الجمهورية اللبنانية مصنب وزيرالدولة لشؤون الشمية الإدارية مصنب وينع ودراسات القطاع النعام

4

THE ROLE OF EDUCATION IN ECONOMIC AND SOCIAL DEVELOPMENT OF LEBANON

ROLE DE L'EDUCATION DANS LE DEVELOPPEMENT ECONOMIQUE ET SOCIAL DU LIBAN

Serie: "Case Studies"

Republic of Lebanon

Office of the Minister of State for Administrative Reform

Center for Public Sector Projects and Studies

(C.P.S.P.S.)

No. 1



Regional Office for Education in the Arab States Beirut - Lebanon

The Author

Wadi D. Haddad is Deputy Secretary of the World Bank in Washington. One of the various positions he held was that of Executive Secretary of an Interagency Commission in charge of the Organization of the 1990 World Conference on Education For All (Jomtien).

A former President of the National Center for Educational Research and Development in Lebanon, he is also the author of many publications.

L'auteur

Wadi D. Haddad est actuellement Secrétaire-Adjoint de la Banque Mondiale à Washington. Au cours de sa carrière, il a entre autres occupé le poste de Secrétaire exécutif de la Commission interagences chargée de l'organisation de la Conférence Mondiale sur l'éducation pour tous de 1990 (Jomtien).

Ancien président du Centre National de Recherche et de Développement de l'Education au Liban, il est aussi l'auteur de nombreuses publications.

Complete or partial reprinting and translation are permitted provided that the source is indicated.

The opinions expressed in this publication do not necessarily reflect the official position of UNESCO or its Member Countries and do not imply a commitment on the part of the Organization.

Published by The Regional Office for Education in the Arab States-UNEDBAS.

Beirut, Lebanon, May 1997.

Summary

	Page	
Preface		
ľ.	The Challenges that Lebanon faces 2	
II.	The role of Education in addressing Lebanon's challenges	
	1. Role of Education in Economic Development 4	
	2. Role of Education in Social Development 7	
	3. Role of Education in Environment Protection 8	
III.	Implications for Education and Training Systems 9	
	1. Strengthening Primary and Secondary Education 9	
	2. Encouraging Skill and Enterprise Training 10	
	3. Providing for Advanced Knowledge, Skills and Technologies	
	4. Focusing on Quality	
	5. Maintenance of Human Capital	
	6. Investing in Educational Development 14	
IV.	The Task Ahead	
V.	Rôle de l'Education (version française) 18	

PREFACE

The publication of this series of books falls within the reinforcement of Training and Information in the Region. This series is originally aimed at administrators and researchers concerned with the planning issues in general, and the structural and institutional reforms, in particular.

As a matter of fact, the educational planning has considerably evolved over the past three years. It is widespread and has developed new strategies within and outside the Educational System.

The need for exploring the future, innovating and improving passes today through a number of prerequisites, among which, we note the necessity to broaden the debate, to encourage a wider participation and to develop information. These are conditions to be met in order to improve the decision-making process, to elaborate efficient educational policies and to assume a greater responsibility as for their implementation.

Wadi D. Haddad, strengthen by his long experience in development, gives Lebanon as an example to show the role and challenges of the educational system in the process of reconstruction.

I would like to thank him for this enriching contribution that urges each and everyone to think about the priorities and strategies to be established in such circumstances.

Kacem Bensalah Director a.i. UNESCO/Beirut

I. THE CHALLENGES THAT LEBANON FACES

1

The challenges that Lebanon faces today are partly unique and partly similar to those confronting other developing countries. Lebanon had come out of a protracted conflict that destroyed its infrastructure, raptured its social and political fabric, outdated its civil institutions, depleted its knowledge base and threatened its confidence in basic human values. At the same time, as any developing country, Lebanon is struggling to catch up with the world economy, to balance between high demands for public good and limited resources, and to make the right choices for sustainable development.

On the threshold of the 21st century, I see six areas of challenges for Lebanon:

- 1. Reconstruction and expansion of the physical infrastructure to establish the base needed for economic productivity, mobility and communication.
- 2. Maintaining a stable macro-economic environment that provides fiscal and financial stability, and spurs renewed growth, generates employment and restores confidence in the private sector.
- 3. Economic development to increase productivity and employment, maintain complementary and competitiveness in the future regional environment, and integrate with the global economy.

These are the first three easy challenges. The next three are harder.

