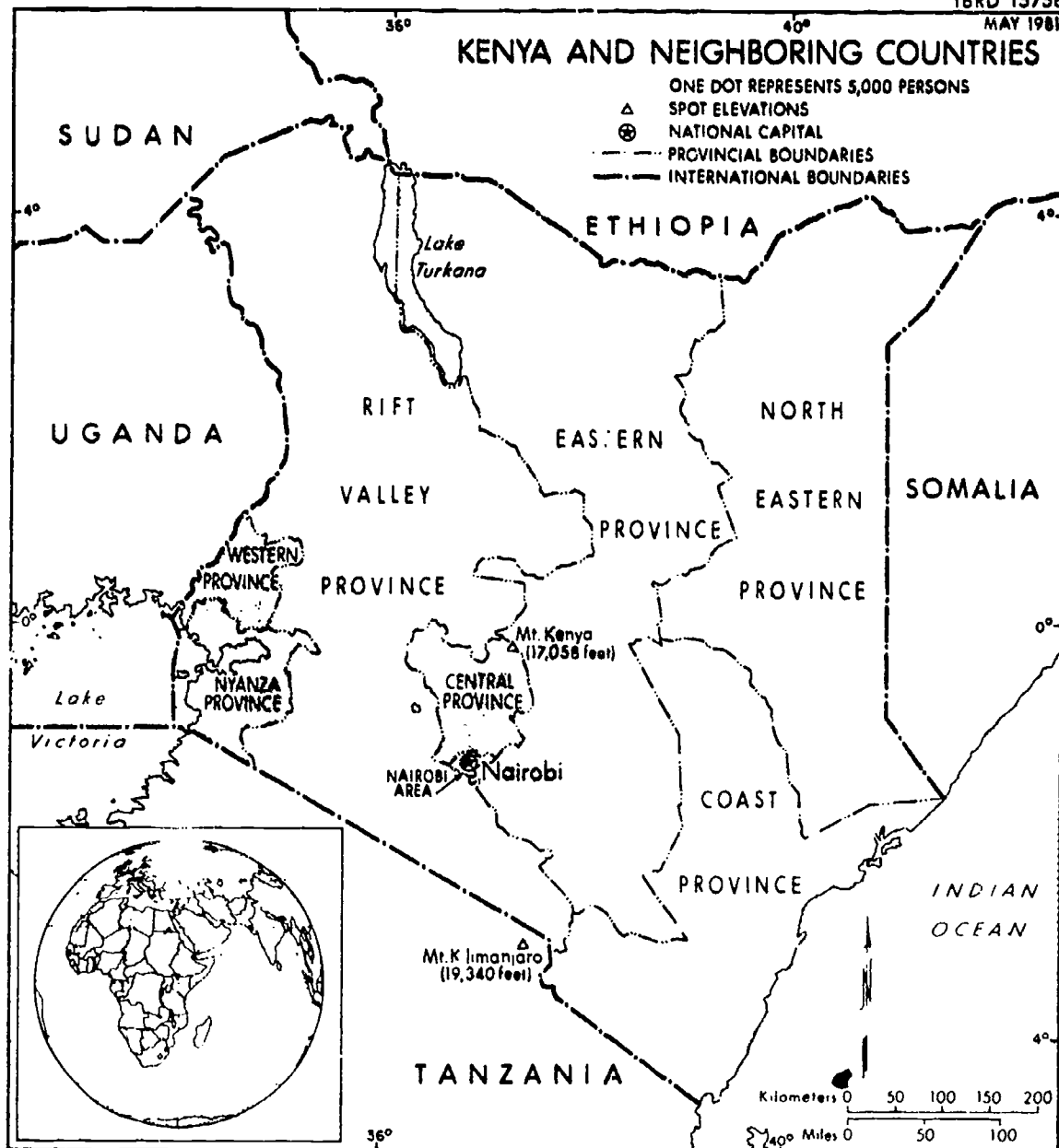
**Population of Kenya, by Age Group, 1981 and projections for 2000**



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MAY 1981

# KENYA AND NEIGHBORING COUNTRIES

- ONE DOT REPRESENTS 5,000 PERSONS
- △ SPOT ELEVATIONS
- ⊙ NATIONAL CAPITAL
- - - PROVINCIAL BOUNDARIES
- INTERNATIONAL BOUNDARIES



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TOWARDS  
A BETTER  
WORLD

Updated Version

# Small-scale Industries in Kenya

A Report of Economic Dev. Co.



The World Bank is an international organization owned by nearly 150 countries. Its work is to help poor countries in their efforts to improve the living conditions of their people. It does this by lending money to these countries for development projects. The International Development Association, which is part of the World Bank, makes interest-free loans to the world's poorest countries. The World Bank began to operate in 1946; the International Development Association was founded in 1960. Their loans to developing countries now amount to about \$14 billion a year.

This book is part of Learning Kit No. 3 in the World Bank's series of multi-media kits about economic development, TOWARD A BETTER WORLD. Other materials in the kit are a filmstrip, an economic summary of Kenya, and a teaching guide. Other kits in the series are listed on page 4 of the teaching guide. Harriet Baldwin is the author of this case study. Bruce Ross-Larson is the editor. David C. King and Cathryn Long were consultants. Carol Crosby Black designed the cover and layout. The statistics, figures, and maps were prepared at the World Bank. The views and interpretations of this book are those of the authors and should not be attributed to the World Bank, to its affiliated organizations, or to any individual acting on their behalf. The denominations used in the maps and the boundaries shown do not imply, on the part of the World Bank and its affiliates, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.

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# Small-scale Industries in Kenya

*A Case Study of Economic Development*

*The World Bank*  
Washington, D.C. 20433  
U.S.A.

## Pronunciation Guide

### *People*

Jomo Kenyatta	<i>Joh-mo Ken-yah-tuh</i>
George Kisilu	<i>George Kee-see-loo</i>
Karari Ngugi	<i>Kah-rah-ree N-goo-gee</i>

### *Places*

Eldoret	<i>El-doh-ret</i>
Embu	<i>Em-boo</i>
Garissa	<i>Gah-ris-uh</i>
Kakamega	<i>Kah-kah-may-guh</i>
Kenya	<i>Ken-yuh</i>
Kisumu	<i>Kee-soo-moo</i>
Machakos	<i>Muh-chah-kohs</i>
Mombasa	<i>Mohm-bah-suh</i>
Nairobi	<i>Nigh-roh-bee</i>
Nakuru	<i>Nuh-koo-roo</i>
Nyanza	<i>Nyahn-zah</i>
Nyeri	<i>Nyair-ee</i>

### *Other*

Harambee	<i>Hah-rahm-bay</i>
Uhuru	<i>Oo-hoo-roo</i>

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## Chapter One

# The Setting

It was nearly midnight. Thousands of people were crowded into the new stadium on the edge of Nairobi. Thousands more stood on hillsides nearby. Searchlights played on two flag poles, one of them empty, the other flying the Union Jack, the flag of Great Britain. Suddenly the stadium was dark, and the crowd hushed. Then just as suddenly, the searchlights played on the flagpoles again. The Union Jack was gone, and on the second flagpole another flag was rising, with broad bands of black, red, and green separated by narrow white stripes. People roared: "Uhuru! Freedom! Uhuru!" Midnight had passed. It was December 12, 1963, and Kenya was an independent country flying its own flag.

Thirteen-year-old Karari Ngugi had spent the day with his parents, brothers, and sisters strolling in Nairobi. The streets were banked with flowers, and buildings were decorated with bright banners, some bearing the word "Uhuru," others the word "Harambee," which means "pull together." Everywhere there were posters of Jomo Kenyatta, leader of the independence movement and the first president of Kenya. In the evening in the stadium, Karari saw Kenyatta for the first time. Waving his fly whisk, Kenyatta led the crowd in cries of "Harambee! Harambee!" Again and again, his deep voice rose above the shouting: "We must all pull together to build a great country."

For as long as Karari could remember, his parents had told him how important it was for Kenyans to be free and to rule themselves. Kenyans treasured their land, and there had always been enough for everyone. But British settlers took over much of the land in the times of Karari's grandparents. And by the 1940s, when Karari's parents were young, there was not enough to go around.

Some Kenyans had to find a way to make a living away from the land, and Karari's father was among them. He went to a school that missionaries ran in a town near the family farm. Later he became a clerk in the town's post office, run by the British colonial government. When he married, he and his wife moved into a thatched-roof hut provided by the post office on the edge of town. They lived there until 1950. That year—the year Karari was born—Karari's father was transferred to the main post office in Nairobi.

His father once told Karari that he nearly quit his job during the independence movement in the 1950s. It was difficult to work for the government then. But his family was growing, and he relied on the income his job brought him. So he kept his job but attended secret rallies of the groups working for independence.

The independence festivities lasted several days. But Karari was soon back in his daily routine of school, soccer, and homework. Often he remembered the flag of Kenya flying in the sky as thousands shouted "Harambee!" He wanted to work with other Kenyans to build Kenya. So he studied hard to prepare for the examinations that would qualify him for the University of Nairobi.

Just before Karari entered the university, two of his cousins came to live with his family. Their father still lived on the family land where Karari's father grew up. His cousins knew there was not enough land to support them, so they came to Nairobi to find jobs.

Karari's family was better off than most Kenyan families but they had few luxuries. The small house was now crowded with two more, but no one complained. The presence of his cousins made vivid for Karari a lesson he had learned in school: that Kenya needed to provide



*Karari Ngugi knew that education was the key to a life of greater opportunity—for him and for other Kenyans.*

jobs for people who could no longer make a living on the land. That meant that Kenya needed more industries.

His university courses—in accounting, economics, and business administration—taught Karari how difficult it was for Kenya to develop industries. But the more he learned, the more convinced he became that Kenya needed them. Many of his friends at the university felt the same way. Some of them hoped to join one of the big companies in Nairobi. But Karari felt that those companies alone were not enough. There had to be many industries, big and small. As graduation approached, Karari hoped to find a job in industry.

George Kisilu was thirteen when his family left their village in 1963 to move to Machakos, a small town fifty kilometers southeast of Nairobi. He helped his father and mother pack baskets with their few belongings, some corn, and a bag of potatoes. George's uncle and aunt would have the farm now.

George's parents decided to go to Machakos because it was getting more difficult each year to grow enough on their three acres to feed their five children. They knew there would not be enough land for the children when they were grown. They hoped life in Machakos would be better for them. At least they would be nearer a clinic.

George's family went slowly out of the village, past the mission school that his grandfather had helped to build many years before, past the path his mother took each day to get water from the stream. The family had a six-mile walk to the road, where they would board a bus to Machakos.

George, his two older brothers, and his father built a hut on some vacant land on the outskirts of Machakos. They used mud, wood, and heavy reeds that grew nearby. His mother planted corn in the yard. She got water each day from a standpipe a kilometer away. His father and older brothers got jobs in a lumber mill, but only after several months. George started school, but he soon dropped out to work in the lumber mill, too.

Pay at the lumber mill was low, so George's father brought home pieces of scrap lumber, which he made into stools. He sold them at the market in Machakos, and the added income helped. After awhile, George's father could afford to buy some tools and lumber to make chairs. George helped him.

Five years after the family moved to Machakos, George's two older brothers left to work in a meat-packing plant near Nairobi. The pay was better there, and their income, plus what George and his father made, enabled the family to save a little. George's father bought a foot-operated lathe and lumber to build a shed that would protect their tools and furniture from the rain and sun.

When George was twenty, he married a girl who came

from a village near the one he once lived in. He and his wife built a hut beside his parents' hut. A year later their first baby was born, two years later their second.

Then in 1975 George's father died. George suddenly had much of the responsibility for supporting his mother, his own family, and a younger brother and sister. There never was enough money, even though his older brothers continued to send money home and his younger brother was now working with him at the lumber mill. To earn more, George occasionally worked as a carpenter. And he kept up the woodworking in the yard. Many people knew he was a craftsman, and he received orders for furniture and for a new product he had learned to carve—decorative lintels for doorways.

*George Kisilu knew that his skill in woodworking was his biggest asset—if only he could capitalize on it.*



## The Setting

By 1977 George had more furniture orders than he could handle. He began to think that by making furniture he could earn more than he did at the lumber mill—if he could do it full-time. He wanted to be able to buy more food and clothing, and he wanted to put his children—there were three by this time—through secondary school. He also wanted to buy some land and build a better house.

But could he risk leaving his job? After months of planning and discussion with his brothers, George decided to take the risk. He painted “Kisilu Furniture” on a board and fastened it to the roof of the shed. There was electricity running past the huts now, and George arranged for a

*Agriculture has given Kenyans a way of life for centuries. But because of the rising pressure of population, new opportunities must be cre-*



hookup to the shed. With some money he had saved, he bought a second-hand electric saw that speeded his work. His sister and wife often helped him, and his younger brother joined them when he could. He rented a stall in the Machakos market to sell his products.

In the first year of working on his own, George earned more than he would have at the lumber mill. After another year, he was convinced that he could sell even more furniture. But to make more, he had to have more space and better tools and machinery. That would cost much more money than he could scrape together, even with the help of his brothers. And he had to have advice—about making cabinets, for example, and selling them.

*ated off the land—in commerce and other services and in manufacturing operations, large and small.*







## Chapter Two

# Helping Small-scale Industries

When Karari Ngugi was about to graduate from the University of Nairobi in 1975, one of his professors talked to him about a company owned by the government. "It's called Kenya Industrial Estates, Limited, or 'KIE' for short," the professor said. "It helps small businesses and is looking for staff. I know the general manager. Do you want to talk with him about a job?" Small businesses make sense for Kenya, Karari thought. So he asked his professor to make an appointment.

KIE occupied some buildings surrounded by a wall in the factory zone of Nairobi. Karari walked through the gate and passed some factories that were part of KIE—a textile mill, a metal-working shop, a print shop. The office of the general manager was in a two-story concrete building.

"Our job here at KIE is to help small-scale industries," the general manager explained. "You see them all over Kenya—in back alleys, in market places, sometimes in the yards of houses, sometimes in small buildings. Some employ one or two people, others forty or fifty—but few are that big.

"There are many kinds of small-scale industries. Some produce clothing, shoes, and other leather goods. Others produce ceramic cooking pots and roof tiles, and still others bricks and concrete blocks. Small-scale metal shops make tin pans, bowls, and milk cans. Blacksmiths make

many of our farm tools and implements. Boatyards, bakeries, and bicycle repair shops are small-scale industries. So are the carpentry shops that make furniture, packing crates, and window frames. Some modern factories—such as fruit and vegetable canneries and grain and textile mills—are small-scale industries, too.

“All these small-scale industries make a big contribution to the Kenyan economy,” the general manager went on. “They provide jobs for many people. Each one employs only a few, but when you add them together, they provide work for many thousands. And they produce goods at prices many Kenyans can afford.

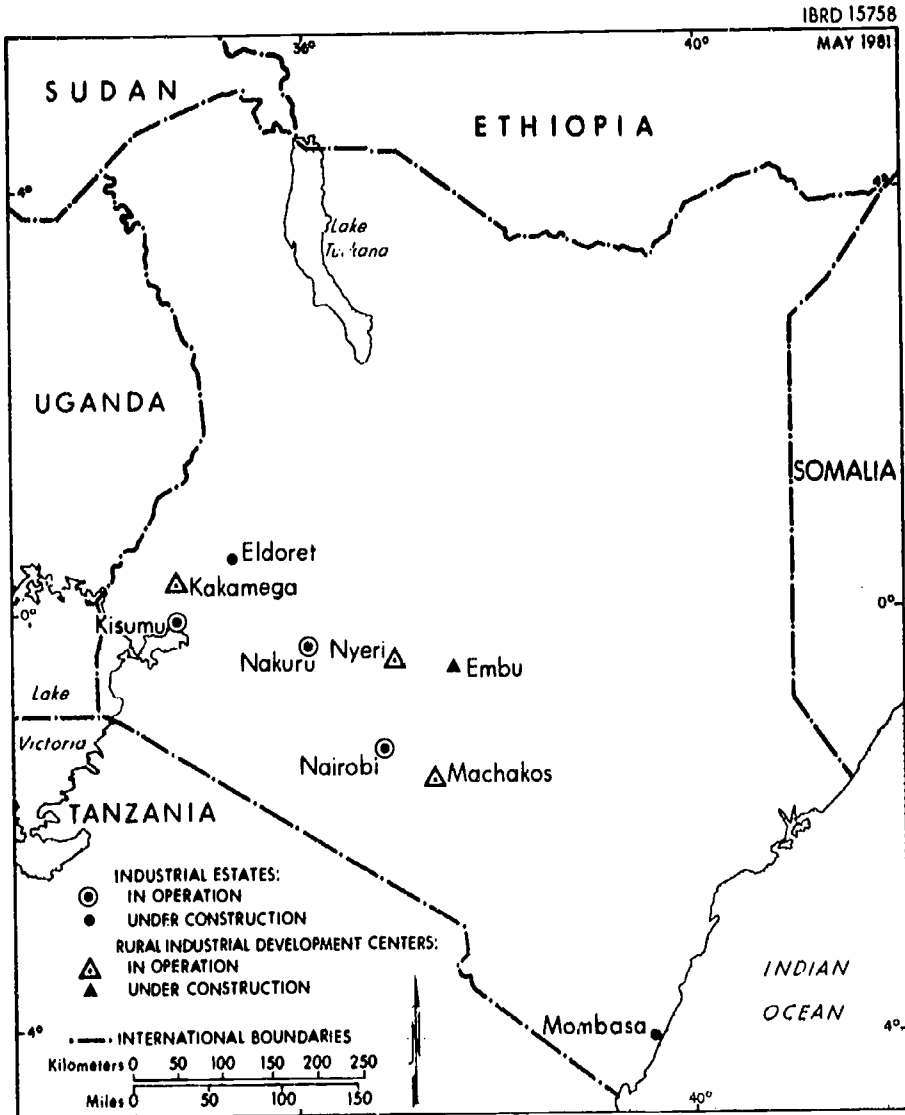
“Small businesses are valuable for another reason,” he continued. “They are like training schools. If we are to have more manufacturing and industry in Kenya, we must have more people who know how to work with tools and machines and how to run businesses. A good way to master these skills is to work in a small business.

“It isn’t very expensive, relatively speaking, to set up small businesses. Most of them use local raw materials rather than expensive imports. They don’t need big buildings and costly equipment. And many of the skills needed for small industries can be learned on the job rather than in vocational schools. A poor country like Kenya can afford only a few large industries, but it can afford many small ones. We have many small industries in Kenya, and at KIE we are strengthening them. We are getting help from Germany and the Scandinavian countries.

“But let me explain how we strengthen them,” the general manager continued. “If small businesses are to modernize and expand, they need more space to work in. They need money for equipment, wages, and raw materials. And they need advice about production, selling, and record-keeping. KIE does three things to help them meet these needs.”

The general manager and Karari rose and looked at the map of KIE’s operations on the wall of the office (see Map 1).

“First of all, we manage places called industrial estates and rural industrial development centers. This compound



Map 1. Industrial Estates and Rural Industrial Development Centers in 1975

in Nairobi is an industrial estate, the biggest of the three we manage. The others are in Kisumu and Nakuru. A fourth, in Mombasa, is nearly finished, and we are starting to build a fifth at Eldoret. Someday there will be an industrial estate in the capital city of each province.

"Our rural industrial development centers, or 'RIDCs' for short, are in three towns, and we are building a fourth. Someday there will be a dozen. RIDCs and the industrial estates have some of the same features. Both

have factory buildings and workshops, equipped with water and electricity, that we rent to the owners of small businesses. But there are fewer factories and workshops at the RIDCs than on the industrial estates.

“Both the industrial estates and RIDCs have centers that we call common facilities workshops, or ‘CFWs’ for short. Tools can be repaired at the CFWs, which also have machinery that many businesses need occasionally



*At the common facilities workshops, small-scale manufacturers can get advice from technical experts on the use of tools and machines.*

but cannot afford. People who rent from us and people who have businesses nearby can use the CFWs.

