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STAFF APPRAISAL REPORT

ECUADOR

FIRST SOCIAL DEVELOPMENT PROJECT
EDUCATION AND TRAINING

NOVEMBER 19, 1991

Human Resources Operations Division
Country Department IV
Latin America and the Caribbean Region

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FISCAL YEAR
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WEIGHTS AND MEASURES
The metric system has been used throughout the report.

SCHOOL YEAR
March - December (Coastal Region)
October - July (Sierra Region)

GLOSSARY OF ACRONYMS

AMER	IDB Project for Rural School Improvement
CENAPIA	Center for the Advancement of Handicraft and Small Industry
CENDES	Industrial Development Center
CINTERFOR	ILO International Center for Vocational Education, Montevideo
CONADE	National Planning Council
CONAUPE	National Corporation for the Support of the Popular Economic Units
CONUEP	National Council of Polytechnic Schools and Universities
DINACAPED	National Directorate of Pedagogical Training
FONNIN	National Fund for Nutrition and Infancy
FOPINAR	Fondo de Fomento para la Pequeña Industria y a la Artesanía (Development Fund for SSEs and Artisans)
IDB	Inter-American Development Bank
IESS	Social Security Institute
ILO	International Labor Office
INEM	National Employment Institute
IPED	Pedagogical Institutes
MEC	Ministry of Education and Culture
MOF	Ministry of Finance
MOL	Ministry of Labor
MPH (or MSP)	Ministry of Public Health
PCU	Project Coordination Unit
SECAP	Vocational Training Service
SNALME	National Service for Educational Materials Supply

SSEs

Small Scale Enterprises

UNEPROM

**Executive Unit of the National Program of
Microenterprises**

ECUADOR

FIRST SOCIAL DEVELOPMENT PROJECT: EDUCATION AND TRAINING

STAFF APPRAISAL REPORT

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This report is based on the findings of a World Bank appraisal mission that visited Ecuador in June/July 1991, comprising Messrs./Mmes. Bernardo Kugler (Mission Leader), Robert McMeekin, Rene Corradine, Emilia Gómez-Fernandini, Luis Pisani, Eduardo Velez, World Bank; María Anderson, Hernando Gómez-Buendía, Alfredo Sarmiento, Consultants. Ms. Barbara Searle and Messrs. Douglas Keare and John Middleton were peer reviewers. Messrs. Ping-Cheung Loh and James W. Adams were the Department Director and Division Chief, respectively.

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ECUADOR

FIRST SOCIAL DEVELOPMENT PROJECT

LOAN AND PROJECT SUMMARY

Borrower: Republic of Ecuador

Beneficiaries: Ministry of Education (MEC) and the Vocational Training Service (SECAP)

Loan Amount: US\$89.0 million equivalent

Terms: Repayable in 20 years, including a 5-year grace period, at the Bank's standard variable interest rate.

Project

Objectives: The proposed project is part of a social sector program incorporating a sequence of projects in rural development, education and training, health and nutrition and social welfare. The program is an integral part of the Bank assistance strategy for Ecuador, supporting structural adjustment and poverty alleviation and seeking to increase the public sector's focus on social welfare. By assisting the Government in improving the quality and effectiveness of basic education and training and in strengthening the resource allocation process, the project would help to remove constraints on growth. By focusing on the urban poor it will, together with the other social sector loans, contribute to improved equity. The project aims to improve the quality and effective delivery of basic education and training services targeted on the poor and strengthen decision-making and management of public institutions involved in the delivery of basic education and training programs. These two objectives would be achieved through: (a) raising learning achievement of primary age children; (b) raising basic skills of poorly educated adults; (c) strengthening capacity of decentralized service providers; and (d) improving resource allocation and program design processes in the education/training sectors.

Project

Description: The proposed project would have two main components. The Urban Basic Education component (76 percent of total project cost) would finance: (a) textbooks and other education materials, in-service teacher training, pre-school and special education programs for needy children and enhancement of existing physical facilities; (b) a decentralized network for school management that will deliver these services; (c) development of an educational assessment system; and (d) policy and institutional strengthening of MEC. The Adult Education and Training component (24 percent of total project

costs) would finance: (a) basic education and training (functional literacy) programs directed to the poor; (b) technological and informational support for small enterprises in subsectors with good export development potential; and (c) strengthening of SECAP's utilization of their installed capacity, and of their institutional and technical capacity.

Benefits:

The proposed project would increase human capital accumulation among the poor and would alleviate poverty in the short and medium term, thus improving the country's human capital stock and strengthening the bases for economic development, as well as contributing to a more equal distribution of economic opportunities due to enhanced educational attainment and productivity of those poor reached by the project. The impact on improved sector policy would be substantial. At the policy level, the project would support: (a) a new approach to basic education, (b) introduction of an education assessment system, (c) development of a cost-effective special education program, and (d) a revised role for SECAP. In addition, the project would improve the efficiency of public resource use by strengthening MEC's planning and budgeting process, as well as its implementation capacity, and by offering sector-level support necessary for the over-all budget reform measures being pursued at the macroeconomic level. Similar benefits would be effected in SECAP, which in addition would put into use its underutilized physical capacity.

Risks:

The main risk for the project derives from poor implementation capacity on the part of Government agencies. This problem may be aggravated by the change of administrations in 1992. Project design incorporates the following features to overcome the kinds of obstacles to successful implementation that have been endemic in the country: development of a decentralized management network for basic education, use of SECAP's existing decentralized facilities and the network used successfully by MEC in its national literacy campaign to reach the target population, use of existing sector staff -- selected on a merit basis, provided with necessary training and offered career development opportunities -- in project tasks, use of SECAP's experience in managing Bank projects, contracting with specialized international agencies to manage procurement and technical assistance, assuring incorporation of counterpart funding of recurrent expenditures in the national budget beginning in 1992 and including annual subsector and project budget reviews during supervision missions, introducing cost-recovery schemes and managing their proceeds in a decentralized manner, and establishing direct ties between schools and their communities and between SECAP and private industries. The potential delay with the upcoming change in Government is reduced by the substance of the project components that, focussing as they do on alleviating

poverty, should enjoy continued support in spite of change in administrations. Intensive supervision will nonetheless be maintained during the transition to ensure clear understanding of and commitment to the project.

<u>Estimated Costs</u>	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	-----US\$ million-----		
A. URBAN BASIC EDUCATION			
Education Quality Improvement	50.0	15.6	65.6
Institutional Strengthening	5.5	5.8	11.3
Subtotal	<u>55.5</u>	<u>21.4</u>	<u>76.9</u>
B. ADULT EDUCATION AND TRAINING			
Post-Literacy Training	9.3	2.1	11.4
Small Enterprise Support	1.4	1.3	2.7
Strengthening of SECAP	7.0	4.4	11.4
Subtotal	<u>17.7</u>	<u>7.8</u>	<u>25.5</u>
Total Baseline Costs	73.2	29.2	102.4
Physical Contingencies	2.7	1.0	3.7
Price Contingencies	9.7	2.9	12.6
Total Project Costs	<u>85.6</u>	<u>33.1</u>	<u>118.7</u>

Financing Plan:

Government of Ecuador	29.7	-	29.7
IBRD	55.9	33.1	89.0
	<u>85.6</u>	<u>33.1</u>	<u>118.7</u>

Estimated Disbursements:

IBRD Fiscal Year	<u>92</u>	<u>93</u>	<u>94</u>	<u>95</u>	<u>96</u>	<u>97</u>	<u>98</u>	<u>99</u>
Annual	5.0 <u>a/</u>	5.0	13.0	16.0	17.0	14.0	14.0	5.0
Cumulative	5.0	10.0	23.0	39.0	56.0	70.0	84.0	89.0

a/ Includes Special Account deposit of US\$4.2 million and part of expected retroactive financing of up to US\$4.8 million for eligible expenditures incurred after July 13, 1991.

I. THE SECTOR

A. Economic Setting

1.01 The stimulus of an oil bonanza in the 1970s and subsequent accelerated economic growth that lasted until 1980 provided an environment for social sector programs to undergo considerable expansion. However, poverty still persists in Ecuador and has been further exacerbated by the harsh economic climate during the 1980s. The country has insufficient human capital accumulation in both an absolute sense and when compared to countries in the region (Annex 1).

1.02 The oil windfall of the seventies led to an average GDP annual growth rate of 9 percent and placed Ecuador among the middle-income countries. The strategy followed by the Government during the boom lacked a long-term perspective, hence major portions of the Government's oil revenues were allocated to inefficient public expenditures and subsidies, and in the end financed consumption instead of productive investments. This increased the public deficit, which was partly financed by external debt.

1.03 Since 1982, the country has faced several external shocks in the form of reduced oil prices and natural disasters, greatly complicating the Government's efforts at adjustment. The public deficit reached an all-time high of 9.7 percent of GDP in 1987, with interest due on external debt representing 9.8 percent of GDP in 1988. With the implementation of a basic stabilization process in 1988, inflation was reduced from 85 percent per year to 54 percent by 1989. As a result of adjustment measures, complemented by a rise in international oil prices, the public deficit was brought down to 5.1 and 0.3 percent of GDP, respectively, in 1988 and 1989, while a 0.8 percent surplus was recorded for 1990. However, annual inflation rates remain high at above 50 percent and the sustainability of the adjustment effort is problematic given the large quasi-fiscal deficit in the public financial sector.

1.04 Economic growth was near zero for the period 1982-87; however, the abrupt fall in GDP caused by the 1987 earthquake was recouped in 1988 when the growth rate approached 11 percent. GDP grew modestly in 1989 and 1990 (under 1 percent per year); and although growth rates could be higher in the coming years, they are expected to remain modest. The mixed record of economic performance during the eighties aggravated the debt burden: external debt was equivalent to 37 percent of GDP in 1982 and 109 percent in 1988. Arrears to commercial banks reached over US\$1 billion before partial interest payments were resumed in the second half of 1989.

1.05 Rapid growth in the seventies was accompanied by changes in the composition of production and employment. The share of employment in the agriculture sector fell drastically while the industrial sector share remained the same. Informal sector employment filled part of the gap, reaching 50 percent of total employment in some major urban areas. The oil and mining sector share of production increased and service sector employment (including government services) increased. Qualitative improvement in the latter, however, was limited since financial and public administration institutions remained weak.

B. Evolution of the Social Sector and its Institutions

1.06 The annual rate of population growth in Ecuador dropped slightly from 3.1 percent during the seventies to a present level of about 2.6 percent; which is above the regional average. Urban population, which was near 40 percent of the total in the early seventies, has now reached 55 percent. The fertility rate declined from 5.4 children in 1975-79 to 4.3 in 1982-87, with the most important determinant of fertility being educational level: an average of 2.3 children for women with some university instruction versus 6.4 for those with no formal education. Similarly, only 19 percent of the women with no formal education use contraceptives compared with 41 percent and 57 percent, respectively, for women with primary and secondary or more education. Despite population growth, substantial resources allocated to the social sector during the seventies brought about major improvements in basic health and education indicators. Infant mortality was reduced by half during the seventies, reaching a level of about 55 per thousand by 1988, while the primary school age group net enrollment rate reached levels of about 90 percent. Correspondingly, life expectancy increased from 46 years in 1970 to 65 in 1988, with the illiteracy rate declining by more than half during that period, from 24 to 10 percent.

1.07 The public sector has been directly responsible for the provision of most social services. The Ministry of Education and Culture (MEC) is the institution generally responsible for primary and secondary education, while universities are loosely coordinated by MEC and a National Council (CONUEP) responsible for higher education. The two main providers of public health services are the Ministry of Public Health (MPH) and the Social Security Institute (IESS). Numerous public institutes responsible for specific social programs are attached to ministries. Some of them have special budgets approved directly by Congress while others are included in the regular public budget. Among these institutes, the Ministry of Labor's Training Service (SECAP), financed largely by payroll contributions, provides labor force training.

1.08 Public social expenditures increased substantially during the seventies but declined by about one-third during the early eighties and then stabilized in real terms since 1984 (Annex 2, Table 1), following the pattern of overall public sector expenditures. The increase in social sector expenditures set in motion an increase in coverage of sectoral programs that continued during the eighties despite the fall and subsequent flattening of the expenditure curves. During this period there were improvements in some social indicators, notably increased education enrollment rates and reduced infant mortality. As a result of overall expenditure declines, however, average expenditure per student and per patient decreased during the eighties. While part of the reduction in unit costs can be attributed to productivity increases (per sucre spent), there is serious concern that the quality of some social services has deteriorated.

1.09 Development of public sector institutional capacity was limited, even though public employment grew at a rate of about 20 percent per year in the period 1974-82, representing nearly 15 percent of total employment during

the eighties. Progress toward better public investment programming mechanisms and toward timely program implementation was insufficient. Social sector institutions were expected to interact with the Ministry of Finance (MOF) and with the National Planning Council (CONADE) in preparing plans, programs, and budgets. However, these exercises have limited relevance, as discussed in paras. 1.15 and 1.17. One of the reasons for this limited relevance is that less than half of the budget is allocated through the planning and budget decision processes, with over one-half of public spending being earmarked. Even when resources are properly allocated for investment programs and projects, implementation is usually fraught with difficulties. An example was a comprehensive development plan issued in 1985 that floundered in part because of inadequate formation of clear priorities and slow implementation of projects sponsored by external financing agencies.

C. Poverty and Income Distribution Trends

1.10 Poverty has been widespread and income distribution highly skewed in Ecuador. Although Ecuador does not have primary data of the sort provided by Living Standards Measurements Surveys, available data permit some reliable analysis. While benefits of the oil boom trickled down to the poor--mostly in the form of increased access to social services--poverty and inequitable income distribution were still evident in 1980 and persisted during the eighties. Poverty is especially serious for Ecuador's large Indian population.

1.11 According to several reports, income distribution continued to be among the worst for middle-income Latin American countries between 1970 and 1990 (see Annex 1 for regional figures). The labor share of GDP, according to national accounts, decreased between 1983 and 1988, and the minimum wage, measured in real terms, by mid-1989 was about three-fourths of its 1983 level. The reduction of incomes during the eighties appears to have affected the poor the most and to a lesser extent the lower-middle income groups. Studies indicate that the lower half of the income distribution was worse off in 1985 than in 1978 with the real income of the lowest quintile falling to the levels of the early seventies. Although the trend toward urbanization led to improved access to social services, poverty measured by monetary income remains pervasive in large cities, as shown by labor force surveys the National Employment Institute (INEM) has performed since 1987.

1.12 Levels of household earnings at or below the poverty level are associated with poor employment opportunities and inadequate human and physical capital. Labor force growth has been concentrated in urban areas, growing at an annual rate of 5.1 percent between the 1974 and 1982 censuses. While open unemployment did not increase substantially, agricultural employment decreased by 110,000 and manufacturing sector employment (three-fourths of which is currently in firms with less than ten workers) maintained its share at 12 percent of total employment. While manufacturing's share of total employment has remained stable since the late fifties, it has declined as a share of urban employment. Thus, most of the new entrants to the urban labor force have been absorbed in low skill, low-productivity jobs in the service sectors, including the public sector. Statistics show some under-

utilization of the labor force, which contributes to worsening income distribution and aggravating poverty. Underemployment appears in the informal sector of self-employed microentrepreneurs and their employees and unpaid family workers. Seventy percent of the informal sector is engaged in commerce and services and the remainder in the manufacturing sector.

D. Institutional and Policy Issues

1.13 Social Sector Expenditure. Social sector expenditures in the Central Government budget stabilized around 5 percent of GDP for the period 1983-87 but fell to 4.5 percent in 1988 and 4.2 percent in 1989. Education experienced the most severe decrease, from 3.8 to 2 percent, during the same period. While these changes are usually unplanned consequences of crises, allocations of resources within the public budget show the rigidities typified by the relative stability of sectoral shares over the last eight years. This is largely due to the incremental nature (in nominal terms) of the budgeting process and the widespread practice of earmarking. About two-thirds of social expenditure is financed by the Government. The remaining one-third is financed from private expenditures of families (mostly those in the upper half of the income distribution), on private education and health services. Cost-recovery is almost completely absent from the arena of public social services, the exceptions being negligible fees charged in higher education institutions (covering under 3 percent of their operational costs) and some charges made on the purchase of student materials. The absence of cost-recovery mechanisms aggravates the situation with respect to efficiency and equity.

1.14 The distributional impact of public expenditure for potable water, sanitation, social security, health, housing and education has been analyzed in detail. Overall social public expenditure has some effect in redistributing income to the poor, as expenditures are less unequally distributed than income. Education expenditures appear to be fairly equitable, and have the greatest redistributive impact on the poor among all the subsectors considered. This is because basic education expenditures are geared primarily to the poor.

1.15 Institutional Capacity to Manage Social Sector Development. The ministries responsible for social services, collectively referred to as the Frente Social (Social Front) -- Education, Health, Labor and Social Welfare -- have limited capacity to plan programs and make resource allocation decisions (a shortcoming found in Government agencies outside the Frente Social as well). The support for planning and programming activities provided to the Frente Social ministries by CONADE and the MOF has been insufficient. In general, expenditures of the Frente Social ministries exceed the amounts originally budgeted by a substantial margin. The principal cause is inflation. However, in years of low inflation, expenditures may fall short of budgeted amounts when either the line ministries or MOF lack the capacity to implement the activities budgeted or fail to adjust the budget when expenditures fall. Neither the Annual Operational Plan nor the multi-year National Plan provide satisfactory operational procedures for evaluating and establishing priorities for capital expenditures. Earmarking has led in the

past to overinvestment in areas of questionable economic merit, which imposes a continuing burden of high recurrent costs.

1.16 Capacity to implement programs and projects is also limited. All ministries suffer from the inability to attract, train and retain high-quality staff on a permanent basis. While on average, public sector salaries are reasonably close to salaries in the urban labor market, typically salaries in the social sectors were slightly below other public sector salaries in 1984. Moreover, while salaries of lower-level staff (those with only a primary or secondary education) are high compared to the private sector, the salaries of senior government employees and others with higher education are lower than comparable private sector salaries. Low salaries for professionals contribute to the difficulty the social sector ministries have in developing the capacity to plan and manage their programs. Specialized Institutes of the Frente Social ministries, such as SECAP, have greater flexibility in salary setting and can attract able staff. Reflecting this, SECAP has greater capacity for program implementation than the ministries themselves. However, even in SECAP, the potential benefit of better staffing has been undermined by a lack of flexibility and financial and management inefficiencies.

1.17 Administration of social sector activities also tends to be centralized. While provincial and municipal governments have some limited roles in the delivery of public programs, especially those related to public works, their role in the social sector is very limited. At most about 5 percent of social public expenditure is directly spent by provincial or municipal institutions. Although the ministries have provincial dependencies with nominal responsibility for management and supervision of education activities (and other social programs in varying degrees), administrative capacities are very limited and virtually all resources (and program direction) come from the central ministries and their institutes. However, SECAP as well as the higher education system, have a more decentralized operational capacity in the geographical zones where they operate.

E. Overview of the Basic Education and Training Sector

1.18 Primary school enrollment in Ecuador totalled 1.84 million students in 1990, of which 0.33 million (17 percent) were in private schools, with 0.99 million (54 percent) enrolled in urban areas. Sixty percent of urban primary students benefit from a school snack program. Net enrollment in primary education is greater than 90 percent, but enrollment ratios are lower in rural areas and especially in low-income communities in both urban and rural zones. Since most public schools offer only six grades, net enrollment is also much lower in grades 7 through 9, the last years of the nine-year Basic Education cycle that Ecuador has adopted as its standard. Poor transition rates indicate that there are serious problems of low quality: the over-all repetition rate is 21 percent and only 64 percent of students who enter grade one finish the primary cycle. Due in part to the reduced resources available for the sector and to the lack of autonomy and control over resources on the part of provincial authorities or school principals, most public primary schools lack teaching materials, teachers have had little in-service training and teach in inefficient ways, and children have few if any textbooks. After

a period of policy neglect, the present administration has indicated firm support for the sector and has taken a number of important initiatives, generally with a strong equity orientation. A nationwide two-year literacy campaign achieved some success, mobilizing 37,000 student trainers who reached 200,000 beneficiaries who are now being offered follow-up training to help them maintain and use their literacy skills. An on-going program to increase primary school enrollment in rural areas, which was financed by IDB (Project AMER), has improved its implementation record in recent years, and a significant quality-improvement reform is being initiated in rural areas, with IDB financing approved.

1.19 A total of 800,000 students are enrolled in secondary school. At the upper secondary level there are both academic and vocationally-oriented streams, the share of enrollment in the latter being about one third. Although there are indications of serious deficiencies and rates of return are lower than for other levels, the vocational stream has continued to grow in recent years. The university subsector has grown very rapidly (even after correcting faulty enrollment data), by about 50 percent between the late seventies and the late eighties. Current enrollment is at 130,000. While some post-secondary institutions continue to have reputations for quality education, there is widespread agreement that quality of university education has deteriorated. The Government has implemented (with varying degrees of success) a series of education sector loans financed by the IDB in the area of technical education.

1.20 SECAP (under the MOL) is a 30 year old institution responsible for general vocational training programs. It is financed mainly through a 0.5 percent payroll tax supplemented with direct contributions from the general budget. Cost-recovery through fees and contracts represents less than 2 percent of SECAP's budget. Workers and private sector employers are represented on the Board of Directors. SECAP has decentralized facilities in twelve different provinces and provides apprenticeship programs lasting three years and short (six-month) training courses for adults. More recently, basic training programs of shorter duration (Programa de Capacitación Popular) have been introduced for the poor. In 1990 SECAP enrolled 45,000 trainees. SECAP completed implementation of Loan 2171-EC, the Bank's only social sector operation in Ecuador during the eighties, and used technical assistance under that loan to prepare the Programa de Capacitación Popular.

F. Major Issues in the Basic Education Subsector

1.21 Ecuador has achieved relatively high levels of access to primary education, similar to most countries in the region. Expansion of primary school enrollment is not, therefore, the highest priority. But there is a serious problem of poor quality of primary education, and the problems of limited access and poor quality are most serious in the case of the poor. Low quality, reflected in children not obtaining a sound foundation of knowledge and skills in the lower grades, causes high repetition and substantial numbers of children to drop out before completing the nine-year basic education cycle. There are some direct indicators of poor quality but, since there is no

national system of evaluating what children learn, it is not possible to determine the magnitude of this problem, to target resources on the neediest regions or schools or to find efficient solutions. Management of the education sector is characterized by excessive centralization in the MEC, inadequate budgeting and resource allocation capacities, weak project implementation capabilities and generally weak sectoral management at all levels.

1.22 Low quality of Basic Education. A recent study confirms that children in rural primary schools and in urban primary schools serving low-income areas do not receive sound academic foundations in language and mathematics skills. Repetition rates are high: of the cohort that entered primary school in 1984, 26 percent dropped out of school without completing six grades of primary, the average repetition rate was 20.7 percent per year and repetition in first grade was 32 percent (Annex 3, Table 4). While these over-all rates are high, the situation in schools serving the poor is even worse. In the area of educational inputs, one of the most serious problems is acute scarcity of textbooks in the public schools. Reflecting this, teaching follows highly inefficient patterns: teachers dictate material or copy it on the blackboard, children copy the text into notebooks and use these in place of textbooks. Teachers make very poor use of classroom time and receive no in-service training in how to use time effectively to improve learning. Indirect indicators, such as availability of charts and maps in classrooms, even inadequate school maintenance, point to low quality learning environments, especially in schools serving rural areas and poor neighborhoods in and around cities.

1.23 Lack of Information on Educational Outcomes. The only indicators of school quality are either indirect ones such as repetition rates, observational data or small-sample one-time studies. There is no system that produces sound and consistent information on how much students learn on a basis that permits valid comparisons between regions, types of schools or over time. Lack of a system to assess educational outcomes complicates evaluating the quality of education and impairs policymaking. Education authorities have no empirical basis for making allocation decisions, or even to argue for more resources for the sector. Professional educators have no guidance on what qualitative problems are most severe (by region, grade, or subject matter) or where to intervene in order to make the most efficacious improvements. Needless to say, there is no reliable information that would contribute to greater accountability at any level in the system.

1.24 Inequity in the Delivery of Basic Education Services. Repetition and dropout rates are higher in rural than in urban schools, due in part to the lower over-all quality of rural schools. Repetition rates among children of families whose total income was less than the average for all families were double the average rates. Observation confirms that there are severe qualitative problems in poor urban communities. Schools in poor communities have fewer textbooks, fewer supplemental educational materials, poorer maintenance and, in some urban schools, severe overcrowding. The best teachers are offered places in schools serving more well-to-do populations and

only a few possess the dedication to remain in schools in poor neighborhoods. Whereas more fortunate families can supplement school resources with modest additional payments (for materials and supplies and other quality-related inputs), poor families have less financial flexibility. Problems of inequity are especially serious in the case of indigenous populations, who are typically poor and suffer from language barriers, problems of intercultural adaptation and varying degrees of overt discrimination. Need for bilingual and intercultural education is greatest in rural areas, although problems of cross-cultural adaptation affect indigenous students in urban schools as well.

1.25 Inefficiency and Ineffectiveness in Sector Management. The limits of public resources allocated to education (para. 1.15) indicate that available resources must be allocated with greater concern for cost-effectiveness than in the past. Serious shortcomings in methods of resource allocation (paras. 1.8, 1.9, 1.15, and 1.17) are found at MEC. While changes at the sectoral level cannot overcome all problems, there is ample margin for improvement within MEC's allocation procedures. Budgeting, like most other decision-making, is highly centralized, with little substantive input from the provinces or line agencies. The provincial education offices, which in theory have responsibility for managing sector operations within their provinces, have little authority, very little discretionary control over plans and budgets, and staffs comprised predominantly of senior teachers who have been promoted to supervisory rank and have little preparation for administrative responsibility. Project implementation capacity, whether at the MEC or the provinces, is weak and even the record of independent project implementation units has been poor.

G. Issues in Vocational Training

1.26 Vocational training in Ecuador is the juncture between basic education and entry into the labor force for most workers. Inadequate employment generation by the modern sector, attributable in part to institutional restrictions imposed on the labor market, has led to a large absorption of workers in the informal sector, which can usually bypass labor legislation. Poor workers are overrepresented in the informal economy, lack human capital, and include the highest percentage of women in total employment. The issues of the informal sector can only be addressed by encouraging economic growth in a competitive environment based on market incentives. This would have a double effect, encouraging both a productive modern sector and the portion of the informal sector with the economic potential to grow and provide employment. In addition, remedies that would improve the productivity of the poor and contribute to raising their incomes, are an appropriate and priority focus for vocational training programs.

1.27 While SECAP has enhanced its physical capacity in recent years, some of this capacity has remained under-utilized because of the institution's inability to adapt to the changing labor market requirements. Two particular areas where innovations could be introduced are training in the informal sector and in sectors with export potential.

1.28 Vocational training programs need to build on sound formal education processes and maintain close relationships with the productive sector. While SECAP has made efforts to do this, it has not yet been able to design and implement courses responding to the current priority needs of labor markets. SECAP courses are not always responsive to the needs of trainees, sometimes duplicating courses already received by trainees and usually oriented toward preparing specialized workers for the formal sector; they have therefore tended to neglect the poor, less-educated workers whose needs are more difficult to serve. Recent actions by MEC geared to improve basic literacy have shown the need for complementing the literacy program with vocational training that would enhance the effects of literacy on productivity and the incomes of the poor. SECAP, which has provided mainly formal training in the past would require adjustments in order to adapt itself to the requirements of this type of program. The movement towards a more open economy with increased exports of some sectors, particularly within regional markets, will also need support in terms of a qualified labor force and of strengthening marketing opportunities of subsectors with comparative advantage.

H. The Government Strategy

1.29 The Government has been actively engaged in a sectoral dialogue with the Bank and has issued several policy statements, among them a Letter of Development Policy submitted to the Bank in January 1990, where priorities in the social sector were identified. Improvement of coverage and quality of basic education and the Programa de Capacitación Popular were among the highest priorities. While progress in these areas has been limited, this project represents a major initiative in this area.

1.30 The Government has indicated a commitment to the education sector and a determination to target services to the poorer segments of society. Targeting is essential because the current economic crisis has imposed severe constraints on the sectoral budget and brought about a decline in sector spending. Its strategy gives priority to basic education, in keeping with its active participation in the World Conference on Education for All and in the LAC regional project for the improvement of education. Key elements in its policy and strategy statements include improvement of educational quality and a major literacy program, the first phase of which was completed successfully. Also, to give children of poor families a fair chance to take advantage of basic education, the strategy emphasizes bilingual education, preschool education and special education. Other elements of the strategy include improving textbooks and educational materials, and taking advantage of educational technology. Currently the highest priority is to improve the quality of basic education, so that children who enter primary school will have the opportunity to complete the cycle and to learn essential skills. The Government views investment in quality as an equity-promoting measure since qualitative deficiencies have the most negative effects on the poor. For implementing these strategies, the Government has already obtained financing from IDB to improve the quality of education in rural areas (para. 1.18). The IDB project will reach schools that serve slightly over half the children of poor families in the country. To extend this qualitative reform to the

remainder of the student population from poor families, the Government now seeks the proposed loan for a complementary project targeted to low-income urban areas.

1.31 The Government is also giving priority to improving skills of less educated workers through training, and to increasing opportunities for poor adults through programs to maintain or enhance their literacy and basic general education and provide training that will improve their productivity. This is consistent with the Government's general policy on labor, where legislative reforms are being sought in order to enhance competitiveness in international markets. To implement Government policy SECAP is establishing closer ties with private enterprises and promoting an increased role of the private sector in training. Besides existing agreements with several business chambers for implementing training programs, SECAP has operational agreements with MEC's adult education campaign (Ecuador Estudia) and with the Frente Social Special Fund for the Infancy (FONNIN). Small enterprise development is an important element in the Government's general program to compete more effectively in international markets. For implementation of its programs in this area, SECAP has agreements with agencies that operate credit for microenterprises (UNEPROM and CONAUPE) and with agencies that provide technical assistance to small enterprises and the handicraft industry (CENDES and CENAPIA). SECAP itself is committed to strengthening its managerial and financial capacity, a process started with Bank technical assistance provided under Loan 2171-EC.

I. The Bank Strategy

1.32 Several World Bank studies stress the importance of social sector programs in alleviating poverty, and also emphasize the need for enhanced public responsibility in the social sector and for improved public sector management. The proposed project forms an integral part of the Bank's strategy for country assistance, which recommends several fundamental changes in the economy, including: (a) a redefinition of the role of the state, devoting greater attention to areas of clear public responsibility such as social welfare; and (b) replacing the existing protectionist trade regime and the inefficient and constraining labor market policies with a set of economic incentives that are likely to stimulate economic diversification and a greater outward orientation of the country. The Bank strategy includes in its core lending program a set of projects for poverty alleviation in the social sectors.

1.33 The Bank strategy for the social sector aims at: (a) giving priority to social sector programs as the instrument for poverty alleviation; (b) establishing efficiency and equity in public social expenditures; (c) strengthening public sector decision-making and management; and (d) enhancing effectiveness of specific social programs. The basic means for addressing the issues identified are: (a) strengthening the budgeting process; (b) decentralization of social programs and project implementation; (c) reinforcing social sector staffing; and (d) fostering the role of the social sector in promoting economic growth and efficiency. The priority social sector programs selected for support include basic education and

training; basic health and nutrition; and investment funds for social assistance and infrastructure. The Government has presented to the Bank project proposals for the first two and work on the third is ongoing.

1.34 Interventions in basic education are a key element in the proposed strategy within the Bank social sector program for Ecuador. The education sector has benefitted from a longer period of dialogue, as well as experience gained in preparing the IDB rural education project, and is the key sector chosen for this first social sector project. Experience indicates that investment in Ecuador's human resources yields relatively high returns; the social rate of return to primary education was estimated as 11.5 percent in 1987; for all secondary education the rate was 9 percent. The project is expected to improve the efficiency of public spending in a sector that is strategically important for Ecuador's development and which represents 15 percent of the public budget. The project's focus on improving educational opportunities for children in low-income urban areas is consistent with the Bank's special concern for reducing poverty and alleviating the social costs of adjustment as well as with the principles of the World Conference on Education for All.

1.35 Vocational training activities in clearly identified priority areas would complement improvements in basic education and contribute to achieving the Bank's strategy by improving productivity and earnings among the poor and promoting a more competitive, market-oriented environment. Evaluations of SECAP courses (Annex 8) show satisfactory results. A recent cost-benefit study found high rates of return to training --18 percent social and 37 percent private-- providing evidence in favor of investing in training and applying cost-recovery mechanisms to finance the investment. SECAP has taken advantage of lessons learned when implementing Bank Loan 2171-EC and is ready and well disposed to improve its responsiveness to market signals, make better use of its installed capacity, and improve its finances through users-fees.