4. Reintegration of the different elements of the population into a dynamic, positive and vibrant society - a society that shares

confidence in the present and hope in the future, and embraces a common belief in inclusion and basic human rights and values. This challenge is hard after years of conflict, hostility, separation and mistrust.

- 5. Social development to provide individuals with the opportunities to develop their potential, to meet their basic needs for knowledge, food, shelter and health, to participate actively in, and benefit from, economic development, and to attain an acceptable quality of life.
- 6. Finally, environmental preservation, Lebanon has been blessed with a beautiful natural environment, but unfortunately pressures on the land from the growth and relocation of people, and the absence of enforcement of a regulatory framework during the years of conflict, have accelerated environmental degradation alarmingly. Improper waste disposal, unregulated use of land, deforestation and industrial pollution all imperil the biological integrity of our land, air and water. The challenge is to halt environmental degradation fast to preserve one of Lebanon's precious assets and to save over time because the costs of environmental repairs, where repair is possible, far exceed the costs of prevention.

4

II. THE ROLE OF EDUCATION IN ADDRESSING LEBANON'S CHALLENGES

3

After decades of international studies and experiences it is well recognized that education is crucial for economic development, human welfare, societal advancement and environmental protection. With education, both individuals and groups are better able to derive sustenance from their environment, to participate effectively in society, to meet challenges, to create new solutions, and to contribute to economic growth. I will group my remarks under three headings: economic development, social development and environmental sustainability.

1. Role of Education in Economic Development

Education contributes to economic growth, but is not sufficient for growth. Economic growth takes place when investments in both human and physical capital take place in an environment characterized by macroeconomic stability, well-functioning labor markets and an openness to international trade and flows of technology.

Education contributes to economic development by increasing the productivity of the individual. This is brought about by the acquisition of skills and attitudes and through the accumulation of knowledge. This is the lesson that emerges from East Asia where rising investments in the 1960s and 1970s in primary and secondary education helped lay the foundation for the export-oriented economic growth that followed. South Korea's experience of carefully timed investments in primary education in the 1960s enabled it to respond to macroeconomic measures promoting trade and the expansion of employment in labor-intensive goods. Extension of these investments in secondary and higher education later positioned South Korea to expand production and trade in goods with higher levels of technology.

Since the majority of workers in developing countries are engaged in subsistence agriculture, the effect of basic education on

agricultural productivity has been an important policy issue and the subject of much research. One study by the World Bank -- based on eighteen analyses carried out in thirteen developing nations -- concluded that a minimum of four years of primary education increased farmer productivity by an average of 8.7 percent for all countries and 10 percent for those undergoing modernization and growth. The greater the demands on farmers to adapt to changing technologies, credit, and marketing systems, the higher will be the benefits to those possessing basic skills.

The effect of education on wage workers and entrepreneurs is indicated by the higher productivity of primary school graduates, as measured by adjusted earnings differentials. Both private and social rates of returns to education have been shown to be higher in one multinational comparison social rates averaged 27 percent for primary and 15-17 percent for secondary education, while private rates averaged 49 and 26 percent respectively. The are also high relative to the common return to capital investments which is about 10 percent. Primary and secondary schooling is critical for promoting the productivity of small entrepreneurs because they face additional decision-making demands and retain a larger share of the benefits of their own productivity. As in the case of agriculture, education increases the productivity of both wage earners and entrepreneurs even more in situations of rapid change and development.

The globalization of the economy and the lowering of barriers to trade internationally in recent years have made education even more crucial:

First, producers of tradable goods and services now operate in a global market place where competition spans national borders. The ability of producers to meet this competition is a key to improving national welfare in a rapidly changing world economy. Rapid technology changes and the opening of economies to

competition are changing modes of production. Industrialized countries with whom developing countries are now competing are moving away from mass production and toward high performance systems. These altered conditions have changed the requirements for economic success. In a more competitive global economy, firms, countries or individuals can compete in only two basic ways: they can reduce wages or improve productivity. Success, therefore, requires greater emphasis on factors that were less important in traditional mass production systems, i.e. productivity, quality and flexibility in production. Perhaps, the most important element here is the foundation of basic education that workers receive and the effect is has on their adaptability in the workplace.

Second, as new technologies and production processes transform the international economy, the future of individual nations in world development hinges much more than even a generation ago on the capacity to acquire, transmit and apply knowledge to work in everyday life. The production of manufacturing and high-valued services no longer filter down "naturally" from high-income to middle-and low-income countries based on labor costs alone. Because of new goods, such as consumer electronics, and new processes, such as numericallycontrolled machine tools and computer-assisted design and manufacturing, the location of manufacturing and high-value services depends increasingly on the producers' capacity to control flexible, information-based quality manage Comparative advantage is now a function of labor and management quality, as well as low wages.