“Another feature the industrial estates and RIDCs have in common is a staff of experts—such as engineers, technicians, accountants, and economists—who help small businesses. Of course, an industrial estate, being bigger, has a larger staff than an RIDC.

“The second thing we do at KIE,” the general manager went on, “is make loans to small businesses. Most owners of small businesses do not have much money if they

want to buy new machinery or expand their businesses, they need loans. But banks seldom lend to them because of the risk."

The general manager explained that KIE had money from the government of Kenya and from Germany and the Scandinavian countries for lending to small businesses. "We are like a bank. We make loans to people who rent space on our industrial estates and RIDCs and



*KIE's loans enable small-scale manufacturers to expand their operations—providing jobs, producing goods, and developing new skills.*

to people who work nearby. Our loans do not have to be repaid for six to ten years. But not everyone can get them. Our borrowers have to put up some money, and they have to estimate their costs and profits and make detailed plans for their businesses. We help them with their loan applications.

"Technical assistance is the third thing we do at KIE. The help we give small businesses in applying for loans is technical assistance. But there are other kinds. For example, an engineer might help someone choose machines

or plan the layout of a workshop or factory. A technician might help design a new product. Or an accountant might help plan the work and set up accounts."

The general manager ordered tea for Karari and himself. As they drank it, he asked Karari about the courses he had taken at the university, and he told Karari about the history of KIE.

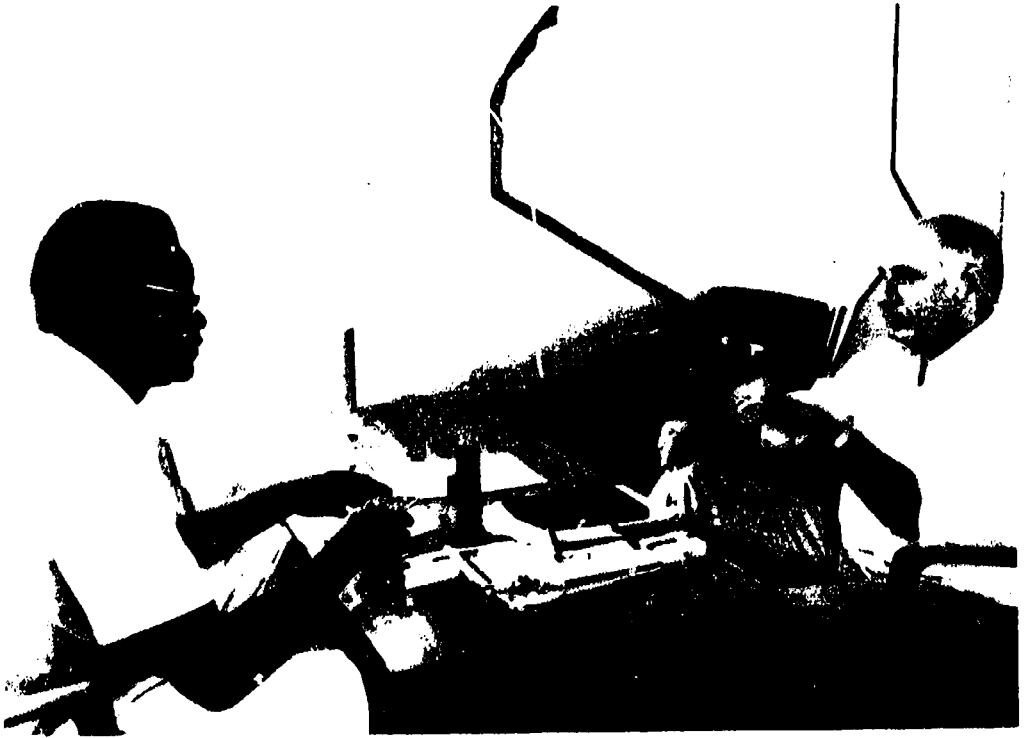
The government began taking steps to help small-scale industries soon after independence. A large government company started by the British—the Industrial and Commercial Development Corporation, or the "ICDC" for short—had been making loans for large-scale industries. The government of Kenya added a new department to the ICDC to make loans to help small-scale industries expand or modernize. Then in 1967 it set up KIE as part of the ICDC to build industrial estates and RIDCs. Soon afterwards, KIE began to make loans and provide technical assistance.

"But KIE's progress has been slow," the general manager said. "We have had many problems, and we still have them. There have been delays in building the industrial estates and RIDCs. It takes a long time to buy land and a long time to get the estates and RIDCs ready. Sometimes it takes more than a year just to install water and electricity. So there is a lot of waiting.

"It also takes a long time to process loans. We have not made as many as we planned. And we have made mistakes that have led to another problem. Often the people we lend to cannot make payments on their loans. And often those who rent space from us cannot pay their rent on time. We need this money to make other loans.

"Foreign advisers are helping us deal with our problems," he went on. "Some are here in Nairobi, and some are on the other estates and the RIDCs. They give KIE technical assistance, which we need just as small businesses do."

Karari had been listening intently, wondering where he might fit into KIE. The general manager seemed to read his thoughts. "We have a staff of about forty here in Nairobi— accountants, engineers, economists, and finan-



*Managers at KIE often work closely with foreign advisers, drawing on their experience and know-how to help make KIE more effective.*

cial specialists," he said. "But we should have many more. We need people with good training, and we need people willing to work hard. Let me introduce you to our personnel manager."

"Our greatest need is in our Projects Department," the personnel manager said. "That department helps owners of small manufacturing businesses apply for loans. We call their businesses 'projects,'" he explained. "Our Projects Department takes the first step in helping small businesses. In a way, it is the most important. If you joined us, you would work here in Nairobi for a few years, and then you might work on one of the industrial estates or RIDCs."

"I would like to work at KIE," Karari said. The personnel manager took him to meet the head of the Projects Department and the foreign adviser in the department. They agreed that Karari would begin work the following month.

There was plenty for Karari to do. Loan applications came to Nairobi from all the industrial estates and RIDCs. Karari and his colleagues were to review them and send them for final approval to the Industrial and Commercial Development Corporation (ICDC), the larger government company of which KIE was a part. But the work did not go smoothly. When Karari joined the department, many loan applications had been there for six months, some for more than a year. And new applications came in each week. The work was more than Karari and the others could handle.

Added to this frustration was another. Often, when the Projects Department had completed work on an application, it took several months to get final approval from the ICDC. Karari and his colleagues felt that the ICDC people—because they were more interested in large businesses than in small ones—were not giving small businesses fair treatment. Karari wished that KIE could approve its own loans. That would cut down on red tape and speed things up.

After a year of working there, Karari began to sense that KIE was in trouble. Construction of the industrial estate at Eldoret slowed and then stopped. RIDCs planned several years before were not being built. Each month someone resigned, even though jobs were scarce. Several foreign advisers left. And in late 1976 word went around that KIE might be abolished.

But in early 1977 the rumor changed. Rather than abolishing KIE, government officials were talking about how to strengthen it. Representatives of the World Bank and the United Nations had joined the discussions. The World Bank had made many loans to Kenya and was planning a loan to help KIE. The meetings continued off and on through 1977. And from time to time, announcements were made of changes at KIE.

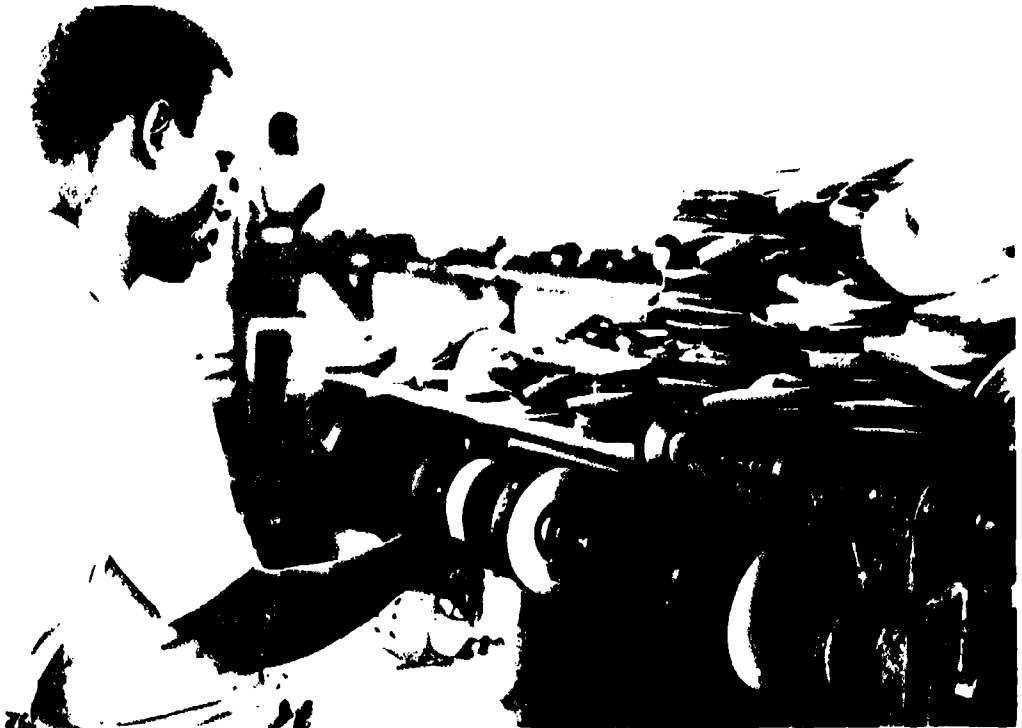
- KIE would be separated from the ICDC and would become the main agency for assisting small industries in Kenya. To strengthen it, the European governments and the World Bank would lend more money to the government of Kenya for KIE. The



Kenyan government would also provide more money. Some of it would help to build industrial estates and RIDCs. But most of it would be lent by KIE to small-scale industries.

- More staff would be hired—for KIE headquarters in Nairobi and for the industrial estates and RIDCs. And new foreign advisers would come to KIE. Their main task would be to train KIE staff.
- KIE staff on the industrial estates and RIDCs would have more responsibility. They would approve loan applications up to a certain amount, and they would collect rent and loan payments.
- Because KIE would handle a lot of money, the Finance Department at KIE's Nairobi headquarters would become more important. Its staff would be increased, and its accounting systems updated. More detailed accounts would be kept at the industrial estates and RIDCs, and more reports would have to go to the Nairobi office.

*By giving space, loans, and advice, KIE helps small-scale manufacturers to prosper.*

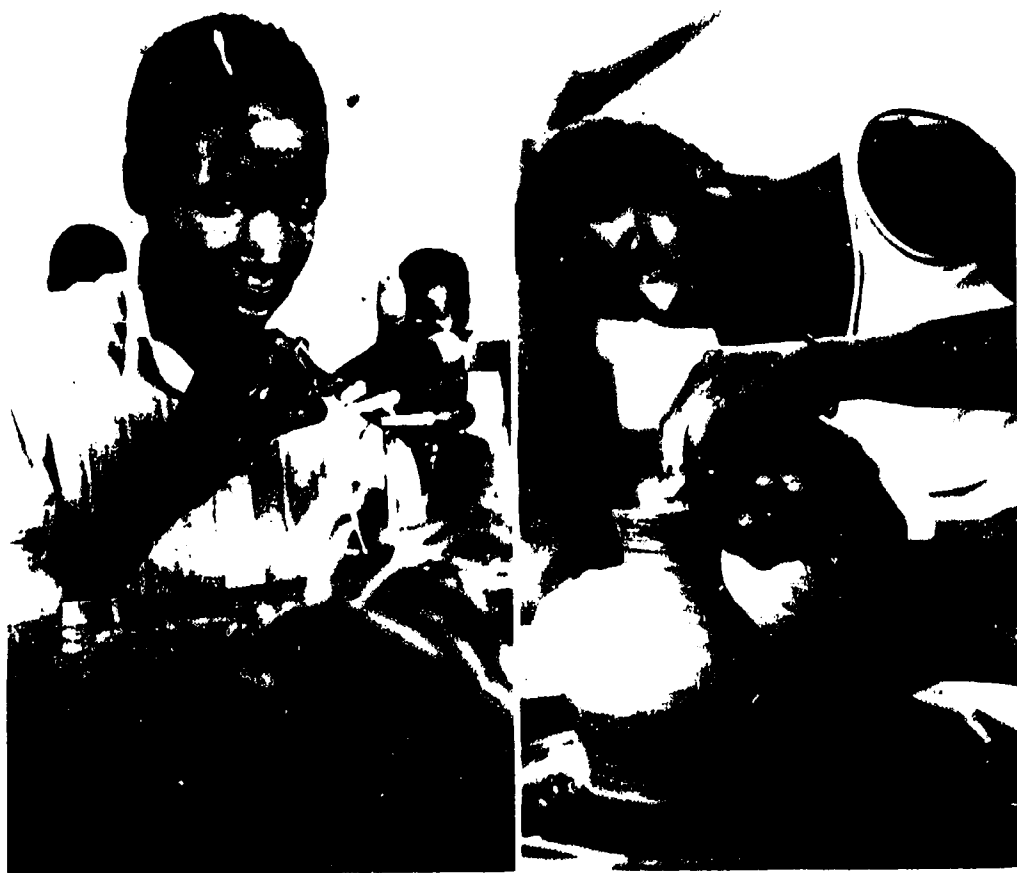


- Greater effort would be made to see that loan and rent payments were made on time. KIE staff would work closely with those who were behind in their payments. Some loans might be foreclosed, some renters evicted.
- In all its work, KIE would follow the industrial policies of the government of Kenya. Special consideration would be given to small businesses that made products for export, that used local raw materials rather than imports, and that used tools and machinery that provided work for many people, not just a few.
- New procedures would be developed for processing loan applications. The procedures would help ensure that projects were successful and that borrowers could repay their loans. More emphasis would be placed on the skill and experience of applicants. Plans and estimates would be more detailed. Applicants would contribute 15 to 20 percent of the money needed to start or expand their businesses. KIE would lend the remaining 80 to 85 percent.

The changes at KIE made 1978 a busy year for Karari. He took part in the discussions of new procedures for loan applications. And he traveled to several industrial estates and RIDCs to help KIE staff learn the new procedures.

Wherever he traveled, Karari met owners of small-scale industries. To Karari, two of them represented KIE's work at its best. One of them was in Kisumu. He owned a small shop where he tied fishing flies, using local feathers and imported hooks. He had sold many of his flies and believed he could sell more. So he applied for a loan at the Kisumu industrial estate, a loan Karari helped to process. He rented a workshop on the estate and hired twenty-five people, whom he trained to make flies. The foreign adviser at Kisumu found that the flies could be exported to Europe and the United States.

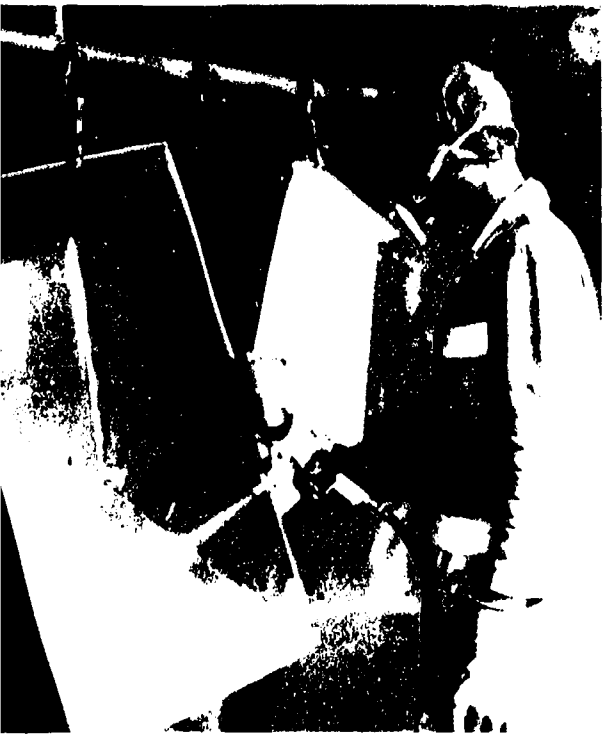
The other lived about fifteen kilometers from Kakamega. A potter, he had used local clay to produce bowls and jugs for many years. He wanted to build up his business,



*A maker of fishing flies, a maker of pottery—these small-scale manufacturers make up an important part of Kenya's industry.*

so he went to the RIDC in Kakamega to apply for a loan. Karari worked with the economist at the RIDC to sort out the details of the loan application. With the loan, the potter enlarged his workshop, hired two assistants, bought more clay and glazes, and built a larger kiln. He sold most of his work in Kakamega until the manager of the RIDC told him about tourist shops in Mombasa and Nairobi that sold the pottery of Kenya craftsmen. The potter soon got a contract to make vases for sale in those shops.

Karari liked meeting business people and KIE staff outside Nairobi. So he was pleased when the personnel manager asked him if he would be willing to go to the RIDC in Machakos as assistant manager. He moved to Machakos early in 1979.



## Chapter Three

# Planning for Kisilu Furniture, Limited

George Kisilu walked alongside the high fence surrounding some concrete-block buildings and stopped at the gate. The sign above it read:

Kenya Industrial Estates, Limited  
Rural Industrial Development Center  
Machakos

The gate was open and George walked in. A watchman pointed out the administration building. As George headed toward it, he passed a large workshop. A buzzing sound drew his attention to an open doorway. Inside a dozen men and women were running sewing machines. "We make school uniforms here," one of them said. Farther along, a truck was pulling away from another workshop, larger and noisier than the first. The truck was loaded with large tin water tanks. George could see men inside the workshop using large machines to form shiny sheets of metal into cylinders. The first step in making the tanks on the truck, George guessed. In a smaller workshop, some men were welding tubular pieces of metal into grill work. And in yet another, wheelbarrows were being painted bright red.

George saw a man using a power sander in a workshop and went inside. The man stopped the machine and

explained to George that he was a technician who worked there. "We call this the common facilities workshop, or 'CFW' for short," he explained. "We repair tools and machinery here. And we have machines that people can use for a small fee—people who work at the RIDC or in small factories or workshops nearby." George asked if he could come to the CFW sometime to use the power sander. "We'd be glad to have you," the technician said.

As George entered the administration building, a clerk greeted him. George explained that he was a furniture maker and had come to find out about a loan. The clerk led George into an office.

"Good morning," said a man about George's age. "My name is Karari Ngugi. Can I help you?"

Karari had been at the RIDC for six months. There were nine others on the staff—the manager, an engineer, two technicians at the CFW, two clerks, a driver, a typist, and a watchman.

Karari's main job was to manage loan applications. There were many of them—from people who wanted to rent space on the RIDC and from people with small businesses in or near Machakos. Karari also helped the manager keep the accounts and make reports to the Nairobi office. He supervised the technicians at the CFW and the clerk who ran the warehouse that stored raw materials for the RIDC factories. And he discussed problems with borrowers who had fallen behind in their loan payments.

George told Karari about his success in making furniture and his wish to expand his business. He told him about his years at the lumber mill and his work as a carpenter. To enlarge his business, he said, he needed more space and a loan for better machinery. And he needed advice about new products and about how to sell them.

"KIE might be able to help you in many ways," Karari began. "We have work areas that can be rented. We make loans to cover purchases of equipment and materials. Our engineers and technicians can help in the design of

new products. And the CFW is available whenever you need it."

George asked how he could rent a work area and apply for a loan. Karari replied that he could rent space if he qualified for a loan. "To qualify for a loan," Karari continued, "you have to contribute to your business. Do you have any savings?"

George said that he had a few thousand shillings and that his brothers might lend him a little more. "Good," said Karari. "But getting a loan takes a lot of work. We have to figure out how much money you should borrow and whether you can pay it back in six to ten years."

George wondered if Karari were trying to put him off: he made getting a loan sound so difficult. But Karari continued. "Don't be discouraged. We will help you. We work hard on loan applications at KIE because we want our borrowers to succeed. Good planning helps. If our borrowers succeed, our loans will be repaid, and we can make more loans. We are as interested in your success as you are."