J. Lessons from Previous Bank Involvement

1.36 The project design takes into account implementation experience in Ecuador in particular with regard to projects aimed to strengthen the capacity within SECAP; other agency implementation experience with the MEC; and the Bank's education sector experience within and outside the Latin American and the Caribbean region, including what was reflected in the Completion Report of Project 2171-EC. Key lessons and their incorporation in the project design are described below.

Lessons Learned and their Application

(a) Education Projects

1.37 A review of past education projects yielded a number of general lessons on implementation. Project preparation should not be rushed, as the participation of the beneficiaries of the project and full understanding of the administrative processes and intended educational outcomes is crucial to successful project implementation. Also, an understanding of Bank procurement

procedures has been a common bottleneck. In addition, in order to facilitate implementation in the education sector it has proven beneficial to: (a) use local contractors and materials; (b) require all tender proposals to include local networks for maintenance and spare parts; (c) have a warehouse to store equipment; (d) check the workload of contractors before bids are awarded; (e) ensure that all equipment is compatible and that adequate manuals are available; and (f) establish in-house maintenance facilities. For consultants, the use of local experts who already know the country has led to substantial savings. Finally, the inclusion of educators, architects, and economists on supervision missions has been found to improve project effectiveness and efficiency.

1.38 More specifically in education projects involving changes and innovations, it has been found that participants must be completely informed about proposed changes and project designs should have built-in flexibility to adapt based on current experience, new information, or changes in the external environment. Furthermore, projects need to anticipate and minimize the effect of interruptions caused by changing political administrations. It has also been shown that decentralization, targeting, and improved budgeting lead to better use of resources.

1.39 Finally, experience has identified a number of critical factors influencing the success of projects to improve educational quality: (a) changes in the educational system should be preceded by a widespread public information campaign; (b) before initiating a system of nuclear schools, linkages between and responsibilities at each management level must be set forth and the sites of schools chosen prior to implementation to avoid community disputes over site selection.

1.40 In order to address the conclusions highlighted above, the proposed project was prepared by the borrower and the basic education component's design was developed using the framework of an on-going education project financed by IDB. To address concerns about procurement, the executing agencies would receive support from procurement agents to facilitate procurement of goods and services (para. 2.37). Local contractors are expected to carry-out any new construction and rehabilitation of hub schools and network schools (para. 2.04). Each project executing agency, operating separately with clear role definition, would be supported by a project coordinating unit staffed with consultants to facilitate project implementation (paras. 2.27 and 2.28). In addition, a high proportion of short-term consultants are expected to be contracted locally.

1.41 At project initiation, informational and training seminars would be conducted for central and provincial level staff as well as for community leaders to enlist their cooperation and ensure their participation in meeting project objectives. The project's long-term objective is to decentralize planning and budgeting functions; to this end, training would be provided at all levels. The project would also seek to decentralize to the school network a portion of the nonsalary budget for school supplies and preventive maintenance of project schools (paras. 2.15 and 2.16). To enhance the sustainability of quality improvements generated under the project,

information and training seminars would be financed to reinforce project objectives and intended outcomes. The procurement agent contracted will work with MEC to ensure that maintenance of existing schools will be managed according to Bank guidelines.

(b) Vocational Training Projects

1.42 Sustainability has been a key constraint in vocational training projects. Some of the most frequent problems affecting sustainability include: (i) difficulty in recruiting and retaining instructors from the private sector; (ii) low enrollment and high dropout rates; (iii) inappropriate job training; and (iv) poor teaching quality.

1.43 Management has been another broad area of concern. In Latin America, it has proven useful to establish an autonomous government agency to manage these programs. Often such agencies are supported by an earmarked payroll tax, although several countries are experimenting with alternative financing methods. Past experience shows that to be effective these agencies must have strong government support, and their responsibilities should be phased in gradually to allow development of management experience and capabilities.

1.44 The proposed project differs significantly from traditional vocational training projects. Training would be targeted to the poor, most of whom would first receive training equivalent to regular basic education. In addition, ties between SECAP and prospective employers would be strengthened by direct participation of private sector associations in determining training priorities and content. Also, labor market information, SECAP graduate tracer studies, and impact evaluation would be carried out to ensure better response to labor market demands (paras. 2.30 and 2.31). Finally to assist in implementation a project coordination unit would be set up in SECAP.

(c) Country-specific Lessons

1.45 In Ecuador, the most frequent observation about implementation is the need to assure that the Government can meet counterpart funding obligations. This is an issue not only relating to fulfillment of project objectives but to the more general matter of budget processes and priorities. Reflecting this, the proposed project, through its institutional strengthening component, would finance technical assistance and training to improve the budgeting and planning capacity within MEC at the central and provincial levels (para. 2.26) and in SECAP (para. 2.31). In addition, the project would include annual subsector reviews and project budget reviews during supervision (para. 2.36). The proposed project also aims at improving availability of resources in SECAP by instituting cost-recovery mechanisms, since the current 0.5% wage levy paid to SECAP by public and private employers has not always been adequate and MEC has faced many financial constraints. A second problem in Ecuador has been the lack of continuity of project staffing. For this reason, staff continuity in project leadership from the Bank, MEC and SECAP has a high priority.

K. Women in Development

1.46 The Bank conducted an Assessment of Women in Development (WID) issues in Ecuador in 1989, which yielded a number of important conclusions about the status of women in the education sector, training and the labor force. There are no major differences in enrollment rates by gender; at the preschool and secondary levels there are more girls than boys. There are, however, fewer male teachers: at the primary level two-thirds of teachers are women and the ratio is nine to one at the preschool level (see Annex 3, Table 10). Most schools (92.3%) are coeducational. Girls have a slight advantage in terms of promotion rates. For example, while boys' promotion rates between first and second years of secondary education improved from 76.4 percent to 78.1 percent between 1980 and 1983, girls' rates improved from 77.4 to 79.1 percent during the same period. Another indicator of slight advantage for girls is that, while 26.7% of secondary schools girls were in the correct grade for their age, 25.1% of boys were in the correct age cohort.

1.47 There are some problem areas. According to local education specialists, there is gender stereotyping in formal education textbooks. Also, girls tend to be directed into educational streams with little mathematics and science which limits later career options. There is little vocational counseling for girls, but the same thing is true for boys. Girls' education could be improved by focusing on the quality and relevance of schooling, specifically through better teacher training, concentrating on basic curricula, and using textbooks that portray women in nonstereotypic occupational roles (see paras. 2.05 and 2.10).

1.48 While there is some general information on women's status (reviewed above), there is little data in the country that could be used to identify priority needs in women's education, much less to develop policies and implement programs to further WID efforts in Ecuador. For example, little or no information exists on factors that could influence women's participation in the economy or their role in contributing to family income and welfare. Enhancing the labor market and earnings information data base through the National Employment Institute LSMS household surveys (see para 2.30) plus the development of a national educational assessment (see paras. 2.12 and 2.13) are two tools that should, in time, fill these information gaps.

1.49 Labor force participation by women has increased since the 1950s, although women are still concentrated in low-skill, service-sector activities and informal occupations with low earnings potential. Available evidence from several surveys suggest that female monthly earnings are lower than males across all educational levels and occupational categories. Even when adjustments are made for differences in average hours worked per week, women with similar levels of schooling and years of experience still earn less than men. Close to 35% of the economically active female population work in the informal sector, with about 45% of working female heads of households in the informal sector, and more than one-third of them self-employed (Annex 3, Table 11). At the same time, illiteracy rates are higher for women than for males, and men in the 25-and-over age group show higher educational attainment.

1.50 With respect to technical education, there is a substantial gender difference in choice of subjects studied. Men generally enroll in industrial and agriculture courses while women choose courses associated with traditional "female" occupations and commercial courses. In SECAP courses in 1987 and 1988, roughly 30% of participating students were women but only 12% matriculated in the industrial tracks. The redesigned SECAP program, focusing on post-literacy education and basic skills training based on labor market demands, will have great potential to improve work skills, productivity and earnings capabilities of women, including women not currently in the labor force (see paras. 2.19 through 2.22).

II. THE PROJECT

A. Project Origin

2.01 The proposed project has been prepared based on the conclusions of Bank Report 8935-EC, "ECUADOR: A Social Strategy for the Nineties", which the Government and the Bank agree should serve as the centerpiece for developing the Bank's social sector lending program in the country. Dialogue with the social sector ministries of the Frente Social has continued since the beginning of this government in 1988 and progress has been achieved with the MEC and SECAP towards definition of projects and policies. Government is committed to the projects proposed and their underlying concepts have been shaped through extensive interaction. Project preparation has been conducted during 1990/91 by MEC under PPF 151-EC and by SECAP under Bank Loan 2171-EC. Appraisal was completed on July 12, 1991. Negotiations took place in Washington D.C. during November 1-7, 1991. At negotiations, the Government delegation was headed by Mr. Raúl Vallejo, Minister of Education, and included representatives of the MOF, MEC, MOL and SECAP.

B. Objectives and Content

2.02 The project supports the Government's planned development and investment programs for basic education and training already started in 1991. Its dual objectives are: (a) to improve the quality and effective delivery of basic education and training services targeted on the poor, and (b) to strengthen decision-making and management of public institutions involved in the delivery of basic vocational education and training programs. There are two main components: basic education and adult education and training. The first component is designed to raise learning achievement of primary age children by improving quality and increasing accessibility of basic education; the second component is designed to raise basic vocational skills of poorly educated adults, thus enhancing their productivity and earning capacity. Both components are meant to strengthen the capacity of decentralized service providers and to improve resource allocation and program design processes in the education/training sectors. Investment criteria under the proposed project target the poor as the priority group to be served by focusing the basic education component on children in low-income urban neighborhoods and the vocational training component on the least educated adults under the Programa de Capacitación Popular.

C. Detailed Project Description

BASIC EDUCATION (Annexes 4-7). (US\$90.1 million, including contingencies, 76 percent of total project costs)

2.03 This component, incorporating the bulk of project expenditures, is designed to increase sector efficiency and equity. It aims at improving the quality of primary education for children from low-income urban families, giving them a better education and reducing their rates of repetition and dropout, and strengthening the management, budgeting and sector programming capabilities of the education sector, within the central MEC and in the provinces. Two complementary groups of activities have been developed to achieve these objectives. The first group involves providing quality-improvement inputs through a system of nuclear schools serving urban poverty zones, and developing a national system for education assessment. The second group involves institutional strengthening, including enhancing capacities for budgeting and sectoral management within the MEC. It would also promote decentralization of administrative authority to the provincial education offices and the nuclear schools, and generating information to guide future policy decisions, especially regarding resource allocation.

Educational Development (Annex 4)

2.04 Building upon the framework developed for the establishment of school networks in rural areas under an IDB financed project, the proposed project would create decentralized networks for qualitative improvement in low-income urban areas. Both the proposed project and the related IDB project for rural areas call for in-service teacher training, improved supervision, and decentralization of pedagogical management to networks of schools organized around nuclei called hub schools. These hub schools would serve as focal points for networks of surrounding schools, centers for the application of training and related quality-improvement activities and, in coordination with the Provincial Education Directorates, for decentralized administrative, teacher supervision and planning functions. During negotiations, the Government presented the ministerial decrees establishing the School Networks and provided assurances that a MEC resolution governing the operational relationships between the Provincial Education Directorates and the school networks would be made effective by July 1992. The IDB project provides for curriculum change and for converting teacher training colleges into higher-quality Pedagogical Institutes (IPED) at the provincial level. The proposed project for urban areas would add innovative subcomponents in special education and preschool education to give poor children a more equitable opportunity to benefit from basic education, and would develop a system for production and distribution of textbooks and teaching materials with strong private sector participation, as well as a national system for assessment of student achievement.

2.05 Networks for Qualitative Improvement. The proposed project would establish fifty-five hub schools in urban areas. The sites would be chosen based on targeting criteria that identify poverty areas where this approach could achieve the greatest benefits. The hub schools would be "centers of

excellence" that would provide both models of good-quality education and nuclei for networks of from 15 to 25 urban schools serving the same low-income urban zone. The schools in the network would receive in-service teacher training in improving quality, supply of improved textbooks and teaching materials, and orientation to ensure that all boys and girls have an equal chance to complete basic education. Schools in the networks would be visited by teams of special education professionals who will screen students for learning disabilities and train teachers in how to ensure all children have effective opportunities to learn. Preschools that already exist in the zones of influence would observe in-school models of service delivery and receive advice on how to improve the quality and cost-effectiveness of their services through short-term visits and exchange. The hub schools would have decentralized authority for management of academic matters, including professional supervision of schools in their networks, and management of a limited budget for non-salary expenditures, including rehabilitating and maintaining schools in the network. The proposed project would finance the budgets for non-salary expenditures on a declining basis.

2.06 Low-income urban areas have been identified through a process of microplanning. Within each target area an existing school shall be chosen based on size, location, and other criteria to serve as the hub school. The project would upgrade and expand the physical facilities at each hub school, including construction of administrative facilities for the hub school functions, addition of classrooms to provide all nine grades of basic education, and provision of two or three preschool classrooms and headquarters for the special education teams that will serve the network of schools in the zone. The 55 school networks to be financed under the program would be upgraded in three phases (See Annex 4, Table 1). The first phase will establish networks serving 137,000 students in 20 low-income zones in Quito and Guayaquil, where detailed microplanning has been completed on the basis of available data. Some of the largest concentrations of urban poverty can be found in these cities and conditions warrant priority attention. The second phase will provide 23 networks in the provinces of Guayas, Pichincha, Esmeraldas, El Oro and Los Rios, while the third phase will provide 12 networks in Carchi, Chimborazo, Loja, Manabi and Cañar. A total of approximately 345,000 students will be enrolled in the hub schools and the schools within their networks. While this represents the current enrollment in the influence zone, it is expected that a more efficient flow of students, due to reduced rates of repetition, would allow the schools to serve a larger group of school age students (Annex 3, Table 4). Detailed planning for the second and third phases will use more recent data from the 1990 Census and other sources to identify priority zones of urban poverty in the provincial capitals and other urban places, and will draw on the experience of implementing Phase One in planning the new school networks. Planning will also take place during the project to extend the quality-improvement program to all remaining low-income areas not covered under this project or the IDB project to rural areas. During negotiations, the Government provided assurances that criteria, acceptable to the Bank, would be applied for choosing the sites of networks and hub schools to be built during phases two and three of the project.

2.07 In-service teacher training would be provided to teachers in all schools in each urban network, on the basis of curricula already developed under the IDB project, emphasizing improved use of time in classrooms, better utilization of textbooks and teaching materials and other quality-enhancing methods and information. A total of 12,700 teachers will be trained during the three phases, as well as 120 Teacher Trainers, 180 IPED staff and 180 Provincial staff. In addition, 2200 community leaders and representatives of Parent-Teacher organizations will participate in meetings to disseminate information about the quality-improvement program. Each teacher would participate, on average, in eleven training events including orientation to the concept of the Decentralized Networks for Quality Improvement and the aim of giving all children, regardless of gender or ethnic background, a fair chance to complete basic education. Training would cover subject matter skills, pedagogical methods (with special emphasis on needs of children from poor families), use of new textbooks (depending on subjects taught), and the role of the educational assessment system. Training would largely take place during vacation periods. Training events would range from 24 to over 200 hours in length with the modal duration being 100 hours. Participation in the training would not, in itself, lead to promotion or pay increase. Training would continue for two years after establishment of each hub school and network of schools in accordance with the phasing of the project. The hub schools will provide facilities and logistical planning and support for the training activities, which will be presented by trainers from The National Directorate of Pedagogical Training (DINACAPED) and, whenever possible, from the IPEDs located in each province.

2.08 Preschool classes will be added to each hub school with the aim of both increasing access to preschool for children in the low-income area and providing a model of preschool education and a source of technical advice and training for operators and staff of other preschools in each network's zone of influence. The model of in-class preschool education would involve unit costs approximately equal to the costs of primary school. Sixty preschool classrooms will be built at the 20 hub schools constructed during Phase I of the project. Approximately 105 preschool classes would be attached to the 35 hub schools constructed during Phases II and III. The direct beneficiaries will be the approximately 5,800 students enrolled each year in the preschools attached to each hub school, while some 37,000 children in other existing preschools within the networks' will receive indirect benefits from the training and technical assistance extended to these schools. This subcomponent is intended as a pilot program. It will be evaluated (para. 2.17) together with alternative modes of preschool education, to determine how to meet the need for preschool services in low-income urban areas in the most cost-effective manner. The evaluation will examine inputs provided, processes of outreach and technical assistance to preschools in the zones of influence, costs of alternative modes of service delivery and direct tests of readiness of preschool completers for grade one. Data from the educational assessment system (paras. 2.12-2.13) will permit measurement of the educational attainment of preschool completers once they reach grade two. For this reason the evaluation will not be complete until after the second iteration of the educational assessment.

2.09 Special education services for all schools in the network will be headquartered at the hub schools. Teams of specialists (Equipos psicopedagógicos) will provide screening to identify students with any learning difficulties. Technical assistance, including nine months of international experts in special education, would be provided to the MEC Department of Special Education, and would focus on the design of training for the specialist teams. The specialist teams will screen students (beginning at the preschool level) to identify problems, provide low-cost interventions when this is possible, make referrals to other agencies in cases requiring special attention, and train teachers in methods of dealing with children who have problems in the classroom. Among their responsibilities will be identification of language, intercultural or psycho-social problems of indigenous students and training teachers in how to respond in sensitive ways to the special needs of such students. All of the 345,000 students in the school networks will be screened. It has been found that, even without taking into consideration intercultural problems of indigenous students, from 10 to 12 percent of primary school students in Ecuador experience some form of learning difficulty, but it is estimated that as many as 20 percent of children in low-income areas have such problems. Thus, approximately 70,000 students would benefit from identification of their problems, better training of teachers to deal with students with special needs, and in many cases from interventions to alleviate or overcome the problems. An evaluation of the special education subcomponent would be based upon inputs and processes applied, repetition and wastage rates among recipients of special education services, educational achievement (utilizing data from the assessment system), costs of the program and estimated savings both in terms of reduced repetition and wastage and costs of other social services (para. 2.17 and Annex 7).

2.10 Development, Production and Distribution of Textbooks and Education Materials (Annex 5). The project would support development of an improved general textbook series for primary education, covering teachers' guides plus textbooks and workbooks in Spanish, mathematics, natural science and social studies. Each student would have access to textbooks in all subjects, with some subjects (e.g., mathematics and science) combined into a single volume. The new series would build on work done to develop the AMER texts for the rural areas, with a design suitable for students in all areas of the country. Special emphasis would be given to removing gender bias and stereotyping from the revised textbooks. The project would finance improvements in the organization, scope, and sequence of materials covered in the new texts and in their physical design. During the project's first phase, before the new series comes into print, an estimated 130,000 units of the AMER textbooks would be distributed, together with 5,000 copies of a brief guide for teachers about how to use them most effectively and how to deal with that series' rural orientation. The project would support provision of 567,000 (new series) textbooks to all students in project schools on a limited cost-recovery basis, plus 1,520,000 workbooks and 60,000 teachers' guides. Project schools' students will pay a rental fee equal to 20 percent of the cost of each textbook, with incentives for return in good condition. Proceeds from the rental fees would be held in an Editorial Fund operated by the National Service for Text and Educational Materials Supply (SNALME) under its existing legal authority to receive and spend funds (Annex 5, para. 4). The average

life of the new textbooks is estimated to be four years. The new series would also be made available on a commercial basis to a wider audience of students. Approximately 250,000 additional books would be sold throughout the country through existing public and private distribution channels at prices that cover full costs of production and distribution, plus a 15 percent charge to replenish the Editorial Fund for republication of the texts. The proceeds from rental fees and charges on additional copies sold on the market would yield over three fourths of the funds needed to make the textbook program financially self-sustaining. These cost recovery arrangements were agreed with the Government during negotiations. Rental fees equivalent to one-fifth of full cost of production would not only contribute to sustainability but would also serve to increase the recipients' appreciation of the books. The project would benefit the great majority of primary school students throughout the country in terms of making good quality textbooks available to students who, for lack of budgetary provision for textbooks, would not otherwise have had access to the books.

2.11 The multiple activities of the Ministry relating to design and development, manufacturing, and distribution of textbooks and educational materials would be streamlined under the coordination of an Editorial Council (Annex 5, para. 5). This includes related activities under the IDB project. The Editorial Council will plan and institute organizational changes to rationalize activities relating to elaboration and production of textbooks. Technical assistance would consist of the following: one person year of international consulting services to advise the Minister and the Editorial Council on long-term arrangements for textbook development; 27 person months of consulting services in investigation, validation, evaluation and promotion. Design and development of the new textbooks would be performed within the Ministry through a process of technical assistance contracts with authors, according to guidelines provided by textbook design experts and international technical advisors (Annex 5, para. 6). Printing would be contracted with the private sector. Distribution would be through existing channels, including SNALME and commercial distributors. During negotiations, the Government presented the ministerial decree establishing the Editorial Council. During negotiations, the Government agreed to prepare by the time of the 1993 annual project review (para. 2.42), and to carry it out thereafter, a plan for rationalizing textbook activities including plans for disposition of the printing press, reduction in number of entities within MEC involved in developing and printing texts and materials, and provision for a small and effective textbook unit.

Educational Assessment System (Annex 6)

2.12 Educational Assessment. To monitor the quality of learning achievement and to identify cost-effective means for raising achievement, systematic educational testing would be introduced under the project. An educational assessment system would be administered to a sample of students, based on objective, criterion-referenced tests (i.e., tests measuring how well students have achieved specific curriculum objectives). Testing would be initiated on a pilot basis in 1992 in language and mathematics for a representative sample of 15,000 students in grades 2, 6 and 9 in the provinces

of Guayas, Pichincha, and El Oro. Pilot testing would be extended in 1993, administering 127,000 tests to a sample of students in other provinces not previously covered, and would include additional subject areas of science and social science. In 1994, pilot testing of language and mathematics skills would be applied to a wider sample and the system would be standardized and introduced on a national scale during 1996 with a sample of approximately 121,150 students (approximately 480,000 tests). Technical assistance comprising regional and international experts would be provided to train local staff in techniques of preparing standardized tests, which would assure that experience from Latin America and elsewhere in the world is incorporated in the test designs.

2.13 The testing system will be under the management of the MEC, which will establish a Council of Directors composed of the Minister of Education, the Director of the Evaluation Department and the Coordinator of the PCU. The project would finance technical assistance, training, and other services needed to develop and manage the testing system. The testing system would have 25 senior professional staff and both local and international advisors. Up to thirty teachers and university professors would be contracted to develop the tests, together with 34 referees who would manage the review and scoring of the tests. Study tours for 20 staff would be financed under the project in order to familiarize them with other achievement testing systems in the region and in other parts of the world. The project would also finance the operating costs of the system during its start-up stages and, on a declining basis, for the full period of implementation. MEC's central and regional staff in collaboration with regional supervisors and teachers would provide support for administering tests. Results would be used to provide performance feedback to teachers, school directors, district officers, and regional staff of the MEC. They would include data on performance in several sets of learning-specific objectives and could be translated into revised teaching techniques or curriculum objectives. In addition, an analysis of the determinants of learning achievement (para. 2.17) would provide feedback to regional and national authorities on priority needs for the allocation of resources. A proposed design for the educational assessment has been prepared. During negotiations, the Government provided assurances that the assessment system would be introduced on a pilot basis in 1992 and established on a national basis by the 1996 school year.

Institutional Strengthening (Annex 7)

2.14 Activities of institutional strengthening closely complement the proposed educational quality-improvement activities and will enhance the long-term capacity of MEC to make better use of its resources and to plan and implement improvements in the sector. The objective would be to strengthen the budgeting and resource allocation capacity of the MEC (para. 2.16), promote administrative decentralization, strengthen provincial and local management and foster policy analysis and innovations (para. 2.15). Financing of consultants and other related expenditures for the Project Coordinating Unit are included. Detailed descriptions of institutional strengthening activities, including technical assistance to be provided, appear in Annex 7.

2.15 Decentralization and Strengthening Local Management. The aim of this activity is to improve the management of the sector by decentralizing management functions to the provinces and to the school networks. At present the provincial directorates have little authority of their own, hardly any control over budget resources, and little impact on management (para. 1.17). The project would provide technical assistance and training to develop their capacities to carry out tasks delegated from MEC, including enhanced roles in generating education statistics, and in microplanning (including detailed design of phases II and III of the project), and newly-developed budgetary authority and supervisory functions relating to educational quality. The activities leading to strengthening the provincial offices and decentralizing management functions will provide primary data based on educational needs at the local level and will contribute to improvements in budget processes that are also part of Institutional Strengthening (para. 2.16). Provincial staff would have access to the informatics equipment provided to the provinces to support local preparation of budget requests. The school networks responsible for improving the quality of basic education would play an important role in decentralization, including micro-level planning, allocation of non-salary budgets and gathering statistical information. Provincial directorates will also work with and support the school networks in administrative and supervisory roles. The hub schools would be critically important to carrying out decentralized management of qualitative improvement programs, including teacher training and other activities relating to project implementation. Directors of school networks would receive allocations of funds for nonsalary expenses, including maintenance of buildings in their networks of schools. At negotiations, the Government provided assurances that budget funds for teaching materials, building maintenance and other non-salary expenditures, would be allocated at the local level. The project would finance training for 110 hub school staff, 480 provincial office staff, and 45 staff members from MEC and other central agencies, 1.5 person-years of international and 10 person years of local technical assistance, plus the cost of staff redeployment and travel.

2.16 Budgeting and Resource Allocation. Training, technical assistance, and supply of data management capacities would contribute to establishing the budget as a more meaningful tool for managing the sector. The project would provide training for staff involved in the budgetary process, not only within the Planning Directorate and its budgeting department but also in parallel operating directorates of MEC that need to participate in the revised budgeting process. This subcomponent will emphasize the involvement of the Provincial Education Directorates and the school networks in generating the basic information on which to base budget proposals. Coordination between MEC's Financial Directorate and budget authorities outside MEC (MOF and CONADE) would also be within the scope of this subcomponent and MOF and CONADE staff working on education budgets would participate in training activities. Training would include on-the-job training by local and international technical advisors, seminars and workshops, provision for relevant studies by key officials, and for travel and study visits to institutions in other countries whose practices could be applied in Ecuador. Technical assistance would provide knowledge of how information-based decision making and resource allocation are implemented in other administrative environments and would be

provided by international experts. Transfer of skills between organizational units and between the MEC and the provinces would be provided by local consultants. A total of 9 person months of international technical assistance and 7 person years of local consultant services would be financed in this area. MEC staff would participate in knowledge transfer to the provincial directorates and the school networks. The project would finance training for 40 staff from MEC, CONADE and the Ministry of Finance, 105 provincial offices staff and 110 hub schools staff.

2.17 Policy Analysis and Innovations. This subcomponent provides for conduct of three studies and two national consultations relating either directly to management and finance or to specific topics pertaining to qualitative improvement and ways of increasing the cost-effectiveness of Ecuador's education system. Purposes of the studies include: providing information needed for policy choices concerning continued efforts to improve the quality and cost-effectiveness of education in Ecuador; analyzing the costs and cost-effectiveness of existing forms of education and possible alternative approaches to meeting educational goals; evaluating activities of the project to inform future policies about whether and how these should be extended (as in the case of preschool education) and how they should be adapted to serve remaining needs for qualitative improvement; and laying the groundwork for possible future projects to improve education at all levels in terms of its quality, cost-effectiveness, and equal access. A list of the proposed studies with a brief summary of each appears in Annex 7. During negotiations, proposals for the studies were reviewed. The Government provided assurances that the studies will be performed in accordance with the schedules agreed.

ADULT EDUCATION AND TRAINING (Annex 8) (US\$28.5 million, including contingencies, 24 percent of total project costs)

2.18 This component is designed to strengthen the effectiveness of vocational training by using Ecuador's training capacity more efficiently and reorienting SECAP's activities so that they respond better to the changing economic and labor market conditions. A past project (Loan 2171-EC) under a more traditional orientation contributed to create institutional capacity in SECAP. Recent policy work has argued for a significant redirection of its more expensive, highly technical programs. Under this project, SECAP would expand basic general training programs targeted to the poor, and would increase coordination with other institutions, especially with MEC and the private sector to orient better its conventional program. Three types of activities are envisaged. By providing post-literacy education and basic skills training to the least educated adults, productivity and the standard of living of the poor would be improved. Technical support and training for small manufacturing businesses would improve their productivity and competitiveness in strategic sectors with export potential. Institutional strengthening activities would enhance SECAP's general and financial management, and improve its capacity to respond to market needs.

Post-Literacy Education and Training.

2.19 The starting point for project activities in this area is the Literacy Campaign completed by MEC and successfully targeted to the poor. Follow-up programs agreed between MEC and SECAP will make use of MEC's existing network of adult training centers and SECAP's capacity in terms of instructors, equipment, and physical infrastructure. The project would support activities in basic adult education and basic skills training. The population targeted for these activities include adults who have started to reach literacy and primary school drop-outs. A preparatory phase would -- on the basis of the network that MEC created for its literacy campaign -- use final-year technical secondary school students to conduct a diagnosis of the training needs and the availability of physical and organizational infrastructure in communities where the poorest urban and rural people live. Then students of the last two grades of the technical secondary school would be trained to serve as instructors. Pilot post-literacy programs conducted by MEC and SECAP in 1990-91 have been financed with resources from FONNIN. Post-literacy training will serve 180,000 different persons during the project lifetime, each receiving modules of two or three training courses (para. 2.20, 2.21 and Annex 8), a majority of them having also received a post-literacy formal course (para 2.20). Activities could thus be maintained after project completion to address continuing poverty objectives.

2.20 Basic Adult Education would be provided to 113,500 (about 20,000 per year) participants who have attained basic literacy skills. A total of 5,765 courses would be offered with options at three levels: literacy instruction (duration 100 hours); primary education (duration 300 hours); and basic middle cycle (1,100 hours). The courses would lead to certification equivalent to a regular basic education. They would be taught by 2,000 regular teachers, 100 volunteers from NGOs, and trained students mentioned in para. 2.19. The activities will be conducted at existing facilities, including the adult education centers, the technical colleges of the MEC, and the SECAP Vocational Training Centers. The training of teachers and instructors, and the preparation of the teaching materials will be the responsibility of the National Directorate of Popular Education of the MEC.

2.21 Basic Skills Training. Short-duration basic skills training that would be provided by MEC comprises implementation of 10,000 practical courses for 200,000 (about 30,000 per year) participants (including most of those who attended the adult education courses -- para. 2.20). These courses provide general training for work in arts and crafts, agriculture, industry, construction, trade, services and small business management. The duration of the courses varies between 60 and 100 hours. The courses are aimed at adults without labor training who work or will work in the informal sector on an independent basis or with small businesses. The courses will be taught by MEC teachers in day and evening sessions. The existing infrastructure of 600 MEC technical colleges, 400 MEC arts and crafts centers, and 19 SECAP vocational training centers will be used to provide these courses. Informal occupational training would be provided also to 25,500 disabled participants through 1,700 practical courses. Since this is a highly individualized form of instruction, the duration of the courses will vary. They will be offered by 500 special

education teachers and 40 institutes of special education that now exist. In addition, 22 multipurpose workshops for training of the disabled will be offered. Teacher training and the preparation of teaching materials will be the responsibility of MEC and SECAP together. Technical assistance in the amount of eight person months of international and four person years of local consulting services would be provided. Submission of signed operational agreements acceptable to the Bank, between the Ministry of Education and SECAP detailing how the work on the basic adult education and basic skills training activities would be coordinated, would be a loan effectiveness condition.