Internally, education enhances the chances of success of investments in other sectors of development by providing the necessary know-how for the design, implementation and above-all maintenance of development projects. This is a crucial role for a continued success of the rehabilitation, reconstruction and physical development program that Lebanon has embarked upon.

The link between education and economic growth is not automatic. Some countries, such as Costa Rica, Korea and Zimbabwe, have long considered education to be as productive an investment as physical capital and have consistently invested in people. Combined with sound macro-economic management, these investments have paid off handsomely. Other countries, such as Brazil, Nigeria and Pakistan, have invested less in education, and are paying a high price in lost opportunities for overall development and in the continuing poverty of large segments of their populations.

2. Role of Education in Social Development

Investment in education is equally important in the reduction of poverty and social inequality and in the advancement of human welfare and quality of life.

1

Education can make a significant contribution to the reduction of poverty by providing the skills, knowledge and attitudes that increase the poor's productivity. It increases their output as farmers and their access to jobs in the formal and informal economic sectors.

Economic disparities are reinforced and reproduced over time by unequal access to basic education and unequal achievement in learning. More equitable access to effective basic learning opportunities will immediately begin to reduce the gap between the least educated and the most educated within a society. Equity in basic learning will also make access to further learning more equitable by assuring that individuals can be selected for these opportunities on the basis of actual achievement, rather than family or community wealth.

The reduction of learning disparities has both immediate and long-term effects. Some of these effects are linked to the

importance of education for technological advancement, which has the capacity to affect profoundly the life circumstances of every person today. All countries need citizens capable of working with and through technology. Increasingly, the possession of knowledge and reasoning ability defines individual and national efficacy. In a very real sense, to be deprived of basic education is to be deprived of the essential tools for modern living. Without the skills to participate in a literate, technological world and the knowledge to transform their environment, people will remain on the margins of society, and society itself will lose their vast potential contributions.

Moreover, education contributes to human welfare in another way. Studies have shown that early home environment plays an important role in the development of a child's intellectual ability. This environment includes intellectual stimulation, provision of health care and nutrition. All of these factors are influenced by the level of education of the parents. In addition, the more educated the parents are, particularly the mother, the lower is maternal mortality and the healthier is the child -- all through the use of medical services and changes in household health behavior, elements inculcated and promoted by education.

4

3. Role of Education in Environmental Protection

To combat environmental degradation, people must understand the effects of their actions on the environment and accept responsibility for them. At the same time they need to be provided with the knowledge and skills to reverse their behaviors. Appropriate education helps to inform individuals of the costs of environmental damage to them, their families and society at large. It also promotes social acceptance of regulations to restrict damaging acts and measures to enhance environmentally sound development.

III. IMPLICATIONS FOR EDUCATION AND TRAINING SYSTEMS

Striving for education to play its critical role in Lebanon's economic, social and environmental development, has serious implications for education policies, strategies and options. I place before you six implications:

1. Strengthening Primary and Secondary Education

A solid basis in general education, including science and mathematics, is important for the following four reasons:

One)It provides the pre-requisite cognitive and theoretical knowledge required for skilled occupations that are becoming more sophisticated with the technological changes.

4

Two)In modern sector manufacturing and services, broad competencies are important, not only to immediate productivity, but also to the ability of workers to learn new skills throughout a career.

Three)General education, particularly secondary education, encourages self-employment and improves its productivity.

Four)General education provides the needed knowledge, skills and attitudes required for people to be able to survive, to develop their capabilities, to live and work in dignity, to participate in development, to improve the quality of their lives, to make informed decisions, and above all, to continue learning.

2. Encouraging Skill and Enterprise Training

While general education provides the foundation and flexibility to acquire skills for new jobs, there needs to be a training system in place to enhance the quality and efficiency of product development, production and maintenance. Ideally, enterprise training based on sound general education can be the most effective and efficient way to develop the skills of the workforce. It has the following advantages:

One)Employers train workers as quickly as possible and place them automatically in jobs that use their skills.

Two)Costs are low compared to pre-employment training.

Three)Large enterprises usually have the technology and expertise to train in both traditional and newly emerging skills. Even the small enterprises of the rural and urban informal sectors can provide the training needed for existing jobs and production practices.

Four)Enterprises must function in the market place and be adept to demands of new technologies and processes, all quickly translating into an adjustment in the training content.

