Entrepreneurship Education as a Strategic Approach to Economic Growth in Kenya

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For the past 10 years, small enterprise development has been identified as a priority area in development policy in general, and in Africa in particular. There is now considerable experience among international donor agencies with interventions aimed at the development of the small enterprise sector. Increasingly, small enterprise development is regarded as crucial to the achievement of broader objectives such as poverty alleviation, economic development, and the emergence of more democratic and pluralistic societies. The trend in recent years has been to target a greater proportion of international aid resources to small enterprise development (Working Group on Business Development Services, 1997).

International donor agencies such as the World Bank, United Nations Development Program, and the African Development Bank have identified the small enterprise sector as a key to development in African countries and have financed a number of projects to encourage the section to grow. In addition, Sweden (SIDA), Germany (GTZ), Great Britain (ODA), and the United States (USAID) are supporting small enterprise development in African countries through their international aid programs. For example, the ODA's financial support of small enterprise development has increased in Africa from approximately $.5 million in 1992-93 to $16.2 million in 1996-97. Within the United Nations system, the International Labor Organization (ILO) and the United Nations Industrial Development

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Organization (UNIDO) have implemented a variety of programs to support small enterprise development, especially for Africa.

In Kenya, a variety of policies and programs have been enacted to facilitate the growth of the small enterprise sector. The small enterprise sector in Kenya is defined as being all of those businesses that employ 1-19 people. It is estimated that 2.1 million of Kenya's workforce are employed in the sector's 912,000 enterprises. The sector is growing at an impressive rate. In 1993, for example, it increased by 20%. On the other hand, the large-enterprise sector recorded only a 2.3% growth in the same year. These growth rates indicate that, in the foreseeable future, small enterprises will employ three out of every four people looking for jobs in the non-agricultural sector of the economy. This is a primary reason why the Government of Kenya should take an active interest in the continued growth and expansion of the small business sector (Onyango & Tomecko, 1995).

Sessional Paper Number 1 of 1986 on Economic Management for Renewed Growth (Government of Kenya, 1986) emphasized the need for small enterprises to be nurtured as beacons for future growth. These enterprises were looked upon to provide the bulk of 400,000 new jobs the country aspired to generate annually from 1986 to the year 2000 (Pratt, 1996). Given the need for new job creation by the private enterprise sector, cooperation and interaction between government agencies, educational institutions, and the private sector are critical if these ambitious employment goals are to be achieved by the year 2000.

Like many developing countries in Africa, Kenya is facing a serious unemployment problem coupled with a declining standard of living, increasing disparity between the urban and rural regions of the country, and inadequate social and physical infrastructures to meet the needs of a rapidly growing population (Ferej, 1994). To provide a means of survival, many of the unemployed have turned to the informal sector to create small enterprises that range from trivial trading activities to reasonably successful production, manufacturing, and construction businesses. In general, a small enterprise may be defined as an enterprise having less than 20 employees. The small enterprise sector is composed of a range of enterprises including: self-employed artisans, microenterprises, cottage industries, and small enterprises in the formal business sector. These small enterprises may be engaged in trade, commerce, distribution, transport, construction, agribusiness, manufacturing, maintenance
and repair, or other services. As a result of the trend toward the creation of small enterprises, the informal sector has grown to include approximately 60% of the labor force in Africa (International Labor Organization, 1985).

In the past, a widespread approach to the problem of limited job opportunities was through the establishment of large industrial complexes that were expected to provide many jobs and enhance the economic situation of the local area (Charmes, 1990). This approach has been largely unsuccessful because it was overly capital-intensive in countries that had limited capital. It actually provided few new employment opportunities and exacerbated the gap between the rich and poor. Because of the failures of this approach, formal development efforts are now emphasizing the creation of small enterprises in the informal sector that are operated by self-employed individuals.

While much of the job growth potential in developing countries seems to exist through the creation of small enterprises, the ultimate impact of new job creation through the informal sector may be limited for numerous reasons. First, much of the growth of private enterprise in the informal sector in Kenya has been spontaneous rather than a result of deliberate strategies within an overall government policy framework. Second, although large numbers of small enterprises may be created, their prospects for growth into medium-sized enterprises is limited (House, Ikiara, & McCormick, 1990; McCormick, 1988; Mwaura, 1994). Reasons for this lack of growth include an over-supply of similar goods in the marketplace, lack of management and technical skills, limited capital, and low product quality (House, et al., 1990). In addition, many of these small enterprises are owned by "first generation" entrepreneurs who have limited experience and are unwilling to take the necessary risks to expand their businesses. Third, while technology is a primary factor in economic development (Sherer & Perlman, 1992), it has had a limited impact on the growth of small enterprises because of political conflicts, economic restrictions, limited educational capabilities, and weak technological infrastructures (Githeko, 1996).