2.22 Complementary to, and in most cases as continuation of, the basic skills training activities of MEC described in para 2.21 is the Capacitación Popular (CP) Program. This activity is aimed at boosting the earnings of the beneficiaries through training, and to promote and advise microenterprises on improving their productivity and profits. SECAP's operational instruments would be adapted for the purpose of providing vocational training services to both urban and rural users chosen from the least educated population. SECAP would increase the utilization of its existing physical capacity and would receive four person years of local technical assistance to design teaching materials, other support materials, and to train instructors. The expected results include: implementation of 10,000 practical short-duration courses for 180,000 participants (about 30,000 per year), most of them identified in the previous courses (paras. 2.20 - 2.21). The courses will provide training for work in agriculture, industry, construction, trade, services, and small business management and project preparation. These are intended for adults without previous training who work or will work in the informal sector. The duration of the courses ranges between 60 and 100 hours. The courses will be taught by 160 SECAP instructors (30 already in-house and 130 to be hired), plus a number of part-time instructors. To provide these courses, SECAP infrastructure will be used, which consists of: 19 permanent vocational training centers, and 7 mobile units, recently acquired out of the resources of IBRD Loan EC-2171. In addition, 150 modular kits and 30 vehicles to transport them would be acquired, and 10 community centers for instruction and production would be established. Instructor training and preparation of teaching materials will be the responsibility of SECAP. It is estimated that the use of the permanent centers in the adult training and small business assistance program will increase their use by one-third. Training costs would be US\$22 per participant-course. This means that US\$50 would be invested in the average person taking 2.25 courses (Annex 8).

Technical Support and Training for Small Manufacturing Businesses

2.23 Activities in this area (representing 2.2 percent of the cost of the project) constitute a pilot effort aimed at developing SECAP's capacity to accommodate to changing training requirements. A specific subset of industrial sectors, characterized by small manufacturing companies with good productivity and export potential, has been chosen for this pilot: clothing, leather products and wood furniture. Taking into account the activities of the Technical Assistance component of the Fourth Small Scale Enterprise Project (Ln. 3162-EC), SECAP would closely collaborate with private enterprises and with the Center for Industrial Development of Ecuador (CENDES)

and the Center for Promotion of Small Industry and Handicrafts of Ecuador (CENAPIA) in implementing activities that would improve productivity and competitiveness in the areas of technology transfer, quality control, and marketing. The project would support the following pilot activities: (a) an in-depth diagnosis of firms in the sectors selected to provide detailed information on needs for training and technical assistance; (b) provision of training and technical assistance to mid-level managers and executives of small enterprises in the leather, clothing and wood-products industries; (c) three information and consulting centers to disseminate knowledge on available technologies, production processes and quality-control techniques; and (d) technical assistance that would assist the capacity of small businesses in international marketing. Following the diagnosis stage, the project would provide in-service training and technical assistance in the areas of productivity, quality and marketing and establish technological information and consultation centers. Technical assistance would consist of 2.5 person years of international and 3 person years of local consulting services. On the basis of sectoral geographic concentration, the provinces of Imbabura, Pichincha and Guayas have been selected as locations for the centers. They would transmit the experience of SECAP, CENDES, and CENAPIA in assisting businesses, and would develop a data base with international links. This data base would place national and international technical information at the disposal of businesses. The centers would provide training of middle-level and executive managers, disseminate technological information, and render technical assistance for production and quality control (Annex 8, p. 9, (c)). Users of services under their proposed component will pay for them. It is expected that activities (c) and (d) above would be fully self-supporting. During negotiations, the schedule of fees for provision of technical assistance to enterprises was agreed. Fees should cover 60 percent of costs by the end of 1995 and reach full recovery by the end of 1997.

Institutional Strengthening of Vocational Training

2.24 These activities aim at improving the quality of the vocational training that SECAP offers, enhancing the capacity of the vocational training system to adjust to labor market requirements, and developing SECAP's internal management systems. Among SECAP institutional strengthening activities initiated under Loan 2171-EC were those leading to increased participation of the private sector in SECAP'S decisions. The role of the private sector in organizing, managing and financing of more efficient training activities would be enhanced under this project through agreements made between SECAP and chambers of the private sector. During negotiations, drafts of proposed agreements between SECAP and the private chambers were discussed. Submission by SECAP of a plan of action for establishing during the period 1992-1995 at least ten agreements with private chambers of commerce and/or industry would be a loan effectiveness condition. Other activities that would be undertaken are training of trainers, curriculum design and production of teaching materials, refurbishing of training centers, strengthening the labor market and earnings information system, and establishing SECAP'S management information system. Financing of consultants and other related expenditures for the PCU are included in this component.

2.25 Training Trainers. During a 5-year period, a total of 137 courses of between 40 and 280 hours each would be provided to 2,158 instructors in basic and advanced methodological training, instructional materials design, advanced technical instruction. The project will finance seven person months of international and 30 person months of local technical assistance. As a supplement, 36 fellowships or internships abroad will be offered, along with 102 internships at national enterprises. Besides enhancing the quality of training, this activity would contribute to career development of SECAP staff.

2.26 Curriculum Design and Production of Teaching Materials. The objective of this activity is to improve the quality of vocational training by strengthening the technical capacity of SECAP to conduct occupational analyses, and develop content, methods, and training aids for new courses developed in response to changing labor market demands. Seven person months of international technical assistance would provide specialized consultation on design of these activities. The following curriculum design activities would be undertaken: updating the curriculum design of 11 clusters of existing specialties, technical/pedagogical design for courses of 11 new specialties of the CP training program, curriculum design for 8 new specialties, and implementing a pilot outreach training project, and a pilot project for individualized training in welding. Implementation would be conducted by 46 specialists, who would receive a one month special course.

2.27 Teaching materials (equipment, auxiliary didactic materials, printed and audio-visual aids) that would be provided include teaching equipment and instruments for the 25 permanent centers of SECAP, teaching materials for the activities of the informal workers training program, 166 technical manuals for all SECAP specialties, and 16 instructional videotapes for different specialties. In addition, an audio-visual materials reproduction unit (filmstrips, video tapes, and slides) would be established and 14 technical staff would receive a 40-hour course in the handling of these materials.

2.28 Refurbishing Training Centers. Limited equipment would be provided for development of new specialties, as well as installation and spare parts for existing equipment. New specialties included are small-scale mining, tanning, industrial electronics, data processing, and baking.

2.29 Strengthening the Labor Market and Earnings Information System. Technical assistance and staffing would be provided to establish an information system for orienting vocational training programs so that they respond more efficiently to the demands of the labor market. The National Employment Institute (INEM), which has established household surveys, would continue developing with SECAP labor market monitoring systems analyzing existing information (started under Loan 2171 EC), and would develop the collection of new information for tracer/evaluation studies of SECAP graduates that would allow a more thorough examination of the impact of SECAP programs. A data bank with labor market information along with analytical models of the impact of economic changes on the demand for labor and labor skills would be outcomes of this activity. INEM would also develop a living standards measurement survey (LSMS) preparing the questionnaire and carrying out a

field-based pilot preparatory survey. SECAP would also establish a National Information System for Vocational Training linked with the CINTERFOR regional network, with one national center and four specialized regional centers that would support quality improvement of training programs. A total of approximately three person years of international and 15 months of local technical assistance would support these labor market information activities.

2.30 Management Information System. This activity is aimed at providing SECAP with the inputs for planning and operational decision making. International and local technical assistance (10 and 3 person months, respectively) will advise SECAP on preparing a set of manuals for administrative and organizational procedures, a cost accounting system, and conducting regular impact evaluation studies and labor market studies based on information from several surveys, including the LSMS.

2.31 The studies proposed in paras. 2.26, 2.29 and 2.30 are part of the project activities aimed at strengthening sectoral effectiveness and increasing the efficiency of training programs (para. 2.18). To ensure that the operational recommendations following the results of the studies would be incorporated in regular training operations during the project's lifetime, results of the studies should be available by October 31, 1994, one year before the mid-term project review of 1995 (para. 2.42 below). During negotiations, proposals and timetables for the studies were reviewed. The Government provided assurances that it will carry out the studies in accordance with the schedules agreed. Results of the studies of curriculum design would be available by March 1994 and of impact of vocational training by September 1994.

D. Implementation

2.32 Project Management. Project implementation would be carried out within the existing organizational structure of both MEC and SECAP through units whose operational and administrative responsibilities are directly linked to project components. Overall responsibility for implementation of the Basic Education Component would be vested in the Minister of Education and Culture and of the Training Component in the Executive Director of SECAP. They would be supported in general policy setting and institutional coordination by a Committee of Directors in MEC and a Board of Directors in SECAP, and, to facilitate project implementation, would be assisted by two Project Coordinating Units (PCUs).

2.33 The PCUs would be staffed by a Coordinator and consultants, both local and international. The Coordinators would report directly to the Minister of Education and to the Executive Director of SECAP respectively. Each PCU would have one technical advisor and technical consultants that would support and monitor technical execution of project components, as well as an administrator/accountant that would manage personnel, procurement, consultant contracting, accounting and financial activities under the project. Technical consultants at MEC's PCU would be in the areas of: education management, education quality, implementation of decentralized basic education programs, infrastructure, and legal counsel. Technical consultants at SECAP'S PCU would

be in the areas of: adult education and basic skills, small export enterprises, and vocational training institutional policy and management.

2.34 The Ministry of Education PCU would assist, coordinate, monitor and evaluate the activities of the following participating entities:

- (a) DINACAPED and IPED in each province for the design and planning of teacher training programs, and school networks for the implementation of the training programs;
- (b) School networks and Provincial Directorates for the implementation of the pre-school education programs;
- (c) National Department of Special Education and school networks for the implementation of the special education program;
- (d) DINACAPED and the Editorial Council for the production of educational materials and SNALME for their distribution;
- (e) Council of Directors formed within MEC for the implementation of the educational assessment program; and
- (f) National Directorates of Education Planning, of Finance and Administration and of Regular and Special Education, Provincial Directorates and school networks for the implementation of the institutional strengthening activities.

2.35 SECAP's PCU would assist, coordinate, monitor and evaluate the activities of the following participating entities:

- (a) Operations Directorate and CENAPIA for technology transfer, quality control, and marketing in support of small manufacturing businesses.
- (b) Directorate of Basic Skills Training (Capacitación Popular) and MEC's Directorate of Adult Education for implementation of short-term training programs for the poor.
- (c) Technical Directorate for (i) the design, planning and implementation of instructor training programs; (ii) curriculum design and production of didactic materials for technical training programs; (iii) production of technical manuals for all technical specialties offered by SECAP; and (iv) procurement of supplemental equipment for technical training centers.
- (d) Planning Directorate for strengthening the labor market and earnings information system and establishing SECAP's management information system.

2.36 The PCUs structure is deemed appropriate to ensure efficiency in project implementation while retaining implementation authority in the

respective line and staff departments of MEC and SECAP. Financing for the PCUs is included under the respective institutional strengthening activities of each component, and includes funds (US\$300,000 equivalent) for paying regular MEC or SECAP staff for their incremental work on the project to the extent not covered by their salaries. The project preparation working teams have been performing the role of PCUs. Establishment of PCUs as operational entities staffed with key personnel, together with submission of satisfactory timetable for filling remaining positions within the PCUs is a condition of loan effectiveness. A committee comprising the heads of the two Coordinating Units and the Under-Secretary of Public Credit of the Ministry of Finance would meet regularly to assure effective liaison between the PCUs themselves and with MOF and taking advantage of project commonalities and complementary capabilities. This committee would assure that communications and relationships with the World Bank are carried out in a coordinated and efficient manner.

2.37 Implementation Procedures. The administrative unit of the PCUs would manage project procurement and consultant contracting with support of procurement agents. Procurement for hub school design, construction and supervision would be done individually or in packages of 1-3 hub schools in three phases covering 20 hub schools in Quito and Guayaquil during the first phase, 23 hub schools in cities other than Quito and Guayaquil during the second phase and 12 hub schools during the third and last phase of implementation. Furniture, equipment and vehicles for the hub schools would be procured following the phasing of civil work construction; whenever possible the distribution would be included as a service to be provided by suppliers. Procurement of basic school supplies and materials for hub schools and other network schools would be done by school network directors. Procurement of supplemental equipment for SECAP's training centers would be done in packages throughout the life of the project. Office furniture and equipment would be procured during the first two years of project implementation. MEC, through SNALME, would be responsible for textbook distribution which would be done through contracts with local transportation companies. Design of textbooks and didactic materials would be done through contracts with authors and printing would be done through competitive bids; their distribution would be carried out by SNALME. Training materials for teachers and instructors would be developed by the responsible units of MEC and SECAP and training delivery would be done by MEC and SECAP's trainers. Technical Assistance would be contracted by the PCUs with support of procurement agents. (For details see Annex 9).

2.38 Implementation Schedule and Status. The project would be completed over a seven-year period beginning in 1992 and ending in 1998. Implementation of components that were fully prepared by appraisal has been initiated. Essential preparatory work for physical infrastructure investments for the first year of the project was completed prior to negotiations. Further preparation for additional school networks, the education assessment system and some of the studies, is on-going, with assistance of consultants financed under PPF 151-1EC.

2.39 Monitoring Targets. In line with project objectives, key indicators will be monitored to track and support improvements in the overall efficiency and effectiveness of primary education. In addition, selected, well-focused performance targets related to improving efficiency, coverage, and expenditure are presented in Annex 10. Both final and interim targets are noted. During negotiations, the Bank and the Government agreed on the targets and indicators of project objectives, to be included in the monitoring plan.

2.40 Five key targets are established in the monitoring plan:

- (a) a reduction in the rate of student repetition from the current 21 percent to 15 percent annually by 1998;
- (b) a reduction in the average dropout rate from the current 4 percent to 3 percent annually by 1998;
- (c) an increase in the participation rate of the primary school age group from the current estimated 92 percent to 95 percent by 1998;
- (d) an increase in SECAP's rate of utilization of its physical capacity from the current 48 percent to 60 percent by 1998; and
- (e) an increase of the productivity and/or earnings of SECAP graduates to 10 percent over those of a suitable comparator group by 1995, and an additional 5 percent by 1998.

The current values and coverage targets of the above indicators are based on analysis of information and estimates currently available and should be refined during project implementation on the basis of improvements in the management information and planning systems of MEC and SECAP. Refined indicators would become available during project implementation based on LSMS information and the outcomes of the educational assessment system. The targeted gains are projected on the basis of quality improvements expected to result from project inputs and expenditures. The targeted increase in the net enrollment ratio is based on a reduced bottleneck in enrollments at grade one and a decrease in the number of over-aged students in the system generally, which would free places for an additional 20,000 children in the 6-12 age group. Achievements in provision of project inputs would largely determine progress towards the performance targets. Monitoring of provision of these inputs (e.g., numbers of textbooks provided, numbers of students benefitting from special education programs) would therefore also be carried out (Annex 10).

2.41 Additional aspects of expenditure on basic education and on vocational training would also be closely monitored during project implementation, with a view to ensuring adequate overall levels of financing and to sustaining benefits and inputs. Particular emphasis would be given to ensuring that no real decline in the current per-student level of financing for primary education transpires; and that sufficient internal funds are

budgeted by 1998 for materials replacement and continued school supervision, teacher and administrator training, educational testing, the chosen alternatives for special and pre-school education and support for parent-teacher associations and maintenance of facilities. At negotiations, the Government provided assurances that it would conduct, during the third quarter each year, a joint review with the Bank of the MEC/SECAP budgets for the forthcoming year. The reviews will concentrate on: (i) the overall level of expenditure with particular attention to the shares allocated to basic education; and (ii) the increases required to cover project incremental recurrent expenditures.

2.42 The results of monitoring would form a central focus in an annual review of project implementation. The review would be conducted jointly by MEC, SECAP, MOF, and the Bank. It would assess the previous year's progress towards achieving expenditure, resource management, and sector performance targets, and establish targets and schedules for the following year. Particular attention would be given to ensuring that systematic school location criteria are adhered to in the rehabilitation and construction of classrooms for primary schools and that SECAP facilities are experiencing increasing utilization. Resolution of implementation problems and required adjustments in project content and targets would also form a focus of the reviews. During negotiations, the Government provided assurances that it would prepare and furnish for Bank review, at the end of every six month period during project implementation, project reports regarding: (a) project implementation results and expenditure for the preceding six months; and (b) a related review of achievements and shortfalls based on established plans and objectives. The two reports covering the immediately prior calendar year shall be consolidated into an annual report which shall be the focus of an annual review held by the Bank, the Borrower and SECAP in the third quarter of each calendar year during project implementation. Each such review shall conclude with the finalization of an annual plan of action to be carried out by the Borrower and SECAP during the year immediately subsequent to the review. The annual review of achievements and shortfalls for 1995 would be a formal mid-project review and with a comprehensive review of all project components. It will focus on the project impact in achieving its main objectives (paras. 2.39 - 2.40) with particular reference to: progress in MEC and SECAP budget programming, cost-recovery in vocational training, streamlining of textbook related activities and establishment of the student assessment system. It would include, in addition, an evaluation of the effectiveness of provision of project inputs in achieving key targets for improving sector performance as measured through the studies mentioned in para. 2.31. Thereafter recommendations would be made of measures to be taken in areas such as reallocation of funds and institutional changes to ensure the best use of available resources congruent with project targets. Another comprehensive review would take place in 1997. During negotiations, the Government provided assurances that it will perform these evaluations based on the studies carried out pursuant to the Project.

E. Costs and Financing (Annex 11)

2.43 The total project cost, including physical and price contingencies, excluding taxes and duties, is estimated at about US\$118.7 million equivalent, of which about US\$33.1 million would be foreign exchange. Investment costs amount to 76% of base costs and incremental recurrent costs amount to 24% of base costs (Annex 11, Tables 1-4). Project costs were estimated at July 1991 price levels and include physical contingencies of 10% for civil works and 5% for equipment, furniture, vehicles, and textbooks. Price contingencies were calculated at 3.4% per year for 1992-98. These rates have been applied to local and foreign costs, and periodic currency rate adjustments based on purchasing power parity would compensate for the difference between projected US dollar inflation and local inflation rates. (See Table 2.1 on page 35).

2.44 Estimated construction costs for the project area are based on unit prices derived from current contracts and cost analyses for similar standards of construction in corresponding facilities. Estimated educational facilities rehabilitation costs were calculated based on studies carried out on existing facilities. Estimated costs of equipment, furniture, and vehicles are based on current CIF unit prices, adjusted to include local transportation costs. Estimates for technical assistance and studies are based on current rates for local and foreign experts. Cost estimates for training, salaries, and operating costs are based on current costs or costing standards used by the Ministry of Education and SECAP.

2.45 Incremental Recurrent Costs. During the implementation period, the project will add an average of about US\$4.0 million per year to the recurrent expenditures budget of MEC and SECAP, starting with US\$2.0 million in the initial year and rising to US\$4.9 million in the last year of implementation as shown below. These incremental operating costs would be incurred mainly by continued provision of materials; hiring of pre-school education teachers, and technical and administrative staff; maintenance of facilities, equipment, and vehicles; and establishment of the new programs of education assessment, special education, and basic skills training. The share of the Government financing of recurrent costs under the project would build incrementally during the 1992-98 period to facilitate absorption of the full increment at completion.

	1992	1993	1994	1995	1996	1997	1998
	-----in US\$ million-----						
Total Cost	2.0	2.6	3.3	3.9	4.7	5.5	6.1
Bank Financing	2.0	2.6	2.0	2.3	2.8	1.6	0
Govt. Financing	0	0	1.3	1.6	1.9	3.9	6.1

Incremental operating costs generated by the project are estimated at US\$4.9 million the last year of project implementation, of which US\$3.3 million correspond to MEC and US\$1.6 million to SECAP. These amounts represent 1.9 percent of the 1991 MEC budget and 45 percent of the 1991 SECAP budget. In

the case of MEC, this incremental demand on the budget does not represent an undue burden; even less so in view of the past decline in real expenditures on basic education and the essential need to provide basic education of good quality to the school-aged population. In the case of SECAP, the significant increase in recurrent costs generated by the project reveals the relative magnitude of the financial requirements for using the existing physical capacity, and demonstrates institutional commitment with the stated objective of reorienting SECAP's activities (para. 2.18). In this context, SECAP would agree to institute a system of partial differential cost-recovery fees in all its training courses. It is expected that the complete set of cost-recovery and fee arrangements (paras. 2.23, 2.24, 2.45) would raise the share of recurrent expenditures financed through cost recovery from the current 2%. At negotiations, the Government provided assurances that it will provide annually the specified amounts required for project costs, and it was also agreed that SECAP would institute a generalized, partial cost-recovery fee system for all SECAP's training courses reaching a recovery of at least 24 percent of such costs by the end of 1995.

2.46 Financing Plan. The proposed loan of US\$89.0 million would finance about 75% of project costs, net of taxes and duties. The loan would finance 100% of foreign exchange expenditures and 65% of local expenditures. The remaining US\$33 million would be financed by the Government. To facilitate project start-up activities, such as those related to employment of consultants and technical and bidding specifications for computer and office equipment, the Bank would authorize retroactive financing of up to US\$4.8 million equivalent to help cover eligible start-up expenditures made on or after July 13, 1991, following project appraisal.

F. Disbursements

2.47 The proceeds of the loan would be disbursed during a seven-year period as follows: (a) civil works, 70 percent of expenditures for new construction and rehabilitation of hub schools and network schools; (b) equipment, furniture and vehicles, 100 percent of foreign expenditures, 100 percent of local expenditures (ex-factory cost), and 80 percent of local expenditures for other items procured locally, excluding taxes; (c) production and distribution of textbooks, 100 percent of foreign and local expenditures, excluding taxes; (d) educational materials, 100 percent of foreign and local expenditures, excluding taxes; (e) training, technical assistance, consultancy services, and studies, 100 percent of total expenditures; and (f) office and school supplies, maintenance of educational facilities, incremental salaries and operating costs at a rate of 100 percent until an aggregate amount of US\$4.6 million has been reached; thereafter, disbursements for this category would be made at a rate of 60 percent until the aggregate amount of US\$10.6 million has been reached; and the remaining funds would be disbursed at a rate of 30 percent. PPF 151-EC would be refinanced under this loan (Annex 13, Table 2).

2.48 Proceeds of the proposed loan would be disbursed against withdrawal applications to be fully documented for all contracts valued at more than US\$100,000 for goods, US\$500,000 for works and US\$20,000 for consultants and

Table 2.1
ECUADOR
FIRST SOCIAL DEVELOPMENT PROJECT
Summary of Project Costs by Category

	Sucre (Thousands)			US\$ (Millions)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
I. INVESTMENT COSTS								
A. Civil Works								
1. Quito & Guayaquil	7135.9	3599.4	10735.3	6.5	3.3	9.8	33.5	9.5
2. Other Cities	21227.1	4332.3	25559.3	19.3	3.9	23.3	16.9	22.7
Sub-Total	28363.0	7931.7	36294.6	25.8	7.2	33.1	21.9	32.2
B. Equipment								
1. Computing Equipment	73.2	460.4	533.6	0.1	0.4	0.5	86.3	0.5
2. Equipment and Furniture	6242.5	7039.4	13281.9	5.7	6.4	12.1	53.0	11.8
Sub-Total	6315.7	7499.8	13815.5	5.8	6.8	12.6	54.3	12.3
C. Didactic Materials								
	1393.7	1048.5	2442.2	1.3	1.0	2.2	42.9	2.2
D. Textbooks and books								
	3284.7	2790.4	6075.2	3.0	2.5	5.5	45.9	5.4
E. Vehicles								
	124.9	789.7	914.6	0.1	0.7	0.8	86.3	0.8
F. Studies and Tech. Assist.								
1. Studies	6920.2	2284.2	9204.4	6.3	2.1	8.4	24.8	8.2
2. Local Experts	2709.2	188.2	2897.4	2.5	0.2	2.6	6.5	2.6
3. Foreign Experts	33.3	2963.8	2997.0	0.0	2.7	2.7	98.9	2.7
Sub-Total	9662.7	5436.2	15098.8	8.8	5.0	13.7	36.0	13.4
G. Training								
1. Scholarships	21.8	2154.6	2176.3	0.0	2.0	2.0	99.0	1.9
2. Short-term, on-the-job trg	82.3	91.4	173.7	0.1	0.1	0.2	52.6	0.2
3. Teachers and Instructors	3375.6	13.1	3388.7	3.1	0.0	3.1	0.4	3.0
4. Staff Training	1093.0	0.0	1093.0	1.0	0.0	1.0	0.0	1.0
Sub-Total	4572.7	2259.1	6831.7	4.2	2.1	6.3	33.1	6.1
H. Purchasing Agents & Audits								
	161.4	3835.3	3996.7	0.1	3.5	3.6	96.0	3.6
Total INVESTMENT COSTS	53878.8	31590.7	85469.5	49.1	28.8	77.8	37.0	76.0
II. RECURRENT COST								
A. Human Resources								
1. Teachers and instructors	7867.1	0.0	7867.1	7.2	0.0	7.2	0.0	7.0
2. Professional and admin.	9500.5	0.0	9500.5	8.7	0.0	8.7	0.0	8.5
Sub-Total	17367.6	0.0	17367.6	15.9	0.0	15.9	0.0	15.4
B. Office and Other Supplies								
	2516.3	301.3	2817.6	2.3	0.3	2.6	10.7	2.5
C. Maintenance								
1. Civil Work Maintenance	1647.7	0.0	1647.7	1.5	0.0	1.5	0.0	1.5
2. Equipment Maintenance	2315.4	12.6	2328.0	2.1	0.0	2.1	0.5	2.1
3. Vehicle Maintenance	891.1	92.2	983.4	0.8	0.1	0.9	9.4	0.9
Sub-Total	4854.2	104.8	4959.1	4.4	0.1	4.5	2.1	4.4
D. Other Operating Costs								
	1780.0	19.6	1799.6	1.6	0.0	1.6	1.1	1.6
Total RECURRENT COSTS	26518.1	425.7	26943.9	24.2	0.4	24.6	1.6	24.0
Total BASELINE COSTS	80396.9	32016.4	112413.4	73.3	29.2	102.4	28.5	100.0
Physical Contingencies	2972.1	1122.0	4094.0	2.7	1.0	3.7	27.4	3.6
Price Contingencies	10568.3	3227.0	13795.3	9.6	2.9	12.6	23.4	12.3
Total PROJECT COSTS	93937.3	36365.4	130302.7	85.6	33.1	118.7	27.9	115.9

for all of the incremental operational expenditures. Disbursement requests for lesser amounts would be disbursed against submission of statements of expenditures (SOE), for which the supporting documentation would be retained by the PCUs for periodic inspection by the Bank and by external auditors. All expenditures and SOEs would be transmitted to the Bank through the PCUs. To facilitate direct management of their part of the loan proceeds by SECAP, the Government will sign a subsidiary agreement with SECAP. Submission of such agreement, satisfactory to the Bank, is a loan effectiveness condition. The government would set up a Special Account in US dollars at the Central Bank of Ecuador with an initial deposit of US\$4.2 million. Withdrawals from the Special Account would be supported by the required documentation. Separate accounting records would be established and monitored by the Project Coordinating Units in MEC and SECAP. The closing date of the project would be September 30, 1999.

G. Procurement

2.49 Procurement of civil works, goods, and services would be done in accordance with Bank guidelines, using standard bidding documents based on Bank models. The GOE has recently enacted new procurement legislation that resolves past disagreements regarding the precedence of Bank procurement guidelines over local legislation. The loan agreement for this project contains explicit provisions dealing with points of difference, either in substance or interpretation, between Bank guidelines and Ecuadoran legislation. For efficiency in complying with Bank procurement policies and procedures, the two executing agencies would retain the services of procurement agents whose qualifications are acceptable to the Bank. The contracting of such agents would be a condition of effectiveness. Project costs breakdown by procurement method are summarized in Table 2.2.

2.50 Civil works. It is expected that about 880 schools throughout the country would be repaired at cost ranging between US\$5,000 and US\$15,000 per school. Because of their modest size and scattered locations it would not be justified to procure these works through international competitive bidding (ICB). Therefore, school repairs costing US\$50,000 or less and up to an aggregate of US\$7.0 million, would be contracted on the basis of comparison of price quotations obtained from at least three local contractors. Local competitive bidding (LCB) procedures, acceptable to the Bank, would be used when it would be possible to group repair works in contracts estimated to cost above US\$50,000. The construction of the proposed 55 new hub schools which would be located in 25 different cities would be carried out over a six-year period. Construction packages of two or more hub schools would be encouraged; resulting contract values are expected to range between US\$250,000 to US\$1,200,000. Therefore, these works would be procured through LCB procedures acceptable to the Bank up to an aggregate amount not exceeding US\$32.5 million. In the event that the expected cost of a package or contract would exceed US\$1.5 million, it would be procured through ICB.

TABLE 2.2
ECUADOR
FIRST SOCIAL DEVELOPMENT PROJECT
Procurement Arrangements
(in US\$ million)

Category	ICB	LCB	Other	Not Appl.	Total
Civil Works		32.5 (22.5)	7.0 (5.0)		39.5 (27.5)
Equipment, Furniture Vehicles	10.6 (10.6)	3.0 (2.0)	2.0 (0.9)		15.6 (13.5)
Textbooks and Didactic Materials	5.0 (5.0)	2.5 (2.5)	1.5 (1.0)		9.0 (8.5)
Studies and Technical Assistance			19.2 (19.2)		19.2 (19.2)
Training				7.0 (7.0)	7.0 (7.0)
Office and School Supplies			3.0 (1.5)		3.0 (1.5)
Operating Costs			5.3 (2.5)	19.9 (9.3)	25.2 (11.8)
	15.6 (15.6)	38.0 (27.0)	38.0 (29.1)	26.9 (16.3)	118.7 <u>a/</u> (89.0)

Figures in parenthesis are the amounts estimated to be financed by the Bank.
a/ Figures do not add to Project total of US\$118.7 million because of rounding.

2.51 Textbooks and Didactic Materials. Procurement of about US\$5.0 million worth of printing of large runs of textbooks based on existing and new designs would be done in packages of at least US\$200,000 and through ICB. Contracts for the printing of textbooks and manuals valued at above US\$25,000 but no more than US\$200,000 each and US\$2.5 million in aggregate, would be awarded through LCB procedures acceptable to the Bank. Teacher, instructor and staff training manuals would be developed by MEC and SECAP staff with technical assistance. The printing of small numbers of these teachers' guides and training manuals estimated to cost US\$25,000 or less, and not exceeding US\$1.5 million in aggregate, would be contracted on the basis of comparison of price quotations obtained from at least three local print shops.

2.52 Equipment. Unless otherwise agreed by the Bank, vehicles (excluding motorcycles) including maintenance, and computers including software and maintenance, would be procured through ICB. Furniture and equipment (including spare parts) valued at above US\$25,000 but no more than US\$200,000 would be procured through LCB procedures acceptable to the Bank, up to an aggregate value of US\$3.0 million. Contracts for other furniture, motorcycles and other equipment (including spare parts) valued at US\$25,000 or less and not exceeding US\$7.3 million in aggregate, would be awarded on the basis of comparison of price quotations obtained from at least three eligible suppliers. Under ICB, local manufacturers would be granted a margin of preference for purposes of bid evaluation, in accordance with Bank guidelines.

2.53 Office and School Supplies. In view of the project's objective of decentralizing school management, procurement of office and school supplies would be carried out by the end users over a period of six years through contracts valued at US\$25,000 or less, up to an aggregate of US\$3.0 million.

2.54 Consultants. The selection and appointment of consultants for studies and technical assistance, including the hiring of local authors for preparing new textbook designs/improving of rural textbooks, would be done in accordance with the August 1981 guidelines for the Use of Consultants by World Bank Borrowers.

2.55 All procurement documentation relevant to ICB contracts and civil-works contracts valued at above US\$500,000 would be subject to prior review by the Bank. In addition, the Bank would review ex-ante, the first LCB procurement for school rehabilitation works, hub school construction, textbook printing and equipment respectively, regardless of their value. Also, an ex-post review of contracts disbursed against SOEs would be conducted during field supervision on the basis of random sampling. The proposed prior review levels would cover about 40% of items subject to procurement arrangements in accordance with Table 2.2.

H. Accounting and Auditing

2.56 SECAP's PCU would develop, with technical assistance, an accounting manual that includes a chart of accounts, payment and control systems to ensure efficient use of loan resources, and budgeting and management reports. MEC's PCU would contract technical assistance to develop, in consultation with SECAP, the accounting manual that includes a chart of accounts, payment and control systems, as well as budgeting and management reports. During negotiations the Government provided assurances that the complete accounting system acceptable to the Bank, to be used for the project by MEC, including charts of accounts, payment and control systems and budgeting and management reporting systems, would be operational by June 30, 1992. SECAP provided such assurances with regard to its accounting system as well.

2.57 During negotiations, the Government provided assurances that implementing agencies would maintain separate project accounts that would be audited annually by independent auditors, in accordance with appropriate

auditing principles, with terms of reference approved by the Bank. The audit would include the Special Account and Statement of Expenditures.