Despite these advantages it is unrealistic to limit all skill development to enterprise training. The extent and quality of private sector enterprise training is constrained by the nature of the economy and the level of enterprise development. These constraints require a continuing role for government to ensure an adequate amount and quality of training. Public training, however, has not had a consistently good record in efficiency and flexibility. International experience has pointed to three elements to improve the role of government in training:

One) Appropriate focus. Publicly provided or subsidized training must focus primarily on areas of significant external benefits, market imperfections or weak enterprise training capacity. For example, training for higher skills can be important to growth in economically strategic sectors or industries in which technological change is rapid. Public pre-employment training may also be justified when employer and private training capacity is weak. Also, retraining for workers to cope with new technologies and production processes minimizes displacement and improves competitiveness.

Two)Responsiveness to market forces. At the institutional level responsiveness can be improved by encouraging training institutions to specialize in the needs of different skill markets, and to develop strong information links with employers. At the national level, responsiveness can be achieved by building capacity for labor market analysis, monitoring of training costs and outcomes, and information gathering from employers to determine training supply.

Three)Complementing equity strategies. In focusing on productivity and competitiveness, the government should not lose sight of the need to bring the poor into the development process. The poor's principal asset is their labor, and improving their productivity and earnings is their main ticket out of poverty. A menu of traditional apprenticeships, appropriately strengthened, formal training programs and even vocational schools in poor areas, can be a major source of skills for the economically disadvantaged.

3. <u>Providing for Advanced Knowledge, Skills and Technologies</u>

While it is important to strengthen general education and skill training, providing opportunities for acquiring advanced knowledge and skills must be pursued concurrently in order to advance development of the economy and harness new technologies. Technological capacity - the ability to assess, select, adapt, use and develop new technologies - is becoming a critical determinant of a country's competitiveness prospects. Institutions of higher education and training must be strengthened to equip individuals with the advanced knowledge and skills required for positions in government, business, industry and the professions. These institutions are expected to produce new knowledge through research and to serve as channels for the acquisition, transfer, adaptation and dissemination of knowledge generated elsewhere in the world. The challenge for these institutions is to introduce new kinds of scientific, mathematical, information technology and technology management programs into their curricula, and new linkages between universities and industry and agriculture.

4. Focusing on Quality

Whether or not education translates into economic or social development depends ultimately on whether people actually learn whether they incorporate useful knowledge, reasoning abilities, skills and values. The focus, therefore, should not be on schooling but rather on the quality of the content and methods of education -- on actual learning acquisition and outcomes.

One specific facet of quality is the relevance of the curriculum. It is certainly essential to relate the curriculum to the immediate needs of the individual, society and the market place. But keeping in mind the broad and intricate role of education, a danger is that relevance to local and immediate environment may

take precedence over the more general and long-term conditions for which education should prepare the individual.

5. Maintenance of Human Capital

The education that can contribute to the economic and social development of Lebanon cannot be a one-shot affair no matter how efficient, relevant and effective it is. In a fast changing world there will be dramatic changes within the life time of an individual triggered by national, regional and international factors. A reconstructed Lebanon recapturing its role in regional economy, the integration of the world economy, technological change and expansion of the stock of knowledge are only a few examples to demonstrate that the world of tomorrow may be beyond our imagination. For Lebanon and the Lebanese to cope with such a dynamic future present education should provide a solid basis for subsequent education and training. At the same time, opportunities for life-long learning and skill acquisition should be an integral part of the national education system. Short of that the human capital formed today will be depleted and outdated in few years, depriving society and the economy of one of its crucial pillars.

6. Investing in Educational Development

The crucial role of education in economic, social and environmental development makes its economically wise and politically imperative to invest in education. Investment in education is not a luxury or a charity. It is a protection of other investments and a necessity for long-term development.

Lebanon, like all other countries faces demands on financial resources. The requirements for rehabilitation and reconstruction limit the potential for expanding public and private spending on education. But without adequate investment in people, Lebanon cannot meet the challenges of long-term economic growth, social stability, and competitiveness in the regional and global economy.

But investment in education requires patience and long-term commitment because of the long gestation period of educational development. As the Chinese proverb of the 5th century BC rightly teaches us:

If you plan for a year, plant a seed.
If you plan for ten years, plant a tree.
If you plan for a hundred years, teach the people
When you sow a seed once, you will reap a single harvest.
When you teach the people, you will reap a hundred harvests.

- K'UAN-TZU, 551-479 B.C.