George and Karari agreed to begin working on a loan application in a few weeks—as soon as Karari finished the applications he was then working on. In the meantime, Karari suggested that George save as much money as possible and use the CFW whenever he wanted to. Perhaps, too, he could take a short course at a technical institute in Nairobi to learn more about modern furniture-making methods.

In the weeks before he could again talk about his workshop with Karari, George did what Karari suggested. And whenever he went to the CFW, he imagined how a work area might someday look with a sign over the entrance:

Kisilu Furniture, Ltd.

When George and Karari met to discuss his loan application, Karari showed George the application form and



*Paperwork seemed to be an obstacle, but Karari told George that it was essential for sound planning.*

explained that they would have to meet several times to complete it.

In response to Karari's questions, George described his experience—at the lumber mill, as a carpenter, in his workshop, and in the course in Nairobi. He said his new workshop would produce chairs, tables, decorative lintels, and cabinets that the technicians at the CFW would help him design. He would buy raw materials—lumber,



formica, nails, screws, hinges, handles, glue, paint, and varnish—in shops in Machakos. He would sell his furniture in the Machakos market, in village markets nearby, and in another market town fifty kilometers to the east. He explained that he would have to rent a truck. "You might sell some furniture to the Machakos hospital and to local schools, too," Karari added.

Karari asked George how many workers he would have. "Five," George answered. His brother would leave the lumber mill to work with him full-time. He would hire two carpenters as assistants. And his wife and a friend of hers would work part-time, painting and varnishing.

Karari explained that they needed to know how many products the workshop might sell in a year, and how much money might come in from sales. The engineer who worked at the RIDC joined them, and the three made some estimates. How many things did George make now? How many more might he make with electric machinery and five employees? What prices might he charge? The engineer worked out a table (see Table 1).

*Table 1.* Estimated Production and Sales

Items	Quantity	Price	Annual sales
Chairs	400	Shs. 200	Shs. 80,000
Tables	200	250	50,000
Lintels	100	100	10,000
Cabinets	100	400	40,000
Total			Shs. 180,000

It was nearly lunch time, and Karari said that before they stopped they had to discuss what George could contribute to his business. George said that his savings, combined with what he could borrow from his brothers, would amount to about 14,000 shillings. Karari made some notes and looked up. "On that basis," he said, "KIE could lend between 70,000 and 80,000 shillings.

That's about right for a workshop the size we've been talking about."

When they next met, Karari explained that at the end of the morning they would know precisely how much George would have to borrow. The engineer joined them again, bringing with him a foreign adviser who was visiting the Machakos RIDC from the Nairobi office.

The four men discussed machinery and equipment and agreed on the need for a table saw, a planer, a band saw, and a lathe. George would not have to buy a power sander, because there was one in the CFW. But he would need a portable electric sander, a portable drill, and a paint sprayer. The group discussed the features the machines and tools should have, and the engineer checked the prices in catalogs of firms in Nairobi. Karari listed the machines they had chosen together with their prices. Then George said his brother and the two assistants would need workbenches, vises, and hand tools. These prices were estimated, too, and Karari added them to the list. "That's 67,400 shillings for all the machinery and equipment," he said.

The engineer and the German adviser left, and George and Karari continued their discussion. "There are some expenses you will have before the workshop begins to operate," Karari said. "We call them 'preoperational expenses.'" He and George estimated them: installing electrical outlets, buying a license for the workshop from the town of Machakos, and paying insurance for the machinery and raw materials.

"We're down to the last estimate of the day," Karari said. "We call this one 'working capital.' It includes the raw materials you will buy and the wages and rent you will pay during the first two months of operation—before any money comes in from the sale of your furniture." They studied the table the engineer made the last time they met and discussed the prices of raw materials. Then they estimated that raw materials for two months would cost 12,000 shillings. They figured wages at 6,600 shillings. "And rent for a work area of about 2,000 square feet will be 1,000 shillings a month," Karari said.

"Now we have all the estimates we need to decide how much your loan will be." Karari continued. He did some figuring on a piece of paper, looked up, and showed George what he had been writing (see Table 2). "This shows what we call 'investments'—all the things you need for your workshop.

"KIE can lend up to 85 percent of a project's total investments; the applicant must put up the other 15 percent. For a project of 92,000 shillings, that would mean a loan of 78,200 shillings with a contribution from you of 13,800 shillings. Let's round both amounts—a loan of 78,000 shillings and 14,000 shillings from you."

Table 2. Summary of Investments

Item	Amount of investment
Building	to be rented
Machinery and equipment	Shs. 67,400
Preoperational expenses	Shs. ,000
Working capital	Shs. 20,600
Total	Shs. 92,000

It took George and Karari two more meetings to complete the loan application. They had to show that George would make a profit so that he would be able to repay his loan. To do so, they estimated his sales and expenses for three years. Then they had to show the amount of the loan from KIE and the amount George would contribute. And they had to show how the loan would be repaid. This information was written on the final page of the application (see Figure 1 on the next page).

The last space on the application was headed "Recommendation." "We use that space on applications we send to Nairobi for approval," Karari explained. "Your loan is under 100,000 shillings, so it can be approved by the manager of the RIDC rather than going to Nairobi. I will talk with him tomorrow. Can you meet with both of us the day after that?" George said he could.

Figure 1. A Page from George Kisilu's Application Form

<b>Estimate of profit<sup>a</sup></b>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
<i>Revenue from sales</i>	Shs. 180,000	Shs. 198,000 <sup>b</sup>	Shs. 217,800 <sup>b</sup>
<i>Expenditures</i>			
Production costs	128,000	133,400 <sup>c</sup>	140,100 <sup>c</sup>
Rent	10,000 <sup>d</sup>	12,000	13,200 <sup>e</sup>
Depreciation of machinery and equipment (10%)	6,700	6,700	6,700
Loan repayment	11,100 <sup>f</sup>	14,400	14,400
<i>Profit</i>			
Gross profit	24,200	31,500	43,400
Tax (45% of gross profit)	10,900	14,200	19, 00
Net profit	13,300	17,300	23,900
<i>Notes:</i>			
a. Numbers have been rounded to the nearest 100 shillings.			
b. 10% increase in output.			
c. 5% increase for inflation.			
d. Shs. 1,000 per month; 2 months grace period.			
e. 10% rent increase.			
f. Shs. 1,200 per month, 6 months grace period; payment of interest during grace period of Shs. 650 per month.			
<b>Financing of the project</b>			
KIE loan			Shs. 78,000
Applicant's contribution			Shs. 14,000
Total			Shs. 92,000
<b>Loan repayment schedule</b>			
Interest rate			10 percent
Repayment period			8 years
Grace period			6 months
Monthly payments			Shs. 1,200

The manager raised some questions in his conversation with Karari. Did George know enough about modern machinery to run a workshop that relied on it? Did he know enough arithmetic to keep records? Who were the carpenters he would hire as assistants? Were the women skillful enough to learn how to finish the quantity of chairs and other things to be produced? Was George skillful enough to learn to make desks, for example, or cabinets for schools, hospitals, and government offices—products that would bring in more money in the future? George was now running a small workshop in the yard of his house. Could he learn to run a small modern factory?

George was asking himself some questions, too. Although pleased to have completed the loan application, he was worried. The new workshop would be risky and demanding. What if he didn't produce as much as he and Karari had estimated? Or sold less? What if he didn't make enough money to pay his rent or make his monthly loan payment? What if the venture failed completely? How would he repay his brothers?

George had met the manager once or twice in the common facilities workshop, and the manager had seemed to be helpful. But George was apprehensive when he entered the manager's office for the meeting. The manager, sensing George's anxiety, offered George tea before they began to talk about the loan. Then he explained that KIE wanted to help George succeed. KIE had helped many people, he said, but such people often faced problems when they started to work in new ways. Would George go to the technicians in the CFW for help in planning his work and operating his machines? Would he work with Karari in keeping his records? When things went wrong or when he was puzzled about what to do, George could talk to Karari, the engineer, or himself. Would he be willing to do so? "Of course," George said.

The three men talked for more than an hour. Then the manager said, "I am going to approve your loan application, and I wish you success. Call on me at any time. We all pull together around here."



## Chapter Four

# Moving Forward

The first year of operation was difficult for Kisilu Furniture, Limited. The workshop did not produce as much as George and Karari had estimated. For one thing, one of the assistant carpenters was often late to work. Then he began to skip whole days, and George finally had to fire him. That meant George had to spend more time than expected training a new assistant, and valuable production time was lost.

Electric power failures also cut into production time: once there was no power in Machakos for three days. And the breakdown of George's band saw slowed his production of chairs. It took a long time to persuade the company representative that the problem was a defective part, not faulty operation. Then George found that it would take two or three months to get the needed part from the manufacturer in Europe. So Karari intervened, insisting that the company give George another band saw to use until his was back in order.

George found, too, that he had to spend a lot of time away from the workshop getting his furniture to markets. He sold everything he made, but his time was becoming more and more valuable. So he decided to stop carving lintels and to concentrate on products that sold for more. The decision was not easy, because carving lintels was the work he enjoyed most.

An unexpected problem arose halfway through the year, when a brother of George's wife arrived in Machakos. Life was hard on his farm: he had left his wife and family there and had come to Machakos expecting that George would hire him. George knew his brother-in-law had

never made furniture; even if he had, George could not pay another employee. George and his wife wanted to help, but they did not know what to do. Karari encouraged George to tell his brother-in-law that there was no job at the workshop now. There might be in a year or so—if he developed some skill in woodworking. George helped his brother-in-law get a job at the lumber mill, and the family made space for him in their house.

Another unexpected problem arose when a buyer from Nairobi ordered a hundred chairs. Meeting the buyer's specifications added to the time it usually took to make chairs. But when George delivered the first fifty chairs, the buyer told George he didn't want them. George was furious, but without a written contract with the buyer he could do nothing. From now on, George told himself, I will take special orders only when I receive a written contract. He still sold the chairs, but at a price too low to make up for the extra time it took to produce them.

Toward the end of the year, George missed another big chance. Karari told him that the government of Kenya was inviting bids on a contract for tables for a hospital in Mombasa. With the help of the technicians at the CFW, George designed a table, estimated its cost, and

*George's workers have become much more proficient as the volume of production has increased.*





submitted a bid. He did not win the contract. But he knew there would be similar opportunities in the future.

There were times during the year when George looked back to the years he had worked alone in the yard of his hut. In some ways things had been easier then. But he did not look back for long. True, production and sales were not what he and Karari had hoped for. But he was able to pay his rent each month, and he was making his loan payments on time. And he made enough profit to begin repaying the money he borrowed from his brothers. His family was a little more comfortable now. There was no money yet for land: he hoped there might be after another year.

George knew that many problems lay ahead, but he had solved some during the year and felt confident about the future. He had enough work space—and if his business did well for six or seven years, he would be able to rent a larger workshop. He had machines—and if things went well, he would be able to replace them with more advanced models when they wore out. He also had help—from the technicians at the CFW, Karari, the RIDC manager, and the engineer who sometimes came to Machakos from Nairobi.

*His workers have also made valuable suggestions about how the flow of work could be improved.*



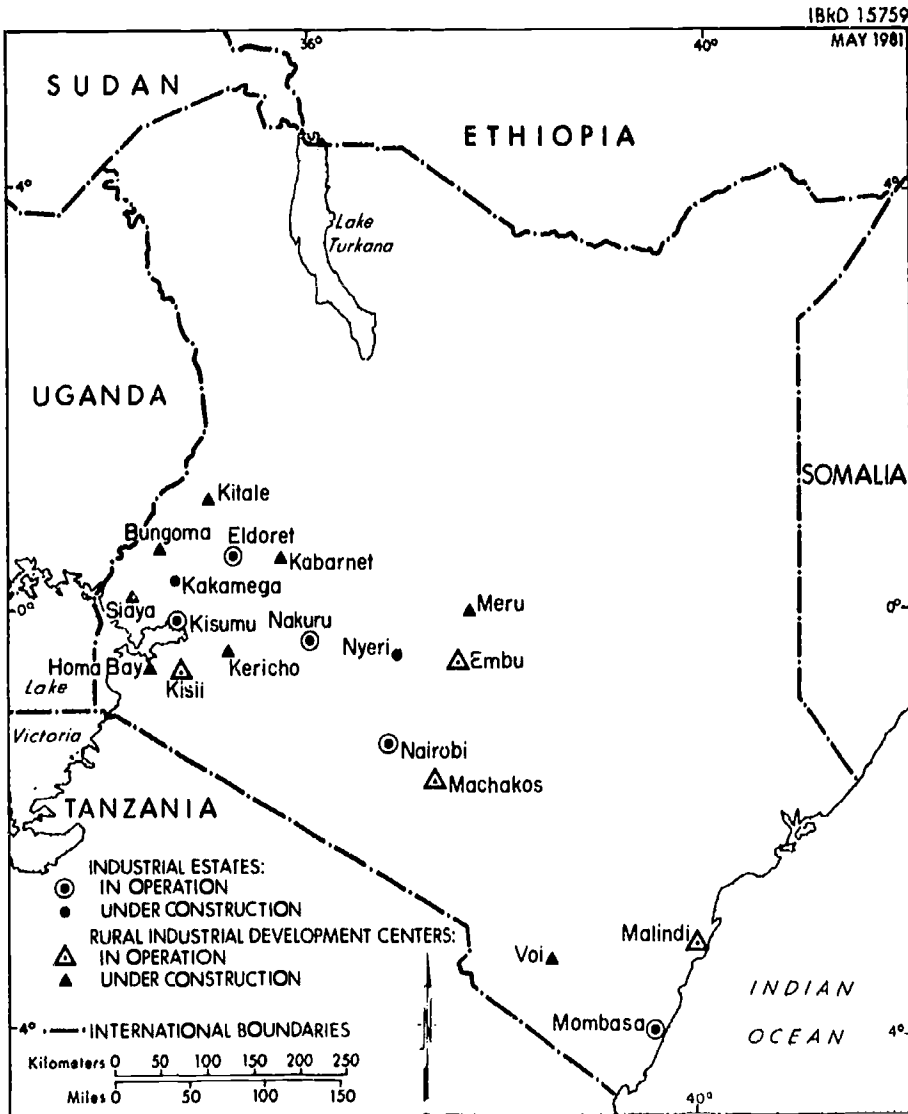
Since its reorganization in 1977, Kenya Industrial Estates has had three tasks: building and managing industrial estates and rural industrial development centers, lending to the owners of small-scale industries, and providing them with technical assistance. Other institutions in Africa have done one or two of these tasks, but not all three. Some of KIE's achievements are shown in Table 3 and Map 2.

Table 3. Some Achievements of KIE, 1978-80

Factories and workshops completed	171
Loans approved	182
Amount lent	Shs. 114,500,000
Jobs created	2,627

KIE's experience since 1977 teaches some important lessons. The first is that progress is slow. Although more factories and workshops were built after 1977 than before, fewer were built than planned, mainly because of increased costs. And plans for future buildings have been cut back: fewer will be built, they will be simpler, and they will use less costly materials. Arranging loans and providing technical assistance has also taken a long time, even though KIE took on more staff after 1977. The number of new loans, the amount lent, and the number of new jobs have been less than expected.

Another lesson is that collecting rents and loan payments is difficult. It is not that borrowers are unwilling to pay. They often cannot pay—usually because production or sales have been less than expected. Low production is often explained by the inexperience of the owners of small businesses, low sales by the difficulty of selling. KIE is dealing with this by paying more attention to the experience and skills of possible renters and borrowers, and to how and where they will sell their products. KIE staff are also working more closely with renters and borrowers from the start—to solve problems quickly.



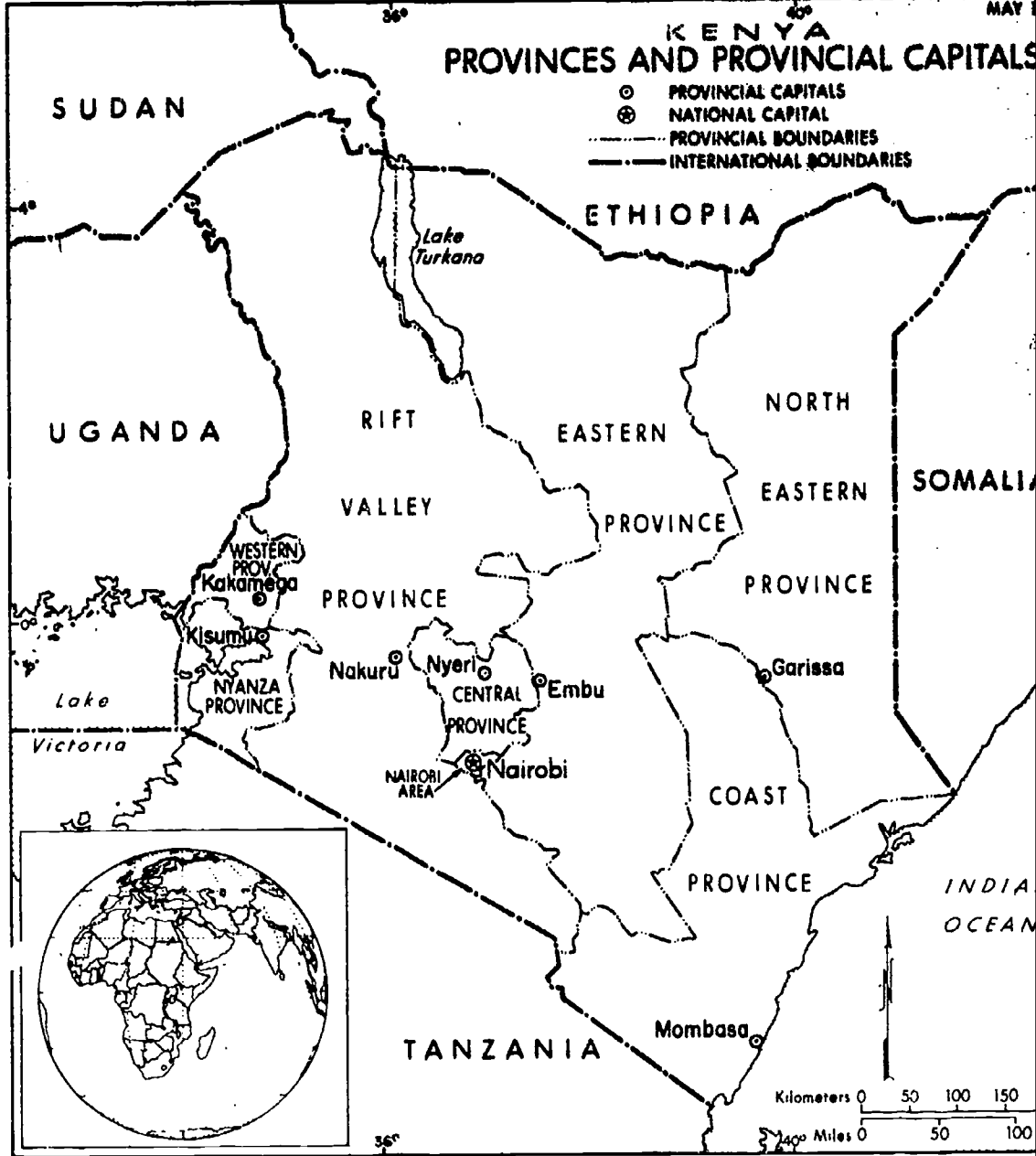
Map 2. Industrial Estates and Rural Industrial Development Centers in 1980

A third lesson is that managing large amounts of money is complex. In 1980 KIE's expenditures amounted to nearly 33,000,000 shillings. The value of its buildings and equipment that year was nearly 67,000,000 shillings. KIE is still developing accounting and reporting systems and training people to use them. It has taken foreign advisers longer than expected to hand over to Kenyans the work of financial analysis and planning.

Despite the delays and problems, those close to KIE believe that its performance is improving. Small-scale industries in Kenya are receiving help, problems are being solved, and lessons are being learned. Like many efforts of economic development, much has been accomplished but much remains to be done.