I. Benefits and Risks

2.58 Expected Benefits. The principal benefits of the proposed project will be increased human capital accumulation among the poor. This would include both primary school children in low-income urban areas, who would gain a better chance to complete primary schooling of good quality; as well as adults who are self-employed or employed in low-productivity occupations, who would obtain skills that would improve their productivity, occupational mobility, and income. The project would invest in human capital to strengthen the basis for Ecuador's economic development, in accordance with the Bank's country strategy. It would alleviate poverty in the medium term and contribute to improved income distribution by targeting education and training on the poor. The project policy focus would help to improve the quality of basic education, especially for the poor. More specifically, it would decentralize educational management; provide cost-effective special education to overcome barriers to learning for poor children and ethnic minorities; institute a system of educational testing; and orient SECAP's training toward meeting the needs of the poor. In addition, the project would improve the efficiency of public resource use by strengthening the process by which the education budget of approximately US\$200 million per year is allocated, and by decentralizing management of the education sector to the provinces and the schools serving poor urban neighborhoods. Improvements in budgeting would parallel overall budget reform measures that the Bank is pursuing at the macro level. The project would take advantage of SECAP's demonstrated capacity to implement projects, which would be strengthened and serve as a model for the education sector, as well as utilize the MEC's basic education capabilities to complement SECAP's training for marginally-literate workers. It would also lead to fuller utilization of SECAP's physical capacity created under Loan 2171-EC.

2.59 The project would promote the use of information to guide policies and program plans in the social sectors. This would be done through establishment of a system for evaluating academic achievement and improving the flow of management and budgeting information in the education sector, and through utilization of household survey information and feedback from training programs to target training and adapt its content to signals from the labor market. The existing household surveys would be refined to provide reliable bases for poverty analysis.

2.60 Risks. The principal risk is in the area of project implementation, where the capacity of the MEC in particular is weak. This problem may be aggravated by the forthcoming presidential election and change of political administrations in 1992. To reduce this risk and ensure a balance between efficient project management and related capacity building at MEC and SECAP, the project includes the appointment of technical and administrative consultants to assist with project management. Moreover, the project design incorporates features to overcome implementation problems that have arisen in

earlier projects in Ecuador, including: (a) decentralized project management in the education sector, working through the line agencies of the MEC and a small, flexible Project Coordinating Unit, and utilizing the best of sector staff, chosen on a merit basis and provided with training and career development opportunities to carry out project tasks; (b) use of SECAP's project management experience; (c) contracting with specialized international agencies to improve and facilitate processes of procurement and technical assistance; and (d) taking steps during preparation to build broad and decentralized support for the project among potential beneficiaries and stakeholders. The project would establish close ties between schools and their communities and between training activities and employers. Its substance and targeted approach to address the needs of the poor promises to meet the approval of virtually any incoming administration. A second risk concerns the sustainability of the project. Preparatory activities have reviewed carefully the recurrent cost implications of the project and determined that these will not impose an undue strain on sector finances. The project will include annual subsector and project budget reviews during supervision. Establishment of cost-recovery schemes and managing their proceeds in a decentralized manner is part of the project and should contribute to long-run sustainability.

III. AGREEMENTS REACHED AND RECOMMENDATIONS

3.01 During negotiations the Government furnished the ministerial decrees establishing the School Networks (para. 2.04) and the Editorial Council (para. 2.11).

3.02 During negotiations, the Government (and SECAP where applicable) provided assurances that:

- (a) a MEC resolution, satisfactory to the Bank, governing the operational relationships between the Provincial Education Directorates and the School Networks would be made effective by July 1992 (para. 2.04);
- (b) criteria, acceptable to the Bank, would be applied for choosing the sites of networks and hub schools to be built during phases two and three of the project (para. 2.06);
- (c) cost-recovery would be implemented in the provision of textbooks, mainly through rental fees (para. 2.10), and a plan for rationalizing textbook activities, including plans for disposition of the printing press, reduction in number of entities within MEC involved in developing and printing texts and materials, and provision for a small and effective textbook unit, would be presented to the Bank prior to the 1993 annual project review, and thereafter carried out by MEC (para. 2.11);

- (d) the assessment system would be introduced on a pilot basis in 1992 and established on a national basis by the 1996 school year (para. 2.13);
- (e) budget funds for teaching materials, building maintenance and other non-salary expenditures would be allocated at the local level (para 2.15);
- (f) all studies and consultations would be performed as part of the Institutional Strengthening activities in accordance with the Schedules agreed. Regarding SECAP, the results of the studies of curriculum design would be available by March 1994 and of impact of vocational training by September 1994 (paras. 2.17-2.31);
- (g) SECAP would charge fees for the provision of technical assistance to enterprises in accordance with an agreed schedule. Fees should cover 60 percent of costs by the end of 1995 and reach full recovery by the end of 1997. (para. 2.23);
- (h) SECAP would implement the plan of action of para. 3.03 (b) (para. 2.24);
- (i) it would conduct, during the third quarter each year, a joint review with the Bank of the MEC/SECAP budgets for the forthcoming year. The reviews will concentrate on: (i) the overall level of expenditure with particular attention to the shares allocated to basic education; and (ii) the increases required to cover project incremental recurrent expenditures (paras. 2.41, 2.45);
- (j) it would prepare and furnish to the Bank for review, at the end of every six month period during project implementation, project reports regarding: (a) project implementation results and expenditure for the preceding six months; and (b) a related review of achievements and shortfalls based on established plans and objectives. The two reports covering the immediately prior calendar year shall be consolidated into an annual report which shall be the focus of an annual review held by the Bank, the Borrower and SECAP in the third quarter of each calendar year during project implementation. Each such review shall conclude with the finalization of an annual plan of action to be carried out by the Borrower and SECAP during the year immediately subsequent to the review (para. 2.42);
- (k) a mid-project evaluation in 1995 and another comprehensive evaluation in 1997 based on the studies carried out pursuant to the Project would be carried out (para 2.42);

- (l) the specified amounts required for project costs would be provided annually , and that a generalized, partial cost-recovery system for all SECAP's training courses reaching recovery of at least 24 percent of such costs by the end of 1995 would be established (para. 2.45);
- (m) it would present to the Bank before June 30, 1992, the complete accounting system to be used by each of MEC and SECAP, including charts of accounts, payment and control systems and budgeting and management reporting systems (para. 2.56);
- (n) it would: (i) have the records and accounts for each fiscal year audited in accordance with generally accepted auditing standards and procedures; (ii) furnish to the Bank as soon as available, but in any case not later than six months after the end of each year, a certified copy of the agreed audit reports; and (iii) furnish to the Bank such other information concerning the records and account as well as the audit as the Bank would from time to time reasonably request; and (iv) select an independent auditor acceptable to the Bank that would conduct the annual audit (para. 2.57).

3.03 Conditions of loan effectiveness are:

- (a) submission of the operational agreement, satisfactory to the Bank, between the Ministry of Education and SECAP (para. 2.21);
- (b) submission by SECAP of a plan of action for establishing during the period 1992-1995 at least ten agreements with private chambers of commerce and/or industry (para. 2.24.);
- (c) establishment of PCUs as operational entities staffed with key personnel, together with submission of satisfactory timetable for filling remaining positions within the PCUs (paras. 2.33, 2.36);
- (d) submission of a subsidiary agreement, satisfactory to the Bank, for the transfer of Loan proceeds from the Government to SECAP for SECAP's part of the project (para 2.48).
- (e) submission by MEC and SECAP of signed contracts between each of them and the procurement/technical assistance agents (para. 2.49);

3.04 Subject to the above conditions, the proposed project would constitute a suitable basis for a Bank loan of US\$89.0 million equivalent to the Government of Ecuador, to be repaid over a period of 20 years, including 5 years of grace.

BASIC SOCIOECONOMIC INDICATORS

I. Basic Economic Indicators

A: GNP per capita (US\$ 1988)

B: Income distribution share of household, lowest 20%

C: Population below absolute poverty line (percent) 1977-87

II. Education*

D: Adult Illiteracy rate (percent)

E: Public Expenditure on Education as % of GNP

F: Public Expenditure on Education as % of Government

G: Public Expenditure on Education per Student US\$-Primary

H: Public Expenditure on Education per Student US\$-Secondary

I: Public Expenditure on Education per Student US\$-Higher Education

III. Health

J: Life Expectancy at birth (years) 1988

K: Infant mortality rate per thousand live births 1988

	A	B	C	D	E	F	G	H	I	J	K
Argentina	2,520	4.4	19	6.1	1.9	8.9	13	268	408	70.7	32
Bahamas	10,560	3.0	..	10.3	**6.2	17.7	...	...	...	69.9	26
Barbados	5,990	7.0	..	0.7	6.1	17.8	627	691	2,604	74.9	12
Belize	1,490	...	..	8.8	...	15.5	141	363	...	66.7	50
Bolivia	570	2.4	85	36.8	0.4	21.3	104	114	...	53.0	108
Brazil	2,160	2.0	73	22.2	4.5	17.7	219	246	1,300	65.3	61
Chile	1,510	4.0	..	8.9	3.6	15.3	180	158	581	71.6	20
Colombia	1,240	4.0	70	14.8	2.7	22.4	40	64	322	68.0	39
Costa Rica	1,690	3.3	34	7.4	4.6	21.6	165	322	1,177	75.0	18
Dominican Rep.	720	6.0	43	31.4	1.6	10.0	26	31	123	66.0	63
Ecuador	1,110	2.0	65	10.0	3.5	21.3	81	136	173	65.0	55
El Salvador	940	5.5	32	30.2	3.0	8.5	96	103	273	63.0	57
Guatemala	900	5.5	74	45.0	1.8	12.4	54	114	491	62.0	57
Guyana	420	...	..	8.4	9.6	8.1	101	93	2,421	66.1	44
Haiti	380	...	80	65.2	1.9	20.6	27	47	547	54.7	116
Honduras	860	6.9	55	40.5	4.9	19.5	111	176	1,023	64.0	68
Jamaica	1,060	5.4	80	3.9	5.2	11.0	140	188	2,064	73.0	11
Mexico	1,770	2.9	49	9.7	3.4	16.2	86	94	989	68.6	46
Nicaragua	830	3.0	19	42.5	6.2	12.0	271	438	3,150	64.0	60
Panama	2,130	2.0	30	11.8	5.4	14.3	283	348	1,072	71.9	22
Paraguay	1,180	...	50	12.5	1.5	16.7	45	139	502	66.9	41
Peru	1,300	4.4	68	18.1	3.3	15.7	158	215	266	62.0	86
Suriname	2,450	9.0	..	10.0	10.4	22.8	908	383	2,305	66.6	42
Trinidad & Tob.	3,350	4.2	39	5.1	5.8	12.3	1,050	1,403	5,521	71.0	16
Uruguay	2,510	6.0	..	6.1	3.1	15.0	318	390	669	72.0	23
Venezuela	3,250	3.0	56	15.3	5.4	21.3	232	137	2,074	70.1	35
LAC Average	1,860	4.4	54	16.7	4.0	16.6	219	266.4	1202.2	67.0	53
Reference Groups											
Low income	320	...	65	43.3	4.0	8.5	...	...	...	60.0	72
Middle income	1,940	4.4	36	26.2	4.4	11.2	...	...	...	66.0	52
High income	17,080	4.7	..	...	5.4	3.9	...	...	...	76.0	9

Source: The LAC Connection, World Bank, LATER, 1990.

* Most recent estimates around 1986

** Refers to 1975

... Not available

BASIC SOCIOECONOMIC INDICATORS

IV. Health

L: Number of Habitants per Doctor 1984-87

M: Number of Habitants per Nurse 1984-87

N: Government Expenditure on Health as a percentage of total expend. 1987

V. Nutrition

O: Infants with Low Birth-Weight (percent)

P: Daily Calorie Supply per capita

Q: Protein Supply per capita (grams per day)

R: Index of Food Production per capita (1979-81 = 100)

VI. Population

S: Population (thousands) 1989

T: Population Growth-percent/per year 1980-86

U: Population Growth-percent/per year 1986-2000 (estimate)

V: Birthrate per Thousand Population 1988

W: Deathrate per Thousand Population 1988

	L	M	N	O	P	Q	R	S	T	U	V	W
Argentina	374	981	2.1	6	3,210	107	96.9	32,429	1.4	1.1	21	9
Bahamas	1,060	206	13.5		2,652	77	101.5	262	2.0	1.8	25	5
Barbados	1,123	223	11.6	6	3,199	100	73.0	262	0.3	0.2	17	8
Belize	2,221	496	9.0		2,599	70	91.3	183	1.9	1.7	37	7
Bolivia	1,538	2,477	1.9	12	2,143	56	94.8	7,113	2.7	2.7	42	14
Brazil	1,080	1,205	9.5	8	2,656	61	111.8	147,399	2.2	1.8	28	8
Chile	1,231	371	6.3	7	2,579	67	105.0	12,960	1.7	1.3	23	6
Colombia	1,186	627	4.5	15	2,542	56	101.7	31,192	2.1	1.6	26	6
Costa Rica	958	450	19.3	10	2,803	68	86.0	2,941	2.3	2.0	27	4
Dom. Rep.	1,763	1,209	10.6	16	2,477	53	91.5	7,018	2.4	1.8	31	7
Ecuador	2,900	2,684	7.3	20	2,058	49	95.9	10,490	2.6	2.2	32	7
El Salv.	2,829	934	7.4	15	2,160	53	90.3	5,135	1.3	2.1	36	8
Guatemala	2,184	851	7.6	10	2,307	60	90.0	8,935	2.9	2.8	40	8
Guyana	6,220	885	5.7	11	2,484	60	77.6	1,023	0.8	0.6	27	7
Haiti	7,179	2,292	11.1	17	1,902	45	95.2	6,381	1.8	1.9	35	13
Honduras	1,511	672	14.7	20	2,068	53	75.1	4,982	3.6	2.9	39	8
Jamaica	2,065	492	7.8	8	2,590	58	100.1	2,483	1.5	0.5	23	6
Mexico	1,242	880	1.3	15	3,132	81	92.5	86,737	2.2	1.9	28	6
Nicaragua	1,498	534	...	15	2,495	63	70.5	3,745	3.4	3.0	41	7
Panama	1,000	390	16.7	8	2,446	59	92.1	2,370	2.2	1.6	26	5
Paraguay	1,459	999	5.8	6	2,853	79	107.5	4,157	3.2	2.7	35	6
Peru	1,042	...	5.8	9	2,246	61	95.5	21,790	2.2	2.1	31	9
Suriname	1,264	276	3.7		2,725	67	101.9	397	0.2	0.4	32	7
Trin. & Tob	962	258	15.9		3,082	82	71.6	1,263	1.7	1.4	26	6
Uruguay	502	...	4.8	8	2,648	78	104.2	3,104	0.6	0.6	17	10
Venezuela	701	...	10.0	9	2,494	66	93.2	19,245	2.8	2.2	30	5
LAC Average	933	857	6.7	11	2,700	69	100.7	*413,600	2.2	1.8	28	7

Ref Groups

L.-income	1,462	1,547	4.2	18	2,384	57	116.4	*2,884,000	2.0	1.9	31	10
M.-income	1,334	...	6.7	10	2,846	75	100.7	*1,068,000	2.2	1.9	29	8
H.-income	530	168	12.7	7	3,376	101	102.1	*784,200	0.7	0.6	14	9

Source: The LAC Connection, World Bank, LATHR, 1990.

* Refers to the total population
... Not available

ECUADOR
Public Expenditure in Social Sectors by Ministry and Main Institutions
1980-1990
Millions of Constant 1988 Suces

Year	Education <u>a/</u>	Welfare	Labor	Health	Sub-Total Ministries	SECAP	IEOS	IESS <u>b/</u>	Sub-Total Institut.	Total
1980	186,516	2,956	1,092	27,974	218,538	1,071	6,734	18,758	26,563	245,101
1981	139,157	4,337	1,674	35,754	180,922	2,106	8,008	22,039	32,153	213,075
1982	129,233	4,176	1,274	36,593	171,276	1,524	8,580	23,513	33,617	204,893
1983	112,345	5,096	1,106	32,971	151,518	1,735	7,390	21,736	30,861	182,378
1984	108,299	2,965	807	31,303	143,373	1,012	6,865	18,610	26,487	169,861
1985	110,434	3,614	791	32,251	147,089	1,229	3,808	21,211	26,248	173,337
1986	111,690	4,503	983	31,424	148,600	1,163	7,645	17,535	26,347	174,947
1987	107,451	4,552	876	32,298	145,177	2,063	10,941	18,684	31,688	176,865
1988	101,045	3,951	1,024	32,552	138,570	2,344	10,246	17,941	30,531	169,101
1989 <u>c/</u>	86,779	11,147	1,022	36,882	135,829	1,159	10,904	14,187	26,250	162,080
1990 <u>d/</u>	75,452	13,870	1,274	40,404	131,000	1,260	18,474	18,780	38,514	169,514

Source: Ministry of Finance, "Presupuesto del Estado, 1980-1990: Gasto Efectivo"
 Ministerial and Institutional Budgets

Notes:

- a/ Includes all higher education expenditures.
- b/ Includes health related expenditures only.
- c/ Provisional figures.
- d/ Coded Budget as of April 30, 1990.

Table 2

ECUADOR
Share of Social Expenditure in GDP and in Total Public Budget (PB)
(%)

	Education		Health		Other Social Sec.		Sub- Total		Institutes		Total Social Sectors	
	GDP	PB	GDP	PB	GDP	PB	GDP	PB	GDP	PB	GDP	PB
1970	2.8	19.8	0.5	3.4	n.a.	n.a.	3.3	23.2	n.a.	n.a.	n.a.	n.a.
1980	7.2	50.0	1.1	7.5	0.2	1.1	8.4	58.6	1.0	7.1	9.4	65.7
1981	5.1	31.8	1.3	8.2	0.2	1.4	6.7	41.3	1.2	7.3	7.8	48.7
1982	4.6	30.2	1.3	8.5	0.2	1.3	6.1	40.0	1.2	7.9	7.4	47.9
1983	4.2	29.0	1.2	8.5	0.2	1.6	5.6	39.1	1.1	8.0	6.8	47.0
1984	3.9	28.7	1.1	8.3	0.1	1.0	5.1	38.0	0.9	7.0	6.1	45.0
1985	3.8	24.8	1.1	7.3	0.2	1.0	5.0	33.1	0.9	5.9	5.9	39.0
1986	3.7	25.5	1.0	7.2	0.2	1.3	5.0	34.0	0.9	6.0	5.8	40.0
1987	3.8	26.3	1.2	7.9	0.2	1.3	5.2	35.6	1.1	7.8	6.3	43.3
1988	3.2	24.2	1.0	7.8	0.2	1.2	4.3	33.2	1.0	7.3	5.3	40.6
1989	2.7	22.1	1.1	9.4	0.4	3.1	4.2	34.6	0.8	6.7	5.0	41.3
1990	2.3	15.1	1.2	8.1	0.5	3.0	3.9	26.3	1.2	7.7	5.1	34.0

Source: Social Sector Study estimates (see Table 1.1 and Annex 17).

Table 3

EQUADOR
ACTUAL SOCIAL SECTOR EXPENDITURE BY MINISTRY
(Thousand Constant 1988 US\$)

	1980			1981			1982		
	RECURRENT	INVESTMENT	TOTAL	RECURRENT	INVESTMENT	TOTAL	RECURRENT	INVESTMENT	TOTAL
EDUCATION									
Pre-school & Primary	119,534	0	119,534	111,757	38	111,792	98,668	37	98,705
Middle School	92,311	337	92,648	85,252	13	85,268	80,457	31	80,488
Higher Education	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other	135,670	79,938	215,608	84,831	37,281	122,112	81,903	35,308	117,211
Sub-total	347,515	80,275	427,790	281,840	37,330	319,170	261,028	35,376	296,404
LABOR									
Employment promotion & Human Resources development	375	14	389	449	139	589	408	112	520
Other	1,678	237	2,115	1,951	1,299	3,250	1,558	848	2,404
Sub-total	2,254	251	2,505	2,400	1,438	3,838	1,965	950	2,924
HEALTH									
Nutrition & Prevention programs	539	26	565	1,007	114	1,120	2,002	39	2,041
Other	53,234	10,362	63,596	67,140	13,745	80,885	63,762	16,132	81,894
Sub-total	53,774	10,388	64,161	68,146	13,859	82,005	65,764	16,172	81,935
WELFARE									
Popular promotion programs	381	1	382	558	65	624	377	2,638	3,015
Child protection	3,018	94	3,110	3,315	90	3,405	2,959	750	3,709
Other	2,322	966	3,287	2,751	3,168	5,918	1,622	1,035	2,657
Sub-total	5,719	1,060	6,779	6,624	3,323	9,947	5,158	4,424	9,581
TOTAL	409,261	91,974	501,235	359,011	55,950	414,961	333,914	58,930	392,845

	1983			1984			1985		
	RECURRENT	INVESTMENT	TOTAL	RECURRENT	INVESTMENT	TOTAL	RECURRENT	INVESTMENT	TOTAL
EDUCATION									
Pre-school & Primary	87,568	0	87,568	84,778	8	84,786	87,714	2	87,717
Middle School	74,470	58	74,528	74,072	32	74,104	79,400	87	79,487
Higher Education	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	40,400	7,778	48,178
Other	77,288	18,313	95,601	68,932	20,568	89,498	21,773	16,135	37,908
Sub-total	239,306	18,371	257,676	227,781	20,607	248,388	229,287	24,002	253,289
LABOR									
Employment promotion & Human Resources development	357	69	426	333	114	447	318	59	374
Other	1,302	609	2,112	1,856	48	1,403	1,336	108	1,444
Sub-total	1,659	678	2,338	1,689	162	1,851	1,650	167	1,818
HEALTH									
Nutrition & Prevention programs	1,207	334	1,541	1,334	15	1,350	1,024	20	1,044
Other	86,951	17,132	104,083	83,636	16,810	100,446	53,172	19,754	72,926
Sub-total	88,158	17,466	105,625	84,972	16,825	101,798	54,196	19,774	73,970
WELFARE									
Popular promotion programs	315	828	1,143	311	336	647	254	473	728
Child protection	3,098	904	4,000	2,844	635	3,479	2,954	381	3,335
Other	1,488	5,045	6,533	1,041	1,632	2,673	3,590	598	4,177
Sub-total	4,917	6,777	11,694	4,196	2,604	6,800	6,838	1,452	8,290
TOTAL	304,089	43,486	347,575	286,638	40,198	326,836	291,970	45,396	337,366

(Cont'd)

Table 3
(cont'd)EQUADOR
ACTUAL SOCIAL SECTOR EXPENDITURE BY MINISTRY
(Thousand Constant 1988 US\$)

	1986			1987			1988		
	RECURRENT	INVESTMENT	TOTAL	RECURRENT	INVESTMENT	TOTAL	RECURRENT	INVESTMENT	TOTAL
EDUCATION									
Pre-school & Primary	89,568	0	89,568	83,250	0	83,250	82,134	0	82,134
Middle School	84,140	0	84,140	79,701	17	79,718	79,843	23	79,866
Higher Education	42,454	7,982	50,436	40,200	8,265	48,465	35,348	5,303	40,650
Other	20,273	11,773	32,046	21,471	15,545	37,016	20,129	8,975	29,104
Sub-total	236,435	19,735	256,170	224,621	21,827	246,448	217,452	14,302	231,754
LABOR									
Employment promotion & Human Resources development	481	125	606	345	8	351	304	2	306
Other	1,542	109	1,651	1,442	217	1,659	2,007	34	2,041
Sub-total	2,023	233	2,256	1,787	222	2,009	2,311	37	2,347
HEALTH									
Nutrition & Prevention programs	1,301	30	1,330	953	23	976	5,518	146	5,664
Other	82,847	7,897	90,744	58,313	14,788	73,101	51,059	17,938	68,995
Sub-total	84,148	7,927	92,075	59,266	14,811	74,077	56,577	18,082	74,659
WELFARE									
Popular promotion programs	315	219	535	236	33	269	218	141	359
Child protection	3,169	488	3,657	3,396	60	3,456	3,028	164	3,192
Other	2,364	3,774	6,138	1,818	5,097	6,915	1,489	4,021	5,510
Sub-total	5,849	4,481	10,330	5,250	5,191	10,441	4,735	4,326	9,061
TOTAL	306,453	32,376	340,830	290,925	42,051	332,976	281,075	36,747	317,821

	1989 1/			1990 3/		
	RECURRENT	INVESTMENT	TOTAL	RECURRENT	INVESTMENT	TOTAL
EDUCATION						
Pre-school & Primary	68,944	0	68,944	50,157	0	50,157
Middle School	84,480	164	84,644	80,385	322	80,707
Higher Education	31,472	4,442	35,914	30,821	3,742	34,563
Other	20,056	9,478	29,534	27,770	9,877	37,647
Sub-total	184,952	14,082	199,034	159,113	13,941	173,054
LABOR						
Employment promotion & Human Resources development	326	29	355	281	84	365
Other	1,738	250	1,988	2,372	185	2,557
Sub-total	2,064	279	2,343	2,653	269	2,922
HEALTH						
Nutrition & Prevention programs	--	--	-- 2/	--	--	-- 2/
Other	--	--	-- 2/	--	--	-- 2/
Sub-total	56,028	28,564	84,592	50,581	42,089	92,670
WELFARE						
Popular promotion programs	249	147	396	580	782	1,362
Child protection	3,115	266	3,381	3,805	337	4,142
Other	17,154	4,636	21,790	22,980	3,328	26,308
Sub-total	20,518	5,049	25,567	27,365	4,447	31,812
TOTAL	263,582	47,974	311,556	230,712	60,746	300,458

1/ Actual expenditure (provisional figures).
 2/ Program budget classification was modified.
 3/ Coded Budget to April 30.

Table 4
Ecuador
ACTUAL SOCIAL SECTOR EXPENDITURE OF THE PUBLIC INSTITUTES
(Thousand of Constant 1988 US\$)

	1986			1987			1988		
	RECURRENT	INVESTMENT	TOTAL	RECURRENT	INVESTMENT	TOTAL	RECURRENT	INVESTMENT	TOTAL
EDUCATION									
SNALME	121	458	578	127	484	612	124	427	551
Inst. Nal. de Patrimonia Cultural	190	64	253	219	213	431	217	275	492
Casa Cult. Ec. Benj. Carrion	885	668	1,553	757	801	1,558	744	1,320	2,064
Orquesta Sinfonica Nacional	163	1	164	194	2,161	2,355	1,417	4,846	6,263
DINACE									
LABOR									
INEM	32	66	98	40	73	113	50	2	52
UNEPROM				98	2	100	85	101	187
SECAP	2,284	385	2,669	2,244	2,488	4,733	1,635	3,741	5,376
HEALTH									
SNEM	2,512	14	2,526	2,929	16	2,947	2,550	46	2,596
Inst. Nal. Leopoldo Izquierda	2,202	89	2,291	2,232	94	2,325	1,909	79	1,988
IEDS	1,893	15,642	17,535	2,044	23,049	25,093	2,267	21,214	23,501
WELFARE									
SEDRI	599	7,440	8,039	544	10,360	10,924	464	8,732	9,197
TOTAL	10,880	24,825	35,706	11,429	39,742	51,171	11,432	40,766	52,218
	1989								
	RECURRENT	INVESTMENT	TOTAL						
EDUCATION									
SNALME	128	375	503						
Inst. Nal. de Patrimonia Cultural	165	372	537						
Casa Cult. Ec. Benj. Carrion	721	1,106	1,827						
Orquesta Sinfonica Nacional	174	24	198						
DINACE									
LABOR									
INEM	225	20	245						
UNEPROM	55	81	136						
SECAP	2,108	4,465	6,573						
HEALTH									
SNEM	2,286	4	2,290						
Inst. Nal. Leopoldo Izquierda	1,280	58	1,338						
IEDS	2,162	22,647	24,809						
WELFARE									
SEDRI	592	14,257	14,850						
TOTAL	9,891	43,600	53,491						

Table 5

ECUADOR
ACTUAL UNIT COST, BY SECTOR AND BY PROGRAM, 1980-1990
(CONSTANT 1988 US\$)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
	----	----	----	----	----	----	----	----	----	----	----
EDUCATION											
Pre-school & Primary	78.01	69.14	59.87	51.28	48.24	49.99	48.69	44.49	42.20	49.20	39.49
Middle School	172.10	161.08	138.04	120.15	113.96	112.62	116.45	107.09	104.58	117.02	95.28
Higher Education	n.d.	n.d.	n.d.	n.d.	n.d.	139.37	131.39	109.10	292.42	352.87	350.98
Other	93.39	50.81	46.81	38.62	485.29	176.54	129.69	122.95	87.20	112.11	128.05
Sub-total	341.50	271.03	242.22	208.00	847.48	478.53	426.43	383.63	526.39	631.00	622.61
LABOR											
Employment promotion & Human Resources development	0.14	0.21	0.18	0.14	0.15	0.12	0.19	0.10	0.09	0.11	0.10
Other	0.79	1.17	0.84	0.71	0.46	0.46	0.51	0.50	0.59	0.49	0.62
Sub-total	0.93	1.38	1.02	0.88	0.61	0.58	0.70	0.60	0.68	0.60	0.78
SECAP	11.64	25.09	16.05	17.95	9.81	13.62	9.65	15.65	17.79	8.68	n.d.
HEALTH											
Nutrition & Prevention program	0.07	0.13	0.24	0.17	0.15	0.11	0.14	0.10	0.56	0.41	0.40
Other	7.63	9.67	9.52	8.37	7.73	7.78	7.33	7.37	6.78	7.15	6.78
Sub-total	7.90	9.81	9.76	8.54	7.88	7.89	7.47	7.47	7.32	7.56	7.18
IESS	1.90	2.20	2.29	1.91	1.73	0.93	1.62	2.53	2.30	2.02	n.d.
IESS											
Medic. Oper.	53.94	58.74	58.21	48.85	36.56	38.62	29.91	29.78	27.24	20.47	26.51
Med. Subsidy	3.81	3.55	3.28	2.37	1.75	1.55	1.18	1.46	1.14	0.77	0.75
Sub-total Medic. IESS	57.75	62.29	61.49	49.02	38.32	40.17	31.09	31.23	28.38	21.24	27.26
										0.00	0.00
WELFARE											
Popular promotion programs	0.06	0.07	0.35	0.18	0.07	0.08	0.06	0.03	0.04	0.09	0.11
Child protection	288.73	257.59	273.95	288.44	244.93	229.26	245.45	226.46	204.23	237.43	242.79
Other	0.40	0.71	0.33	0.74	0.29	0.45	0.64	0.68	0.54	1.32	2.38
Sub-total	289.19	258.37	274.64	289.31	245.29	229.78	246.14	227.16	204.80	238.84	245.26

ECUADOR
MINISTRY OF EDUCATION
Expenditure by Program
(1)

	1985	1986	1987	1988	1989 1/
Central Activity, Direction and General Administration Budgeted credit and contributions to ascribed agencies	1.9	1.8	2.2	1.9	5.2
Provincial education administration	3.8	3.4	3.7	3.8	4.6
Pre-school and primary education	35.4	35.5	34.8	35.8	32.3
Secondary school	32.1	33.5	33.3	34.8	31.7
Higher education	19.4	20.1	19.4	17.7	19.0
Permanent popular education	1.0	1.2	1.0	1.1	1.5
Construction and equipment for schools and sports centers	5.3	3.4	4.5	3.6	4.6
Cultural development	1.1	1.1	1.1	1.3	1.1
Total Sector	100.0	100.0	100.0	100.0	100.0

ECUADOR
MINISTRY OF LABOR AND HUMAN RESOURCES
Expenditure by Program
(2)

	1985	1986	1987	1988	1989 1/
Central Activity, Direction and General Administration	28.9	26.5	26.0	19.5	24.5
Administration and labor mediation	28.8	24.3	26.7	18.9	32.3
Employment promotion and human resources development	20.6	26.8	17.7	13.1	18.8
Budgeted credit and contributions to ascribed agencies	21.7	22.4	29.6	48.5	24.4
Total Sector	100.0	100.0	100.0	100.0	100.0

Source: Social Sector Study estimates, based on Ministry of Finance data.