One approach to enhancing entrepreneurial activity and enterprise growth in developing countries is to create an "enterprise culture" among the youth of the country (Nelson & Mburugu, 1991). By focusing on youth while they are still in school, this approach may provide a long-term solution to the problem of job growth. To achieve a widespread "enterprise culture" in the long run, education and
training programs in Kenya must integrate business, technology, self-employment, and entrepreneurship into the curriculum. This idea was supported by the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond (1988), which recommended that entrepreneurship training be taught in all technical training institutions. With its history firmly entrenched in the technical and occupational aspects of work, technical education is an ideal vehicle through which to create an "enterprise culture."

The purpose of this article is to discuss the role of technical education and training in supporting economic growth in developing countries such as Kenya. This role includes developing human resources through formal programs in entrepreneurship education, training teachers to implement new curricula that emphasize the development of entrepreneurship knowledge and skills, and promoting entrepreneurship and small enterprise creation and growth within local communities through training programs and consultancy services. The article concludes with a description of an educational change initiative that is supporting the creation of an "enterprise culture" through entrepreneurship education.

**Major Development Concerns**

Before considering the role of education and training in creating an enterprise culture, several critical concerns about development issues need to be highlighted. It is argued that properly designed and implemented programs of technical education can significantly reduce the negative impact of these concerns for developing countries.

**Unemployment**

Unemployment, particularly among the youth, is a critical problem in developing countries. Self-employment in small enterprises has been identified as a partial solution (Nelson, 1986; Republic of Kenya, 1992). Entrepreneurship education can play a major role in changing attitudes of young people and providing them with skills that will enable them to start and manage small enterprises at some point in their lives.

**Rural-Urban Balance**

Potential entrepreneurs who are able to establish small enterprises in small towns and villages in rural areas must be developed in adequate numbers. By increasing the number of entrepreneurs in a region, a more even distribution of income between rural and urban
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areas can be achieved by improving the productive capacity of people living in rural areas (Gibb, 1988). Since technical training institutions are located throughout Kenya, entrepreneurship education will help ensure an adequate supply of potential entrepreneurs in both urban and rural areas.

**Industrialization**

Accelerated industrialization, particularly through small-scale enterprises, requires an increased supply of individuals with entrepreneurial capabilities. As Kenya moves from over-dependence on an agrarian economy to a more diversified industrial society, the supply of entrepreneurs involved in manufacturing and technology-related businesses must increase. Technical training institutions are capable of preparing potential entrepreneurs by adding entrepreneurship education to their curriculum.

**Capital Formation**

Capital is a scarce resource for economic development that needs to be used wisely. Care should be taken to ensure that the individuals who receive loans actually possess the technical and entrepreneurial skills needed to succeed. The emergence of limited numbers of enterprises, the high mortality rate of those that start, and the slow or stagnated growth of those that survive are clear indications that increased efforts are needed to prepare more competent entrepreneurs.

**Labor Utilization**

Human resources are very important for development. By orienting young people toward self-employment, human resources may be used more productively. The objectives of entrepreneurship education should focus on: (a) upgrading the social and economic status of self-employment as a career alternative, (b) stimulating entrepreneurial attributes in young vocational trainees, (c) facilitating the development of entrepreneurial ideas, and (d) promoting the overall development of an "enterprise culture" in Kenya. Entrepreneurship education is an area of study that can challenge trainees to adopt such an orientation to work, either as employers or as employees.

**Entrepreneurship as a Field of Study in Technical Education**

The entrepreneur is the key actor in the private enterprise sector and can be defined as a person who is able to look at the environment,
identify opportunities for improvement, gather resources, and implement action to maximize those opportunities. The entrepreneur can be depicted as a role model in the community, a provider of employment opportunities for others, a stabilizing factor in society, and a primary contributor to the development of natural and human resources within a nation. Entrepreneurs provide new insights and perform a positive function in the economic development of a country. In the private sector, entrepreneurs are those who are motivated to take risks, be innovative, develop new business ideas, and invest money and other resources to establish enterprises that have growth potential. There appears to be some agreement that most people possess entrepreneurial qualities to some extent and in some combination.

What are the entrepreneurial qualities that are needed by future entrepreneurs? The entrepreneurial traits shown in Table 1 were identified from an extensive review of research studies (East-West Center, 1977). If formal educational programs support the development of these personal entrepreneurial traits, potential entrepreneurs will be more likely to initiate action and have a better chance for success in their business ventures.