*Because of KIE, many workers in small-scale industries can think not only of today's needs and demands but also of tomorrow's prospects.*







Small-scale Industries in Kenya



**TOWARD A BETTER WORLD**  
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**- A Case Study of Economic Development -**

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Changes have been made on the following pages of this teaching guide so that it conforms to the 1984 version of Economic Summary: Kenya and Small-scale Industries in Kenya:

Pages 2, 4 through 7, 15, 16, 18, 20, 27, and 40.

Worksheets No. 1; No. 2, page 2; No. 9, page 1; No. 11, page 2.

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## FOREWARD

TOWARD A BETTER WORLD is a series of multimedia kits, called Learning Kits, developed by the World Bank for secondary schools. The kits deal with world poverty and the economic and social changes that must be made to relieve it. Items in the kits are as follows:

THE DEVELOPING WORLD (Learning Kit No. 1): an introduction to economic development:

Student book, The Developing World  
Sound filmstrip, Some Big Questions  
Sound filmstrip, Toward A Better World  
Teaching Guide: The Developing World

THE RAJASTHAN CANAL PROJECT (Learning Kit No. 2): a case study of a development project in India

Student pamphlet, Economic Summary: India  
Student book, The Rajasthan Canal Project  
Sound filmstrip, What Happens When A Desert Blooms  
Teaching Guide: The Rajasthan Canal Project

SMALL-SCALE INDUSTRIES IN KENYA (Learning Kit No. 3): a case study of a development project in Kenya

Student pamphlet, Economic Summary: Kenya  
Student book, Small-scale Industries in Kenya  
Sound filmstrip, Small-scale Industries in Kenya  
Teaching guide: Small-scale Industries in Kenya

TACKLING POVERTY IN RURAL MEXICO (Learning Kit No. 4): a case study of a development project in Mexico

Student pamphlet, Economic Summary: Mexico  
Student book, Tackling Poverty in Rural Mexico  
Sound filmstrip, Many Steps, One Goal  
Teaching Guide: Tackling Poverty in Rural Mexico

### Rationale and point of view

Relieving world poverty is one of the pressing problems of our time. Three-quarters of the world's people live in countries that are poor. Nearly a billion people in poor countries are hungry, illiterate, in poor health, and without productive employment. Other hundreds of millions are only a little better off. Because the

populations of the poor countries are increasing, each year millions more people must be fed, educated, and provided with houses, clothing, jobs, health services, and pure drinking water.

To improve the living conditions of their people, the poor countries engage in economic development. They do so mainly by using their own resources, although the rich countries provide technical and financial assistance. As a result of these efforts, all poor countries have made some progress; a few have made dramatic gains. But widespread poverty remains and threatens to increase. It affects rich countries as well as poor in an increasingly interdependent world.

Since 1946, The World Bank, in cooperation with governments and other institutions, has been assisting the world's poor countries in the process of economic development. TOWARD A BETTER WORLD draws on that experience. The purpose of the World Bank in publishing TOWARD A BETTER WORLD is to help young people better understand the need for and the process of economic development. Economic development is helping hundreds of millions of people to improve their physical and material well-being and better fulfill their potential as human beings. Hundreds of millions of others must be affected by it if humanity is to move toward a better world.

### Goals

TOWARD A BETTER WORLD has two educational goals. The first goal is to increase students' knowledge--of the nature and extent of world poverty, of the process of economic development, and of the growing interdependence of rich and poor countries that economic development is bringing about. The second goal is to encourage students to develop informed opinions--about relieving world poverty, about economic development, and about global interdependence.

### Approach

The approach of TOWARD A BETTER WORLD is to introduce students to the nature of life in the developing countries, to the process of economic development, and to the effects of economic development in the developing countries and in the world as a whole. Against this background, case studies of specific development projects are presented to illustrate economic development vividly and in detail. The case studies are of projects that have been partly financed by the World Bank and its affiliate, the International Development Association. Information is presented in statistical and descriptive form in books, pamphlets, and sound filmstrips. Lesson plans provide opportunities for students to enter imaginatively into the experiences of people in the world's poor countries, and to use the knowledge they acquire in their study to clarify their opinions.

### Contributions to the social studies curriculum

TOWARD A BETTER WORLD makes three contributions to the secondary school social studies curriculum. First, it deals with two major concepts examined in social studies: change and interdependence. Second, it presents a number of economic concepts and terms that all citizens should understand. Third, it offers opportunities for strengthening skills in reading, writing, geography, and critical thinking, and in using statistical tables, graphs and charts. The kit is designed as supplementary material, to be used in such courses as world geography, world history, world studies, global studies, and current issues. The entire kit can be used as a unit of six to nine weeks in these courses, or items in it can be selected for use in existing units.

### Acknowledgments

TOWARD A BETTER WORLD was pilot tested in classrooms in Washington, D.C. and its Maryland and Virginia suburbs. It was then evaluated in schools in many parts of the United States. The teachers who participated in the evaluation are listed below. The World Bank expresses its appreciation to them and Carole L. Hahn, past president of the National Council for the Social Studies and Professor of Education, Emory University, Atlanta, GA, and to Social studies supervisors who assisted in the pilot testing: Frances Powell, Washington, D.C.; Richard Wilson, Montgomery County, MD; Jack Henes, Alexandria, VA; Frank Taylor, Fairfax County, VA; Barbara Davis, Prince William County, VA; and especially Dana Kurfman, Prince George's County, MD.

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Billie Day, Benjamin Banneker High School, Washington, D.C.  
Simine Heise, Homestead Senior High School, Homestead, FL.  
Richard Gross, Riverwood High School, Atlanta, GA.  
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Craig Simpson, Andover High School, Andover, MA.  
Linda Lucatorto, Holton Arms School, Bethesda, MA.  
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Ronald Anderson, Fairmont Heights Senior High School,  
Hyattsville, MD.  
Fred Crouch, Duval Senior High School, Lanham, MD.  
Sister Rose Galvin, Derham Hall High School, St. Paul, MN.  
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## INTRODUCTION TO SMALL-SCALE INDUSTRIES IN KENYA

Small-scale Industries in Kenya is Learning Kit No. 3 in the World Bank's series of multimedia kits about economic development, TOWARD A BETTER WORLD. The kit consists of a pamphlet and book for students, a sound filmstrip, and this teaching guide. It presents a case study of a project to strengthen small-scale industries in Kenya.

TOWARD A BETTER WORLD includes three case studies of development projects. The case studies may be used separately or as a set together with the introduction to economic development in Learning Kit No. 1, The Developing World. When used as a set, The Developing World should be used first; when it is finished, the case studies may be used in any order. If the case studies are used apart from The Developing World, teachers should be prepared to make some adjustments in the activities suggested in the teaching guides for the case studies.

### Materials

The materials to be used with this Teaching Guide for the case study of Kenya's small-scale industries project are as follows:

Student pamphlet: Economic Summary: Kenya

Student book: Small-scale Industries in Kenya

Sound filmstrip: Small-scale Industries in Kenya

Worksheets (included in the Teaching Guide, beginning on page 53; those preceded by an asterisk are for highly motivated students):

- No. 1. A Few Questions About Kenya
- No. 2. Improving Living Conditions in Kenya
- \* No. 3. A Meeting in the Ministry for Economic Planning
- No. 4. Kenya and Neighboring Countries
- No. 5. After You Read
- No. 6. How KIE Helps Small-scale Industries
- No. 7. Fourteen Questions
- No. 8. George Kisilu's Loan Application Form
- No. 9. What Would You Do If...?
- No.10. More About Small-scale Industries
- No.11. Test
- \* No.12. Additional Activities

The following materials will enrich the study. They are not included in the multimedia kit, TOWARD A BETTER WORLD, but are easily available:

Two novels by the Kenyan writer, Ngugi wa Tiong'o--  
The River Between (London: Heinemann, 1965; 153 pages;  
\$2.50) and Weep Not, Child (London: Heinemann, 1965;  
136 pages, \$3.00)--are about two young Kenyans and the  
tensions and disunity in which they grew up during Kenya's  
independence movement. The former deals in part with the  
traditional rite of circumcision, which symbolizes the  
passage of Kikuyus from youth to maturity. Available  
from Heinemann Educational Books, Inc., 4 Front Street,  
Exeter, New Hampshire 03833.

"Kenya Says Harambee!" (National Geographic, vol. 135,  
no. 2, February 1969) describes the Kenyan people, land-  
scape and wildlife, and social and economic conditions  
six years after independence.

The film, Kenya Boran I (33 minutes, color, 1977) portrays  
life among the cattle-herding Boron people of northern  
Kenya. Available from Wheelock Educational Resources, P.O.  
Box 491, Hanover, N.H. 03755; \$41 rental, \$340 purchase.

The film Maragoli (60 minutes, color, 1979) depicts the  
tensions created for the Maragoli people in southwest  
Kenya by rising population and limited farm land. Avail-  
able from University of California Extension Media Center,  
Berkeley, Cal. 04720; \$52 rental, \$730 purchase.

### Overview

In all developing countries, many goods are produced and many  
services performed by small-scale industries. Workshops produce  
clothing, bread, household utensils, building materials, and metal  
ware. Repair shops fix tools, bicycles, and electric motors.  
Small factories process foods and make cloth and lumber. Small-  
scale industries play an important economic role by providing jobs  
and low-cost goods and services. So the governments of most  
developing countries assist small-scale industries in various ways.

The government of Kenya assists small-scale industries through  
Kenya Industrial Estates, Limited, a government-owned company.  
KIE performs three functions. First, it builds and manages urban  
industrial estates and rural industrial development centers (RIDCs)  
--clusters of buildings that are served with water and electricity  
and rented to small-scale enterprises. Second, KIE makes loans to  
modernize and expand small enterprises on and near the estates and  
RIDCs. And third, it provides technical assistance in planning,  
production, marketing, and record-keeping. This case study deals  
with the work of Kenya Industrial Estates, Ltd.

Students will begin the case study by comparing living condi-  
tions in Kenya and the United States using the Economic Summary:  
Kenya. They will recognize the severe problems Kenya faces in  
raising standards of living: limited agricultural land, few mine-  
ral resources to support industry, and rapidly increasing population.

Turning to the book, Small-scale Industries in Kenya, students will meet Karari Ngugi, a university graduate who wants to help build Kenyan industry, and George Kisilu, the owner of a small furniture workshop. Students will learn about Kenya Industrial Estates, Ltd., where Karari goes to work. Karari and George meet when George goes for help to KIE's rural industrial development center in the town where he lives. With Karari's help, George makes plans to rent a workshop at the RIDC and applies for a loan that will enable him to enlarge his business. Students will consider the effects of KIE's assistance to small-scale industries--on George's life and on the economy of Kenya. They will review the study by watching a sound filmstrip.

### Objectives and Evaluation

The case study of small-scale industries in Kenya can be used to meet many educational objectives. The Lesson Plans that follow are designed to help students achieve the general objectives listed below. The achievement of these objectives can be measured in a test given in Lesson 8 (Worksheet No. 11).

Objective 1. Students will identify some characteristics of the Kenyan economy and list some activities in which Kenya engages to advance economic development.

Objective 2. Students will describe the working conditions of a typical small-scale industry in Kenya.

Objective 3. Students will describe the activities in which Kenya Industrial Estates engages to carry out the government of Kenya's policy of assisting small-scale industries.

Objective 4. Students will illustrate the complexity of assisting small-scale industries in Kenya by:

- listing a variety of small-scale industries
- stating some things that must be considered in making loans to small-scale industries.

Objective 5. Students will explain how strengthening small-scale industries affects the lives of individuals and families and contributes to economic development in Kenya.

Objective 6. Students will locate Kenya on a map of Africa and the following on a map of Kenya and neighboring countries:

The equator	Mt. Kilimanjaro	Tanzania
Indian Ocean	Ethiopia	Uganda
Lake Victoria	Kenya	Machakos
Lake Turkana	Somalia	Nairobi
Mt. Kenya	Sudan	



## LESSON PLANS

### Introductory Notes for Teachers

- Lesson Plans are organized in eight lessons, one of which is a test. Most student groups should be able to complete one lesson in a single class period.
  
- The Lesson Plans are designed to follow the study of the book, The Developing World, from the multimedia kit, TOWARD A BETTER WORLD. Teachers will need to change a few activities in the Lesson Plans for students who have not read that book.
  
- Lesson objectives are derived from the general objectives of the study listed on page 9. Activities in which students may demonstrate the achievement of the lesson objectives are listed after each objective.
  
- Activities are numbered according to the lesson in which they occur and the sequence within the lesson.
  - Activity numbers followed by letters (i.e., 2.2.a. and 2.2.b.) indicate that the activities are alternatives. Teachers should choose only one of them.
  - Activity numbers preceded by asterisks indicate activities for highly motivated students.
  - Supplementary activities are included at the end of most lessons.
  
- Vocabulary that may be new to students is listed at the beginning of each lesson. Teachers should be sure that students understand the vocabulary before beginning the lesson, but activities to strengthen mastery of vocabulary are not included in the lesson plans.
  
- The pronunciation of African words used in the lesson is given at the beginning of the lesson. Students should pronounce these words aloud three or four times so that they can say them easily. Pronunciations are also given on page 2 of the book, Small-scale Industries in Kenya.



- Worksheets are at the end of the Teaching Guide. By cutting them along the line of dashes, teachers can remove them for duplicating without damaging the book. Teachers should read each worksheet carefully before using it to determine whether it is appropriate for their class.
  
- The test in Lesson 8 (Worksheet No. 11) measures students' achievement of the general objectives of the study listed on page 9.
  
- A world map and/or a map of Africa should be displayed in the classroom throughout the study.
  
- Additional activities that will enrich the study:
  - a bulletin board display of pictures and magazine and newspaper articles about Kenya.
  
  - talks by students or adults who have lived or traveled in Kenya.
  
  - listening to recordings of Kenyan music.
  
  - a trip to the school's wood shop and a discussion with the shop teacher (toward the end of the study).

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Lesson 1

THE ECONOMY OF KENYA (1)

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Lesson objectives

As a result of this lesson, students should be able to:

1. Locate the following places on a map of the world and on a map of Kenya and neighboring countries:  
Ethiopia                      Tanzania  
Kenya                              Uganda  
Somalia                         Nairobi  
Sudan                              Indian Ocean                      . (Activity 1.2)
2. Describe the living conditions of a typical teenager in Kenya, making inferences from statistics. (Activity 1.3)
3. Summarize the problems Kenya faces in relieving poverty. (Activity 1.5)

Materials

Worksheet No. 1. A Few Questions about Kenya

Economic Summary: Kenya

Worksheet No. 2. Improving Living Conditions in Kenya (for homework)

Vocabulary

arid, semiarid  
gross national product (GNP)  
GNP per capita  
livelihood  
millet  
pyrethrum  
social and economic indicators  
tourism

Pronunciation

Bantu	<u>Ban-<u>too</u></u>	Mr. Kilimanjaro	Mt. Kill-ee-mun- <u>jah-<u>roh</u></u>
Kamba	<u>Kahm-<u>bah</u></u>	Mombasa	Mohm- <u>bah-<u>suh</u></u>
Kikuyu	<u>Kih-<u>koo-<u>you</u></u></u>	Nairobi	Nigh- <u>roh-<u>bee</u></u>
Kenya	<u>Ken-<u>yuh</u></u>	Nyanza	<u>Nyan-<u>zuh</u></u>
Luhya	<u>Loo-<u>yuh</u></u>	Samburu	Sam- <u>boo-<u>ruh</u></u>
Luo	<u>Loo-<u>oh</u></u>	Swahili	Swah- <u>hee-<u>lee</u></u>
Masai	<u>Mah-<u>sigh</u></u>	Tanzania	Tan- <u>zuh-<u>nee-<u>uh</u></u></u>
		Uganda	You- <u>gahn-<u>duh</u></u>

---

Lesson 1

THE ECONOMY OF KENYA (1)

---

Activities

- 1.1 Introduce the study. Explain to students that they are going to learn about a specific development project now underway in Kenya. The case study will help them understand economic development in greater detail. They will begin by learning about the Kenyan economy.

Distribute Worksheet No. 1. Read the instructions with students and have them complete it quickly. When they have finished, tell them to put the worksheet aside; they will refer to it later.

- 1.2 Locate Kenya on a wall map of the world. Have students identify the countries that border it.

Distribute the pamphlet, Economic Summary: Kenya. Have students look at the map on the back cover. Ask the following questions:

- Where is Kenya on the map at the lower left?
- What countries border Kenya? What ocean borders it?
- How many provinces are there in Kenya? (There are seven; the Nairobi Area does not count as a province.) Name the provinces.
- How many miles across is Kenya at the widest point?
- Where is the Rift Valley? What is it?  
(Explain that the Rift Valley is part of a geological fault that begins in Israel and extends to Mozambique. Point to the fault on a map of the world that shows topography. Remind students that the Leakey family is recovering evidence of prehistoric man in the Rift Valley.)
- Where is the equator? (Note zero latitude.)
- What does the equator suggest to you about the climate of Kenya?
- What evidence is there on the map that Kenya is not uniformly hot? (Mt. Kenya)
- Where is the population of Kenya concentrated? Can you guess why? (Good soil, adequate rainfall.)

Have students summarize in a few words the location of Kenya. (They should be able to respond that it is in East Africa, on the Indian Ocean, and straddles the equator.)

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Lesson 1

THE ECONOMY OF KENYA (1)

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- 1.3 Have students look at the statistical table on the cover of the Economic Summary: Kenya. Some statistics in the table may appear to be out-of-date. Explain that those in the table were the most reliable ones available at the time the table was prepared. Ask students to find the copyright date on the back of the pamphlet to determine the year the table was prepared.

Have students look at the first three statistics in the table. Ask the following questions:

- How does Kenya compare in area with the United States?
- What is likely to happen to Kenya's population by 2000?

Ask students to study the table to answer the following questions. Ask them to identify the statistic that answers each question.

If you were like most Kenyan teenagers,

- Would you like in a city, in a suburb, or on a farm?
- What would your parents' occupation probably be?
- Would you be likely to attend school?
- Would your parents be literate?
- Would you have a good chance of living to be 70?
- Might a brother or sister have died as a baby?
- Would you be likely to go to a doctor when you were ill?
- Would you probably get enough to eat?
- Would your family be likely to own a car?
- Would you be likely to have electricity in your house?

To summarize the discussion, write the following on the chalkboard: "If we were like most Kenyan teenagers..." Ask students to suggest sentences for a paragraph beginning with these words that draw on the knowledge they have acquired from the statistical table. Write the sentences on the chalkboard.

- 1.4. Explain to students--or remind them of--the meaning of the terms GNP and GNP per capita. (GNP--gross national product--is the value of all the goods and services a country produces in a year. It includes, for example, food and clothing, roads and buildings, military equipment, government salaries,

and exports. GNP per capita is the part of a country's GNP each person in the country would have if the GNP were divided equally among them. See Supplementary Activity 1.7.)

Explain that a country's GNP per capita means more when it is compared with that of another country. Write the chalkboard the following countries and their GNP per capita in 1981:

India	\$260
Mexico	\$2,250
Somalia	\$280
Tanzania	\$280

Ask students: Among these developing countries, is Kenya moderately well-off or very poor?

- 1.5. Read aloud with students the Economic Summary: Kenya to the section entitled "Economic Development in Kenya." Lead a discussion of the following questions during the reading.

- Why do you think political stability and peace would help a developing country?
- What conditions in Kenya might make it difficult to maintain political stability? (A diverse population.)
- What information does the reading provide that explains Kenya's population distribution?
- Why is agriculture important in the Kenyan economy?
- Why is tourism important in the Kenyan economy?
- Why are Kenya's towns and cities crowded?

Have students re-read the first sentence in the section, "The Kenyan Economy." Ask them to summarize the severe problems Kenya faces in relieving poverty. Students should be able to list the following:

- few natural resources
- rapidly growing population
- pressure on the land
- too few exports to buy needed imports
- urban slums and unemployment

- 1.6. Homework

1. Correct Worksheet No. 1.
2. Read Economic Summary: Kenya, "Economic Development in Kenya."
3. Complete Worksheet No. 2.