1/ Coded Budget

Sources and Notes:

- 1). Gastos de los Ministerios: Fuente: Ministerio de Finanzas, Presupuesto del Estado; 1980-1988: Gasto Efectivo; 1989: Presupuesto Codificado a 30 de agosto; 1990: Presupuesto Aprobado (inicial)
- 2). Educación Superior : 1985-1990 : Ministerio de Finanzas, Presupuesto del Estado (Véase Cuadro 1). Para 1980-1985 no es posible separar este renglón de "otros" en el presupuesto del MEC. Se incluyen sólo las transferencias que figuran en el Presupuesto Nacional, pues algunas, cuya cuantía no fué posible determinar sino para el año 1987, parecen ir directamente al Fondo de Universidades; en efecto, según la Subsecretaría del Tesoro y el Banco Central del Ecuador, Dirección Central de Estadísticas Presupuestarias, el total de transferencias efectivas para Universidades y Escuelas Politécnicas en 1987 fué de s/14'546.278.000 a comparar con los s/13.829'054.000 del presente cuadro.
- 3). SECAP : Dirección de Planeación; 1980-1989 : las "transferencias de presupuesto" son su valor efectivo total; bajo "con ingresos propios" se incluyen gastos con cargo al impuesto del 0.5% sobre nómina, superávit y "otros"; el rubro se calculó por diferencia entre gasto total y transferencias de presupuesto; en 1981 se incluye la contrapartida del préstamo BID; en 1986, 88 y 89 se incluyen préstamos BEDE.
- 4). Ministerio de Salud, Discriminación por programas 1985-1989 --- Datos de la Dirección de Presupuesto del Ministerio.
- 5). IEOS : Dirección de Presupuesto. En "transferencias presupuestales" se incluyen las partidas subvención fiscal para funcionamiento (No.30-120-100) y subvención fiscal para inversiones (No.30-200-100); no se incluyen depósitos de otras entidades públicas, aportes con destinación especial ni fondos con interés regional. 1980-1988 : Transferencia efectiva; 1989 : asignación original. El rubro de gastos financiados "con otros

ingresos" se calculó por diferencia entre el gasto total y las transferencias presupuestales.

6). IESS : Departamento de Control y Evaluación Presupuestaria. 1980-1985 : Balances Generales; 1986-1989 : Ejecución Presupuestaria; 1990 : Proforma Presupuestaria.

4. Cobertura. No se incluye : a) El gasto de los hogares; b) El gasto público financiado con ingresos propios de las provincias y municipios, ni c) El gasto en educación, capacitación de recursos humanos, salud y "bienestar" que efectúan otros ministerios, en especial el de Defensa. Las dos últimas categorías de gasto parecen sin embargo de muy poca importancia dentro del gasto público social total (menos del 5%).

Por lo demás, debido a que las fuentes son independientes y sus sistemas de clasificación no comparables estrictamente, puede haber algunas sumas incluidas tanto bajo "IEOS-transferencias presupuestales" como bajo "MSP-otros"; esta doble contabilización podría estar, como máximo, y según el año, entre un 3 y un 6% de las transferencias al IEOS.

- 7) Educación Preescolar, Primaria y Media : Número de Alumnos según MEC, Estadísticas de la Educación.
- 8) Educación Superior : Según UNESCO, el número de matriculados en 1983 era de 280.599 y la matrícula aumentó entre 1978 y 1983 al 11% anual. (Desarrollo Educativo. Problemas y Prioridades, 1986). A falta de otra información, se extrapoló la serie completa. Debe además señalarse que se habla de una sobreestimación cercana a 1/3 en el número de estudiantes universitarios, lo cual por supuesto elevaría proporcionalmente el costo unitario del Cuadro 8.
- 9) Para los "otros" programas educativos se toma el total de estudiantes.
- 10) Trabajo : Población Económicamente Activa Total 1983-1987 según BCE, Boletín anuario No. 10, 1987; 1980-82 y 1983-90 : proyectada por regresión.
- 11) SECAP : Dirección de Planeación, número total de horas de formación impartida.

**PRIMARY SCHOOL ENROLLMENT AND ANNUAL GROWTH RATE
TOTAL AND BY URBAN RURAL ZONES**

School Year	Students			Growth		
	TOTAL	URBAN	RURAL	TOTAL	URBANA	RURAL.
1982-1983	1,633,516	807,971	825,545			
1983-1984	1,635,671	832,290	803,381	0.13%	3.01%	-2.68%
1984-1985	1,700,755	869,033	831,722	3.98%	4.41%	3.53%
1985-1986	1,737,241	893,467	843,774	2.15	2.81	1.45%
1986-1987	1,785,426	920,231	865,195	2.77%	3.00%	2.54%
1987-1988	1,817,463	944,489	873,351	1.79%	2.64%	0.94%
1988-1989	1,897,829	993,605	904,224	4.42%	5.20%	3.54%
1989-1990	1,843,519	992,189	851,330	-2.86%	-0.14%	-5.85%

Primary School Enrollment, Repetition and Dropout
1989 - 90

ALUMNOS MATRICULADOS, NUEVOS, PROMOVIDOS, NO PROMOVIDOS, Y DESERTORES, POR GRADOS, SEXO SEGUN PROVINCIAS
DATOS DEFINITIVOS

TOTAL NACIONAL	COMPOSICION DE LA MATRICULA	GRADOS														
		TOTAL			PRIMERO		SEGUNDO		TERCERO		CUARTO		QUINTO		SEXTO	
		TOTAL	URBANO	RURAL	URBANO	RURAL	URBANO	RURAL	URBANO	RURAL	URBANO	RURAL	URBANO	RURAL	URBANO	RURAL
1982-1983	Matr. Neta	1,633,616	607,971	626,646	171,673	223,363	142,186	163,492	136,162	138,627	127,660	118,404	119,907	98,601	111,473	83,168
	Nuevos	1,487,969	767,639	730,460	166,889	166,034	130,722	140,646	126,224	124,144	119,694	108,190	116,101	92,827	108,909	79,609
	Promovidos	1,419,746	722,668	697,188	147,061	170,326	124,811	134,947	121,271	119,384	114,264	104,290	110,211	89,670	104,970	78,672
	No Promovidos	127,413	61,496	76,917	13,690	31,169	11,641	18,916	8,641	11,600	8,790	8,336	6,823	4,360	2,921	1,296
	Desertores	66,357	33,917	62,440	10,842	21,849	6,744	9,629	6,240	7,343	4,636	6,779	3,873	4,661	3,662	3,290
1983-1984	Matr. Neta	1,636,671	632,290	603,381	176,216	209,036	146,746	164,621	138,196	136,782	132,792	117,463	122,942	99,991	116,339	86,288
	Nuevos	1,496,982	781,799	714,183	160,317	173,924	136,610	133,874	129,376	121,676	126,027	107,620	117,847	94,106	113,723	82,984
	Promovidos	1,437,880	766,662	682,318	163,082	161,474	131,113	129,766	126,862	117,080	120,363	103,206	114,194	90,607	110,948	81,186
	No Promovidos	110,246	40,606	69,640	11,231	28,036	9,414	16,704	6,914	11,169	7,200	8,066	4,309	4,406	1,637	1,270
	Desertores	87,646	36,123	61,423	10,903	19,627	6,218	9,361	6,420	7,643	6,229	6,192	4,439	4,978	3,914	3,832
1984-1985	Matr. Neta	1,700,766	669,030	631,722	186,968	226,337	163,460	169,646	144,164	136,617	137,149	120,927	129,699	102,284	119,613	89,012
	Nuevos	1,661,966	818,042	743,913	171,019	190,661	142,180	139,136	136,208	122,286	129,139	110,947	123,637	96,384	116,969	86,611
	Promovidos	1,606,628	786,180	710,248	163,608	174,196	136,162	133,066	132,776	117,977	126,678	107,144	120,271	93,401	114,686	84,666
	No Promovidos	114,216	39,869	74,366	11,637	31,473	9,441	17,614	6,649	11,230	6,802	8,299	4,264	4,491	1,166	1,260
	Desertores	81,012	33,994	47,018	10,713	19,668	6,847	7,866	4,839	6,410	4,669	6,486	4,164	4,392	3,762	3,197
1985-1986	Matr. Neta	1,737,241	693,467	643,774	190,670	224,036	161,180	161,376	147,637	139,068	140,646	120,761	131,190	106,831	122,244	92,713
	Nuevos	1,603,444	844,263	769,181	176,777	191,034	147,931	143,766	139,884	126,361	133,363	110,296	126,773	99,823	119,636	88,913
	Promovidos	1,660,409	827,629	732,880	171,236	181,488	146,682	134,118	137,606	123,636	130,123	107,666	124,217	97,846	117,667	88,139
	No Promovidos	96,966	33,319	63,666	9,223	23,960	8,944	17,381	6,221	9,247	6,049	7,916	2,921	3,801	961	1,362
	Desertores	79,847	32,618	47,228	10,112	18,689	6,664	9,876	4,811	6,176	4,474	6,191	4,062	4,186	3,616	3,212
1986-1987	Matr. Neta	1,766,426	620,231	666,196	196,723	224,837	164,269	169,306	163,424	143,106	144,991	124,924	134,329	107,228	126,606	96,794
	Nuevos	1,669,838	872,679	794,269	183,223	198,662	163,747	161,141	146,776	132,092	137,983	116,667	127,906	104,684	123,946	93,123
	Promovidos	1,607,409	862,181	766,228	176,229	186,917	149,179	141,668	143,030	126,337	134,286	110,862	127,699	99,210	121,869	90,944
	No Promovidos	99,227	36,078	64,149	9,906	20,809	9,467	17,966	6,478	10,732	6,369	9,109	2,900	3,896	941	1,668
	Desertores	78,790	32,972	46,818	10,669	18,111	6,613	9,393	4,918	6,037	4,347	4,963	3,830	4,132	3,706	3,192
1987-1988	Matr. Neta	1,824,490	671,842	662,648	203,640	217,393	173,183	166,364	163,666	142,603	166,667	124,861	142,839	107,746	132,828	94,691
	Nuevos	1,710,127	930,698	779,429	189,619	192,180	169,199	148,670	166,191	133,007	147,926	117,406	138,649	103,797	130,216	84,499
	Promovidos	1,663,623	901,263	762,370	182,876	179,247	167,348	141,189	162,490	128,102	144,683	112,660	136,600	100,626	128,367	90,467
	No Promovidos	97,676	37,879	69,797	10,612	22,419	9,911	16,926	6,144	8,686	6,684	7,327	3,496	3,396	1,032	1,146
	Desertores	73,191	32,710	40,481	10,163	16,727	5,924	7,240	4,961	6,916	4,400	4,684	3,843	3,826	3,439	3,088
1988-1989	TOTAL	1,897,829	430,863	349,887	319,946	292,637	263,196	241,291								
	URBANO	993,606	107,778	176,699	166,861	169,647	146,604	132,026								
	RURAL	904,224	223,086	173,188	163,086	133,990	117,691	109,266								

FUENTE: DIRECCION NACIONAL DE PLANEAMIENTO
ELABORADO POR: Ivan Davila

Table 3

Enrollment by Age and Grade
and Enrollment Ratios
1983 and 1984

Edad	Matriculas por edades y grados						TOTAL	Poblac. edad 7	Tasa Escol
	Primer	Segundo	Tercer	Cuarto	Quinto	Sexto			
4	0	0	0	0	0	0	0	260000	0.0%
5	25026	10	0	0	0	0	23036	257560	9.7%
6	186250	15998	10	0	0	0	202258	251431	80.4%
7	99754	124067	12900	44	0	0	236765	245895	96.3%
8	39325	82492	104135	12574	34	1	238561	240832	99.1%
9	16400	38329	72128	93079	9473	17	229426	256118	97.2%
10	8302	19625	39523	65137	75568	6355	214310	231748	92.5%
11	3859	9644	21119	34677	62892	53745	186136	227711	81.7%
12	2420	5576	11818	20678	35616	61916	138026	223310	61.8%
13	1208	2728	6268	11959	19662	39060	80885	218192	37.1%
14	735	1523	3012	6574	10552	20635	42831	212379	20.1%
15	414	684	1593	3119	5541	10858	22209	207128	10.7%
16	259	388	672	1414	2295	6600	11628	201802	5.8%
17	150	250	350	600	900	2000	4250	196041	2.2%
18	80	140	240	200	400	900	1960	189662	1.0%
19	70	60	120	100	100	400	850	182919	0.5%
20	0	50	50	50	50	100	300	176225	0.2%
21	0	0	40	30	25	50	145	169463	0.1%
22	0	0	0	20	15	25	60	163162	.0%
23	0	0	0	0	10	15	25	157612	.0%
24	0	0	0	0	0	10	10	152777	.0%
25	0	0	0	0	0	0	0	0	0.0%
26+	0	0	0	0	0	0	0	0	0.0%
1983	384252	301566	273978	250255	222933	202687	1635671	2867090	56.7%
	Tasa bruta de escolarización en el año:							1983 es:	114.1%
	Tasa neta de escolarización en el año:							1983 es:	91.2%
Edad	Matriculas por edades y grados						TOTAL	Poblac. edad 7	Tasa Escol
	Primer	Segundo	Tercer	Cuarto	Quinto	Sexto			
4	0	0	0	0	0	0	0	265000	
5	33361	11	0	0	0	0	33372	263027	
6	192602	22124	4	0	0	0	214730	256485	83.7%
7	101309	123981	18575	22	0	0	243887	250609	97.3%
8	46243	81627	103519	17088	10	1	248488	245281	101.3%
9	17778	40931	74796	90738	13491	9	237763	240381	98.9%
10	9468	20675	38280	68584	76564	8763	222334	235866	94.3%
11	4619	9871	20758	38692	61797	56494	192231	231688	83.0%
12	2686	6306	11293	19934	38363	62301	140885	227359	62.0%
13	1574	2850	6018	11106	19918	36247	79513	226614	35.1%
14	790	1745	3209	6287	11233	21577	44641	217555	20.5%
15	410	883	1648	3102	5481	11020	22544	212642	10.6%
16	455	671	1181	1523	3126	5407	12363	207892	5.9%
17	200	300	300	500	1000	3000	5500	202502	2.6%
18	0	0	200	300	0	1500	2000	196152	1.0%
19	0	0	0	200	0	350	550	189208	0.3%
20	0	0	0	0	0	150	150	182353	0.1%
21	0	0	0	0	0	0	0	175449	0.0%
22	0	0	0	0	0	0	0	168913	0.0%
23	0	0	0	0	0	7	7	163021	.0%
24	0	0	0	0	0	0	0	137587	0.0%
84	411295	311995	279781	258076	230983	208625	1700755	2990230	56.9%

Source: E. Schiefelbein, "Ecuador: Acceso, Permanencia, Repeticion y Eficiencia en la Educación Basica", UNESCO / OREALC, 1989

Retention and Efficiency of the 1984
Primary Education Cohort

1984 Trayectoria y Eficiencia de una Cohorte de Primaria								
Anios	Primero	Segundo	Tercero	Cuarto	Quinto	Sexto	Total Graduados	
1984	1000	0	0	0	0	0	1000	
1985	318	620	0	0	0	0	938	0
1986	101	316	453	0	0	0	870	0
1987	32	123	325	338	0	0	819	0
1988	10	44	158	311	264	0	787	0
1989	3	15	65	180	281	220	764	0
1990	1	5	24	85	162	256	553	198
1991	0	2	9	35	93	177	315	231
1992	0	1	3	13	41	95	153	159
1993	0	0	1	5	16	44	66	85
1994	0	0	0	2	6	18	26	39
1995	0	0	0	1	2	7	10	16
1996	0	0	0	0	1	3	4	6
1997	0	0	0	0	0	1	1	2
1998	0	0	0	0	0	0	0	1
1999	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0

Anos - alumnos	1466	1125	1038	970	887	821	6307	739
Desertores	91	88	46	18	19	0	261	
% de desertores	6.2%	7.8%	4.4%	1.9%	2.1%	0.0%	4.1%	
Desertaron de cohorte	9.1%	17.9%	22.4%	24.3%	26.1%	26.1%	26.1%	
Promovidos	909	821	776	757	739	739	4740	
Anos repetidos	466	216	217	194	129	82	1305	
% de Repeticion	31.6%	19.2%	20.9%	20.0%	14.6%	10.0%	20.7%	
Escolarid por promovi	1.6	1.4	1.3	1.3	1.2	1.1	1.3	
% Extra edad:								
Uno o mas anos	31.6%	44.9%	56.4%	65.1%	70.2%	100.0%	57.6%	
Dos o mas anos	10.1%	16.8%	25.1%	33.1%	38.5%	73.2%	29.5%	
Tres o mas anos	3.2%	5.8%	9.8%	14.5%	18.0%	42.0%	13.6%	
RESUMEN DE PROMEDIOS OBSERVADOS EN EL SISTEMA ESCOLAR:								
Porcentaje de alumnos que se graduan en la cohorte:								73.9%
Anios alumnos que tosa al sistema en promedio cada graduado:								8.5
Anios que cada alumno permanece en primaria (escolaridad media):								6.3
Grados que aprueba cada alueno en su paso por la escuela:								4.7
Eficiencia bruta (considera los desertortes como ineficiencia):								75.2%
Eficiencia neta (solo considera repeticion como ineficiencia):								79.3%

Enrollment by Age by Grade in Urban and Rural Zones

MATRICULA POR EDAD

1988-1987

MATRICULA TOTAL

EDAD	TOTAL NACIONAL	PRIMER GRADO			SEGUNDO GRADO			TERCER GRADO			CUARTO GRADO			QUINTO GRADO			SEXTO GRADO	GRADO	
		TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL		TOTAL	URBAN	RURAL
5	31.987	31.984	19.518	12.466	3	2	1	0			0			0			0		
6	235.447	199.798	103.984	95.814	35.637	18.480	17.157	12	8	4	0			0			0		
7	268.005	113.447	47.634	65.813	125.405	66.524	58.881	29.109	18.603	10.506	44	13	31	0			0		
8	263.470	45.611	15.326	30.285	85.582	41.770	43.812	104.828	58.037	46.791	27.421	16.266	11.155	27	14	13	1	1	
9	249.826	16.830	6.072	10.758	42.734	18.315	24.419	75.943	38.037	37.906	94.312	55.552	38.760	19.971	13.582	6.389	36	18	18
10	235.027	6.826	1.856	4.970	22.671	10.122	12.549	41.892	17.733	24.159	71.786	36.347	35.439	77.059	50.454	26.605	14.193	10.812	3.981
11	207.711	3.320	1.089	2.231	11.995	5.516	6.479	22.214	10.750	11.464	36.360	17.647	18.713	70.663	36.775	33.888	63.159	42.664	20.495
12	145.462	1.845	517	1.328	4.459	1.653	2.806	12.612	5.727	6.885	20.633	10.342	10.291	38.927	17.058	21.069	58.586	38.884	28.102
13	74.396	846	198	648	2.577	925	1.652	5.232	2.566	2.666	10.770	5.079	5.691	17.349	7.625	9.724	37.622	16.137	21.405
14	40.359	414	127	287	1.321	373	948	2.608	1.055	1.553	4.734	2.078	2.656	10.505	4.626	5.879	20.777	9.520	11.257
15	19.747	274	134	140	586	201	385	1.189	442	747	2.202	911	1.291	4.243	1.896	2.347	11.253	5.198	6.055
16	13.989	365	268	97	595	378	217	891	466	425	1.853	756	897	2.813	1.499	1.314	7.672	3.271	4.401
TOTAL	1.785.426	421.560	196.723	224.837	333.565	164.259	169.306	296.530	153.424	143.106	268.915	144.991	124.924	241.557	134.329	107.228	222.299	126.505	95.794

RESULTS OF EVALUATIONS OF STUDENT LEARNING
IN A SMALL SAMPLE OF URBAN AND RURAL SCHOOLS

	<u>URBAN SCHOOLS</u>		<u>RURAL SCHOOLS</u>		
	<u>Private</u>	<u>Public</u>	<u>Single- Teacher</u>	<u>Multi- Teacher Incompl.</u>	<u>"Complete"</u>
LANGUAGE: Percent of students scoring					
Excellent	7.5	5.0	0.0	0.0	0.0
Very Good	38.8	11.2	27.3	17.6	0.0
Good	26.3	10.0	12.1	8.1	8.3
Acceptable	13.8	18.8	6.1	25.0	33.3
Insufficient	13.8	55.0	54.5	48.6	58.3
MATHEMATICS: Percent of students scoring:					
Excellent	2.5	2.5	3.0	8.1	0.0
Very Good	17.5	5.0	18.2	6.8	0.0
Good	31.3	16.3	21.2	13.5	16.7
Acceptable	35.0	26.3	24.2	17.6	58.3
Insufficient	13.8	50.0	33.3	54.1	25.0

Source: ISOTEC/CIEDC "Diagnóstico de La Realidad Educativa Primaria Regular Rural," USAID, Quito: 1990 (Tables 64, 65 and 66).

ECUADOR
Average Monthly Income by Sector
based on Education Level
(Constant 1987 Sucres)

Education Level	Total	Formal Sector	Informal Sector	Formal/ Informal
None	10,829	11,722	13,842	84.7
Incomplete Primary	18,035	21,827	19,718	110.7
Complete Primary	22,456	25,375	22,458	113.0
Incomplete Secondary	24,168	27,134	21,057	128.9
Complete Secondary	36,368	37,867	31,152	121.6
Incomplete Higher	43,428	45,266	32,208	140.5
Complete Higher	67,744	67,017	55,578	120.6
Total Average	33,236	39,126	24,737	158.2

Source: J. Mezzara & R. Pisoni, El Mercado de Trabajo Urbano en el Ecuador, PREALC-OIT, 1989.

PRIVATE AND SOCIAL RATES OF RETURN
TO EDUCATION IN ECUADOR, 1987

<u>Level of Education</u>	(percent)		<u>Social Rates of Return</u>
	<u>Private Rates of Return</u>		
	<u>Private Sector</u>	<u>Public Sector</u>	
Primary (vs. less than primary)	12	32	11.5
Secondary (vs. primary)	10	3	9.0
Higher (vs. secondary)	18	10	12.0

Source: Gomez-Castellanos, Luisa and George Psacharopoulos, "Earnings and Education in Ecuador: Evidence from the 1987 Household Survey". Washington: World Bank, 1989, Tables 7 and 9.

ECUADOR
Employed Population by Sector and Sex
1987.

	QUITO		GUAYAQUIL		CUENCA	
Total	451,078	100%	618,537	100%	79,211	100%
Female	182,835	100%	214,307	100%	33,928	100%
Male	268,243	100%	404,230	100%	45,283	100%
Urban Formal Sector	267,900	59.4%	308,622	49.9%	39,214	50.3%
Female	86,465	47.3%	87,522	40.8%	12,676	38.9%
Male	181,435	67.6%	221,100	54.7%	26,538	58.6%
Informal Sector	183,178	40.6%	309,915	50.1%	39,997	51.3%
Female	96,370	52.7%	126,785	59.2%	21,252	65.2%
Male	86,808	32.4%	183,130	45.3%	18,745	41.4%

Source: INEM, Encuesta Permanente de Hogares y Empleo, 1987.

ECUADOR
Employment Levels

	Total Population Employed (Thousand)		Employed by Public Sector (%)	
	Urban	Total	Urban	Total
1974	64.3	73.5	8.3	3.9
1982	247.5	316.4	21.6	14.1
1986/87	195.2		18.4	

Source: World Bank, Ecuador-Country Economic Memorandum, 1988.

TEACHERS AND SCHOOL ENROLLMENT BY EDUCATIONAL LEVEL AND GENDER,
1989/90

	<u>Preschool</u>		<u>Primary</u>		<u>Secondary</u>	
	Male	N %	N %	N %	N %	
Teachers	Male	528 9.6	20931 34.5	33862 57.7		
	Female	4949 90.6	39703 65.5	24849 42.3		
Students	Male	56672 49.6	940435 51.0	393405 49.6		
	Female	57510 50.5	903084 49.0	398892 50.4		

Source: Estadísticas de la Educación. Datos Iniciales, 1989-90.
MEC-Departamento Nacional de Planeamiento.

TABLE 11
ECONOMIC SECTOR AND OCCUPATIONAL DISTRIBUTION BY
GENDER OF HOUSEHOLD HEAD
(percentage)

	<u>Females</u>	<u>Males</u>
<u>Economic Sector</u>		
Modern	38.8	60.9
Informal	44.8	35.5
Agr./Domes. Service	16.5	3.6
<u>Occupational Category</u>		
Owner	8.0	13.5
Self-employed	34.2	23.9
Government employees	16.1	21.1
Private employees	23.4	40.8
Unpaid Family workers	3.2	--
Paid Apprentices	--	0.2
Agr./Domes. Service	15.2	0.4

Source: INEM, Household Survey: Quito, Guayaquil, and Cuenca, 1987.

TABLE 12
QUITO: EMPLOYMENT BY GENDER AND ESTABLISHMENT SIZE, 1985
(percentage)

<u>Size of Establishment</u>	<u>Male</u>	<u>Female</u>
1-2 employees	25.7	47.7
3-9 employees	20.1	16.3
10-49 employees	18.0	13.3
50-99 employees	5.0	3.9
100+ employees	31.3	18.8
Total	100.1	100.0

Source: Instituto de Investigaciones Económicas. La Fuerza de Trabajo en Quito: Análisis Metodológico y Estructura Ocupacional, Quito, August 1986.

ANNEX 4: IMPROVING THE QUALITY OF BASIC EDUCATION
IN LOW-INCOME URBAN AREAS

1. The cornerstone of the program to improve quality of the nine-year basic education cycle in Ecuador is the creation of "school networks" in areas where the population is poor and school quality is low. The aim of these networks is to make sure that poor children have an opportunity not only to attend school but also to be able to take full advantage of this opportunity, overcome poverty-related barriers and learn effectively. The school network concept is essentially the same as what have been called "nuclear schools" in other countries. They are intended to be centers of excellence in themselves, but they will also be the focal point for quality-improvement activities in local networks of from 10 to 20 schools serving the same low-income neighborhoods. The Directors of the networks will be highly qualified educators who will be paid approximately the same as Principals of secondary schools ("Colegios") and who will be responsible not only for managing their centers of excellence but also for orchestrating the quality enhancement programs in their network of schools. Responsibility for professional supervision of the schools in their areas will be delegated to the Directors, together with budgets for non-salary expenditures. The budgets will be used for minor quality-enhancing expenditures (e.g. purchase of single copies of storybooks, or of pictures for classrooms) and for priority maintenance activities; they will be based upon enrollment in schools in the network and calculations of urgent needs for maintenance. Secondary schools have such budgets under present regulations but no primary schools do, nor do provincial education offices have any discretionary funds for such purposes.

2. The activities that will be headquartered at each hub school will include, in addition to the activities of a large (usually three-stream, nine-grade) school:

- In-service training for all teachers in the network of schools: actual training will be provided by professional trainers from the appropriate Pedagogical Institute (IPED) or the National Directorate of Pedagogical Training (DINACAPED);
- Peer-based professional supervision of schools in the network (relationships between supervision of teaching practices and other quality-related factors and supervision of administrative matters such as personnel and financial records will be coordinated with the provincial departments that have the latter responsibility);
- Distribution of textbooks provided under the project and training of teachers in how to use the new materials (Annex 5);
- Local administrative of the national system for assessing student learning (Annex 6);
- A preschool education program, to be offered on an experimental basis at the hub school that will provide technical advice and training to preschools in the network area and will evaluate the cost-effectiveness of alternative models for providing preschool education;

- A special education program that will identify children with learning difficulties, provide simple interventions or refer them to agencies that can help them overcome problems, and train teachers in their network of schools in how to deal with children with special needs in the classroom. The special education teams will include specialists in bilingual/intercultural education.
- Community organization activities designed to involve parents throughout the network area in the school's efforts to improve learning, inform them of their roles in encouraging their children in studying and learning, and to seek community participation in improving the school.

3. The school networks and the targeted quality-improvement program aim to make sure that children from low-income neighborhoods have a fair chance to learn; to help overcome handicaps that cause them to repeat, drop out in frustration or simply not learn the material. The program takes account of the problems of children whose parents may be illiterate, who are under pressure (both boys and girls) to work because their families need their economic contributions, whose culture makes it difficult for them to adapt to the culture of the school. For poor children in rural areas, government has sought and obtained a loan from the Inter-American Development Bank for a quality-improvement project in rural areas of the country, where poverty affects virtually all families. This proposed project would extend the program to urban areas where low-income families are concentrated. Total enrollment in the schools to be included in the project would be 345,000 or an estimated 75 percent of urban public enrollment in low-income areas. Ultimately the concept will be extended to all parts of the country, including areas where children from low-income families are more dispersed and cannot be attended to readily through the school network concept in its present form. (Planning to provide 100 percent coverage to all poor children will take place under the proposed project.)

4. One critical concern is the selection, training and support the network Directors will receive. School network Directors and Deputy Directors will be competitively selected from among the best Principals of primary or secondary schools, supervisors or other well-qualified individuals. The selection methodology has been developed and refined with international technical assistance and used successfully in selection of the first Directors under the IDB-financed rural project. Special training for Directors and Deputy Directors will be provided under the Training subcomponent of the project. Responsibility for the management of the hub school itself will be delegated to the Deputy Directors of each network who will report to the Director. The Directors will also count on the support of the teacher/manager in charge of the Special Education teams, the head teacher of the preschool program, the senior staff within the network of schools who are responsible for in-service training and textbook distribution and the (competitively selected) teacher in charge of coordination with communities and parent teacher associations in the network areas. Additional support from outside the networks will come from the Pedagogical Institute (IPED) staff conducting in-service training, and from Provincial supervisors responsible for budgeting, micro-planning and other administrative functions. Provincial supervisors may be detailed to

work with the school networks for periods ranging from a few days to several weeks. The school network Directors will coordinate and provide leadership for the multiple quality-improvement activities within their networks with extensive support from these sources.

5. Each hub school will have the following personnel, in addition to the classroom teachers and staff of a regular school providing nine grades of basic education:

- Director
- Deputy Director
- Community development coordinator (part time)
- Support personnel (4)
- Preschool staff (2 or 3, depending on size of the hub school)
- Special Educatio. Teams (Equipos psycho-pedagogicos) (5).

Teachers and principals of schools in the hub school's network will be selected to coordinate in-service training, distribution of textbooks, achievement testing in schools in the network and peer-based supervision.

6. Provision of physical infrastructure. The proposed project to cover low-income urban areas would provide 55 networks (See Annex 4, Table 1). Implementation of this project would take place in three phases. The first would cover 20 low-income areas in Quito and Guayaquil, where data have been available that made it possible to carry out detailed physical planning to identify low-income neighborhoods, schools that can serve as hub schools and nearby schools serving the low-income population that will form part of the network. The second phase will provide 23 networks in urban areas in the remainder of Guayas and Pichincha provinces, Esmeraldas, El Oro and Los Rios; the third phase would cover Carchi, Chimborazo, Loja, Manabi and Cañar. Annex 4, Table 2 shows enrollment in the hub schools and the schools in their networks, by phase of implementation and in total. The 55 school networks proposed have been chosen on the basis of detailed micro-planning efforts that identified low-income urban areas and the schools within those areas, gathered data on all the schools identified, chose one school in each area to become a center of excellence and serve as the headquarters for its network of schools, and gathered data on the size and condition of that school building. Criteria for choosing schools to be hub schools included location near the center of a low income barrio, fairly large size of the original school, and space to provide the additional facilities for the hub school. Cost estimates have been based on the information generated through micro-planning and on estimates of the costs of providing the necessary facilities for prototype schools and costs of rehabilitation and maintenance of schools in the networks. Beginning in the first full year of implementation and continuing during the second year, detailed planning would be carried out for all remaining hub schools using the enhanced planning capabilities of Provincial Education Departments resulting from the Institutional Strengthening component of the project and technical assistance. The establishment of school networks has already begun on a pilot basis in three areas with financing from the government's own resources. Implementation began in rural areas under the IDB project in July, 1991.

7. Teacher training will be provided to 12,700 teachers in the hub schools themselves and in network schools, and for 160 candidates for the positions of school network Director and Deputy Director. The curricula for teacher training have been developed as part of the IDB project to improve quality in the rural areas. The proposed project for urban low-income areas will make use of the processes and Teacher Training curricula and training materials already developed, with adaptations to suit the needs of low-income urban children, thus the main costs will be for delivering the training. Training will be carried out by teacher educators from DINACAPED and each Province's Pedagogical Institute (IPED).

8. The general design of the training program will incorporate the following:

Introduction for Teachers: concepts and philosophy of the quality improvement program; information about program services and subcomponents and ways teachers can take advantage of them, orientation to other elements in the training program.

Upgrading Teaching Skills: specialized training, for each level and specialty, in improved methods and modes of classroom organization and utilization of time, making use of new textbooks, lesson planning, materials preparation and related pedagogical skills;

Special Education: the Special Education team in each network will provide training on the role of the teams and how classroom teachers can deal with students with special needs and draw upon the resources of the teams and from outside the program.