4

IV. THE TASK AHEAD

The critical importance of education for Lebanon's long-term development calls for a strategy of strengthening primary and secondary education, encouraging skill and enterprise training, providing for advanced knowledge, skills and technologies, focusing on learning, providing for life-long education and training, and investing in educational development. This is not easy to achieve. Lebanon, like all countries, faces financial and institutional constraints. Therefore, much of the hope for education development depends on the capacity of policy makers to make strategic national and sectoral choices, and of education planners to translate these choices into efficient and effective measures.

Many countries, like you, have embarked on educational reform to strengthen the role of education in national development. International experience all points to the complexity and multifaceted character of this process, and to the fact that policy

changes are not purely technical but have socio-political-economic dimensions. Internally, the educational system is an intricate network of institutions interlocking horizontally and vertically. A policy decision in any one component can have strong repercussions throughout the system. Externally, education seems to be everyone's business and nearly everyone feels qualified to have an opinion about it. Policymaking, therefore, involves balancing a number of contradictory demands, and soliciting support, or at least tolerance, from the many different segments of society which have an interest in education.

As Lebanon engages in this long process of educational reform, it shares recurring lessons from similar experiences worldwide:

First, education policy development should be based on solid knowledge along three dimensions: (a) a diagnosis of the sector itself drawing on data, research, experience and international knowledge; (b) contextual analysis of the economic, political and social conditions and prospects; and (c) an assessment of the interest groups, their rationalities and roles in education change, and the processes through which tradeoffs are accomplished among them.

Second, before a policy decision is made, different viable policy options need to be generated. This is the easy part. What is more difficult is to construct scenarios around each opinion to determine requirements and consequences. Each scenario should be systematically analyzed and evaluated, not only in terms of the educational merit of the policy proposal but also in terms of its desirability (taking into consideration the multiplicity of interests involved), financial affordability, feasibility in terms of the implementation capacity of the country, and sustainability over a sufficient period of time to show results. The selection of the optimal option will continue to be ultimately political, but a

rigorous analysis of different scenarios, based on reasonably good knowledge, enlightens the political decision making process and allows the different interest groups to be engaged in consultations in a meaningful manner.

Third, how radical and comprehensive should a policy It is not obvious that an incremental step-by-step approach is always superior to a comprehensive strategic approach. Certainly, a comprehensive strategic reform is unlikely to succeed where the absorptive capacity of the country is meager or where there is not demonstrated demand for the policy. A step-by-step approach allows experimentation and adjustment and does not have high political and institutional demands. On the other hand, this approach may lead to "low risk" quick-fixes, and inadequate investment in terms of political capital and other resources to carry the reform off successfully. The success stories worldwide have shown that to solve sector-wide problems in the context of political and economic demands, it is prudent to start with a limited incremental phase, but should proceed in time to a comprehensive strategic approach, the timing and speed of this evolution should be gauged to the degree of acceptability of the reform by the stakeholders, and the implementation capacity of the system.

Fourth, whether a policy reform is incremental or comprehensive, its true test comes during planing and implementation. Here, three factors proved to be crucial: (a) Macro planning, to address national problems and provide an overarching blueprint, must be complemented (and not substituted) by micro planning at the project and local level. (b) Mobilization of political and public support should be deliberately planned for and sought, and during the planning and implementation stage stakeholders should be actively involved. (c) Planning should be flexible, leaving room for modifications during implementation.

Fifth, when a policy goes into effect it is not the end of the policy-planning process; it is the beginning of a new chapter. Policy reforms should be systematically assessed, preferably with a built-in mechanism, in terms of their impact; is it achieving what was expected of it at the time of its adoption? implementation mechanisms need to be reviewed continuously, policies themselves should be allowed to mature before a judgment is passed on their impact. Even then, implementation problems should not be mistaken for inadequacies of the policy itself. Even if impact assessment concludes that the desired changes have been successfully implemented, policy makers and planners should maintain vigilance for new changes required, given the rapid pace of contemporary society and the intimate links between an educational system and its environment. Finally, if a policy is determined to be ineffective, it should not be allowed to linger while new policies are introduced alongside. Instead, a new cycle of rigorous policy design, formulation and planning must be initiated.

> الجمهُوريَّة اللَّبَانيَّة مَكتب وَزيرُ الدَّولة لشوَّون الشَّمَة الإداريّة مَك: مشاريع وَدرَاسَات القطاع الْعَامُ

Republic of Lebanon

Office of the Minister of State for Administrative Reform

Center for Public Sector Projects and Studies

(C.P.S.P.S.)