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Lesson 1

THE ECONOMY OF KENYA (1)

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Supplementary activities

- 1.7. With students who are not familiar with the terms GNP and GNP per capita, calculate Kenya's GNP per capita in 1981 on the chalkboard:

$$\frac{\$ 7,308,000,000}{17,400,000} = \$420$$

Have students calculate the GNP per capita of the following countries in 1981:

	GNP	Population	GNP per capita
Ethiopia	\$4,480,000,000	32,000,000	(\$140)
Mexico	\$160,200,000,000	71,200,000	(\$2,250)
Pakistan	\$29,575,000,000	84,500,000	(\$350)

- 1.8. Have students make pictographs displaying the data on the cover of Economic Summary: Kenya. Have them use bar graphs, pie charts, pictures, or symbols (for example one figure representing 50,000 people).

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Lesson 2

THE ECONOMY OF KENYA (2)

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Lesson objectives

As a result of this lesson, students should be able to:

1. Explain what Kenya must do to provide jobs for its increasing population (Activity 2.1)
2. Give examples of activities in which Kenya is engaging under its development plan, and give reasons for those activities. (Activity 2.2.a or 2.2.b)
3. On a map of Africa, locate Kenya. On a map of Kenya and neighboring countries, locate the following:

The equator	Lake Turkana	
Ethiopia	Lake Victoria	
Kenya	Indian Ocean	
Somalia	Nairobi	
Sudan	Machakos	
Tanzania	Mt. Kenya	
Uganda	Mt. Kilimanjaro	(Activity 2.3)

Materials

Economic Summary: Kenya

Worksheet No. 2. Improving Living Conditions in Kenya (cont'd).

\* Worksheet No. 3. A Meeting in the Ministry for Economic Planning

Worksheet No. 4. Kenya and Neighboring Countries (for homework)

Vocabulary

abolished  
economic growth  
energy sources  
geothermal  
hydroelectric  
makeshift

Activities

- 2.1. Have students refer to page 2 of Worksheet No. 2 which they completed for homework, and to the chart on page 7 of the Economic Summary: Kenya. Check their answers to question 4 (a. 7,700,000; b. 17,600,000; c. 9,900,000). Lead a discussion of the following questions:
- What information does the chart provide about the number of jobs needed in Kenya by 2000?  
(Kenya will need more than twice as many jobs in 2000 as were needed in 1981, and more new jobs by 2000 than the total number needed in 1981.)
  - Why is this a problem for Kenya?  
(Because of acute pressure on the land and few resources for industry.)
  - What can Kenya do to help with the problem?  
(Increase economic growth and family planning)
  - How does economic growth help with the problem?  
(It increases the number of jobs and the supply of goods and services.)  
Explain that population growth often declines when economic growth occurs so that fewer jobs may be necessary. Thus economic growth may help in two ways. (See The Developing World, page 68.)
  - How might a strong family planning program help?  
(Fewer babies would be born, so fewer jobs would be needed.)

Ask students how a large population of working age can be of benefit to a country.

(Help students to see that a country with many people of working age has many people who can do productive work--if there are enough resources to support them.)

- Either 2.2.a. Tell students to put aside Worksheet No. 2. Ask them to give examples of activities in which Kenya is engaging under its present development plan. Write the activities on the chalkboard as students recall them. (The activities they recall should be those listed in the boxes on page 1 of Worksheet No. 2.)



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Lesson 2

THE ECONOMY OF KENYA (2)

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Ask students to group the activities listed on the chalkboard under the headings of agriculture, industry, energy, and basic services.

Ask students how each group of activities helps to improve living conditions in Kenya.

(The reasons students give should be their answers to questions a. - d. on page 1 of Worksheet No. 2.)

Have students refer to their worksheets and check question 2 with the information on the chalkboard. Discuss questions 1 and 3.

\* Or 2.2.b.

Distribute Worksheet No. 3. Organize the class into small groups. Explain that each group will play the role of a unit in the Ministry for Economic Planning in Kenya. Appoint a spokesperson for each group. Read the directions on the worksheet aloud. Then have the groups meet for about twenty minutes to do the assigned task.

Have the spokespersons for each group present the group's selections. Have students take notes during the presentations so that they will be able to discuss the presentations afterwards. When all the presentations have been made, have students discuss the selections of each group.

End the discussion in time to ask the following question: What makes the role-play realistic? (Students should be able to respond that Kenya can engage in many activities that will improve living conditions, and choices among those activities are difficult to make. But choices must be made because of Kenya's limited resources.)

2.3. Homework. Explain that on the test at the end of the study students will be asked to locate the places listed on Worksheet No. 4.

1. Complete Worksheet No. 4.
2. Be able to spell the places listed on the worksheet.

Supplementary activities (see p. 20)

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Lesson 2

THE ECONOMY OF KENYA (2)

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Supplementary activities

- 2.4. Suppose you are a Kenyan teenager who has come to your high school as an exchange student. Write a letter home. Based on what you have learned in Lessons 1 and 2, make specific comparisons between your life in Kenya and the lives of the American teenagers you are meeting.
- \* 2.5. Have students construct a chart showing Kenya's population by age groups in 2015, like the one on page 7 of the Economic Summary: Kenya. Tell them to assume that the number of people in each age group in 2000 moves into the next age group by 2015. Have students make the following calculations:
- How many people of working age will there be who need jobs in 2015? (36,100,000)
  - If Kenya provides enough jobs for all people of working age in 2015, how many new jobs must be created between 1981 and 2015?  
(28,400,000)

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Lesson 3

THE SETTING

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Lesson Objectives

As a result of this lesson, students should be able to:

1. Describe the living conditions of the Kisilu family in their village and in Machakos. (Activity 3.3)
2. Compare Karari Ngugi and George Kisilu in terms of their education, knowledge, and values. (Activity 3.3)
3. Describe the working conditions of Kisilu Furniture. (Activity 3.4)

Materials

Small-scale Industries in Kenya. Pages 4-11  
Worksheet No. 5. After You Read (for homework)

Vocabulary

British  
fly whisk  
grievous  
lathe  
lintel  
missionaries  
nagging  
outskirts  
Union Jack

Pronunciation

Harambee	Hah-rahm-bay
George Kisilu	George Kee-see-loo
Machakos	Muh-chah-kohs
Karari Ngugi	Kah-rah-ree N-goo-gee
Nyanza Province	Nyan-zuh Province
Uhuru	Uh-hoo-roo

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Lesson 3

THE SETTING

---

Activities

Note: Teachers should practice the pronunciation of words and names used in the lesson.

3.1. Collect Worksheet No. 4 which students did for homework. Have students locate the places on the worksheet on wall maps of the world and of Africa. Give students a quick spelling test of the places on the worksheet (including 'equator').

3.2. Remind students that they will begin the case study of a development project in Kenya during this lesson. Distribute copies of Small-scale Industries in Kenya. Ask students what the terms "small-scale" and "large-scale industries" might mean. (Small-scale industries employ few people and use few machines; large industries employ many people and use many machines.) Discuss the small-scale industry shown on the cover of the book; ask students to give examples of other small-scale industries.

Have students look at the map on the back cover of the book. Ask them to recall the map on the back cover of the Economic Summary: Kenya. Have them name the provinces in which most of Kenya's people live.

Direct students' attention to the "Pronunciation Guide" on page 2. Have them pronounce aloud the names of the people and places listed. Have them pronounce aloud uhuru and harambee; ask them if they know what these terms mean.

3.3. Read aloud with students or have them read silently pages 4-7. Lead a discussion of the following questions during or after reading:

- How long has Kenya been independent?
- What was Nairobi like on December 11 and 12, 1963?
- What does uhuru mean? Harambee?
- How do you think Karari's father might have felt about having to make a living away from the land?
- How might he have felt about moving to Nairobi?

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Lesson 3

THE SETTING

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- What experiences did members of Karari's family have that illustrate "the acute pressure on the land" mentioned in the Economic Summary: Kenya? (His father and cousins could not make a living in farming.)
- At the University of Nairobi, Karari learned that it is difficult to develop industry in Kenya. What conditions explain this difficulty? (Few mineral resources, few exports that provide money to import machinery.)

Continue with pages 8-11, reading aloud or having students read silently. Lead a discussion of the following questions during or after the reading:

- How do you think George's parents might have felt about leaving their village?
- What were the conditions in which George's family lived in the village?
- What were the conditions in which they lived in Machakos?
- In what ways were they better off in Machakos? worse off?
- Why did George's father start making stools?
- Where did the money come from that supported the family after George's father died?
- Why did George want to earn more money?
- What problems does he face in his furniture business?
- What might his feelings be about the future?

Ask students to compare Karari and George. Use the following questions:

- How do they differ in education?
- What knowledge does each have that the other lacks?
- What values do they share?
- What values does each have that the other does not have?

- 3.4. Ask students to pretend that they are photographers with the assignment of producing a photo-essay about George's workshop. Ask them what they would photograph and what characteristics of the workshop they would try to portray. (Students should be able to suggest the shed, a few tools, some lumber, some completed products--all located in the yard of the hut. They might want to portray George's skill and the size of the area he works in.)

- 3.5. Explain to students that George's workshop is one of many in Kenya, and the case study is about the effort of the government of Kenya to help people like George. Ask students what kinds of help George needs. (Students should be able to recall George's need for more space, for more tools and machines, and for advice.)

Have students speculate about what the government of Kenya might do to help George and people like him.

- 3.6. Homework. Explain that the term "Limited" or "Ltd." is used by the British and by the Kenyans to mean the same thing as the term "Incorporated" or "Inc." in the United States.

1. Read Small-scale Industries in Kenya, pages 12-23.
2. Complete Worksheet No. 5 after completing the reading.
3. Ask for volunteers to be ready in a few days to describe the following furniture-making machines and tools and the prices of factory models: table saw, planer, band saw, lathe, portable sander, and portable drill. A shop teacher may be able to help students with this information.

Supplementary activities

- 3.7. Ask students to compare Karari's and George's family life with family life in the United States.

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Lesson 4

HELPING SMALL-SCALE INDUSTRIES

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Lesson objectives

As a result of this lesson, students should be able to:

1. Give examples of activities in which KIE is engaging to assist small-scale industries. (Activities 4.1 and 4.2)
2. Give reasons why the government of Kenya is assisting small-scale industries. (Activity 4.3)

Materials

Small-scale Industries in Kenya. Pages 12-23.

Worksheet No. 5. After You Read (cont'd.)

Worksheet No. 6. How KIE Helps

Worksheet No. 7. Fourteen Questions (for homework)

Vocabulary

application  
borrower  
facilities  
intently  
modernize  
small-scale  
technical assistance

Abbreviations

CFW	central facilities workshop
ICDC	Industrial and Commercial Development Corporation
KIE	Kenya Industrial Estates, Limited
RIDC	rural industrial development center

Pronunciation

Eldoret	El-doh- <u>ret</u>
Embu	Em- <u>boo</u>
Kakamega	Kah-kah- <u>may-guh</u>
Kisumu	Kee- <u>soo-moo</u>
Mombasa	Mohm- <u>bah-suh</u>
Nakuru	Nuh- <u>koo-roo</u>
Nyeri	Nyair- <u>ee</u>

Activities

- 4.1. Have students get out their books and Worksheet No. 5 they completed for homework. Write the following abbreviations on the chalkboard and ask students what each stands for: CFW, KIE, RIDC, and ICDC. Then lead a discussion of the worksheet.

At item I.A., organize students' responses into the following groups:

cloth and clothing	wood-working
food processing	household utensils
building and construction	metal work
tools and transportation	others
equipment	

At item I.D., ask students to describe industrial estates and rural industrial development centers (RIDCs). Have them study the map on page 15 of their books; list on the chalkboard the places where there are industrial estates and RIDCs. Have students pronounce the places using the Pronunciation Guide on page 2 of their books. Ask students to give examples of technical assistance.

At item II.B., ask students to explain how the changes at KIE in 1977 might have helped to solve the problems listed in Item I.F. Discuss the industrial policies of the government of Kenya briefly; students may recall these policies from the Economic Summary: Kenya. Ask students how these policies would help Kenya.

- 4.2 Organize the class into small groups. Distribute Worksheet No. 6 and have the groups complete it. Have students discuss their responses to the questions on the worksheet. Then ask them to summarize the ways in which KIE helps owners of small-scale industries. (Students should be able to state that KIE provides rental space on industrial estates and RIDCs, loans to assist small-scale industries in modernizing and expanding, and technical assistance.)

- 4.3. Ask students to give reasons why the government of Kenya is assisting small-scale industries. (Students should be able to state that such industries provide jobs, produce low-cost goods and services that Kenyans need, and help people to develop skills in using machinery and operating businesses.)



- 4.4. Ask students to describe the RIDC in Machakos and to compare it with an industrial estate. Have them look at the photographs on page 24 and state what workshop described on page 25 each photograph illustrates. Ask them to guess what will happen in Chapter Three of Small-scale Industries in Kenya.

Distribute Worksheet No. 7. Read the directions aloud. Then have students do the first task on the worksheet.

- 4.5. Homework.

1. Read Small-scale Industries in Kenya. Pages 24-33.
2. Complete Worksheet No. 7.

Tell students who volunteered to find out about furniture-making machines to be ready to discuss them in the following class.

Explain that Chapter Three contains many references to shillings, Kenya's money. One Kenya shilling was worth 8.25¢ (U.S.) in 1980, the year the events in Chapter Three occurred. If students want to work out the dollar equivalents of the amounts in Chapter Three, they can do so by dividing the amount in shillings by 8.25.

Supplementary activities

- 4.6. Ask two students to volunteer to do a role-play of a meeting of Karari and his professor after Karari has worked at KIE for a year.
- 4.7. Pretend that you are a member of the parliament of one of the Scandinavian countries that contributed funds and sent advisors to KIE. The time is 1977, when officials of your government and others are discussing KIE (see Small-scale Industries in Kenya, page 21). A colleague has asked you whether your country should continue to assist KIE. Write an answer to this question.
- 4.8. Write a story about the maker of fishing flies or the potter, described on pages 22-23, whose photographs are on page 23.

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Lesson 5

PLANNING FOR KISILU FURNITURE, LTD.

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Lesson objectives

As a result of this lesson, students should be able to:

1. State some things that had to be taken into account in processing George's loan application. (Activity 5.1)
2. Imagine George Kisilu's feelings at various times during the loan application process. (Activity 5.3)

Materials

Small-scale Industries in Kenya. Pages 24-33.

Worksheet No. 7. Fourteen Questions (cont'd.)

Worksheet No. 8. George Kisilu's Loan Application (for homework)

Vocabulary

application form  
apprehensive  
band saw  
planer  
precisely  
table saw  
technician

Activities

5.1 Lead a discussion of Worksheet No. 7 which students completed for homework. The order in which George and Karari answered the questions is follows:

1. What experience has the loan applicant had which qualifies him/her for running a business? (a)
2. What will the business produce? (n)
3. What raw materials will be required, and where will they be purchased? (d)
4. Where will the products be sold? (j)
5. How many people will the business employ? (h)
6. How many products might the business sell in a year? (i)
7. How much money might come in from sales in a year? (k)
8. How much money can the applicant contribute to the business? (e)
9. What machinery will the applicant need? ( )
10. What costs must be met before the business begins to operate? (l)
11. What costs must be met after the business begins to operate but before money comes in from sales? (m)
12. What will be the exact amount of the loan? (f)
13. In how many years must the loan be repaid, and what will the monthly payments be? (g)
14. How much profit will the business make in the first three years? (c)

Students may disagree on the ordering of nos. 13 and 14. Careful readers will notice that the amount of the loan repayment was calculated in estimating profits (see Figure 1 on page 32).

Ask students to review some of the things that George and Karari had to consider in processing George's loan application. Students should be able to state the following:

- whether George was qualified to run a business
- what he would produce
- what raw materials he would use
- where he would sell his products
- how he would produce them
- the total amount he would need for his business
- the amount he would contribute himself
- whether he would make a profit

5.2. Have students who volunteered to find out about furniture-making machines describe them to the class. Have them keep price information for use in the next class. These students might be assigned to role-play No. 2, below.

5.3. Organize the class into four groups to plan and present role-plays of four episodes in Chapter Three. Tell students to discuss the feelings those portrayed might have had during the episode. Tell them to include any questions on Worksheet No. 7 that fit into their role-play.

Assign each group one of the following episodes:

1. The meeting of George and Karari to begin to prepare George's loan application.
2. The meeting of George, Karari, the RDC engineer, and the foreign adviser to select the machines George will need.
3. The meeting of Karari and the RDC manager to discuss George's loan.
4. The meeting of George, Karari, and the RDC manager to discuss George's loan.

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Lesson 5

PLANNING FOR KISILU FURNITURE, LTD.

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Have the groups plan for about 15 minutes and then present their role-plays. Lead a discussion of the role-plays and of the feelings of those portrayed during each episode.

- 5.4. Homework. Distribute Worksheet No. 8. Read the directions aloud to be sure students know how to proceed. Tell them to complete the worksheet for homework.

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Lesson 6

PLANNING FOR KISILU FURNITURE, LTD. (2)

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Lesson Objectives

As a result of this lesson, students should be able to:

1. Summarize some things KIE takes into account in making loans. (Activity 6.3)
2. Use the knowledge they have acquired in the study to decide on a loan application. (Activity 6.2)

Materials

Small-scale Industries in Kenya, pages 24-33.

Worksheet No. 8. George Kisilu's Loan Application (cont'd.)

Worksheet No. 9. What Would You Do If...?

Worksheet No. 10. More About Small-scale Industries (for homework)

Vocabulary

depreciation	A reduction in the value of machinery to take wear and tear into account.
grace period	The period after a loan has been made and before loan repayments must begin.
gross profit	Revenue from sales minus operating expenditures.
net profit	Gross profit minus tax.

Activities

Note: For classes that show interest in the financial details of George Kisilu's business, there is additional data at the end of the lesson.

6.1 Lead a discussion of Worksheet No. 8. Have students compare their responses.

At item 7.b. on page 2 have students who found out about furniture-making equipment report on price information. Have them add up the amount for machines and power tools and convert the total into Kenyan shillings (multiply by 8.25); have them add \$1200 for workbenches, vises and handtools. Convert the total into shillings and compare it with the total in 7.b.

At item 7.d., ask students to figure out George's total wage bill for a year (Ksh. 3,300 x 12 = Ksh. 39,600). (If students want to compare the wages of George and his employees with U.S. wages, use the information at the end of this lesson. Convert the amounts in shillings into U.S. dollars by dividing by 8.25: e.g., Ksh. 10,000  $\div$  8.25 = \$1,212.12).

Have students refer to Figure 1 on page 32 of their books. Lead a discussion of the figure. See that they understand the use of notes. Ask students what production costs might include. (Students should be able to state raw materials, wages, maintenance and repair, transportation, and insurance.)

Draw students' attention to the terms depreciation, gross profit, and net profit. Explain that the amount of the monthly loan repayment was determined by multiplying the amount of the loan by a factor provided in a book of interest and discount tables, and dividing by 96 months.

Either 6.2.a. Organize the class into small groups. Distribute Worksheet No. 9 and read page 1 with students. Have them refer to the map on page 39 of their books to locate Meru and note the approximate location of Isiolo. Have students work in groups for about 15 minutes reading pages 2 and 3 and answering the questions on page 1.

Lead a class discussion of the questions, asking the groups to report their answers to the class. If students are interested, tell them the additional information about Mr. Mukira's loan application given at the end of the lesson.

Or 6.2.b. Use Worksheet No. 9 as a writing activity. Distribute the worksheet to students and read page 1 with them. Have them read pages 2 and 3 and write answers to the questions on page 1.

Discuss the questions when the writing has been completed. If students are interested, tell them the additional information about Mr. Mukira's loan application given at the end of the lesson.