Other Program Subcomponents: Teachers will receive training on how to make effective use of the various elements of the quality improvement program, including the textbook subcomponent, the nature and purpose of the student evaluation subcomponent, the role of the preschools and related issues.

Continuing Training at a Distance: both network Directors and teachers will receive materials on a continuing basis designed to provide additional content, refresh and upgrade skills and strengthen professional competences.

In addition to training for Directors and teachers, the training component will provide information to community leaders and parents on the quality improvement program and ways in which parents and the community can contribute to achieving its objectives. Monitoring and evaluation of the Training Component will be under the responsibility of the Training Expert of the PCU, who will draw on resources in DINACAPED, the IPEDs and technical assistance to develop and implement an evaluation of the effects of training on teachers' knowledge and teaching practices.

9. Preschools will be provided at each hub school a pilot basis. Preschools will have two or three classrooms at each hub school (depending on whether the hub school itself has 2 or 3 first grades). All of the 20 schools in Phase I of implementation will have 3 preschool classes, thus there will be 60 pre-school classrooms in the hub schools in Phase I, plus an estimated 105 classrooms in hub schools of Phases II and III. In virtually all cases these will be new classrooms. Total enrollment in the preschool classrooms provided by the project will be approximately 6,000, but an estimated total of 37,000

children per year will benefit indirectly from preschool improvements in existing public preschools in the zones of the 55 hub schools. The "model" of preschool education provided at the hub schools will be formal, classroom-based preschool education conducted by teaching professionals who, while trained, are not early childhood education specialists. One of the preschool teachers will be selected by the network Director to be Coordinator of the preschool program for the network. The coordinator will receive a salary increment and the Director will delegate to this teacher the responsibility for establishing a center of excellence and coordinating training for other preschool teachers throughout the network. The unit costs of preschool will be comparable to those of primary education. While Ecuador has interesting, low-cost models of non-formal preschool education and child care (and these alternatives will be studied as part of the project), the MEC is best able to provide more traditional forms of services. The objectives of the preschools will be:

- to demonstrate to other preschools in the network (public and private, formal and informal) how preschool education of good quality operates, what standards and practices are observed;
- to provide technical assistance and training to preschool teachers and directors in the network on specific aspects of preschool education, early-childhood pedagogical techniques, use of low-cost materials for intellectual stimulation of children, proper physical conditions for child care and other themes;
- to evaluate alternative models of preschool education, including their costs and the quality of services they provide, in order to inform national policies on how to offer preschool education to children in low-income urban neighborhoods on a feasible and cost-effective basis.

All preschools within the low-income neighborhoods served by the hub schools and their network of schools will be beneficiaries of the outreach activities of the preschool program. These activities will include training for public preschool teachers in the concepts of the quality improvement program and techniques for improving the quality of formal in-class preschool education. Materials, manuals and guides used in this training will be made available to all teachers in the networks (including teachers in formal and informal or "guaguahuasi" schools, both public and private). In addition teachers and preschool directors from private and informal schools will be invited to participate in short training courses and informational meetings appropriate to their different types of preschools, the content of which will be prepared at DINACAPED and the IPEDs. The content will focus on the stages of intellectual development of preschool children, forms of intellectual stimulation and preparation for formal schooling appropriate to their ages, the concept of readiness to enter grade one and the purpose of testing for readiness and the test instruments that can be used. These types of training will be organized by the preschool Coordinator. Finally, personnel from all types of preschools will be invited to observe preschool classes at the hub schools and to raise questions and seek advice from the Coordinator and preschool teachers. An evaluation of the preschool subcomponent will be based upon (a) observation of preschools of all types or "models" in a sample of network areas and the categories and quality of services they provide, (b) sample-based application of a test of readiness of preschool children for

grade one at the end of the preschool year, (c) use of data from the Educational Assessment System to evaluate the achievement of second grade students who attended different types of preschool or no preschool, and (d) data on the costs of alternative models of preschool education.

10. Special Education teams (Equipos Psicopedagógicos) will report to the Directors of the school networks. One member of each team will be designated Coordinator of the team's activities and will assume responsibility for programming its visits, screening and other services, arranging for transportation to schools within the network, and integrating the team's teacher training activities with the broader in-service teacher training program. Each team will be composed of:

- Psychologist: university-level professional
- Special Education specialist: university-level professional
- Speech therapist: university-level professional and specialist
- General Educator: one for each 5 to 6 schools in the network, trained in special education; one of these, who must be bilingual in Quichua, will specialize in diagnosing and dealing with bilingual/bicultural education issues and problems
- Social Worker: specialist in social services (knowledge of referral arrangements) with post-secondary training.

In general the teams will operate as mobile units, visiting classrooms in network schools, conducting screenings, working with children with special needs, observing how teachers cope with differences in children's levels of advancement and with disabilities, and providing coaching, demonstrations and training in how to deal with diversity in the main stream classroom. Each network will have appropriate vehicles that will enable the SE teams to visit the schools in the network, as well as budgets for fuel and maintenance.

11. At each school, in the course of various visits, the teams will carry out the following activities:

- orientation for teachers and network school principals in the national policy on special education and its application in the quality-improvement program for low-income urban areas
- training for classroom teachers in how to deal with children with special needs, how to establish ability groups, use peer-tutoring methods to deal with special problems, deal with behavior problems that impair the learning opportunities of others
- screening (e.g. for dyslexia of various degrees of seriousness; speech, hearing or vision problems)
- interventions (e.g. teaching left-handed children improved techniques for writing; recommended exercises for children with mild psychomotor disorders)
- In the case of ethnic minority children, identification of, for example, problems of adjusting to the classroom environment and counselling (of student, teacher and/or parents) in ways of overcoming the problems
- referrals (e.g. for eyeglasses; for in-school special courses in the case of mild dyslexia; to specialized institutions for children

with degrees of mental retardation that cannot be dealt with through mainstreaming strategies)

- Parent information conferences with parents of children with special needs to make them aware of the program, of services available from other social agencies, of activities they can provide in the home to supplement the schools' efforts to provide for their children's needs.

12. Over-all programming and policy direction in the area of special education is provided by the National Department of Special Education, under the National Directorate of Regular and Special Education. The Coordinator of each school network's special education team will be an employee of the National Department. The Department will provide training and other inputs to the special education teams and, together with the PCU and with international technical assistance, will carry out monitoring and evaluation of special education activities of the project.

13. Community organization activities will include involving the parents in the network area more closely with their children's schools. Where feasible and appropriate, they will also promote community self-help activity to maintain and generally improve the physical condition of the schools. Each school network Director will receive a limited budget based on the number of students attending schools in the network. Funds for this purpose will be provided by the project on a declining basis, with increasing responsibility assumed by the government as part of local counterpart funding. One teacher from within the network will be chosen to work part time as Community Coordinator for the hub school and its network. The Community Coordinator will report to the network Director on activities to promote community involvement with the schools, identify community organizations (Parent Teacher Organizations or other local groups) and leaders at each school in the network, identify the needs and priorities of each school, and develop plans for meeting those needs, using the budget allocated for this purpose.

Annex 4. Table 1

SCHOOL NETWORKS, BY PHASE

<u>Province and City</u>	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>TOTAL</u>
1. GUAYAS				
Guayaquil	12	6	-	18
Milagro	-	2	-	2
Puna	-	1	-	1
2. PICHINCHA				
Quito	8	-	-	8
Santo Domingo	-	2	-	2
Mejia	-	1	-	1
3. ESMERALDAS				
Esmeraldas	-	3	-	3
Borbon	-	1	-	1
4. EL ORO				
Machala	-	2	-	2
Huaquillas	-	1	-	1
Santa Rosa	-	1	-	1
5. LOS RIOS				
Quevedo	-	2	-	2
Babahoyo	-	1	-	1
6. CARCHI				
La Libertad	-	-	1	1
7. CHIMBORAZO				
Riobamba	-	-	1	1
Chunchi	-	-	1	1
Guamote	-	-	1	1
8. LOJA				
Loja	-	-	1	1
La Toma	-	-	1	1
Macara	-	-	1	1
9. MANABI				
Manta	-	-	1	1
Chone	-	-	1	1
Portoviejo	-	-	1	1
Montecristi	-	-	1	1
10. CAÑAR				
El Tambo	-	-	1	1
TOTAL	20	23	12	55

Annex 4 - Table 2
Urban Public Enrollment and Coverage of Networks of Hub Schools

Project Phase	Province Covered	Students in 1989/90				No. of Hub Schools	Students Covered in Hub Schools and Networks	Percent Coverage (%)
		PP	P	SB	Total			
1.2	Pichincha	10,765	116,970	53,699	181,434	11	61,882	34.10
1.2	Guayas	8,912	224,740	80,493	314,145	21	150,517	47.90
2	Esmeraldas	3,262	38,099	12,019	53,380	4	25,200	47.20
2	El Ora	4,008	50,305	20,304	74,617	4	25,200	33.80
2	Los Rios	1,725	37,059	14,332	53,136	3	18,900	35.60
Subtotal	Phase 1 and 2	28,672	467,193	180,847	676,712	43	281,699	41.60
3	Carchi	714	8,988	4,428	14,130	1	5,200	36.80
3	Chimborazo	2,369	22,457	10,055	34,881	3	15,600	44.70
3	Loja	2,404	23,785	14,256	40,715	3	15,600	38.30
3	Manabi	4,378	66,539	31,416	102,333	4	20,800	20.30
3	Canar	760	9,221	9,990	19,971	1	5,200	26.00
Subtotal	Phase 3	10,625	130,990	70,145	212,030	12	62,400	29.40
Project Subtotal		39,297	598,183	250,992	888,742	55	344,099	38.70
Other Provinces		11,148	52,356	52,356	183,439	0	0	0.00
National Total		50,445	650,539	303,348	1,072,181	55	344,099	32.10

PP = Pre-primary
P = Primary
SB = Secondary Basic

Sources: Planning Department, Ministry of Education and Culture, Estadística de la Educación (1989-90), and project preparation team.

DEVELOPMENT, PRODUCTION AND DISTRIBUTION OF TEXTBOOKS
AND EDUCATIONAL MATERIALS

1. The Bank's research indicates that one of the most cost-effective means of improving the quality of education is through the medium of textbooks. Public schools in Ecuador, as in many developing countries, operate with few textbooks. Teachers must resort to highly inefficient methods of dictation and copying from the blackboard as the dominant mode of instruction. Government has not been able to provide free textbooks to primary school students. An earlier project financed by the IDB provided textbooks designed for rural areas (the Abramos Surcos series developed under Project AMER). These are provided free to students in some rural areas but production and distribution have not achieved the project targets. Texts are available from commercial booksellers throughout the country and from an extensive network of sales and distribution centers (National Text and Educational Materials Supply Service, SNALME) operated by the MEC, but not all students are able to purchase them. There is no single approved text. Costs of texts vary, with the costs of the government-produced texts (including the AMER series) generally lower than those of commercial texts (Annex 5, Tables 1 and 2). SNALME does not stock a full line of textbooks and materials and the commercial sources tend to stock the more expensive imported textbooks that have been adopted by private schools and public schools serving more affluent populations. In general the textbook supply situation in Ecuador could be described as chaotic; there is no doubt that there are severe shortages of texts in schools serving low-income urban neighborhoods.

2. Objectives. The main aim of the Textbook portion of the project is to make sure that children in project schools in low-income urban areas have adequate textbooks and that teachers know how to use the new texts effectively. A broader objective is to contribute to overcoming the situation described above, in which there is an inadequate supply of good quality textbooks. The project would develop an improved general textbook series for primary education including texts for Spanish, Mathematics, Natural Science, and Social Studies, as well as teachers' guides and workbooks to accompany the series. While the design and development of the series will build upon the existing texts developed for Project AMER, that series will be updated and improved in organization, scope, sequence and physical design of the books. The new series will be reviewed specifically to eliminate bias or stereotyping with regard to gender or ethnic minorities.

3. Coverage. The project will provide textbooks and materials to all children in project schools, including not only the Matrix Centers but also the schools in the networks associated with each center. The materials produced and provided will include textbooks, workbooks and supplementary materials, as well as teachers guides. After considering alternatives, it was decided to provide students in grades 7 through 9 (Ciclo Basico) with modularized instructional materials that can be used on an individualized basis, which reduces costs and conforms to curricular plans for those grades. The total number of texts to be produced is 567,000 and 1,520,000 workbooks will also be produced. The number of workbooks is far greater since they are only used once by each student, while textbooks are used for an average of four years. Cost analyses indicate that efficient print runs for individual volumes would be larger than necessary for

project schools alone. For that reason, and in order to generate revenue to make the textbook component more nearly self-sustaining, an additional 250,000 books (in the four subject areas) will be produced and sold through SNALME and through commercial bookstores.

4. Costs and Sustainability. Total cost of the textbook component will be US\$5.7 million (including contingencies), of which US\$5.3 million will be investment costs. The cost of printing the textbooks themselves will be US\$4.6 million. In order to make the textbook subcomponent self-sustaining, Government has agreed to a form of limited cost recovery whereby poor children in project schools pay a rental fee equal to 20 percent of the full cost of the book (with incentives for return of books in good condition). The books will be designed to have an average useful life of four years, thus the rental fees will equal 80 percent of cost. An Editorial Fund will be created under SNALME, which has the legal authority to receive monies, establish accounts and spend for textbook-related purposes. This Fund will hold the amounts collected until they are applied to the costs of producing new books to replace those no longer usable. Minimum efficient print runs will lead to quantities larger than the numbers needed for project schools. The additional books will be sold to students who are not in project schools at a cost 15 percent greater than the cost of producing them, and the surplus will also be transferred to the Editorial Fund for replacing the stock of textbooks. Total revenues from rental fees and charges for copies sold will not fully cover the costs of replacing outworn books but will make a substantial contribution to the sustainability of the textbook program (approximately three fourths of the cost of replacing the books.)

5. Administration of the Component. The subcomponent includes creation of an Editorial Council within the MEC, which is designed to bring together the multiple activities of the Ministry relating to the design and development, manufacturing and distribution of textbooks and educational materials. The Council will be composed of one representative of the Minister of Education, the Coordinator of the PCU, the National Directors of Planning, DINACAPED and Regular and Special Education of MEC, SNALME and one representative of the private publishing sector. One result of the work of this Council will be a rationalization of these dispersed activities, some of which are of inefficient size and many of which operate without knowledge of or contact with other related activities.

6. Implementation of textbook activities will be the responsibility of the Ministry and will be carried out by a textbook unit under DINACAPED and by SNALME. The PCU, as the source of funding for textbook activities and a member of the Editorial Council, will have oversight. The responsibilities of the textbook unit will include:

- Coordinating the design and development of the new textbooks and materials;
- Contracting with private sector firms for the production of textbooks;
- Arranging, in coordination with SNALME, for distribution of textbooks to:
(a) students in low-income urban areas covered by the project's Matrix Centers, and (b) distributions centers -- both SNALME and private sector

booksellers -- that will sell additional copies of the new textbooks and raise revenues for the Editorial Fund;

- Contracting for technical assistance to advise the Minister and the Editorial Council on the long-term arrangements for textbook development, distribution and finance.

7. The design and development of the textbooks will be performed through a process of contracts with authors, according to guidelines provided by textbook design experts and international technical advisors. There needs to be close communication with the groups that developed the AMER texts, the curriculum development activity under the IDB project and other activities associated with the project. Printing will be contracted on the basis of international competitive bidding, in which Ecuadoran firms can obviously compete. The operating unit under DINACAPED will receive technical assistance in preparing bidding documents for procurement of goods and services needed to carry out its tasks. Distribution will be carried out through SNALME and through commercial booksellers.

8. SNALME, which is one of the key entities represented on the Editorial Council, will have the following operating responsibilities. First it will receive the funds collected from renting textbooks to primary school students in the Matrix Centers and their networks of schools, and for maintaining the Editorial Fund for use in printing additional textbooks as needed. Second, SNALME will arrange for distribution of textbooks (a) to the Matrix Centers, for distribution to the project schools and students and collection of rental fees; and (b) for sale of additional copies and receipt of proceeds for the Editorial Fund. In the case of distribution in project schools, SNALME will simply contract for physical delivery to the Matrix Centers. With regard to arrangements for sale of additional copies, SNALME will sell some textbooks through its own distribution centers throughout the country, and will seek bids from private sector booksellers to market additional copies. The more copies marketed through all means, the more revenue will be received for the Editorial Fund.

9. The textbook subcomponent includes training 17,000 in-service teachers in how to use the new textbooks. Textbook-related training will be provided to teachers as part of the training activities offered within the general quality-improvement subcomponent; for training in effective use of texts and materials, teachers will be grouped according to the subject matter of the text in question. Costs of textbook-related training are included in the training component.

Annex 5 - Table 1

INDICATIVE COSTS OF PRIMARY TEXTBOOKS
IN THE PRIVATE SECTOR

GRADE	AREA	TITLE OF TEXT	NO. OF PAGES	PUBLISHER	UNIT COST (SUCRES)	
1 TO 5	MATH	NACHO CALCULA	200	ED. NACHO/ SUSAETA	4290	
1 TO 5		MATEMATICA	200	SM/LOS ANDES	3700	
1 TO 3		MATEMATICA	170	ALMA ZAMBRANO	1500	
1 TO 5		MUNDO DE LA MATEMATICA	200	EL CID	4765-5325	
1 TO 3	SPANISH	LENGUAJE	200	SM/LOS ANDES	3700	
1 TO 5		ANTOLOGIA COMUNICATIVA	200	NORMA	4000	
1 TO 5		CRECE CON TU IDIOMA	200	SUSAETA	2715	
1 TO 5		NACHO LEE		SUSAETA	2420-2715 3330	
1 TO 6		LENGUA ESPAÑOLA	200	CULTURAL A	9000	
1 TO 6		CRECE CON TU IDIOMA	200	SUSAETA	3800	
1 TO 6		ESPAÑOL	200	GEORGINA GONZALEZ	8500	
1 TO 5		ESTRUCTURAL ARMONIA DEL LENGUAJE	200	EL CID	4985-5325	
1 TO 2		NATURAL SCIENCE	SERIE PATITO	150		1000-1500
3 TO 6			SERIE LNS		DON BOSCO	1550-2100
1 TO 6			CIENCIA REY	250	CULTURAL A	6480-9880
1 TO 6			CIENCIA DE LA NATURALEZA	120/2	EL CID	5800-7200
1 TO 2	CIENCIA 1-2		150	SM/LOS ANDES	3700	
3	CIENCIA 3 (NT)		150	SM/LOS ANDES	3800	
1 TO 6	SOCIAL SCIENCE		LNS		DON BOSCO	2500
4 TO 6			ESCOLAR ECUATORIANO		EC.	2500
1 TO 6			COLECCION CABELAS		EDITORIAL CABELAS	2500

Note: Costs based on a sample survey of private bookstores in Quito; Primary level (grades 1 to 6); prices as of July, 1991

Annex 5 - Table 1
(Continued)

INDICATIVE COSTS OF LOWER SECONDARY TEXTBOOKS
IN THE PRIVATE SECTOR

GRADE	AREA	TITLE OF TEXT	NO. OF PAGES	PUBLISHER	UNIT COST (SUCRES)	
1 TO 3	MATH	REPETTO 1,2,3	350	KAPELUSZ	6000	
1 TO 3		ARMAS/ZAMBRANO	120		1700	
1 TO 3		MATEMATICA PROGRESIVA	200	NORMA	5200	
1 TO 3		MATEMATICA	250	PIME	5900	
3		DOLCIANI	450	PUBL CULTURA	17000	
1 TO 3		ENCICLOPEDIA LNS	200	DON BOSCO	2300	
3		MATEMATICA	470	MACIL/CULTURA	7400	
3		ANALITICA/ALGEBRA	580	BALDOR/CULTURA	20000	
1 TO 3		SPANISH	CASTELLANO	250	MOSQUERA	2600
1 TO 3			CASTELLANO	250	LNS	1450-2300
1 TO 3	ESPAÑOL MODERNO		250	ALVARADO	2000	
1 TO 3	CASTELLANO		250	JACOME	19000	
1 TO 3	IDIOMA NACIONAL		250	CORNEJO	2000	
1 TO 3	CASTELLANO DINAMICO		300	ARQUERO	5390	
1 TO 3	ESPAÑOL		300	LEGURBURU	4915-4980	
1 TO 3	Lenguaje Total		300	NORMA	5215	
1 TO 3	NATURAL SCIENCE		CIENCIAS NATURALES	250	LNS	4600
1 TO 3			CIENCIAS NATURALES	250	ALVAREZ	2000
1 TO 3		CIENCIAS NATURALES	250	MENA-MENESES	1700	
1 TO 3		CIENCIAS NATURALES	400	MANTILLA	2400	
1 TO 3		CIENCIAS NATURALES	350	NORMA	1200	
1 TO 3		CIENCIAS NATURALES	200	NORMA	7000	
1 TO 3		CIENCIAS NATURALES	200	NAVAS	2000	
1 TO 3	SOCIAL SCIENCE	HIST. GEO. Y CIVICA		GARCIA GONZALEZ	3200	
1 TO 3		ESTUDIOS SOCIALES	300	LNS/DON BOSCO	1500	
1 TO 3		HIST. GEO. Y CIVICA	250	MARTINEZ ESTRADA	2200	
1 TO 3		HIST. GEO. Y CIVICA	250	NAVAS JIMENEZ	2000	

Note: See previous page; books above are for grades 7 through 9.

Annex 5 - Table 2

APPROXIMATE PRINTING COSTS OF "ABRAMOS SURCOS" TEXTS
(in thousands of sucres)

GRADE	MATERIAL	NO. OF EXAMPLES	UNIT COST	TOTAL COST
FIRST	Texts	309,000	1.7	525,300
SECOND	Texts	235,000	1.8	423,000
THIRD	Texts	21,000	2.4	506,000
FOURTH	Texts	182,000	3	546,000
FIFTH	Texts	164,000	2.8	459,200
SIXTH	Texts	151,000	3.2	483,200
FIRST	Notebooks	657,000	1.35	886,950
SECOND	Notebooks	532,000	1.45	771,400
THIRD	Notebooks	474,000	1.33	630,420
FOURTH	Notebooks	438,000	1.8	788,400
FIFTH	Notebooks	394,000	2	788,000
SIXTH	Notebooks	360,000	2.1	756,000
FIRST	Guides	15,000	1.2	18,000
SECOND	Guides	15,000	0.67	10,050
THIRD	Guides	15,000	0.74	11,100
FOURTH	Guides	15,000	0.74	11,100
FIFTH	Guides	15,000	0.83	12,450
SIXTH	Guides	15,000	0.74	11,100
FIRST	Charts	898,000	0.25	224,535

NATIONAL SYSTEM FOR MEASUREMENT OF ACADEMIC ACHIEVEMENT

1. Objectives. The objective of this subcomponent of the project will be to improve the quality of basic education, and in particular to provide an empirical basis for targeting programs and resources to benefit children of poor families, by providing an objective, standardized system for assessing how much children have learned at critical stages in their education. Specifically the system will:

- provide an examinations-based indicator of educational quality;
- develop the tests needed to measure command of essential knowledge, according to the curriculum for basic education;
- provide information to educators and administrators about the levels of academic achievement of students in a stratified sample of basic education institutions;
- provide feedback on areas of strength and weaknesses to aid teachers in improving student learning; and
- carry out educational research related to measurement of achievement.

2. Characteristics of the System.

- Measurement will be an assessment; that is it will be used to evaluate the education system and not individual schools, teachers or students.
- Tests will be administered to a sample of schools (approximately 15 percent of schools in the early phases of implementation)
- Testing will take place every two years
- Measurement will be on the basis of criterion referenced tests
- Testing will take place at grades 2, 6 and 9 of the basic education system.
- Tests will be administered

3. Content of the Project

The project will finance:

- preparatory activities -- design of the system, technical assistance for developing the tests, training of specialist staff, contracting for services to manage the system, pilot testing of instruments -- leading to implementation of the assessment system;
- operating costs (on a declining basis) of implementing the system during the duration of the project including international technical assistance;
- study visits to observe assessment systems in operation

- in other Latin American countries and elsewhere;
- in-country training for specialists in educational measurement;
- procurement of computational equipment, including an optical scanner, needed to develop and administer the assessment system and analyze the findings of the tests;

4. Administration of the System for Measuring Academic Achievement.

The educational assessment system would be under the direction of a Board of Directors (Consejo Directivo) composed of the Minister of Education and Culture or the Minister's delegate, the head of the Department of Evaluation of the National Planning Directorate and the Coordinator of the PCU. Responsibility for implementing the system would rest with MEC, with the PCU being the entity that assures performance of operational tasks. The PCU, which would arrange for physical space, logistical support, technical assistance and other services as necessary. The PCU would contract for the international technical assistance that will be essential for establishing an assessment system of good quality, and for other services and would be responsible for financial arrangements during the seven-year period and arrangements for publication of findings without interference from the government. During project implementation, arrangements will be made for the long-term institutional support of the assessment system. An Academic/Technical Unit would be responsible for assuring that the materials covered conform to the national curriculum, that the design of the tests are in accordance with the philosophy and guidance laid down by the Board and that the system will operate independently. The Administrative Unit would be responsible for activities such as arranging for printing the test forms and distribution of the tests, and for assuring the security of the tests and of the equipment provided under the project. The Research Council would be responsible for analyses of the tests, interpretation and dissemination of the findings and governing access to the basic data.

5. Coverage of the Assessment System

Once it is fully operational, the system will be applied to a national sample of approximately 121,000 students. While it will benefit the schools aided specifically by the project, its over-all coverage will be national. During the pilot testing phase, 51,000 students will take the tests. Annex 6 Table 1 shows the estimated size of the samples to be used in the pilot test. Initially the subjects covered will be Spanish language and mathematics, although the subjects to be evaluated will be extended to cover natural and social sciences as well.

Annex 6 - Table 1

APPROXIMATE TOTAL OF PILOT TESTS TO BE ADMINISTERED
IN 1992

PROVINCES

	PICHINCHA	GUAYAS	EL ORO	TOTAL
A. UNIVERSE				
No. of primary schools	1332	2522	533	4387
No. of secondary schools	475	543	121	1139
No. of students:				
2nd grade	49046	87520	14876	151442
6th grade	38207	58752	10960	107919
9th grade	28646	42120	8136	78902
B. SAMPLE				
No. of primary schools	200	378	80	658
No. of secondary schools	71	81	18	170
No. of students:				
2nd grade	7357	13128	2231	22680
6th grade	5731	8813	1644	16194
9th grade	4291	6318	1220	11855
TOTAL STUDENTS	17385	28259	5095	50739
No. of tests:				
2nd grade	14714	26256	4462	45432
6th grade	11462	17626	3288	32376
9th grade	8594	12636	2440	23670
TOTAL TESTS	34770	56518	10190	101478

Annex 7: INSTITUTIONAL STRENGTHENING AND DECENTRALIZATION

1. Objectives. The institutional strengthening activities within the Education component of the proposed project are designed: (a) to make the MEC a more efficient and effective agency and specifically to improve the ways it allocates resources; (b) to delegate greater authority to provincial offices of education and to the hub schools so that education officials at the local and provincial levels, and eventually parents and community leaders, will have a greater role in efforts to improve the quality of basic education; and (c) to generate new information to guide educational policies and to stimulate the use of objective information to guide sectoral strategies and decisions. These are long-term objectives; the proposed project will make initial steps toward their eventual achievement. The following sections describe the activities that will promote these ends.

2. Strengthening the Ministry's Budgeting and Financial Management Capacities. There is a network of offices and key staff within the MEC, the provinces and other agencies involved in preparing and approving the budget of approximately US\$200 million for education annually. This network includes the central MEC Directorate of Planning and other units within the ministry involved in budgeting and resource allocation, offices at the provincial level that are charged with planning and gathering information related to budgets, and certain staff of the Ministry of Finance and CONADE responsible for education sector budgets. Annex 7, Figure 1 shows an institutional map of the institutions involved in the budgeting process. Annex 7, Figure 2 shows the budget cycle and the key agencies involved in the capital and recurrent budgeting process. As noted in the Social Sector Study, the budgeting process does not lead to considered decisions on resource allocation. The project proposes to work within the existing system to strengthen analytical capacities, improve decision processes and make the budget a more effective tool for sector management. An important innovation in the project will be strengthening the involvement of the Provincial budget offices, which have a mandated role in budgeting but now play little effective part in planning and budgeting, and the school networks in a "bottom-up" process of generating information and indications of financial needs that is fundamental to decentralization. Improvement of budgeting in the education sector alone can proceed only as far as the institutional context outside the MEC will permit; still the project will make what advances are possible within the time period of project implementation and constraints external to the education system, and will lay the groundwork for longer-term improvements in programming, budgeting and policy formulation, some of which may be financed through other operations in the Social Sector. The project will promote better resource allocation in the education sector through the following:

- Technical Assistance to the budget and finance network within MEC and the provinces. The project will finance 60 person months of international consultant services, 180 person months of local consultants, and related seminars and workshops on budgeting and financial management. Technical advisors will design improved processes and provide on-job training to permanent staff who are

responsible for gathering information, performing analyses related to planning and budgeting and preparing education sector budgets. Advisors will also provide inputs into training activities and will identify key staff for local and international training.

- Training for permanent staff will include, in addition to on-job advice and guidance from technical advisors, semi-formal training, courses, seminars and workshops, and more formal training for staff involved in the budgeting process. Formal training will include local courses for 48 staff, international courses for 12 selected key budget personnel, and international study visits for 15 higher level staff to learn about budgeting procedures in other settings. Informal training in the form of short courses and seminars will be provided to 110 school network Directors and financial officers and, through the hub schools to the principals of primary schools in their networks.
- Provision of informatics equipment and software and training in its use: Budgeting and the use of information to guide policy will benefit from introduction of computers and training in how to use information and computing technologies. This is especially true for staff at the provincial levels, where modern information technologies have not been introduced. The project provides for purchase of 75 computers plus related equipment, software and training.

Immediate beneficiaries will be the staff trained; longer term benefits will be better decision making, based on improved information and budgeting procedures, and more efficient use of resources to accomplish sectoral objectives. Indicators of performance will initially be process indicators: technical assistance activities, studies and reports and number of training activities and of staff trained. Longer run evaluation of the Institutional Strengthening activities will be designed to indicate whether budgeting processes have changed and improved. Specific indicators will show what officials are involved in allocation decisions, what information is being generated and used, what budget technologies have been adopted or adapted for use in Ecuador's education sector, and how the steps in the budget process have changed in a qualitative way.

3. Decentralization of Sector Management to the Provincial Education Offices. The process of decentralizing the management of education will take a number of years. The project will finance activities that will start this process and lay the groundwork for continuing progress in this direction. Decentralization will constitute a substantial change in established practices and Bank experience with projects that involve substantial organizational change and innovation indicates that successful implementation requires: adequate information to all parties about the objectives of the change and specific activities to be undertaken, participation on the part of "stakeholders" in the design of changes, and flexibility during the implementation of changes to take account of experience, new information and changes in the external environment. Design of this component takes these

lessons into account. The quality-improvement program and the system of school networks in rural and urban low-income areas involves decentralizing professional/pedagogical management, including some control over financial resources, and decentralization in this respect will be linked with decentralization of administrative functions within the provincial offices. The school networks will establish working relationships and linkages with the Provincial Education Departments in the areas of micro-planning, budgeting, administrative supervision and implementation of the quality improvement program. Key activities leading to decentralization will include the following.

- Implementation of a phased program of decentralization. Government has issued an executive decree giving the school networks authority to receive and allocate budgets for non-salary expenses, including maintenance, and to perform professional management functions concerning teachers in the hub schools and the networks of schools associated with the hub schools. This constitutes a significant step in decentralization. In addition, the project will put into operation the plan for decentralization and a process by which the initial steps will be implemented. The process includes consultation with representatives of provincial offices, central ministry offices and officials in charge of developing the school network program for quality improvement. This consultation will solicit the views of key provincial and school network officials on the proposed plan and the actions necessary to make the delegation of authority and responsibility to their operating levels effective, the barriers to decentralization they perceive and ways of removing these barriers. The consultation will provide orientation and information programs to inform all parties affected about the objectives of decentralization, what will be expected of them and what benefits they can expect in return.

- Development of links between the provincial education offices and the school networks. As an important part of the decentralization process, the quality-improvement program will be linked with provincial level management processes, which are themselves to be strengthened through the project. Staff of the provincial offices will provide support to school network Directors in implementing the quality improvement program, while educators from the hub schools and schools in their networks will work closely with the provincial offices on matters such as generating data for budgeting and planning.