While technical skills are needed by successful entrepreneurs, it is important to identify differences between technical skills and entrepreneurship capabilities. This distinction is important because there are many training programs for technical skill development, but relatively few entrepreneurship development programs currently exist in Kenya. Most existing entrepreneurship development programs have been designed for entrepreneurs who are already in business. During the past 10 years, large numbers of Kenyans have received vocational and technical skill training, but there are limited employment opportunities for graduates of technical training institutions. A growing economy will help expand opportunities for producing new goods and services in the market; yet people need to be equipped with both technical and entrepreneurial skills in order to take advantage of these new opportunities, initiate new enterprises, and become self- employed.

The Status of Entrepreneurship Education in Kenya

The Government of Kenya has recognized the potential of small enterprises to support the job growth requirements of the country by establishing a inter-ministerial unit on Small Enterprise Develop-
Table 1
Traits of Entrepreneurs

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<thead>
<tr>
<th>Characteristics of Entrepreneurs</th>
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<tbody>
<tr>
<td>Self-Confidence</td>
<td>• Confident&lt;br&gt;• Independent, individualistic&lt;br&gt;• Optimistic&lt;br&gt;• Leadership, dynamic</td>
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<tr>
<td>Originality</td>
<td>• Innovative, creative&lt;br&gt;• Resourceful&lt;br&gt;• Initiative&lt;br&gt;• Versatile, knowledgeable</td>
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<tr>
<td>People-Oriented</td>
<td>• Gets along well with others&lt;br&gt;• Flexible&lt;br&gt;• Responsive to suggestions/criticisms</td>
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<tr>
<td>Task-Result-Oriented</td>
<td>• Need for achievement&lt;br&gt;• Profit-oriented&lt;br&gt;• Persistent, perseverance, determined&lt;br&gt;• Hard-worker, drive, energy</td>
</tr>
<tr>
<td>Future-Oriented</td>
<td>• Foresight&lt;br&gt;• Perceptive</td>
</tr>
<tr>
<td>Risk Taker</td>
<td>• Risk-taking ability&lt;br&gt;• Likes challenges</td>
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ment (SED) within the Ministry of Planning and National Development (King, 1990). In a report developed collaboratively with the United Nations Development Program (UNDP) and the International Labor Organization (ILO), Kenya was encouraged to develop a training capacity in entrepreneurship that could lead to the creation of an “enterprise culture” in the country (Republic of Kenya, 1990). Within the same time frame, a new Ministry of Research, Technical Training and Technology was established; one of its goals was to harness and develop the entrepreneurial efforts in the country.

Entrepreneurship Education Project

One of the first efforts to move in the new direction to entrepreneurial development in Kenya involved introducing entrepreneurship education into all technical training institutions in the country. In 1990, the Ministry of Research, Technical Training and Technology (MRTT&T) initiated a four-year project to implement a new policy requiring all vocational and technical students to complete a course in entrepreneurship education. The UNDP provided the
funding and the ILO executed the project. The following outcomes were achieved:

**Creation of organizational units within institutions.** A Department of Entrepreneurship Education has been initiated in most technical training institutions in Kenya. In addition, each institution was encouraged to develop a *Small Business Center* (SBC) whose mission (as described by the Ministry of Research, Technical Training and Technology) was to “facilitate the development of small and ‘Jua Kali’ enterprises [small artisan-run manufacturing and service enterprises] and promote an entrepreneurial culture within the institution and the local community” (Republic of Kenya, 1993, p. 1). Initially, Small Business Centers were attached to seven technical training institutions to promote linkages between education and business and to facilitate entrepreneurship development at the local community level. One of the primary objectives was to assist people in initiating entrepreneurial activities. In the future, it is expected that Small Business Centers will be created in all technical training institutions in Kenya.

**Curriculum development.** An entrepreneurship education curriculum framework was created and syllabi were prepared for the artisan, craft, and technician levels of training. The six major areas covered in the curriculum included: (a) entrepreneurship and self-employment, (b) entrepreneurial opportunities, (c) entrepreneurial awareness, (d) entrepreneurial motivation, (e) entrepreneurial competencies, and (f) enterprise management. The entrepreneurship education program focuses on the pre-start level in vocational institutions where positive business and entrepreneurial attitudes need to be developed in trainees before they initiate the process of becoming self-employed. All students in technical training institutes at the artisan, craft, and technician level are required to complete a 154-hour course in entrepreneurship education to develop positive attitudes towards self-employment and entrepreneurship. In addition, all trainees gain experience with business planning and are required to prepare a business plan before graduation.