6.3. Ask students to summarize in general terms the considerations KIE must take into account when making a loan. Students should be able to state the following:

- the qualifications of the applicant for running a small-scale industry
- the specific products to be made
- the availability of raw materials
- the market for the products
- the production process to be used
- the total amount of money needed for the business
- the amount of money to be contributed by the applicant
- whether the business would make a profit



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Lesson 6

PLANNING FOR KISILU FURNITURE, LTD. (2)

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6.5. Homework. Exp in to students that in the following class they will have opportunities to express their opinions about KIE's work and will view a filmstrip. The filmstrip will help them review for the test they will take at the end of the study. To prepare for these activities they are to:

1. Read Small-scale Industries in Kenya, pages 35-40.
2. Do the task labelled "Before Viewing" on Worksheet No. 10. (Some teachers may wish to have students refer to pages 13-14, 22-23, and Worksheets Nos. 6 and 9 in completing this task.)

Supplementary activity

\* 6.5. Explain to students that when small-scale industries expand, other businesses often expand, also. Ask students to list businesses that might expand as a result of the expansion of Karari's workshop. (The list might include the suppliers of raw materials, makers of machinery, those who service machinery, those who transport his products, and those who sell them.)

Explain that each of these businesses in turn might expand, employing more people. Ask students to list other businesses that might expand as a result of the expansion of the first set. (The list might include forest workers, those who service trucks, manufacturers of paint and varnish, etc.)

Students should be able to see that the expansion of Karari's workshop might lead to increased employment in many related businesses. Ask the following questions:

- What might be the effect of increased employment on the demand for Karari's products? (It might increase.)
- What might be the effect of this increased demand on Karari's workshop? (It might expand further.)
- What might be the effect of this expansion on Karari's suppliers? (They might expand further.)

Students should be able to see that the expansion of small-scale industries may set in motion a spiral of growth. (See The Developing World, page 85.)

Additional Data for Activity 6.1

The following data were used in writing  
Small-scale Industries in Kenya

Machinery and equipment

Machinery and spare parts	
table saw -----	Ksh. 10,000
planer -----	24,700
band saw -----	6,600
lathe -----	8,300
Power tools	
portable sander -----	2,500
portable drill -----	3,300
paint sprayer -----	2,000
Equipment	
lumber and vises for 3 workbenches -----	5,000
miscellaneous tools and clamps	5,000
	<hr/>
	Ksh. 67,400

Annual wages

George -----	Ksh. 10,000	(\$1212)
George's brother -----	8,000	(\$970)
Assistant carpenter -----	6,000	(\$727)
Assistant carpenter -----	6,000	(\$727)
George's wife, part-time -----	5,000	(\$606)
Additional finisher -----	4,600	(\$558)
	<hr/>	
	Ksh. 39,600	

Annual production costs

Raw materials -----	Ksh. 70,400
Wages -----	39,600
Maintenance and repairs -----	4,000
Transportation -----	6,000
Insurance -----	5,000
Fees and miscellaneous -----	3,000
	<hr/>
	Ksh. 128,000

Additional Information for Activity 6.2

Worksheet No. 9 is based on an actual KIE loan application from the Meru RIDC. The action taken by the Projects Department in Nairobi was to request more information. Who would manage the stone-crushing business? Mr. Mukira is himself employed full-time in operating his concrete blocks company and the construction company of which he is part-owner. Who would operate the stone-crusher, and how would he and the mechanic learn the skills they would need? Mr. Mukira was asked to describe the government building program in the Isiolo area and list officials from whom he got information about it.

Mr. Mukira responded as follows:

- The business would be managed by his brother, who had been manager of the vehicle repair garage operated by the District of Meru.
- The stone-crusher operator would be the chief mechanic in the vehicle repair garage. The mechanic would be one of Mr. Mukira's employees at his concrete block plant.
- The stone-crusher operator and the mechanic would be trained to run the new machine by spending a week at the stone-crushing plant 40 kilometers away. This plant uses the machinery Mr. Mukira planned to use.
- Mr. Mukira summarized the government building plans in the Isiolo area for the next five years: a government office building and housing for officials in Isiolo; housing for the staff of a new agricultural college outside Isiolo; a hospital in Isiolo; an office area and store on a nearby game reserve.

After this information had been provided, the loan application was reviewed and approved.

Lesson Objectives

As a result of this lesson, students should be able to:

1. Use information acquired in the study to support opinions about KIE's work. (Activity 7.1)
2. Explain how KIE's work is helping Kenya solve some of its economic problems. (Activity 7.2)
3. Give examples of small-scale industries and group them. (Activity 7.3)

Materials

Small-scale Industries in Kenya. Pages 35-40.

Worksheet No.10. More About Small-scale Industries (cont'd.)

Filmstrip. Small-scale Industries in Kenya.

Vocabulary

defective  
intervene  
specifications

Activities

Notes: Teachers should preview the filmstrip to be shown in in this lesson. The narration is on page 47.

During this lesson, students should be encouraged to express their opinions freely and to support them with information they have acquired.

7.1. Lead a discussion of the following questions:

- What problems did George Kisilu face during the first year his workshop was operating?  
(Low production, a defective machine, difficulty in selling, the arrival of his brother-in-law, a cancelled order, failure to get a contract.)
- What things happened to George which made the year a success despite these problems?  
(He made rent and loan payments on time and began to repay his brothers; conditions for his family improved.)
- What skills can you think of that he learned?  
(Planning, operating machines, supervising employees, marketing, producing new products, keeping accounts.)
- Summarize the ways in which KIE helped George.  
(It provided him with more space, a loan, and technical advice.)
- In your opinion, was George better off after he received his KIE loan, or before?  
(The gains cited in the foregoing discussion should be weighed against such factors as George's increased worries, his absence--and his wife's--from home, his longer work hours.)

7.2. Ask students to express their opinions about KIE's work. Use the following questions:

- In what specific ways is KIE helping other people like George Kisilu?  
(It is providing rental space by building industrial estates and RIDCs; it is also providing loans and technical assistance.)

- In what specific ways has KIE's performance not met expectations?  
(Fewer buildings have been constructed, fewer loans have been made; some people are still not repaying their loans; accounting and reporting systems are still being developed.)
- In what ways is KIE's performance improving?  
(It is selecting renters and borrowers more carefully, helping them sell their products, helping them solve their problems quickly.)

Ask students to recall the chart on the last page of the Economic Summary: Kenya. Ask them how many new jobs must be created in Kenya if everyone between 15 and 60 is to have a job in 2000. (9,900,000; see page 18 above). Ask students how many new jobs were created by KIE between 1977 and 1980 (2,627; see Table 3, page 38). Lead a discussion of the following question:

- In your opinion, should Kenya spend nearly Ksh. 33,000,000 a year on KIE when KIE creates such a small number of jobs?

Ask students, In your opinion, is KIE improving the living conditions of women in Kenya? What more might it do?

7.3.

Have students recall some things Kenya must do if living conditions are to improve. Students should be able to recall the following:

- increase the number of rural and urban jobs
- produce more goods and services
- help people to develop skills in using machines and operating businesses
- produce more exports
- expand basic services
- reduce population growth

Ask students how assisting small-scale industries is helping Kenya to do these things.

(Students should be able to respond that it helps directly with the first four listed above. It helps with the other two indirectly--by contributing to economic growth. Economic growth enables countries to expand basic services and often leads to reduced population growth.)

- 7.4. Lead a brief discussion of Worksheet No. 10; then show the filmstrip, Small-scale Industries in Kenya. After viewing, students should be able to add handkerchiefs, farm equipment, plastic bags, milk cans, and windmills to the worksheet. Ask them to name the three needs of small-scale industries that KIE helps them meet (space, money, technical advice).
- 7.5. Homework. Tell students to prepare for a test covering the Economic Summary: Kenya and the book, Small-scale Industries in Kenya. Explain that the test will have four parts: a map, multiple-choice questions, brief-answer questions, and an essay. In the essay, students will explain how KIE's help changes the lives of owners of small-scale industries.

Supplementary activity (See also Worksheet No. 12, activity 4.)

- 7.6. Have students compare the maps of KIE's operations on pages 15 and 39. Put the outline of the chart below on the chalkboard, and lead a discussion to complete the chart. Pronunciations are given in Lessons 3 and 4 (pages 21 and 25) except the following:

Kisii	<u>Kee-see</u>	Kericho	<u>Kuh-ree-cho</u>
Malindi	<u>Muh-lin-dee</u>	Kitale	<u>Kuh-tah-lee</u>
Baugom	<u>Bung-oh-mah</u>	Meru	<u>Mee-roo</u>
Homa Bay	<u>Hoh-muh Bay</u>	Siaya	<u>See-eye-yuh</u>
Kabernet	<u>Ka-ber-net</u>	Voi	Voy

	1975	1980
<u>Industrial estates</u>		
In operation	Kisumu Nairobi Nakuru	Eldoret Kisumu Mombasa Nairobi Nakuru
Under construction	Eldoret Mombasa	Kakamega Nyeri
<u>RIDEs</u>		
In operation	Kakamega Machakos	Embu Kisii Machakos Malindi
Under construction	Embu	Bungoma Homa Bay Kabernet Kericho Kitale Meru Siaya Voi

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Lesson 8

TEST

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During this lesson, students will take a test. There are no additional objectives for the lesson.

Materials

- Worksheet No. 11. Test  
\* Worksheet No. 12. Additional Activities

Activities

- 8.1. Distribute Worksheet No. 11 which is a test. Point out to students that there are four parts of the test. They should spend no more than 5 minutes on Part One, 5 minutes on Part Two, 10 minutes on Part Three, and 20 minutes on Part Four.

Time students as they take the test: after 5 minutes tell them to go on to Part Two. Five minutes later, tell them to go on to Part Three. Ten minutes later, tell them to go on to Part Four.

Instructions for grading the test begin on the following pages.

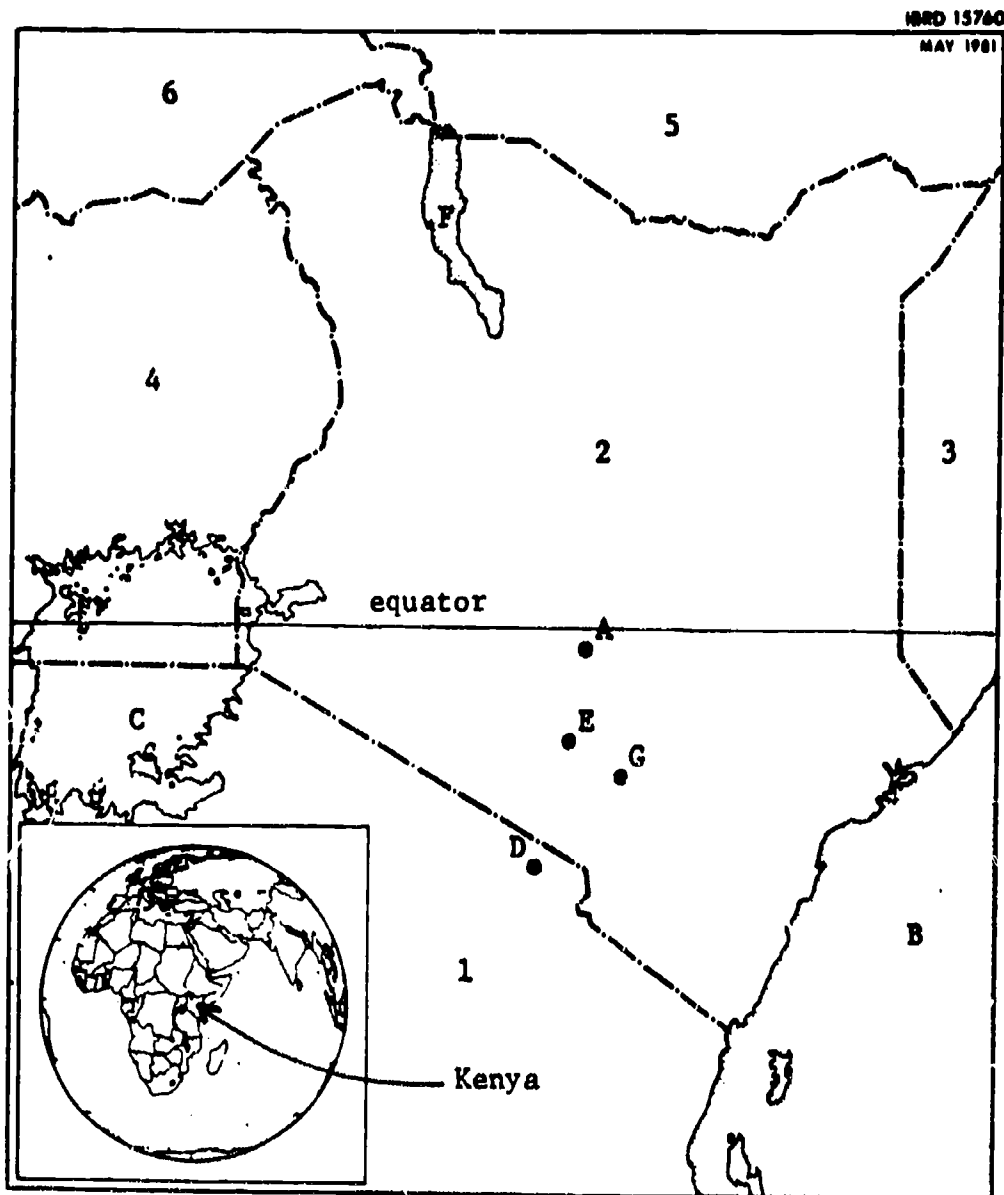
Supplementary activity

- \* 8.2. Distribute Worksheet No. 12 and have students select an additional activity.



Instructions for grading Worksheet No. 11

Part One (15 points)



- |            |                 |                   |
|------------|-----------------|-------------------|
| 5 Ethiopia | 1 Tanzania      | B Indian Ocean    |
| 2 Kenya    | 4 Uganda        | A Mt. Kenya       |
| 3 Somalia  | F Lake Turkana  | D Mt. Kilimanjaro |
| 6 Sudan    | C Lake Victoria | G Machakos        |
|            |                 | E Nairobi         |

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Lesson 8

TEST

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Part Two (17 points)

"X's" should precede the following:

1. b
2. c
3. a, b, c
4. a, b, c
5. b, c
6. b, c
7. a, b, c
8. b, c

Part Three (18 points)

1. Six of the following:

- increasing agricultural production
- improving tea and coffee growing
- encouraging dairying
- research about new crops
- new herding practices
- developing modern industries
- improving factories
- setting up new factories
- increasing energy sources
- exploring geothermal energy sources
- building a hydroelectric power station
- expanding basic services
- building schools
- training teachers
- building hospitals and clinics
- training doctors and nurses
- improving water and sewerage facilities
- family planning services

2. One in each of the following groups:

- cloth and clothing---textile mill, shoes, school uniforms,  
leather items
- food processing-----fruit or vegetable canneries, bakeries,  
grain mills
- construction -----concrete blocks, bricks, roof tiles,  
stone-crushing
- metal-working-----grill work, water tanks
- household utensils---cooking pots, tin pans and bowls,  
milk cans

3. All the following:
- It provides rental space in industrial estates and RIDCs
  - It makes loans for modernizing and expanding
  - It provides technical assistance
4. Five of the following:
- the qualifications of the applicant
  - specific products to be made
  - raw materials
  - market for the products
  - the production process
  - total amount of money needed
  - amount of money from the applicant
  - whether the business will be profitable
5. Three of the following:
- They create jobs
  - They produce low-cost goods and services.
  - They train people to use tools and machines and to manage businesses
  - They increase exports

Part Four (20 points) and Grading See next page.

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**Lesson 8**

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**TEST**

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**Part Four (20 points)**

Good papers would make many of the following points:

**Working conditions of typical small-scale industries**

- small space
- few machines and tools
- few raw materials
- little production
- little income
- few employees
- little technical advice

**KIE's assistance**

- providing rental space on industrial estates and RIDCs
- making loans
- giving technical advice

**Working conditions with KIE's assistance**

- more space at low rent
- adequate tools and machines
- more production and sales
- more raw materials
- more employees
- technical advice available
- more income
- new skills in managing a business

**Grading**

Part One ---- 15 points  
 Part Two ---- 17 points  
 Part Three -- 18 points  
 Part Four --- 20 points  
                   70 points

**Suggested scale**

70 - 63 --- A  
 62 - 56 --- B  
 55 - 49 --- C  
 48 - 42 --- D  
 41 ----- F

NARRATION FOR FILMSTRIP: SMALL-SCALE INDUSTRIES IN KENYA

(Time: 9:45 )

- |   |   |
|---|---|
| Focus and start sound   | ---   |
| 1. TOWARD A BETTER WORLD<br>World Bank Educational<br>Materials | ---   |
| 2. Mt. Kenya  | <u>First Voice</u><br>The landscape of Kenya...   |
| 3. Sunset over Lake Victoria                                    | ---   |
| 4. Giraffe  | ... and its wildlife.   |
| 5. Zebras   | ---   |
| 6. Elephant   | ---   |
| 7. Portrait of a man  | We are many peoples--the Kikuyu, the Luo,<br>the Luhya, the Kamba, and others...  |
| 8. Portrait of a woman  | ---   |
| 9. Portrait of a woman and child                                | ... with many languages and customs.  |
| 10. Portrait of a boy   | ---   |
| 11. Portrait of a woman   | ---   |
| 12. Tea picking   | Most of us make our living by farming.  |
| 13. Good farmland   | About a fifth of our land has rich soil<br>and gets plenty of rain.   |
| 14. Herding   | Other land is good enough to provide pasture<br>for the herds of the Masai, the Turkana, the<br>Samburu, and other nomadic peoples. |
| 15. Poor land   | But more than half our land is not<br>suitable for either farming or herding.   |
| 16. Urban street  | Some of us make our living in industry and<br>commerce--in Nairobi, our capital city, and<br>in other cities and towns.             |
| 17. Urban slum  | Although better off than many other African<br>countries, our country is poor.  |
| 18. Kenyan children   | ...and our population is growing rapidly.   |

19. Composite of portraits                    So we are doing many things to try to improve the living conditions of our people. We are providing more education, better health care, and more opportunities in agriculture and industry.
20. Carpentry workshop                    One way of increasing opportunities is to build up our smallest industries.
21. Title slide  
Slide 20 with overlay:  
Small-scale Industries  
in Kenya                    This is the story of what we are doing for those industries.
22. Ceramic pots                    Second voice  
  
Small-scale industries make many products that Kenyans use--ceramic pots for cooking and storing food, for example...
23. Woman at water pump                    ...tin and plastic household utensils...
24. Clothing workshop                    ...and clothing.
25. Repair shop                    Small-scale industries also provide services--repairing trucks, bicycles, and machines, for example.
26. Market street                    Small-scale industries are found in villages, towns, and cities throughout Kenya.
27. Small factory with overlay:  
Few employees  
Few machines  
Local raw materials                    Most of them employ only a few people, use only a few machines, and draw on local raw materials.
28. Textile mill with overlay:  
Low-cost goods & services  
Jobs  
Training                    Small-scale industries play an important part in the economy of Kenya--by producing goods and services Kenyans need, by providing thousand of jobs, and by training workers in industrial skills.
29. Map 1:  
Kenya and neighboring  
countries                    Soon after our country became independent in 1963, the government decided to help small-scale industries.
30. Graphic:  
Kenya Industrial Estates, Ltd.  
"KIE"                    A government company was formed, called "KIE" for short. It became the main agency for helping small-scale industries in Kenya.
31. Shoe factory, Mombasa                    KIE provides three things that the owners of small-scale industries need. First, it provides them with space--in factories and workshops that they can rent.