- Technical assistance, training, continuing consultation and provision of necessary equipment. Strengthening provincial management capacities will involve organizational design, staffing and other changes. In addition to technical assistance and training relating to improved budgeting processes, the project will also provide TA and training in support of decentralization.

4. Conduct of studies and evaluation of innovations. The objectives of this subcomponent are:

- providing information needed for policy choices concerning continued efforts to improve the quality and cost-effectiveness of education in Ecuador;
- promoting public consultations and policy deliberations among concerned parties on education sector policy and strategy issues;
- analyzing the costs and cost-effectiveness of existing forms of education and possible alternative approaches to meeting educational goals;
- evaluating subcomponents of the project in order to inform future policies about whether and how these should be extended (as in the case of preschool education) and how they should be adapted to serve remaining needs for qualitative improvement; and
- laying the groundwork for possible future projects to improve education at all levels in terms of its quality, cost-effectiveness and equitable access.

The studies would not only generate information that will define sector priorities and allocation decisions but also demonstrate ways in which information -- including information from the educational assessment system -- can be used to guide policies and plans. The appraisal mission reviewed proposals for studies and recommended reductions in their number, methodological approaches, and substantive changes in the focus and emphasis of a reduced set of studies and national consultations. The studies proposed include the following.

a. An evaluation of the quality of basic education.

This proposed study would utilize data produced by the achievement testing system to assess the quality of education and cast light on the results of some of the activities of the education component. It would complement achievement data with information on school inputs, student background and participation in quality-improvement programs and activities. Data on program costs would also be gathered and related to the quality study. In addition to analyzing data from the achievement testing system to provide general information on educational quality, the study proposed would include two sample-based investigations. One would be a longitudinal study of a group of students designed to provide information on repetition and wastage: what students are at greatest risk of repeating or dropping out, what associations exist between inputs of the quality-improvement program, indicators of achievement and tendencies to repeat or drop out? The second sample, drawn in the fourth year of implementation, would examine the achievement of students who had participated in various models of preschool education -- formal, informal, public and private -- or who had had no preschool education.

b. Study of Needs for Bilingual and Intercultural Education for Indigenous Students in Urban Areas.

Project preparation activities have determined that the principal needs of indigenous students in Quito and Guayaquil, where Phase I of the project will be implemented, are for intercultural education to deal with possible problems

of psychological adaptation to majority culture and the behavioral requirements of school. Phases II and III will take place in smaller communities, however, and more information is needed in order to program interventions to understand the needs of indigenous students and make sure that they have an equal chance to obtain an education of good quality. This study would use data from the 1990 Census and other sources to provide information on demographics of indigenous population and students, as well case studies in a limited number of communities of the social, cultural, linguistic and other problems indigenous children encounter to provide this information.

c. Specific studies of quality-improvement programs, their inputs, effectiveness and costs.

This complex of studies would use a consistent conceptual framework and set of methodologies to examine aspects of the teacher training, special education and preschool activities of the education component. The first would focus on the way teachers use time in the classroom for active learning activities, one of the key factors associated with student learning and a subject to be emphasized in teacher training. The study would use observational methodologies both early in the implementation period and a second iteration in the fifth year of implementation to determine whether there have been changes in this important variable, and would also relate data on time use to achievement data from the testing system. The second two studies would examine in detail the special education and preschool programs, their inputs and modes of operation based on observations in a sample of cases. The data would emphasize process and would provide short-term feedback on implementation of these activities. The information would also be related to data from the achievement study to explore whether student contact with these programs is associated with differences in achievement. In the case of the preschool component, the study would examine not only project preschools but other models as well.

d. Preparatory work for a National Consultation on Reform of the Secondary Education Curriculum.

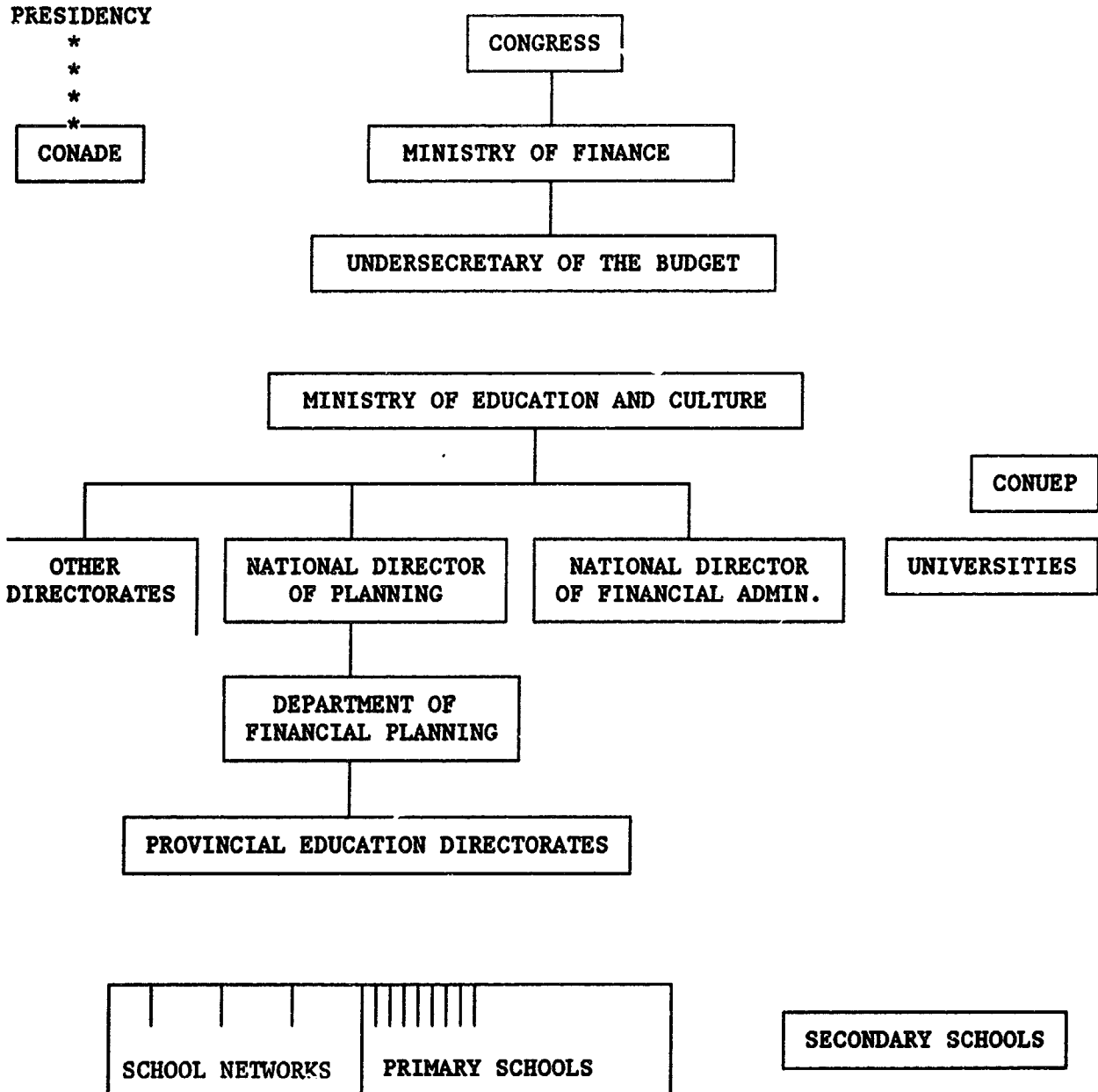
Although government gives priority to improving basic education, there are also serious needs to assess the objectives of the upper secondary level (called diversified education) and propose reforms. There are great differences of opinion on how this should be done and very little information to guide policies and decisions. For example, there are no studies of the post-school employment and earnings of completers of the several streams. Government proposes a "national consultation" on reform of secondary education, in which interested parties and institutions -- schools, teachers, employers, social and religious institutions and parents -- would have an opportunity to receive valid information and make their views and priorities known. This study would provide analytical information for that consultation, including a review of the secondary curriculum and its relation to modern-day requirements, and an analysis of the internal and external efficiency of the several types of secondary schooling offered in Ecuador.

e. A National Consultation on Higher Education Quality and Costs.

A similar activity would examine the post-secondary education subsector, about which little information is available on quality, management, costs, or

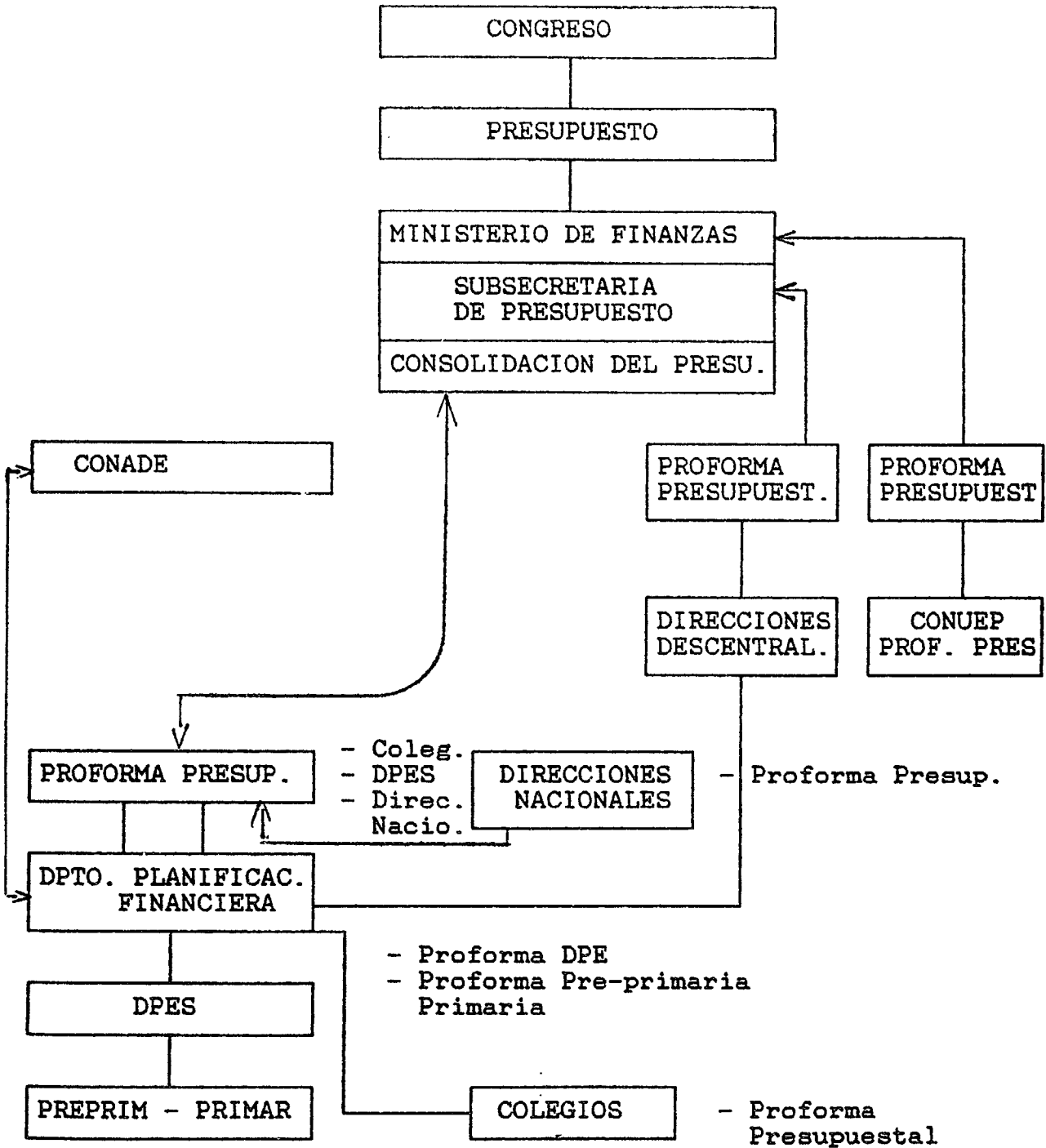
finance. Analytical work would be carried out under the direction of the National Higher Education Council (CONUEP) and would lead to policy deliberations on ways of making Ecuador's higher education better adapted the needs of the society and the economy of the coming century, within the financial constraints the country and the subsector will continue to face.

Annex 7 - Figure 1: INSTITUTIONS INVOLVED IN THE EDUCATION BUDGET PROCESS



Annex 7 - Figure 2

PROCESO PRESUPUESTAL ACTUAL



ECUADOR
FIRST SOCIAL DEVELOPMENT PROJECT
ADULT EDUCATION AND TRAINING COMPONENT

I. BACKGROUND

In August 1989 a delegation from the Ecuadoran Ministry of Labor Training Service (SECAP) visited the World Bank Headquarters to review the execution of the Vocational Training Project, Loan 2171-EC (US\$16.0 million)¹ and to indicate its interest in obtaining technical and financial assistance for basic skill training programs targeted to the unskilled poor and to small manufacturing business owners working in marginal areas of the economy. Project preparation began in February 1990 with Bank and UNDP assistance.

One of the major problems in developing assistance strategies and designing programs for the poorest segments of society lies in the difficulty of identifying and grouping them to ensure successful interventions. In Ecuador, the MEC has succeeded in establishing a system of community service which has identified the poorest communities where there are a large number of young adults between 12 and 18 years old who dropped out of the education system without having, in most cases, completed basic education, and who entered or are seeking to enter the labor market. In addition, there are more than 500 technical secondary schools whose sixth year level students can provide community services by imparting basic skills training after a short-duration instruction program to acquire teaching skills. There could be a considerable increase in the relevance of the training offered and in the cost-effectiveness ratio if SECAP's equipment and institutional capacity to provide technical instruction, MEC's identification of poor communities and their training needs, and the multiplier potential of the technical area students are brought together.

A basic problem for the development of the Ecuadoran social sector is institutional weakness. As a consequence, it is difficult to find an appropriate institutional setting to identify and carry out programs and projects successfully. SECAP, while being the only Ecuadoran institution which has completed with acceptable success social sector projects and the institution which has best implemented poverty programs with resources from FONNIN in 1990-91 still needs institutional strengthening in the following

¹ The First Vocational Training Program, Ln. 1157-EC (US\$4.0 million) had been implemented in 1975-84.

areas: (i) selection, training and management of instructors; (ii) curriculum design and production of training materials; (iii) improved utilization of existing equipment and infrastructure; and (iv) labor market and earnings information system. In addition, SECAP requires a management information system and development of student follow-up and training evaluation systems.

SECAP's Impact. Although a comprehensive economic evaluation of vocational training in Ecuador has not been conducted to date, several studies of SECAP's graduates show a positive impact of vocational training. Among them a 1987 study sponsored by the Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ) (Bernd Schleich, El paradero ocupacional de los egresados en metalmeccanica y automotriz de los centros de Quito, Ibarra, Ambato y Santo Domingo) found that "91.3% of trainees were working as skilled workers", "70% of the business owners were satisfied with the quality of SECAP instruction, one third was very satisfied and only one-fourth was not fully satisfied." A 1990 follow up study of former SECAP students who received training in electricity and electronics (Jesus Mejia, Evaluacion de impacto de la capacitacion: areas de electricidad y electronica, Consulting contract, PNUD/OPS) found that "90% of those who received training are working, 59.5% as salaried workers and 26% are self-employed. It also showed that " 73.5% are working in private sector companies and 26.4% in public sector institutions." Supervisors surveyed indicated that "under similar circumstances" they preferred a SECAP-trained worker. The reasons given were "adequate general knowledge and high level technical knowledge." A cost/benefit analysis based on the 1989 data (Eduardo Martinez, El valor economico de la capacitacion profesional en las areas de electricidad y electronica, SECAP/PNUD/OPS) shows a social rate of return of 18% and a private internal rate of return of 37% in the areas of electricity and electronics.

II. GOVERNMENT STRATEGY

The Government has indicated a commitment to the education sector and a determination to target services to the poorest segments of society. Targeting is essential because the current economic crisis has imposed severe constraints on the recurrent budget and brought about a decline in sector spending. The Government's strategy gives priority to basic education and to targeted basic general and technical skills training programs for the poor. This would serve to maintain or enhance their literacy and basic general education and improve their productivity. To implement these programs, SECAP has operational agreements with MEC's adult education campaign (Ecuador Estudia) and with the Frente Social Special Fund for the Infancy (FONNIN). Facilitating access of small enterprises to information and training in the areas of quality control, design, management and marketing would increase their potential competitiveness in the market. For

implementation of programs in these areas, SECAP has agreements with agencies that provide credit to microenterprises (UNEPROM and CONAUPE) and with agencies that provide technical assistance to small enterprises and the handicraft industry (CENDES and CENAPIA). The Government has expressed its commitment with a more market oriented economic policy. In particular it has approached labor market issues attempting reforms that would eliminate fixed costs of labor which have deterred in the past new investments. Trade issues have also started to be addressed and markets within the Andean Group will start opening in 1992. It is within this context that labor productivity increases will become more necessary in the near future. SECAP itself is committed to strengthening its managerial and financial capacity, a process started with Bank technical assistance provided under Ln. 2171-EC. A main feature of SECAP's institutional strengthening policy is establishing closer ties with the private sector. In addition to implementing existing agreements with the private sector, SECAP is actively seeking new agreements with enterprises and chambers of the private sector that would give a more significant role to them in the design, management and financing of training courses.

III. PROJECT DESCRIPTION

The Adult Education and Training component seeks to strengthen the effectiveness of vocational training by using Ecuador's training capacity more efficiently and reorienting SECAP's activities so that they respond better to changing economic and labor market conditions. To achieve these objectives, SECAP would expand basic general training programs targeted to the poor, and would increase coordination with other public sector institutions and with the private sector to better orient its conventional program.

The component has three types of activities: (i) provision of basic skills post-literacy training for the least educated adults; geared to improving productivity and the standard of living of the poor; (ii) support to small manufacturing businesses in strategic sectors with export potential seeking to improve their productivity and competitiveness; and (iii) institutional strengthening of SECAP's general and financial management aiming to improve its capacity to respond to labor market needs.

Post-Literacy Education and Training

The objective of this program is to improve the standards of living of the poorest segments of society by providing basic adult education and basic skills training. Other objectives are to institutionalize basic skills training as an instruction process for those who drop out of the formal education system. An important characteristic of this program is that SECAP has operational agreements with MEC, UNEPROM, CONAUPE that will

facilitate its implementation. In addition, it is expected that a large number of non-governmental organizations working with the poorest communities will be involved in these activities. In addition, the program seeks to create within SECAP the capacity to serve marginal urban and rural population groups. These services will be provided based on explicit criteria of economic efficiency since many of the training activities will be done by using SECAP's existing infrastructure during hours when there is little demand from apprenticeship and adult education programs.

An important aspect of the basic adult education and basic skills training programs developed between MEC and SECAP is that it will use MEC's existing network of adult training centers and SECAP's capacity in terms of instructors, equipment and physical infrastructure. Another important aspect of these programs is that they will have more flexibility due to simplified requirements for participation; short duration; training based on needs assessment; and use of available capacity at the permanent centers. The program includes massive and quick training needs assessment methods that include canvassing the communities with regard to their felt needs and to the availability of suitable infrastructure in the area.

Basically, there will be a continuum of training that begins with basic adult education, continues with basic skills training and affords some of the participants the opportunity of self-employment. The most talented will have the opportunity to continue their training at SECAP centers and financial assistance to cover their transportation costs would be available in both instances.

The post-literacy training program would meet the education and basic training needs of the urban and rural poor who are working or are seeking to enter the labor force as follows: (i) a total of 5,675 basic education courses for adults would be offered by the Ministry of Education and Culture for 113,500 participants; (ii) 10,000 short-duration basic skills training courses would be offered by MEC, with SECAP's collaboration, for 200,000 participants; (iii) 1,700 short-duration basic skills training would be offered by MEC, with collaboration of SECAP, for 25,500 disabled adults; and (iv) 10,000 practical, short-duration courses would be offered by SECAP for 180,000 participants, including about 20,000 small manufacturing business owners who will receive technical and management training. In addition, a number of these small business owners will require technical support in project preparation and gaining access to funding sources. The following table summarizes the expected results of this program.

Post-Literacy Training Targets (1)

	Primary Responsibility	Courses	Participants
(i) Basic Adult Education	MEC	5,675	113,500
(ii) Basic Skills Training	MEC	10,000	200,000
(iii) Basic Skills Training for the Disabled	MEC	1,700	25,500
(iv) Capacitacion Popular and Small Business Assistance	SECAP	10,000	180,000

(1) 60% of the activities in rural areas and 40% in urban. The table shows the person-courses to be provided. One person can take more than one course. The project would cover a total of 180,000 different persons each of whom will receive between two and three training courses (an average 2.25) each. Of them, 113,500 would have also received the basic education course.

The post-literacy training program is subdivided into two main activities: basic adult education and basic skills training for adults who have started to reach literacy and primary school drop-outs. The basic adult education and basic skills training activities would: (i) use sixth-year technical secondary school students to conduct training needs assessments and determine the availability of physical and organizational infrastructure in the poorest urban and rural communities. These assessments would be carried out using the network that MEC created for its literacy campaign; and (ii) provide short-term training as instructors for students of the last two grades of technical secondary schools. The estimated cost of this program is about US\$13 million, including contingencies.

The program objectives would be met through the following actions:

- (i) Implementation of 5,765 courses for 113,500 participants, with options at three levels: literacy instruction (100 hours); primary education (300 hours); and basic middle cycle (1,100 hours). These courses lead to certification equivalent to regular basic education. Program participants would be those attending the basic adult education and skills training programs of MEC and SECAP who have not completed their basic education. The courses will be given by 2,000 regular teachers, 100 volunteers from social service agencies and 35,000

students from the last grades of technical secondary schools. The activities will be conducted at existing facilities including adult education centers and technical colleges of the MEC, as well as the *SECAP Vocational Training Centers*. The training of teachers and the preparation of teaching materials will be the responsibility of the National Directorate of Popular Education of the MEC.

- (ii) A basic skills training program, including implementation of 10,000 eminently practical, short-duration courses for 200,000 participants. These are courses that provide training for work in arts and crafts, agriculture, industry, construction, trade, services and small business management. The duration of the courses varies between 60 and 100 hours. The courses are aimed at unskilled adults who work or are seeking to join the labor force on an independent basis or as small business employees. The courses will be offered by MEC teachers in day and evening sessions. The infrastructure of 600 MEC technical colleges, 400 MEC arts and crafts centers and 19 *SECAP* vocational training centers will be used to give these courses. The teacher training and the preparation of teaching materials will be the joint responsibility of MEC and *SECAP*.
- (iii) A basic skills training program for the disabled including implementation of 1,700 eminently practical, short duration courses for 25,500 participants. Since this will involve a highly personalized form of instruction, the duration of the courses varies. They will be offered by 500 special education teachers, in 40 existing institutes of special education. In addition 22 multipurpose workshops for training of the disabled will be established to provide these courses. The teacher training and the preparation of teaching materials will be the joint responsibility of MEC and *SECAP*.
- (iv) Implementation of 10,000 eminently practical, short-duration courses for 180,000 participants. The courses will provide training for work in agriculture, industry, construction, trade, services and small business management. Also included are technical support activities for microenterprises in project preparation and submission of credit requests. The duration of the courses is variable, ranging between 60 and 100 hours. The Capacitación Popular training and microenterprise assistance program is for the unskilled who work or will enter the labor force, on an independent basis or as a small business employees. Program participants may also choose the basic adult education courses, either before

or after their training. The courses will be given by 160 SECAP instructors (30 already in-house and 130 to be hired), plus a number of part-time instructors. To provide these courses, use will be made of the SECAP infrastructure consisting of 19 permanent vocational training centers, currently used at 49% of capacity, and seven mobile units, recently acquired with the resources of IBRD Ln. 2171-EC. Teacher training and the preparation of teaching materials will be the responsibility of SECAP. It is expected that the utilization of SECAP's permanent centers for these training programs will increase by 35%. Thus, the use of SECAP infrastructure will increase from the present 49% to 65%.

A comparison of 1989 unit costs of training of SECAP and the estimated training costs, with the project, are presented below:

	1989 Average Unit Recurrent Costs US\$	1989 Average Unit Costs US\$
Industry		
Cost/participant	69.3	141.6
Cost/hour of instruction	6.0	12.3
Commerce and Services		
Cost/participant	11.4	24.4
Cost/hour of instruction	5.5	11.8
Total		
Cost/participant	41.4	84.9
Cost/hour of instruction	5.9	10.6

Project training costs would be US\$22.0 per participant-course of which US\$15.2 represent recurrent costs. This means that US\$50 would be invested in the average person taking 2.25 courses (or US\$72 including for those who take the basic post-literacy education course). By increasing the utilization of SECAP's capacity its unit costs per participant would fall from the present US\$84.9 to US\$73.7 in case the proposed activities are undertaken.

Technical Support to Small Manufacturing Businesses

Ecuador has a group of small manufacturing businesses engaged in textile and leather garment and accessories manufacturing, furniture-making, and metal-machinery. These businesses have a tradition of having craft skills that enabled them to compete in the Andean subregion. Ecuador also has institutions experienced in

technical assistance to small businesses. These are the Center for Industrial Development of Ecuador (CENDES) and the Center for Promotion of Small Industry and Handicrafts of Ecuador (CENAPIA). Coordinated action between SECAP, CENDES and CENAPIA would provide support to small manufacturing businesses through training and technical assistance.

This program constitutes a pilot effort to improve the productivity and competitiveness of small manufacturing companies in strategic sectors with export potential by transferring production technologies, quality control and marketing knowledge. The transfer of technologies will be done through training activities, provision of information, technical assistance and promotion of marketing associations. It is expected that about 2,800 already established companies, which provide employment to an estimated 28,000 workers would be assisted through this pilot program which will have a four-year duration at an estimated cost of about US\$2,800,000. SECAP, CENDES and CENAPIA will be responsible for its implementation.

The program will have four basic activities: (a) identification of production, design and quality control problems of small manufacturing businesses of textiles, leather, and wood products; (b) provision of technical assistance services to these businesses; and (c) establishment of technological information and consulting centers for the targeted sectors. Each one of these activities will include training for production workers, middle level managers and executives.

- (a) Identification of production, design and quality control problems would be done by SECAP, CENDES and CENAPIA, with support of national and international consultants, using a sample of 1,200 businesses. The identification of problems facing these small manufacturing businesses would be done through: (i) preparation of a critical overview of past studies of the selected sectors; (ii) preparation of an industrial profile of each of the sectors; (iii) identification of existing bottlenecks in the production, design, and marketing processes; (iv) identification of norms, procedures and policy changes required to enhance the sector's potential; and (v) training the staff of SECAP, CENDES and CENAPIA that would perform these analyses.
- (b) Technical assistance in productivity and quality to the textiles and leather ready-to-wear clothing and accessories sectors would be provided to resolve previously identified problems of production and quality ((a) above). Also, the capacity to replicate these programs in SECAP, CENDES AND CENAPIA would be developed. The following tasks would be accomplished: (i)

identification of specific production and quality problems; (ii) identification and testing of solutions suited to local conditions; (iii) standardization of successful interventions and training of technical advisors who can assist businesses in identifying problems and recommending solutions; and, finally (iv) developing a fee-based system for provision of technical assistance services to the enterprises. It is expected that this activity will last two years beginning from the date of completion of the identification phase.

- (c) Three technological information and consulting centers for the leather garment and clothing sectors and the furniture and wooden parts manufacturers would be established (one for each sector). The centers will take advantage of the experience of SECAP, CENDES and CENAPIA in providing support to small businesses, and will develop a data base with international links. This data base will place national and international technical information at the disposal of businesses. A set of manuals would be developed and continuously updated to assist in the provision of services; also, the staff of the three above institutions would be trained to enable them to provide technical support services to manufacturing businesses in the target sectors. The centers would provide technical support services using the resources of the three agencies or of those offering the required assistance within Ecuador or abroad. The three centers would have the following functions: (i) offer training for middle-level managers and executives; (ii) disseminate technological information; (iii) provide technical assistance in the areas of production and quality control. At the outset, these functions will be organized by CENDES, using the infrastructure, technical staff and information available within CENDES as well as that of CENAPIA and SECAP. The centers will be located in the areas having the highest concentration of activities in the target manufacturing sectors. Initially, the province of Pichincha (textiles), Imbabura (leather) and Guayas (wood) have been considered as likely locations.

Institutional Strengthening of Vocational Training

The objectives of this program are: (i) to improve the quality of the vocational training that SECAP offers; (ii) to enhance the capacity of the vocational training system to adjust to labor market requirements; and (iii) to develop the institution's internal management systems.

The following activities would be undertaken: training of trainers; curriculum design and production of teaching materials; refurbishing of training centers; strengthening the labor market and earnings information system; and establishing SECAP's management information system. The total cost is estimated at US\$12.8 million, including contingencies.

Training of Trainers and Instructors. The objective of this activity is to train and provide advanced instruction to trainers and instructors in teaching methodology and techniques. The training program is based on the results of the technical training needs assessment carried out in 1990; at that time, an instructor selection process as well as the technical profiles for the seven types of existing technical instructors were also developed. The training program includes: (i) 20 courses of 180 hours, on basic methodological training, for 455 existing and new instructors; (ii) 20 courses of 280 hours, on advanced methodological training for 500 instructors who have completed the basic training; (iii) 3 courses of 120 hours for 60 trainers of instructors; (iv) 2 courses of 40 hours, on design of instructional materials, for 25 technical staff from the department of pedagogical design of SECAP; (v) 86 advanced technical instruction courses of between 60 and 80 hours, aimed at 1,043 instructors (some instructors will take more than one course); (vi) 3 courses of 80 hours, on basic methodological training, for 75 part-time instructors in the Capacitacion Popular program; and (vii) 3 courses, of between 60 and 80 hours, for promoters and supervisors of the Capacitacion Popular program. In addition, 36 fellowships or internships abroad would be offered, along with 102 internships at Ecuadoran enterprises, for advanced technical training of instructors and their trainers. Implementation of the training programs will be the responsibility of the Technical Directorate of SECAP and it is expected that training would be part of the staff career development system of the institution, presently under study.

Curriculum Design and Production of Training Materials. One objective of these activities is to improve the quality of vocational training by strengthening the technical capacity of SECAP to conduct labor market analyses, and develop program content and methodology. A second objective is to improve the instructional design capacity within SECAP because a study done by its Department of Pedagogical Design and Methods showed that SECAP has only 38% of the instructional materials it needs. Of these, 23% are now obsolete. Similarly, SECAP has only 27% of required training media when compared to the minimum requirements indicated in CINTERFOR standards. Available instructional materials are outdated and in certain specialties such as construction, graphic arts and industrial clothing manufacturing there are no bibliographical references for consultation and research. A final objective is to establish a specialized documentation center, that

would become part of CINTERFOR's international network, to orient vocational training programs. Its primary function will be to support the tasks of designing curricula and to take advantage of international training materials production that is covered by the CINTERFOR network.

The first objective would be met by: (i) forming a group of 46 specialists in charge of technical and instructional design who would receive training through two specialized courses of one month duration each; (ii) updating of curriculum design of 11 families of existing specialties that SECAP offers at present; (iii) technical/pedagogical design for courses of 11 new specialties to be offered under the Capacitación Popular training program; (iv) curriculum design in eight new specialties for SECAP's regular program; (v) implementation of an experimental distance training program that would be used for training of instructors in teaching methodologies; and (vi) implementation an experimental program of individualized training in welding. The execution of the curriculum design program is the responsibility of the Technical Directorate of SECAP and it is expected that it would become a permanent activity.

The second objective would be met by: (i) replacing, during a two-year period, all training equipment and media in the 25 training centers of SECAP; (ii) training 14 technical staff in training media use through a 40 hour course. These technical staff will later become multiplier agents for in-service training of instructors; (iii) producing training materials for the Capacitación Popular program; (iv) organizing and equipping an audio-visual media reproduction unit (filmstrips, videotapes and slides); (v) preparation of 166 technical manuals for all specialties offered by SECAP; and (vi) acquiring 16 instructional videotapes for different specialties. Program implementation is the responsibility of the Technical Directorate of SECAP and it is expected that it would become a permanent activity.