**Pre-service and inservice teacher training.** Traditional technical teachers tend to use teaching approaches that emphasize vocational skill development and prepare students for certification and employment in the formal sector. With the new emphasis on self-employment and entrepreneurship, the necessary programs for preparing teachers to teach curricula regarding entrepreneurship education were designed.
A required methods course was purposefully designed to help future teachers instill entrepreneurial skills and attitudes in both male and female trainees in an attempt to break gender stereotyping regarding entrepreneurship and to diversify technical training fields for women as future entrepreneurs. Approximately 150 instructors who are currently teaching in the technical training institutions have completed inservice workshops on teaching entrepreneurship education.

Graduate programs. At the graduate level, thirty-four vocational educators completed a Master's Degree program that was offered by the University of Illinois through Kenya Technical Teachers College in Nairobi. This group has become a cadre of national experts who are positioned to provide leadership for the development of entrepreneurship education in Kenya over the next 20 years. All courses were taught in Nairobi, Kenya by faculty of the University of Illinois. The following courses were specifically designed to enhance the capabilities of Kenyan educators to provide leadership in the future development of entrepreneurship education:

- Small Enterprise Environment
- Methods and Materials for Teaching Entrepreneurship Education
- Curriculum Development for Entrepreneurship Education
- Evaluation of Entrepreneurship Education Programs
- Design and Content of Entrepreneurship Development Programs
- Entrepreneurship Education for Adults
- Small Enterprise Development Policies
- Research in Entrepreneurship Education
- Seminar in Entrepreneurship Development

Each course within the graduate program contained classroom instruction as well as practical activities that were related to entrepreneurship development issues within Kenya. These activities included (a) developing case studies on specific topics relating to entrepreneurship education, (b) working as interns in small businesses, (c) interviewing successful entrepreneurs and preparing "success stories," (d) designing and implementing one-day workshops on business topics important to local entrepreneurs, and (e) developing curriculum for teaching entrepreneurship education. A primary activity for all graduate students in the program was to conduct a research study on a topic related to entrepreneurship education. The results of these studies were important to further the
development of curriculum and programs for teaching entrepreneurship education and to provide a much needed scholarly knowledge base for entrepreneurship education.

A second Master's Degree program in entrepreneurship development was conducted by the University of Illinois for 30 vocational educators following completion of the first program. The primary goal of the second program was to institutionalize the program at Jomo Kenyatta University of Agriculture and Technology in Nairobi, Kenya. This was accomplished by pairing Illinois faculty with Kenyan professors so they could assume the responsibility for the program in the future. Immediately following the completion of the second graduate program, Jomo Kenyatta University began its own graduate program in entrepreneurship education with 19 graduate students.

Institutional Support for Entrepreneurship Education

The entrepreneurship education program was designed to develop the vast human potential for entrepreneurship that exists in Kenya. The development of proper attitudes toward self-employment and entrepreneurship is essential, and these concepts need to complement instruction in specific vocational and technical skill areas. More graduates could become self-employed if they understood the attitudes and skills needed to own and operate a business. They will also be able to make better informed decisions regarding self-employment as a potential career.

Entrepreneurship education is now a required course (154 hours of instruction) in technical training institutions that are supported through the MRTT&T. These institutions include Youth Polytechnics, Technical Training Institutes, Institutes of Technology, National Polytechnics, and Kenya Technical Teachers College.

Youth polytechnics. There are over 325 government-assisted Youth Polytechnics with enrollments of approximately 35,000 students. Entrepreneurship education is taught in the Youth Polytechnics for trainees in artisan and craft level courses. The Ministry's goal is to develop training programs in Youth Polytechnics that will encourage and facilitate trainees to become self-employed in the small enterprise sector after graduation, especially in the rural areas of Kenya.

Technical training institutes. There are 19 Technical Training Institutes with an enrollment of over 6,500 students. These institutes provide students with relevant vocational and technical skills
at the craft level to prepare them for employment in local business and industry. Instruction in entrepreneurship education helps these graduates move from just seeking employment opportunities to seeking self-employment opportunities once they have sufficient experience in the area where they want to become self-employed.

_Institutes of technology._ There are 17 Institutes of Technology in Kenya preparing students for craft certificates. These Institutes of Technology enroll over 6,000 students and play a major role in providing skill/training that is responsive and relevant to industrial and commercial needs. One of the primary roles of the Institutes of Technology is to prepare students to be self-reliant in seeking employment in small-scale industries as well as becoming self-employed.