32. Milk can factory,  
Nakuru  
KIE builds clusters of factories and workshops. In cities, these clusters are called "industrial estates."
33. Furniture workshop,  
Machakos  
In towns, they are called "rural industrial development centers."
34. Water tank factory,  
Machakos  
---
35. Pottery workshop,  
Kakamega  
In the space that owners of small-scale industries rent from KIE...
36. Pottery workshop,  
Kakamega  
...they are able to produce more...
37. Fishing fly workshop,  
Kisumu  
...and employ more people.
38. Map 2:  
Industrial estates  
and RIDCs  
By 1980, KIE had industrial estates in five cities (solid circles on the map), and more under construction (the open circles). And it had rural industrial development centers in four towns (the solid triangles), with eight more being built (the open triangles).
39. Animal feed factory,  
Kakamega  
First Voice  
In addition to providing space, Kenya Industrial Estates provides loans to the owners of small-scale industries. Loans enable them to buy machines--a corn grinder, for example, in a small factory that produces animal feed...
40. Printing press,  
Nairobi  
...a press for a small print shop...
41. Weaving equipment,  
Mombasa  
...a loom for a textile mill...
42. Sewing machine,  
Mombasa  
...and sewing machines for a factory that makes handkerchiefs...
43. Sewing machine,  
Machakos  
...and for a factory that makes school uniforms.
44. Shoe-making, Kisumu  
KIE loans help small-scale manufacturers to pay for shoe-making equipment...
45. Welding, Nakuru  
...and welding equipment for metal workshops.
46. Welding, Machakos  
---

47. Electric sander, Machakos KIE loans pay for wood-working machines...  
48. Lathe, Machakos ...in small furniture factories.  
49. Plastic bag factory, Nakuru A loan for machinery and raw materials helped to start up this plastic bag factory.  
50. Plastic bag factory, Nakuru ---  
51. Milk can factory, Nakuru And a KIE loan paid for this machine that shapes metal into milk cans.  
52. Metal products factory, near Kakamega Another paid for the raw materials to produce this metal gate.  
53. Potter, near Kakamega With a KIE loan, this potter expanded his workshop.  
54. Technician Second Voice  
The third thing KIE does is to give advice. Engineers, technicians, and others help the owners of small-scale industries improve the design of their products...  
55. Agricultural tools, Nakuru ...farm tools...  
56. Watering cans, Machakos ...watering cans...  
57. Windmills near Kisumu ...or windmills used to pump water into a village...  
58. Woman carrying water, near Kisumu ...so that women no longer have to spend so much time carrying water from a distant stream.  
59. Preparing paint, Mombasa Technical experts also help plan production processes.  
60. Woman painting wheelbarrow, Mombasa ---  
61. Woman at a sewing machine, Mombasa ---  
62. Women in furniture workshop Machakos ---



- |                                       |  |
|---------------------------------------|--|
| 63. Agricultural equipment,<br>Kisumu | And KIE's experts advise the owners of<br>small-scale industries about how to sell<br>their products...farm equipment...   |
| 64. Loading dollies,<br>Machakos      | ...and loading dollies...  |
| 65. Fishing flies, Kisumu<br>Kisumu   | ...even fishing flies.   |
| 66. Fly tying, Kisumu                 | One of KIE's technical advisers helped to<br>find a market for fishing flies--in<br>Europe and the United States.  |
| 67. Composite of KIE<br>activities    | <u>First Voice</u><br><br>What do the activities of Kenya Indus-<br>trial Estates add up to? A lot.<br>Many small-scale industries in Kenya<br>are renting space at industrial estates<br>and rural industrial development centers.<br>Many are receiving loans to expand and<br>modernize. Many are getting advice. |
| 68. Unimproved workshop               | But there are many more small-scale<br>industries that need help.  |
| 69. Appliance repair shop             | ---  |
| 70. Shoe-making workshop              | ---  |
| 71. Metal workshop                    | ---  |
| 72. Shoe repair shop                  | ---  |
| 73. Repeat Slide 27                   | With time, and with the continuing efforts<br>of KIE, these small-scale industries may<br>get the help they need.  |
| 74. Repeat Slide 19                   | Then there will be more goods and services<br>for us, more jobs, and more changes to<br>learn industrial skills. And our living<br>conditions will improve.  |
| 75. Slide 20 with overlay             | ---  |

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### WORKSHEETS

- By cutting the worksheets along the line of dashes, teachers can remove them for duplicating without damaging the Teaching Guide.
- Worksheets preceded by an asterisk are for highly motivated students.
- Teachers should read each worksheet carefully before using it to determine whether it is appropriate for their class.

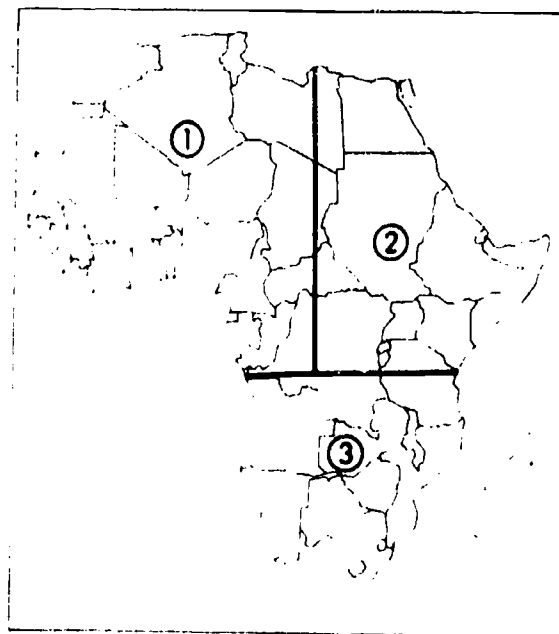
Worksheet No. 1	Lessor. 1	<u>A Few Questions About Kenya</u>
Worksheet No. 2	Lessons 1 and 2	<u>Improving Living Conditions in Kenya</u>
* Worksheet No. 3	Lesson 2	<u>A Meeting in the Ministry for Economic Planning</u>
Worksheet No. 4	Lesson 2	<u>Kenya and Neighboring Countries</u>
Worksheet No. 5	Lessons 3 and 4	<u>After You Read</u>
Worksheet No. 6	Lesson 4	<u>How KIE Helps Small-scale Industries</u>
Worksheet No. 7	Lessons 4 and 5	<u>Fourteen Questions</u>
Worksheet No. 8	Lessons 5 and 6	<u>George Kisilu's Loan Application Form</u>
Worksheet No. 9	Lesson 6	<u>What Would You Do If...?</u>
Worksheet No. 10	Lessons 6 and 7	<u>More About Small-scale Indus- tries</u>
Worksheet No. 11	Lesson 8	<u>Test</u>
* Worksheet No. 12	Lesson 8	<u>Additional Activities</u>

A FEW QUESTIONS ABOUT KENYA

Answer the questions below as well as you can on the basis of what you now know about Kenya. You will be able to correct your answers later.

1. The map of Africa at the right is divided into three numbered areas. Write the number of the area in which Kenya is located. \_\_\_\_\_

Label Kenya on the map.



2. Among the developing countries, Kenya is (check one):

\_\_\_\_\_ moderately well-off

\_\_\_\_\_ very poor

3. The land of Kenya is (check one):

\_\_\_\_\_ primarily farmland

\_\_\_\_\_ primarily desert and grassland

\_\_\_\_\_ primarily forest

4. In 1981, Kenya's population was (check one):

\_\_\_\_\_ about 1,700,000      \_\_\_\_\_ about 17,000,000      \_\_\_\_\_ about 170,000,000

5. In 2000, Kenya's population will be (check one):

\_\_\_\_\_ slightly larger than in 1981      \_\_\_\_\_ about twice the 1981 population

\_\_\_\_\_ much more than twice the 1981 population

6. Check the conditions that exist in Kenya:

\_\_\_\_\_ a large amount of fertile land

\_\_\_\_\_ little fertile land

\_\_\_\_\_ beaches that attract many tourists

\_\_\_\_\_ wild animals

\_\_\_\_\_ agricultural products for export

\_\_\_\_\_ many people with skills for modern industry

\_\_\_\_\_ crowded slums in large towns and cities

\_\_\_\_\_ adequate supplies of oil, natural gas, and electricity

\_\_\_\_\_ a rapidly growing population

IMPROVING LIVING CONDITIONS IN KENYA

Complete this worksheet as you read "Economic Development in Kenya," pages 5-7 in the Economic Summary: Kenya.

1. Summarize briefly what happened to the Kenyan economy between independence and 1979.

---

---

2. Answer the questions below about Kenya's development plan for 1979-83. List in the boxes specific steps that are being taken.

- a. Why does the plan emphasize agricultural production?

Steps to increase agricultural production

- b. Why does the plan give attention to developing modern industry?

Steps to develop modern industry

- c. Why does the plan include efforts to increase energy sources?

Steps to increase energy sources

- d. Why does the plan expand basic services?

Steps to expand basic services

3. Why will it be difficult for Kenya to keep up with population growth in the years ahead?

---

---

4. Answer the following questions from the chart on page 7. Assume that everyone between the ages of 15 and 60 in Kenya needs a job.

a. If everyone between the ages of 15 and 60 in Kenya had a job in 1981, how many jobs were needed? \_\_\_\_\_

b. If everyone between the ages of 15 and 60 in Kenya is to have a job in 2000, how many jobs will be needed? \_\_\_\_\_

c. If everyone between the ages of 15 and 60 in Kenya is to have a job in 2000, how many new jobs must be created between 1981 and 2000? \_\_\_\_\_

d. To provide an increasing number of jobs, the Kenyan economy must continue to grow. What can Kenya do to hold down the number of jobs needed? \_\_\_\_\_

\_\_\_\_\_

## A MEETING IN THE MINISTRY FOR ECONOMIC PLANNING

The Ministry for Economic Planning in Kenya writes the country's development plan and oversees its operation. You are a member of a small unit in the Ministry which must recommend activities to the Minister.

Listed below are fourteen activities that have been proposed under the present plan. All of them---and others--will be carried out during the period the plan covers. But only five can be started in the coming year.

Your unit has two tasks:

1. You must select five activities and recommend them to the Minister. You must select at least one activity in each set, and those you select must serve a number of geographic regions in Kenya.
2. You must prepare your presentation to the Minister. You must explain your selections by listing the specific ways activities you chose will benefit individuals and families and the country as a whole.

### Set One

1. In an area with agricultural potential in the Rift Valley Province, 50,000 farmers on small farms will receive training to increase their production of corn, beans, potatoes, cotton, meat, and milk. Tools, seeds, fertilizer, and veterinary care will be provided at low cost. Rural roads will be improved and soil conservation measures will be introduced.
2. An irrigation system using water from the Tana River will be built in the North Eastern Province. Six thousand hectares of land will be made available for farming cotton and peanuts, primarily for export. Five thousand families will be settled on the new land, where schools, health services, and farmer training programs will be set up.
3. Irrigation and drainage will be improved in Nyanza Province to serve a 3,000 hectare sugar plantation and 4,500 small farms nearby. New equipment will be installed in the factory where sugar is refined, and the factory will be enlarged creating new jobs. Some sugar will be exported, but most will be consumed in Kenya.
4. Wildlife resources will be protected and tourist facilities provided in areas not yet developed for tourism. Construction jobs will be created, and tourism will stimulate other forms of rural employment. A Wildlife Training Institute will be established to train personnel for work in all of Kenya's game reserves.

Set Two

5. Loans will be provided to establish large- and medium-scale industries in rural areas in several locations in Kenya. Textile mills will receive loans as will factories for processing locally grown fruits, vegetables, and forest products.
6. Additional funds will be provided to a government-owned company that assists small-scale industries throughout Kenya. The government-owned company will make loans to upgrade or expand such operations as carpentry workshops, ceramic tile manufacturers, metal-working shops, and agricultural tool makers.

Set Three

7. A hydroelectric power station will be built on the upper Tana River in the Eastern Province. Transmission facilities will be installed that link the station to the country's existing power lines.
8. Three hundred thousand hectares of over-cut forest in the Western Province will be reforested, and 100,000 hectares of established forest will be developed for long-term production. Sawmills will be set up, providing local fuel wood and sawn timber for export.
9. Drilling equipment and other supplies will be provided in an area of proven geothermal potential 100 kilometers northwest of Nairobi. Local personnel will be trained for work during the construction phase and in the completed installation.

Set Four

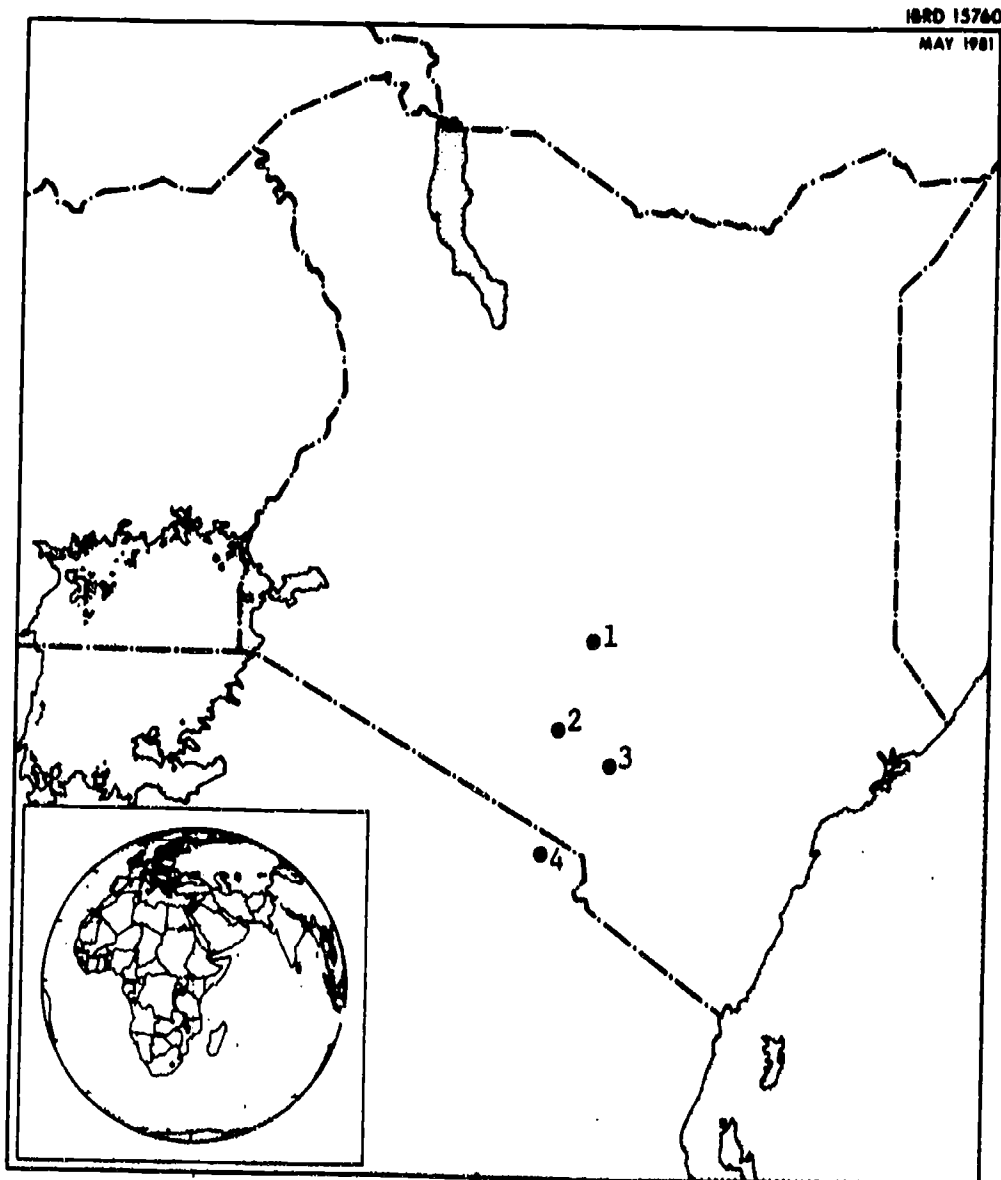
10. Twenty teacher-training colleges will be built and a curriculum developed for training primary school teachers. A daily program for rural primary school teachers will be broadcast from Nairobi.
11. Twelve boarding schools for children of nomads will be built and a related teacher training program developed. Itinerant teachers will be trained to offer literacy classes to adult nomads.
12. Schools, markets, water and sewerage facilities, vocational training and health centers will be built in squatter settlements in Kenya's three largest cities--Kisumu, Mombasa, and Nairobi. Areas to accommodate new housing will be set up, and loans for building materials will be provided for new residents.
13. The water supply system of Mombasa will be improved and extended, and water will be provided to rural areas in the Coast Province. A program will be set up in Mombasa to train technicians to maintain rural water facilities in the province.
14. Five nurses' training schools will be built where nurses will learn to teach about family planning. Twenty-five rural health centers, equipped to provide family planning services, also will be built.

KENYA AND NEIGHBORING COUNTRIES

Use the map on the back of the Economic Summary: Kenya for reference.

1. Draw an arrow that points to Kenya on the locator map in the lower left corner.
2. Draw the equator on the large map.
3. Label the following:  
Ethiopia                      Uganda  
Kenya                          Lake Turkana  
Somalia                        Lake Victoria  
Sudan                          Indian Ocean  
Tanzania
4. In the spaces at the left of the places listed below, write the numbers on the map which show their locations. Guess the location of Machakos.

\_\_\_ Machakos    \_\_\_ Mt. Kenya    \_\_\_ Nairobi    \_\_\_ Mt. Kilimanjaro





AFTER YOU READ

Read Chapter Two. Then complete the outline below.

I. Getting acquainted with Kenya Industrial Estates, Ltd.

A. Examples of small-scale industries

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

B. Contributions of small-scale industries to the economy of Kenya

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

C. The needs of small-scale industries

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

D. The activities of KIE

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

E. Steps taken to strengthen small-scale industries in Kenya

1. \_\_\_\_\_
2. \_\_\_\_\_

113

(I. cont'd. on page 2)

(I. cont'd.)

F. Problems KIE has encountered

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

II. Working at KIE

A. 1976: frustrations

1. \_\_\_\_\_
2. \_\_\_\_\_

B. 1977: changes

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_

C. 1978: new work for Karari

1. \_\_\_\_\_
2. \_\_\_\_\_

D. Governments and other institutions that are helping KIE

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**HOW KIE HELPS SMALL-SCALE INDUSTRIES**

Be able to locate on the map in Chapter Two all the places mentioned in the worksheet.

**Making fishing flies in Kisumu**

Re-read the account in Chapter Two of the man who ties fishing flies in Kisumu. Then follow the directions below.

1. State two ways in which his business followed the industrial policies of the government of Kenya.

---

---

---

2. State some ways in which KIE helped him.

---

---

---

**Making pottery near Kakamega**

Re-read the account in Chapter Two of the potter who lives near Kakamega. Then follow the directions below.

3. State two ways in which his business followed the industrial policies of the government of Kenya.

---

---

---

4. State some ways in which KIE helped him.

---

---

---

Making shoes in Mombasa

A shoe factory that employs ten people grew from a small shoe-repair shop near the harbor in Mombasa. The son of the original owner took it over several years after he graduated from a technical high school. His wife, a graduate of the commercial department of the same school, assists her husband with accounting and bookkeeping. They want to expand the factory so that it employs 25 to 30 people. They will need to rent a larger factory, stock much more leather, and import additional machinery from India. If they expand, they will be able to produce many times more of the inexpensive shoes they now produce for sale in Kenya.

5. How might KIE help them?

---

---

---

---

A textile mill near Kisumu

A government official, who recently retired at the age of forty, ran a large government department successfully for many years. He has never run a factory, but he wants to set up a textile mill that would employ 30 or 40 people. The mill would be located in a small town twenty kilometers from Kisumu where he owns a little land. The town is in a rich agricultural area where cotton is grown. But many people there are unable to make a decent living on the land and are moving to larger towns and cities. The retired official has some savings, but not enough to build, equip, and operate the mill.

6. How might KIE help him?

---

---

---

---

A bakery in Nakuru

Four women in Nakuru want to set up a bakery where they will produce bread. One has worked for many years at a local bakery and recently received training as a home economist at a technical college. Another has had experience as an accountant. Bread consumed in Nakuru is trucked in from Nairobi each day, or is made locally--in 3 bakeries that use modern equipment, or in a half-dozen bakeries that use traditional methods. The supply of bread in Nakuru is usually exhausted by noon. The women propose to rent a building, install an electric mixer that will be imported from Europe, and purchase the other equipment they will need locally. They will employ eight people.

7. How might KIE help them?

---

---

---

FOURTEEN QUESTIONS

Applicants for loans from KIE must answer many questions. Listed below are fourteen questions that George and Karari will answer in processing George's loan application.

1. Read the questions and number them in the order in which you think they should be answered. Write the numbers in the column on the left side of the worksheet headed "Before Reading."
2. Read Chapter Three. When you have finished, go back over the chapter and number the questions in the order in which George and Karari answered them in Chapter Three. Write the numbers in the column on the left side of the worksheet headed "After Reading."

Before reading	After reading	
		a. What experience has the loan applicant had which qualifies him/her for running the business?
		b. What machinery will the applicant need?
		c. How much profit will the business make in the first three years?
		d. What raw materials will be required and where will they be purchased?
		e. How much money can the applicant contribute to the business?
		f. What will be the exact amount of the loan?
		g. In how many years must the loan be repaid, and how much will the monthly payments be?
		h. How many people will the business employ?
		i. How many products might the business sell in a year?
		j. Where will the product be sold?
		k. How much money might come in from sales in a year?
		l. What costs must be met before the business begins to operate?
		m. What costs must be met after the business begins to operate but before money comes in from sales?
		n. What will the business produce?

GEORGE KISILU'S LOAN APPLICATION FORM

Two pages of George's Kisilu's loan application form are shown below; the third page is shown in your book. Fill in the application form using the information in Chapter Three. Give as much information as you can on page 2.

---

1. Summary of the project

Name \_\_\_\_\_

Product \_\_\_\_\_

Location \_\_\_\_\_

---

2. Applicant (Describe previous experience and training)

---

3. Product(s) (State quantities, prices, expected annual sales)

---

4. Raw materials needed and availability

---

5. Market (Describe the need for the product(s) and the location of sales)

---

6. Production process (Include number of employees)

110

---

7. Investments

7.a. Land and buildings

Total: Ksh. \_\_\_\_\_

---

7.b. Machinery and equipment

Total: Ksh. \_\_\_\_\_

---

7.c. Pre-operational expenses

Total: Ksh. \_\_\_\_\_

---

7.d. Working capital

Total: Ksh. \_\_\_\_\_

---

7.e. Summary of investments



WHAT WOULD YOU DO IF...

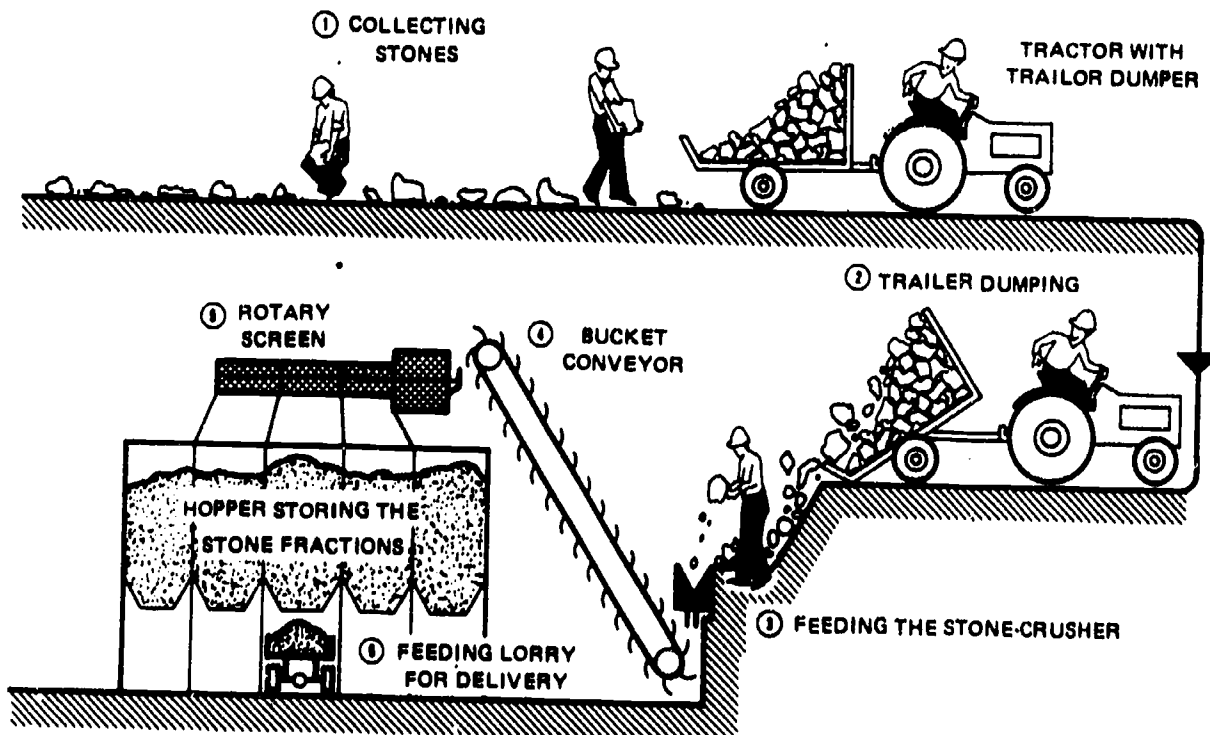
...you were a member of KIE's Projects Department in Nairobi in 1980? One of your jobs is to review loan applications. Loans up to Ksh. 100,000 can be approved by the managers of the industrial estates and RIDCs. Loans above that amount are sent to your office from all the industrial estates and RIDCs.

Your office has received an application for a loan for a business with total investments amounting to Ksh. 381,000. The loan would be for Ksh. 292,000. The application has come from the manager of the RIDC in Meru (Mee-roo). The loan applicant proposes to set up a stone-crushing business in the town of Isiolo (Iss-ee-oh-lo) 50 kilometers north of Meru.

You are to review the loan application and make a recommendation to the head of the Projects Department. Read the information on pages 2 and 3 and answer these questions:

1. What makes Mr. Mukira a good candidate for a loan?
2. What makes him a weak candidate?
3. What people will benefit if a stone-crushing business is set up in Isiolo?
4. What recommendation will you make? Should the loan be approved or rejected, or should more information be provided?

The production process for the proposed Isiolo Stone-crushing Works



### The applicant

John Mukira, 40 years old, produces concrete blocks and pipes in Isiolo. He is also part-owner and part-time operator of a construction company. He started the concrete block business in 1977 with a loan from ICDC, which he is repaying ahead of schedule. Both businesses are profitable. He employs 12 people.

Mr. Mukira started producing ballast--crushed stone and gravel--as part of his concrete block business. He now sells all the ballast he can produce. He proposes to set up a separate business to produce ballast.

### The product

Ballast is used in making concrete, constructing buildings, and laying road beds. It varies from a powder to coarse gravel. It is produced in the Meru area by pounding stone with hand tools or by using stone-crushing machinery. At Mr. Mukira's cement block plant, ballast is produced by hand crushing; output averages 5 to 10 tons a day. With stone-crushing machinery, output averages 8 tons an hour. Mr. Mukira estimates that he can produce 10,000 tons of ballast a year with stone-crushing machinery. At Ksh. 50 a ton--the price at which machine-crushed ballast is sold in the area--he would take in Ksh. 500,000 in year.

### Raw materials

There is enough stone in Isiolo suitable for making ballast to last for many years. Mr. Mukira has arranged to rent a 15-acre plot of land served by a road and soon to be served by electricity. His rent will be low because removing stones will increase the value of the land by making it suitable for farming.

### The market

There will be need for ballast in the Isiolo area for many years. The government is building office buildings and housing for government officials. The Isiolo sewerage system is to be rebuilt, and the airstrip at the airport is to be extended. Roads in the area are being paved, and existing roads are in need of maintenance. In addition, there is some private construction.

The only ballast produced in Isiolo comes from Mr. Mukira's concrete block plant. Ballast is produced by machine 40 kilometers away, where it sells at Ksh. 50 a ton. But the cost of loading and hauling it to Isiolo raises the price to Ksh. 140 a ton.

### Production process

The production process is shown in the accompanying sketch. Stones are collected and loaded into a tractor that has a trailer and are dumped onto a slope leading to the stone-crusher. Stones are fed by

hand into the crusher and fall onto a bucket conveyor that lifts them onto a rotating screen. The screen sorts them and feeds them into hoppers from which they fall into trucks for transport. The crushing machine can be adjusted to produce gravels of various dimensions and the stone dust used in concrete.

The vehicles and machinery required are a tractor and trailer, a stone-crusher, a bucket conveyor, a rotary screen, hoppers to store the crushed stone, and a truck to transport it. Employees required are 2 stone collectors and loaders, a tractor driver, a crusher operator, a mechanic, and a truck driver. An accountant and a watchman also will be needed. The stone-crusher operator and the mechanic must receive special training and be on hand whenever the machinery is being used.

### Summary of investments

The stone-crusher, bucket conveyor, and rotary screen are to be imported from India, the tractor and trailer from Germany. A small office will be built to house records and accounting operations.

Land and building -----	Ksh. 14,000
Machinery, equipment, and vehicles -----	258,000
Pre-operational expenses including installation fees -----	83,000
Working capital -----	26,000
	Ksh. 381,000

### Estimate of profit

	Year 1	Year 2	Year 3
Revenue from sales ----- Ksh.	300,000	500,000	500,000
Production and other costs --	284,000	378,500	371,200
Gross profit -----	15,800	121,500	128,800
Tax -----	7,700	54,700	58,000
Net profit -----	8,100	66,800	69,800

### Financing of the project

KIE loan -----	Ksh. 292,000
Applicant's contribution -----	Ksh. 89,000

### Loan repayment schedule

Interest rate -----	10 percent
Repayment period -----	4 years
Grace period -----	1 year
Monthly payments -----	Ksh. 7,665

**MORE ABOUT SMALL-SCALE INDUSTRIES**

Worksheet No. 10  
Lessons 6 and 7

Before viewing the filmstrip: List as many small-scale industries as you can recall in the boxes where they fit.

After viewing the filmstrip: List additional small-scale industries shown in the filmstrip in the boxes where they fit.

Cloth and clothing

Food processing

Building and construction

Tools and transportation equipment

Wood-working

Household utensils

Metal work

Other

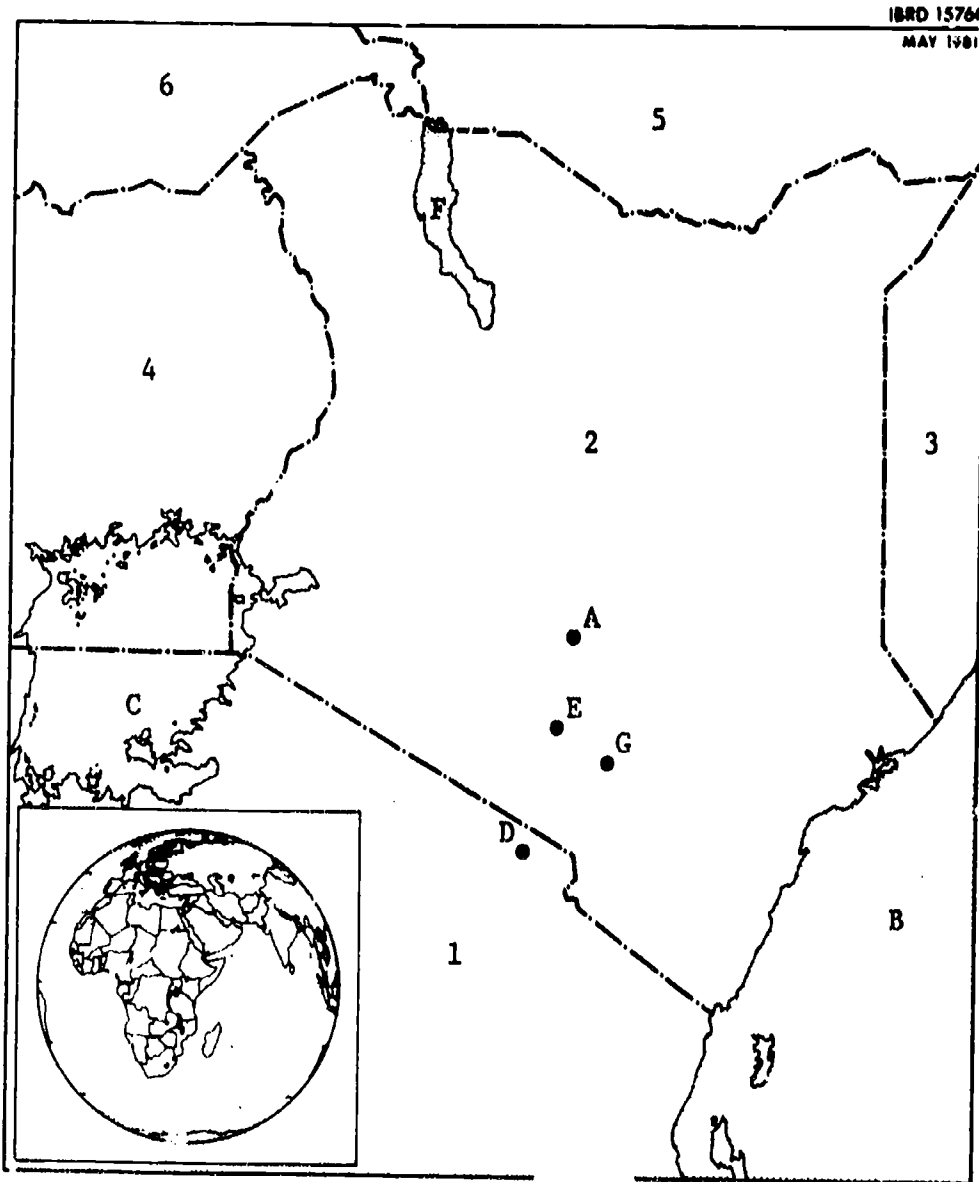
(Name) \_\_\_\_\_

TEST

Part One

1. Draw an arrow that points to Kenya on the locator map in the lower left hand corner.
2. Draw a line representing the equator on the large map.
3. Countries on the map are labeled with numbers and other places are labeled with letters. In the space at the left of each place in the list, write the letter or number that shows its location.

- |                |                     |                       |
|----------------|---------------------|-----------------------|
| _____ Ethiopia | _____ Tanzania      | _____ Indian Ocean    |
| _____ Kenya    | _____ Uganda        | _____ Mt. Kenya       |
| _____ Somalia  | _____ Lake Turkana  | _____ Mt. Kilimanjaro |
| _____ Sudan    | _____ Lake Victoria | _____ Machakos        |
|                |                     | _____ Nairobi         |



\_\_\_\_\_  
(Name)

Part Two

Put an "X" before all the phrases that correctly complete the sentences below.

1. Study the data for 1981 in the table.

	Gross National Product	Population	GNP per Capita
Kenya	\$7,308,000,000	17,400,000	\$420
Malaysia	\$26,128,000,000	14,000,000	\$11,840

The main reason Kenya's GNP per capita is lower than Malaysia's is:

- \_\_\_\_ (a) Kenya's population is larger than Malaysia's.  
\_\_\_\_ (b) Malaysia's GNP is much larger than Kenya's.  
\_\_\_\_ (c) not clear from the data in the table.
2. In comparison with the United States, Kenya has:  
\_\_\_\_ (a) a higher proportion of adults who are literate.  
\_\_\_\_ (b) a higher proportion of people living in towns and cities.  
\_\_\_\_ (c) fewer doctors per person.
3. Agriculture is important for Kenya because,  
\_\_\_\_ (a) most people depend on agriculture for their livelihood.  
\_\_\_\_ (b) Kenya's principal exports are produced on farms.  
\_\_\_\_ (c) Kenya's principal industries are related to agriculture.
4. The following conditions are present in Kenya:  
\_\_\_\_ (a) a small proportion of the land is suitable for farming.  
\_\_\_\_ (b) there are few mineral resources for modern industry.  
\_\_\_\_ (c) population is increasing rapidly.
5. The Kenyan development plan (1979-83):  
\_\_\_\_ (a) deals only with small-scale industries.  
\_\_\_\_ (b) includes steps to increase economic growth and reduce poverty.  
\_\_\_\_ (c) encourages industries that produce exports.
6. So that it can acquire money to buy imports, Kenya is:  
\_\_\_\_ (a) building more schools and hospitals.  
\_\_\_\_ (b) encouraging tourists to visit its beaches and game parks.  
\_\_\_\_ (c) modernizing farms that grow coffee and tea.
7. Economic growth will help Kenya because,  
\_\_\_\_ (a) it will create new jobs.  
\_\_\_\_ (b) it may slow population growth.  
\_\_\_\_ (c) it will provide more goods and services.
8. Most small-scale industries in Kenya:  
\_\_\_\_ (a) are located in Nairobi and Mombasa.  
\_\_\_\_ (b) employ very few people.  
\_\_\_\_ (c) use local raw materials.

\_\_\_\_\_  
(Name)

**Part Three** Write brief answers in the space provided.

1. List six activities in which Kenya is engaging to improve the living conditions of the Kenyan people. Do not include helping small-scale industries.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Name one small-scale industry in each of the following groups:

cloth and clothing \_\_\_\_\_

food processing \_\_\_\_\_

construction \_\_\_\_\_

metal-working \_\_\_\_\_

household utensils \_\_\_\_\_

3. Describe briefly three ways in which KIE helps the owners of small-scale industries.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. State five things that KIE considers in making loans to the owners of small-scale industries.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. State three ways in which small-scale industries contributes to economic development in Kenya.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Name)

Part Four

Choose one of the following.

1. You are Karari Ngugi and have been asked by your former professor to give a lecture about KIE to a class at the University of Nairobi. Write your lecture. Describe briefly the working conditions of typical small-scale industries, explain what KIE does to assist them, and state some ways in which KIE's assistance changes the working conditions of people engaged in small-scale industries.
2. Write a newspaper article based on an imaginary interview with George Kisilu. Describe the conditions under which he worked when he was operating a workshop in his yard, his contacts with KIE, and the conditions under which he is working today. Tell about any changes that you think have taken place in his attitudes.



ADDITIONAL ACTIVITIES

1. Write another chapter for Small-scale Industries in Kenya. Imagine some experiences George might have in his furniture workshop, and some experiences Karari might have as his career in KIE continues.
2. Draw up a floor plan for George Kisilu's workshop. It is 2,000 square feet in area. Figure out where to put workbenches, a table saw, a planer, a band saw, a lathe, and hand tools. You must provide a place for lumber and other raw materials, an area where finishing is done, and another area where finished products can be stored. The shop teacher in your school might be willing to help.
3. Conduct a debate on the following proposition:  
  
Resolved: The money Kenya uses to strengthen small-scale industries should be used instead for its family planning program.
4. Organize a panel discussion to evaluate the work of KIE. Have students list all the individuals they met in Small-scale Industries in Kenya (Karari, his father, his professor, KIE's general manager, the RIDC manager at Machakos, the RIDC engineer, George, his mother, his wife, his older brothers, his younger brother and sister, two assistant carpenters, his wife's friend who assisted her in finishing furniture, and her brother).  
  
Assign students to play the roles of these individuals as members of the panel. They are to express the views of KIE the individuals they represent might hold.
5. Plan a vacation in Kenya. List some places you will visit and show them on a map of Kenya. Include a trip to KIE's headquarters in Nairobi and to an industrial estate and RIDC. Prepare a list of questions you will ask George Kisilu or Karari Ngugi if you meet them. Show on a world map the route you will take to and from Kenya.
6. Read one of the following books by the Kenyan author Ngari Wa Thiong'o, and report on it to the class.

Weep Not, Child (London: Heineman, 1965; 136 pages, \$3.00).  
The boy Njoroge grows up in a tenant farm family that is caught up in the struggle for independence in the 1950s.

The River Between (London Heinemann, 1965; 152 page, \$2.50).  
Waiyaki lives in the tension and disunity created by the presence of white people in Kenya.