_National polytechnics._ Three National Polytechnics (Kenya Polytechnic, Mombassa Polytechnic, and Eldoret Polytechnic) offer technician courses for both diploma and higher diploma levels. These institutions have a total enrollment of over 5,500 students. Most students (except those pursuing business studies courses) are sponsored by their employers. Most of the courses last between three and four years. These institutions provide technical training and their curriculum is based on the skill requirements of vocational-based trade certificates. Because of the high level of training provided to these trainees, it is expected that many growth-oriented entrepreneurs are expected to emerge from this group.

_Kenya Technical Teachers College (KTTC)._ This is the only college in the country where technical and business teachers are trained for secondary schools and technical training institutions. KTTC has a capacity of approximately 500 trainees. The courses conducted at KTTC are purely pedagogical (one year) and are for professionally-qualified candidates in the engineering, business, and vocational trade areas. KTTC has assumed responsibility for teaching the entrepreneurship education methods course to all prospective trainers. A course in _Methods of Teaching Entrepreneurship Education_ is now a requirement for all vocational teachers in Kenya. A two-year Higher Diploma has been designed and implemented at Kenya Technical Teachers College to prepare teachers as subject matter specialists in teaching entrepreneurship education. Annual enrollment in this program is approximately 50 students.
Impact of Entrepreneurship Education Efforts in Kenya

The long-term goal of this program was to develop an "enterprise culture" among young people by helping them understand the entrepreneurial attitudes and skills needed to be successful, either as employers or employees. It is apparent that the development of this "enterprise culture" is underway. Entrepreneurship education has been institutionalized in all post-secondary vocational and technical training institutions as well as in four of the five universities in Kenya. As of June, 1996, over 55,000 students have received instruction in this important subject. In 1994, an evaluation of the entrepreneurship education project was conducted by the International Labor Organization. The following information was included in the evaluation report:

The Master's Degree training for 34 technical trainers and ministry personnel was provided, as called for, under subcontract with the University of Illinois, a leading U.S. academic center for entrepreneurship education. These inputs were of the highest quality and did much to create the aura of infectious enthusiasm and sound technical grounding that spread through the multiplier effect from 34 Master's Degree trainees to over 700 technical trainers at all levels.

The fact that the course was delivered in Kenya rather than abroad, and during school vacations, rather than continuously made the cost per trainee quite competitive with no apparent sacrifice of quality. It also allowed and encouraged the candidates to play a key role in the broad implementation of the entrepreneurship education program while they were in the process of earning their Master's degree. (Huntington, Manu, & Dena, 1992, p. 27)

Beyond providing preparation for future entrepreneurs, this project created a leadership network and scholarly knowledge base that can be used to further enhance efforts to expand the entrepreneurial capacity of citizens within developing countries. The 34 instructors with Master's Degrees in Entrepreneurship Education and the nine Kenyans with doctorates in entrepreneurship education provide the critical mass of leadership needed to sustain this initiative. The extensive body of curriculum materials for preparing future entrepreneurs and teachers is in widespread use throughout the country. Beyond typical course materials, 78 case studies have
been prepared as supplementary teaching materials describing a variety of problems confronted by small enterprise entrepreneurs. In addition, the “success stories” of 34 indigenous Kenyan entrepreneurs have been prepared.

Based on the experiences with this program, several observations should be useful to developers of similar entrepreneurship education programs. Entrepreneurship education programs need to include work experience in small-scale enterprises, integration of entrepreneurial role models in the training program, and active participation of trainees in idea generation and business planning. Creating a general culture to support the small enterprise community is likely to facilitate the establishment of new enterprises. This “enterprise culture” should include the following components to enhance entrepreneurship education:

- Exposure of trainees to successful small enterprises in their community.
- Opportunities to practice entrepreneurial attributes in technical training institutions during critical formative years of trainees’ growth.
- Opportunities to become familiar with entrepreneurial and managerial tasks during their technical training.
- Utilizing small enterprises, family acquaintances, and community contacts to assist in implementing business opportunities.

The entrepreneurship education program in Kenya can be viewed as a part of the general education of young people for the world-of-work. Since attitudes take considerable time to develop, it is essential that entrepreneurial attitudes be incorporated into general education programs for young people before they become employed or self-employed.

To compete effectively in the marketplace, it is important that the workforce of a country have entrepreneurial attitudes before they enter employment, whether as employers or employees. Because it may be a new subject, a strategic approach is needed to integrate entrepreneurship education into ongoing career preparation programs in universities and other post-secondary educational institutions. Since graduates of these institutions will provide much of the national leadership in the business community and in public service, entrepreneurship education should be an integral component of these instructional programs.
The impact of entrepreneurship education programs may not be immediately evident, but should have sustained effects on developing a strong "enterprise culture" in Kenya. Although this might be difficult to determine in the short-term, it is essential to the long-term economic growth of Kenya.

References