The final objective would be met by: developing a national information and documentation system, headquartered at SECAP, consisting of one national center and four specialized regional centers that would be part of the Regional Information System on Vocational Training (SIRFO), which CINTERFOR coordinates for Latin America and the Caribbean. The first year will be devoted to adapt the physical infrastructure required, train the persons who would manage the system, and index all documents in accordance with the ILO glossary, with CINTERFOR technical assistance. During the second year of program implementation, the centers could start operations.

Training Center Refurbishing. The objective of this activity is to acquire and provide equipment for new specialties, and provide supplemental equipment, equipment repair and installation

for existing specialties.

The objective of this program would be met by: (i) providing supplemental equipment to existing centers in Ambato, Cuenca, Graphic Arts of Quito, Tulcan and the mobile units; (ii) providing equipment for the following new specialties: small scale mining, tanning at the Ambato center, industrial electronics at CERFIN, informatics in 17 centers, baking in Quito, Guayaquil, Cuenca and Ambato; (iii) designing and implementing an equipment maintenance system in SECAP; and (iv) administration of the equipment acquisition process.

Strengthening the Labor Market and Earnings Information System. The objective of this activity is to provide SECAP with a system that orients its vocational training programs so that they respond more efficiently to the demands of the labor market. The National Employment Institute (INEM), which has established household surveys, would continue developing with SECAP a labor market monitoring system that analyzes existing labor market information (started under Ln. 2171-EC) that is collected by a variety of institutions and which will be useful for guiding and planning of education, vocational training and national employment programs.

The two institutions, with technical assistance, defined the required methodology, computed the indicators and trained the professionals to perform related tasks. This work was a preliminary requirement for developing the necessary data base, for the design, writing and testing the processing and analysis programs, and for training the specialists in charge of maintaining and operating the system in the future.

The attainment of this objective would be done by developing the institutional capacity for analysis and utilization of information at INEM and SECAP, by means of training analysts to maintain the system through: (i) establishment of a data bank that supports labor market analysis; (ii) conducting continuous analyses of the status and dynamics of economic sectors and their effect on the demand for labor and labor skills; and (iii) publicizing the results for effective use by users, among them INEM and SECAP.

Labor market studies aim to improve existing knowledge on the target population of SECAP, to provide feedback to the planning, design, and pedagogical development processes and to SECAP's overall operations. An important objective at present is to determine the standards of living of the population to ensure that priority will be given to the poorest segments of the population. A national living standards measurement survey, at the national level will be conducted by INEM.

Management Information System. The objective of this activity

is to provide SECAP with the basic information for planning and operations decision-making.

This activity will involve: (i) improvement of institutional administrative and organizational procedures; (ii) development of a cost accounting system for decision-making on the allocation and administration of funds; and (iii) conducting impact evaluation studies of SECAP's target population.

Institutional improvement would be accomplished by performing institutional analyses and, as a result, developing manuals which would cover the programming and control of utilization of infrastructure; the procurement of services and materials; the programming and follow up of trainers; and the decentralized management of funds.

The cost accounting system would be established using the methodology developed, and partially tested, in 1990, with international technical assistance.

The impact evaluation studies (tracer studies) would be done using methodology developed and applied with international technical assistance, under Ln. 2171-EC. There would be two studies per year, at the national level, with regional breakdowns and by center in each of the training modalities (apprenticeship, adult training, combined in-house and on-the-job training, basic skills training and management training.)

Project Implementation

The component will have a Project Coordinating Unit (PCU) which will report to the Executive Director of SECAP. The PCU's responsibilities would be to coordinate and follow up on all project's activities such as procurement of services and goods (with the assistance of a procurement agent); and liaising with the Bank in operational and administrative areas.

A Coordinating Committee will be created and will be composed of SECAP's Executive Director, the PCU Coordinator and the coordinators of the three programs.

There will be four implementation units responsible for project activities: (a) the Informal Sector Training Directorate that will be responsible for the Capacitacion Popular program and will coordinate program activities with the Director of Adult Education of MEC; (b) the Operations Directorate that will be responsible for the support program for small manufacturing businesses and will coordinate with CENDES and CENAPIA; (c) the Technical Directorate will be responsible for the following institutional strengthening activities: trainer and instructor training, curriculum development and preparation of instructional

ANNEX 8

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materials and media; refurbishing of training centers; and impact evaluation studies; and (d) the Planning Directorate will be responsible for the management information system.

The Planning Directorate and the PCU Coordinator will be responsible for the preparation of quarterly reports informing the Executive Director of SECAP on the physical and financial progress of all project activities. Each report will also provide an analysis of past and projected activities.

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FIRST SOCIAL SECTOR DEVELOPMENT PROJECT

Project Management and Implementation Arrangements

Organization and Staffing

1. Overall management authority is vested in the office of the Minister of Education for the Basic Education Component and in the office of the Executive Director of SECAP for the Adult Education and Training Component

A. Basic Education Component

2. At the policy level, guidance would be provided by the Committee of Directors of MEC. Day-to-day coordination of project implementation would be provided by the Project Coordinating Unit whose head would report directly to the Minister of Education. The Coordinating Unit would be managed by a Coordinator and would have four consultants for technical support and an Administrative/Accounting consultant. The technical consultants would be an education management expert, an education quality specialist and specialists in the areas of construction and facilities maintenance systems and legal affairs. Other technical specialists providing support in areas such as general education, textbook development, educational assessment and institutional development will be housed in the respective implementing units at MEC. Main functions include providing technical support to the implementing agencies and facilitating coordination between MEC units and with external public or private agencies. The Administrative Unit would have responsibility for personnel management, accounting and financial reporting, and procurement of goods and services (with support from procurement agents). Responsibility for implementation varies by subcomponent: in general, policy execution and the implementation of management improvements would be managed by the MEC at the central and provincial levels; procurement would also be managed at MEC's central level; pedagogical and administrative supervision would be managed at the provincial level with technical support from MEC at the central level, and teacher training, special education and pre-school education programs would be managed by the school networks with support from the responsible MEC units at the central level and from the PCU technical staff.

Implementation Procedures

The implementation procedures for the Basic Education component are described below (more details are in Annexes 4-7 and MEC's project proposal, available in the Project File).

Educational Facilities. The proposed 55 hub schools were selected on the basis of detailed microplanning. Detailed costs for the five hub schools to be constructed during the first year of project implementation were provided during Negotiations. During the first year of implementation

detailed planning would be completed for the remaining 15 hub schools included in Phase I. The experience of the first five school networks will yield information that will be fed back into plans and procedures for those that follow. Beginning in the first full year of implementation and continuing throughout the second year, detailed planning would be carried out for all remaining school networks using the enhanced planning capabilities of Provincial Directorates resulting from the institutional strengthening component of the project. The civil works specialist contracted by the PCU would coordinate with the procurement agent to ensure that civil work design, construction and supervision is implemented in accordance with agreed plans and schedules.

Management and Teacher Training

Management Training. The training specialist housed in DINACAPED will assume responsibility for coordinating the development of a training program for school network Directors and Deputy Directors, key individuals in the National Directorates of Regular and Special Education and Planning, DINACAPED, Provincial Education Departments and other relevant managerial personnel of the MEC. To implement the program, the training specialist would draw upon the resources of the Teacher Training Directorate (DINACAPED) of the MEC, the experience of the IDB-financed rural quality-improvement project, the Pedagogical Institutes (IPED) (formerly teacher training schools), and technical assistance.

In-Service Training for Teachers. The school network Directors will be responsible for (i) programming and scheduling the in-service teacher training activities for all teachers in schools in their networks and (ii) assuring that training is adequately implemented. The IPED in each Province will be responsible for carrying out the training activities in all hub schools in the province. The content of the training events and the training materials will be developed by the IPEDs, DINACAPED, with technical assistance engaged by the PCU. Training design will be done by DINACAPED staff with technical assistance and input from IPED trainers and school network Directors. Training material reproduction and distribution to the hub schools would also be the responsibility of DINACAPED.

The most intense training would take place during the first year of program implementation in a given network. Training activities will usually take place at the hub schools in facilities provided for that purpose, or in regular classrooms of network schools. IPED personnel will present the training events in accordance with each network's program and with support from the PCU's training specialist.

In addition to training for management and teachers, information will be provided to community leaders and parents on the quality improvement program and ways in which parents and the community can contribute to achieving its objectives. Each school network Director will plan meetings with community leaders, parents and parent associations. Also, informational pamphlets would be produced and distributed in the community.

Monitoring and evaluation of the training courses and seminars will be coordinated by the training specialist of the PCU, who will draw on resources from DINACAPED, the IPEDs and technical assistance to develop and implement an evaluation of the effects of training on teachers' knowledge and teaching practices.

Preschool Education

Each hub school will have three new preschool classrooms. The network Director would appoint one of the preschool teachers to be Coordinator of the preschool program for the network. The coordinator will be responsible for establishing a center of excellence and organizing and coordinating training for other preschool teachers throughout the network. Training content would be developed with assistance from DINACAPED and IPEDs.

All preschools within the low-income neighborhoods served by the hub schools and their network of schools will be beneficiaries of the outreach activities of the preschool program. Training, materials, manuals and teacher guides, prepared by DINACAPED, with technical assistance, will be made available to all teachers in the hub school's zone of influence.

The preschool program evaluation would be conducted with technical assistance managed by the PCU training specialist.

Special Education

Special Education teams composed of one psychologist, a special education specialist, a speech therapist, a social worker, and a general education specialist, will report to the Directors of the school networks. One member of each team will be designated Coordinator of the team's activities and will assume responsibility for programming school visits, screening and other services, arranging for transportation to schools within the school network, and integrating the team's teacher training activities with the broader in-service teacher training program.

Over-all programming and policy direction in the area of special education is provided by the National Department of Special Education, under the National Directorate of Regular and Special Education. The Department will provide training and other inputs to the special education teams. The Coordinator of each network's special education team will be an employee of the National Department of Special Education.

Monitoring and evaluation of special education will be carried out by the network Director, the PCU and by the National Department of Special Education.

Development, Production and Distribution of Textbooks

Responsibility for implementing the Textbook subcomponent will rest with DINACAPED and the Editorial Council who would set policy, norms and procedures

for textbook development. DINACAPED will, with support from the PCU and technical assistance: (a) coordinate the design and development of the new textbooks and materials through contracts with authors; (b) contract with private sector firms for the production of textbooks.

SNALME, one of the key entities represented on the Editorial Council, will be responsible for: (a) collecting textbook rental fees from primary school students in the hub schools and their networks of schools; (b) maintaining the Editorial Fund for use in printing additional textbooks as needed; (c) contracting and/or otherwise arranging for distribution of textbooks to the hub schools for further distribution to the project schools and students; and (d) selling additional copies through its distribution centers; and inviting private sector booksellers to present proposals to market additional copies.

National System for Measurement of Academic Achievement

Direct responsibility for implementing the system would rest with the PCU. A Council would be formed, composed of the Minister of Education, the Director of the Evaluation Department and the PCU Coordinator to provide overall policy guidelines. The PCU would contract the required consulting services to carry out the educational assessment program.

Reporting Requirements

The Planning Directorate and the PCU Coordinator will be responsible for the preparation of periodic reports to inform the Minister of Education about the physical and financial progress of all project activities. Each report will also provide an analysis of past and projected activities. The PCU would submit to the Bank bi-annually project progress reports in a format to be agreed between MEC and the Bank.

B. BASIC ADULT EDUCATION AND TRAINING COMPONENT (ANNEX 8)

The component will have a Project Coordinating Unit (PCU) which will report to the Executive Director of SECAP. The PCU would be staffed by one Coordinator, three technical specialists, one technical assistant and one administrator/accountant. Its responsibilities would be to coordinate and follow up on all project's activities such as procurement of services and goods (with the assistance of a procurement agent); and liaising with the Bank in operational and administrative areas.

A Coordinating Committee will be created and will be composed of SECAP's Executive Director, the PCU Coordinator and the coordinators of the post-literacy training, support to small manufacturing businesses, and institutional strengthening programs.

There will be four implementation units responsible for project activities: (a) the Informal Sector Training Directorate will be responsible for the Capacitacion Popular program and will coordinate program activities

with the Director of Adult Education of MEC; (b) the Operations Directorate will be responsible for the support program for small manufacturing businesses and will coordinate with CENDES and CENAPIA; (c) the Technical Directorate will be responsible for the following institutional strengthening activities: trainer and instructor training, curriculum development and preparation of instructional materials and media; refurbishing of training centers; and impact evaluation studies; and (d) the Planning Directorate will be responsible for the management information system.

The Planning Directorate and the PCU Coordinator will be responsible for the preparation of quarterly reports informing the Executive Director of SECAP on the physical and financial progress of all project activities. Each report will also provide an analysis of past and projected activities. The PCU would be responsible for forwarding to the Bank bi-annually a progress report in a format to be agreed upon between SECAP and the Bank.

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FIRST SOCIAL DEVELOPMENT PROJECT

Monitoring Indicators and Implementation Targets

Activities		1992				1993	1994	1995	1996	1997	1998
		1	2	3	4						
URBAN BASIC EDUCATION											
Overall Management											
Establish the PCU			D								
Contract a procurement agent			D								
Contract firm to develop accounting manual				D							
Conduct Implementation Review	No.	7				D	D	D	D	D	D
Contract independent auditor	No.	7				D	D	D	D	D	D
Decentralized Networks											
Select sites for Hub Schools	No.	55	0	9%	0	0	18%	44%	29%		
Build/rehabilitate hub schools	No.	55					9%	18%	22%	22%	16%
Procure furniture and equipment	Hub Sch	55					9%	18%	22%	22%	16%
Select and assign directors and staff	Network	55	0	9%	0	0	18%	22%	22%	16%	13%
Train trainers, directors and MEC staff	No.	480	15%	30%	30%	25%					
In-service teacher training											
Adapt training programs and plan courses							100%				
Select and Train teachers	No.	17,000					9%	18%	22%	22%	16%
Pre-school classes											
Acquire/develop low-cost didactic materials								100%			
Select and appoint teachers									27%	44%	29%
Develop teacher training materials								100%			
Plan training and train teachers								27%	44%	29%	
Conduct study to evaluate program										S	C
Special Education											
Select and appoint specialists									27%	44%	29%
Train teachers		12,700						27%	44%	29%	
Development, production and distribution of textbooks											
Develop TOR for Editorial Council			D								
Develop teacher guides for AMER textbooks	No.	5,000	0	0	50%	50%	100%				
Print and distribute AMER textbooks & guides	No.	135,000	0	0	35%	15%	50%				
Develop guidelines and contract authors to design textbooks, workbooks and guides							25%	25%	25%		
Print and distribute textbooks	No.	567,000						25%	25%	25%	25%
Print and distribute workbooks	No.	1,520,000						25%	25%	25%	25%
Print and distribute textbooks	No.	60,000						25%	25%	25%	25%

Activities	1992				1993	1994	1995	1996	1997	1998
	1	2	3	4						
Educational Assessment										
Contract technical assistance		20%	30%	10%	0	10%	10%	10%	10%	
Plan study tours for MEC staff		0	25%	50%	25%					
Develop training program for specialists					80%	20%				
Develop and conduct pilot tests										
Language and mathematics	grades 2, 6, 9	0	30%	50%	20%					
Language, math, science, social science	grades 2, 6, 9					100%				
Language, math, science, social science	grades 2, 6, 9						100%			
Administer national tests, analyze data disseminate results	Sample 121,150							100%		
Administrative decentralization										
Contract technical assistance		0	25%	25%	0	20%	20%	5%	5%	
Develop programs						100%				
Train MEC and other Govt. agency staff	No. 45					100%				
Train school networks staff	No. 110					50%	50%			
Train Provincial Directorate staff	No. 480					50%	50%			
Budgeting and resource allocation										
Contract technical assistance		0	25%	25%	0	20%	20%	5%	5%	
Develop programs and train staff	No. 255					100%				
Purchase and distribute computers and office equipment for HQ and provinces						100%				
Policy analysis and innovations										
Education Quality Evaluation			BPh1				CPh1	BPh2		CPh2
Bilingual Education Study			B			C				
Education Program Evaluation				B						
Consultation on Secondary Education		B					C			
Consultation on Higher Education			B				C			
ADULT EDUCATION AND TRAINING										
Overall Management										
Establish the PCU		D								
Contract a procurement agent		D								
Develop accounting manual			D							
Conduct Implementation Review						D	D	D	D	D
Contract independent auditor						D	D	D	D	D
Post-Literacy Training										
Select and train teachers, volunteers and students						100%				
Conduct basic adult education courses	No. 5,675					100%				
Conduct basic skills training courses	No. 10,000					10%	20%	20%	20%	10%
Conduct training courses for disabled	No. 1,700					10%	20%	20%	20%	10%
Conduct Capacitación Popular courses	No. 10,000					5%	15%	20%	20%	20%

Activities		1992				1993	1994	1995	1996	1997	1998
		1	2	3	4						
Support to Small Manufacturing Businesses											
Contract technical assistance		0	0	40%	40%	20%					
Provide training for managers and staff							60%	10%	10%	10%	10%
Establish technological information and consulting centers	No.	3				50%	50%				
Develop system to charge fees for services rendered						20%	80%				
Institutional strengthening											
Prepare administrative and organizational procedures manuals						50%	50%				
Produce technical manuals for all specialties offered by SECAP	No.	30				10%	20%	20%	20%	20%	10%
Conduct courses for trainers and technical staff	No.	137					100%				
Curriculum Design				B			C				
Update labor market & earnings info. system					D						
SECAP Other Info. Systems				B			C				
Conduct tracer studies of SECAP graduates	No.	12			B		C				
Other Impact Evaluation Studies							B				
Carry out LSMS	No.	2			B		CPh1		CPh2		

D = Single activities to be started and completed within one year
 B = Beginning of an activity
 C = Completion of an activity
 Ph1 - Ph2 = Phase 1 - Phase 2

Ecuador
FIRST SOCIAL DEVELOPMENT PROJECT
Project Cost Summary

	Sucre (Thousand)			US\$ (Million)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
A. URBAN BASIC EDUCATION								
1. Ed. Quality Improvement	54911.3	17141.2	72052.5	50.0	15.6	65.6	23.8	64.1
2. Instit. Strengthening	6050.9	6294.0	12344.9	5.5	5.7	11.2	51.0	11.0
Sub-Total	60962.2	23435.2	84397.5	55.5	21.3	76.9	27.8	75.1
B. ADULT EDUC. AND TRAINING								
1. Post-Literacy Training	10228.0	2329.7	12557.7	9.3	2.1	11.4	18.6	11.2
2. Small Enterprise Support	1518.4	1382.8	2901.2	1.4	1.3	2.6	47.7	2.6
3. Strengthening of SECAP	7686.3	4868.7	12557.0	7.0	4.4	11.4	38.8	11.2
Sub-Total	19434.7	8581.2	28015.9	17.7	7.8	25.5	30.6	24.9
Total BASELINE COSTS	80396.9	32016.4	112413.3	73.2	29.2	102.4	28.5	100.0
Physical Contingencies	2972.1	1122.0	4094.0	2.7	1.0	3.7	27.4	3.6
Price Contingencies	10568.3	3227.0	13795.3	9.6	2.9	12.6	23.4	12.3
Total PROJECTS COSTS	93937.3	36365.4	130302.7	85.6	33.1	118.7	27.9	115.9

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FIRST SOCIAL DEVELOPMENT PROJECT
Summary Account by Project Component
Sucres (Thousand)

	Ed. Quality Improvem ent	Instit. Strength ening	Post-Lit eracy Training	Small Enterpri se Support	Strength ening of SECAP	Total	Physical Contingencies		Price Contingencies	
							%	Amount	%	Amount
I. INVESTMENT COSTS										
A. Civil Works										
1. Quito & Guayaquil	10735.3	0.0	0.0	0.0	0.0	10735.3	9.1	979.6	5.6	603.1
2. Other Cities	25559.3	0.0	0.0	0.0	0.0	25559.3	6.7	1718.5	14.9	3809.4
Sub-total	36294.6	0.0	0.0	0.0	0.0	36294.6	7.4	2698.1	12.2	4412.5
B. Equipment										
1. Computing Equipment	126.2	284.4	16.5	21.6	84.9	533.6	2.4	12.9	2.1	11.1
2. Equipment and furniture	8619.6	453.3	2238.8	2.6	1967.6	13281.9	4.9	645.6	12.9	1709.2
Sub-total	8745.8	737.6	2255.3	24.3	2052.5	13815.5	4.8	658.5	12.5	1720.3
C. Didactic Material										
D. Textbooks and books	1139.1	0.0	521.4	55.3	726.3	2442.2	5.0	122.1	14.2	346.4
E. Vehicles	5834.1	49.4	0.0	175.7	16.0	6075.2	5.0	301.3	9.1	554.6
F. Studies and Tech. Assist.	322.3	98.3	444.7	49.4	0.0	914.6	5.0	45.7	5.0	45.4
1. Studies	2218.5	2799.9	43.9	131.0	4011.1	9204.4	0.7	67.3	11.4	1050.8
2. Local Experts	537.4	845.5	195.0	283.3	1036.3	2897.4	0.6	16.2	9.9	287.4
3. Foreign Experts	1044.2	554.2	87.8	823.5	487.3	2997.0	0.1	3.5	7.4	220.5
Sub-total	3800.1	4199.6	326.8	1237.8	5534.7	15098.9	0.6	86.9	10.3	1558.6
G. Training										
1. Scholarships	387.0	0.0	261.9	306.3	1221.1	2176.3	0.9	19.4	7.9	172.5
2. Short-term, on-the-job trg	116.8	56.9	0.0	0.0	0.0	173.7	1.9	3.3	9.5	16.6
3. Teachers and instructors	3147.1	0.0	92.2	0.0	149.3	3388.7	4.5	152.4	12.5	424.6
4. Staff Training	113.6	833.2	5.5	131.4	9.3	1093.0	0.6	6.3	8.7	95.1
Sub-total	3764.6	890.1	359.6	437.8	1379.7	6831.8	2.7	181.4	10.4	708.8
H. Purchasing Agents & Audits										
	0.0	3919.9	0.0	0.0	76.9	3996.7	0.0	0.0	11.2	446.6
Total INVESTMENT COSTS	59900.6	9894.8	3907.8	1980.2	9786.1	85471.5	4.8	4094.0	11.5	9793.2
II. RECURRENT COSTS										
A. Human Resources										
1. Teachers and instructors	2302.9	0.0	4181.8	253.0	1129.4	7867.1	0.0	0.0	14.3	1123.4
2. Professional and admin.	4702.7	1660.2	1824.7	387.2	925.7	9500.5	0.0	0.0	14.4	1368.3
Sub-total	7005.6	1660.2	6006.5	640.2	2055.2	17367.7	0.0	0.0	14.3	2491.8
B. Office and Other Supplies										
C. Maintenance	2152.0	192.1	320.2	11.4	141.8	2817.6	0.0	0.0	16.9	475.2
1. Civil Work Maintenance	1638.5	0.0	9.2	0.0	0.0	1647.7	0.0	0.0	16.5	271.8
2. Equipment Maintenance	1093.2	163.5	559.7	7.3	504.3	2328.0	0.0	0.0	17.9	416.0
3. Vehicle Maintenance	262.6	69.3	582.2	69.2	0.0	983.4	0.0	0.0	14.3	140.5
Sub-total	2994.3	232.8	1151.1	76.5	504.3	4959.0	0.0	0.0	16.7	828.3
D. Other Operating Costs										
	0.0	365.0	1172.1	192.9	69.6	1799.6	0.0	0.0	11.5	206.9
Total RECURRENT COSTS	12151.9	2450.1	8649.9	921.0	2770.9	26943.9	0.0	0.0	14.9	4002.2
Total BASELINE COSTS	72052.5	12344.9	12557.7	2901.2	12557.0	112413.3	3.6	4094.0	12.3	13795.3
Physical Contingencies	3767.4	10.9	161.1	15.2	139.5	4094.0				
Price Contingencies	9559.4	1235.2	1503.4	131.1	1366.2	13795.3	3.3	456.4		
Total PROJECT COSTS	85379.3	13591.0	14222.2	3047.6	14062.6	130302.7	3.5	4550.5	10.6	13795.3
Taxes										
Foreign Exchange	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Foreign Exchange	19985.4	6901.7	2633.7	1441.1	5403.5	36365.4	3.4	1226.5		

ECUADOR
FIRST SOCIAL DEVELOPMENT PROJECT
Summary Accounts by Year

Totals Including Contingencies
US\$ (Million)

	1992	1993	1994	1995	1996	1997	1998	Total
I. INVESTMENT COSTS								
A. Civil Works								
1. Quito & Guayaquil	2.8	5.5	2.9	0.0	0.0	0.0	0.0	11.2
2. Other Cities	0.0	2.0	4.5	8.4	6.7	5.9	0.8	28.3
Sub-Total	2.8	7.5	7.4	8.4	6.7	5.9	0.8	39.5
B. Equipment								
1. Computing Equipment	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
2. Equipment and furniture	0.4	2.5	3.3	2.6	2.5	1.6	1.3	14.2
Sub-Total	0.9	2.6	3.3	2.6	2.5	1.6	1.3	14.7
C. Didactic Material								
D. Textbooks and books								
E. Vehicles								
F. Studies and Tech. Assist.								
1. Studies	1.0	1.4	2.3	0.8	2.7	1.0	0.3	9.4
2. Local Experts	0.5	0.7	0.6	0.4	0.4	0.2	0.2	2.9
3. Foreign Experts	0.8	0.9	0.6	0.2	0.3	0.1	0.1	2.9
Sub-Total	2.2	2.9	3.5	1.4	3.4	1.3	0.6	15.2
G. Training								
1. Scholarships	0.5	0.7	0.4	0.2	0.2	0.1	0.1	2.2
2. Short-term, on-the-job trng	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
3. Teachers and instructors	0.3	0.4	0.8	0.7	0.8	0.5	0.2	3.6
4. Staff Training	0.1	0.4	0.2	0.2	0.1	0.0	0.0	1.1
Sub-Total	0.9	1.6	1.5	1.0	1.1	0.6	0.3	7.0
H. Purchasing Agents & Audits								
Total INVESTMENT COSTS	7.9	18.2	19.7	15.3	15.1	10.5	3.8	90.5
II. RECURRENT COSTS								
A. Human Resources								
1. Teachers and instructors	0.7	0.9	1.0	1.1	1.3	1.5	1.6	8.2
2. Professional and admin.	0.8	1.0	1.2	1.3	1.6	1.9	2.1	9.9
Sub-Total	1.5	1.8	2.2	2.5	2.9	3.4	3.7	18.1
B. Office and Other Supplies								
C. Maintenance								
1. Civil Work Maintenance	0.0	0.2	0.2	0.2	0.3	0.4	0.5	1.7
2. Equipment Maintenance	0.0	0.1	0.2	0.4	0.5	0.6	0.7	2.5
3. Vehicle Maintenance	0.1	0.1	0.1	0.2	0.2	0.2	0.2	1.0
Sub-Total	0.1	0.3	0.5	0.8	1.0	1.2	1.4	5.3
D. Other Operating Costs								
Total RECURRENT COSTS	2.0	2.6	3.3	3.9	4.7	5.5	6.1	28.2
Total PROJECT COSTS	9.9	20.8	23.0	19.2	19.8	16.1	9.9	118.7

ECUADOR
FIRST SOCIAL DEVELOPMENT PROJECT
Projects Components by Year

Totals Including Contingencies
US\$ (Million)

	1992	1993	1994	1995	1996	1997	1998	Total
A. URBAN BASIC EDUCATION								
1. Ed. Quality Improvement	3.8	12.5	14.4	14.6	13.6	12.1	6.8	77.8
2. Instit. Strengthening	1.8	3.1	2.2	1.6	1.5	1.5	0.6	12.4
Sub-Total	5.6	15.6	16.7	16.2	15.1	13.6	7.4	90.1
B. ADULT EDUC. AND TRAINING								
1. Post-Literacy Training	1.7	1.9	2.2	2.1	1.9	1.5	1.6	13.0
2. Small Enterprise Support	1.2	1.0	0.6	0.0	0.0	0.0	0.0	2.8
3. Strengthening of SECAP	1.3	2.4	3.7	0.9	2.7	0.9	0.9	12.8
Sub-Total	4.3	5.3	6.4	3.0	4.7	2.4	2.5	28.5
Total PROJECTS COSTS	9.9	20.8	23.0	19.2	19.8	16.1	9.9	118.7

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FIRST SOCIAL DEVELOPMENT PROJECT

Financing Plan
(in US\$ million)

<u>Category</u>	<u>MEC</u>	<u>SECAP</u>	<u>Total</u>
Civil Works	27.5	0.0	27.5
Equipment, Furniture, and Vehicles	9.0	4.5	13.5
Didactic Materials	7.0	1.5	8.5
Technical Assistance and Studies	12.0	7.2	19.2
Teacher, Instructor and Staff Training	5.0	2.0	7.0
Office and School Supplies	1.2	0.3	1.5
Operating Costs a/	5.3	6.5	11.8
Total	67.0	22.0	89.0

a/ Includes incremental staff, travel expenditures, and maintenance of civil works, equipment, and furniture repair.

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Table 1

FIRST SOCIAL DEVELOPMENT PROJECT

Estimated Schedule of Disbursements

(in US\$ million)

Bank Fiscal Year	Quarter Ending	Disbursed During Quarter	Cumulative Amount	Disb. as % of Total	Balance of Loan
92	June 30, 1992	5.0 a/	5.0	8	84.0
93	Sept. 30, 1992	0.5	5.5		83.5
	Dec. 31, 1992	0.5	6.0		83.0
	March 31, 1993	2.0	8.0		81.0
	June 30, 1993	2.0	10.0	16	79.0
94	Sept. 30, 1993	3.0	13.0		76.0
	Dec. 31, 1993	3.0	16.0		73.0
	March 31, 1994	3.5	19.5		69.5
	June 30, 1994	3.5	23.0	37	66.0
95	Sept. 30, 1994	3.5	26.5		62.5
	Dec. 31, 1994	3.5	30.0		59.0
	March 31, 1995	4.5	34.5		54.5
	June 30, 1995	4.5	39.0	62	50.0
96	Sept. 30, 1995	4.5	43.5		45.5
	Dec. 31, 1995	4.5	48.0		41.0
	March 31, 1996	4.0	52.0		37.0
	June 30, 1996	4.0	56.0	89	33.0
97	Sept. 30, 1996	3.5	59.5		29.5
	Dec. 31, 1996	3.5	63.0		26.0
	March 31, 1997	3.5	66.5		22.5
	June 30, 1997	3.5	70.0	91	19.0
98	Sept. 30, 1997	3.5	73.5		15.5
	Dec. 31, 1997	3.5	77.0		12.0
	March 31, 1998	3.5	80.5		8.5
	June 30, 1998	3.5	84.0	95	5.0
99	Sept. 30, 1998	3.0	87.0		2.0
	Dec. 31, 1998	1.5	88.5		0.5
	March 31, 1999	0.5	89.0	100	0.0

a/ Includes Special Account deposit of the equivalent of US\$4.2 million and expected retroactive financing of up to the equivalent of US\$4.8 million for eligible expenditures incurred after July 13, 1991.

ECUADOR

ANNEX 13

FIRST SOCIAL DEVELOPMENT PROJECT

Table 2

Withdrawal of the Proceeds of the Loan

Category	Amount of the Loan Allocated (Expressed in Dollar Equivalent)	% of Expenditures to be Financed
1. Civil Works	23,000,000	70%
2. Equipment, Furniture, and Vehicles		
(a) MEC	8,500,000	100% of foreign expenditures,
(b) SECAP	4,000,000	100% of local expenditures (ex-factory cost) and 80% of local expenditures for other items procured locally
3. Didactic Materials		
(a) MEC	6,300,000	100%
(b) SECAP	1,400,000	100%
4. Tech. Assistance, Studies, and Audits		
(a) MEC	11,000,000	100%
(b) SECAP	6,500,000	100%
5. (a) MEC Teacher and Staff Training	4,500,000	100%
(b) SECAP Instructor and Staff Training	1,800,000	100%
6. Office and School Supplies		
(a) MEC	1,200,000	100% until the aggregate reaches US\$0.5 million; 60% until the aggregate reaches reaches US\$1.1 million, and 30% thereafter
(b) SECAP	300,000	100% until the aggregate reaches US\$0.1 million; 60% until the aggregate reaches reaches US\$0.2 million, and 30% thereafter
7. Operating Costs (excl. office and school supplies)		
(a) MEC	4,800,000	100% until the aggregate reaches US\$1.8 million; 60% until the aggregate reaches reaches US\$4.2 million, and 30% thereafter
(b) SECAP	5,700,000	100% until the aggregate reaches US\$2.2 million; 60% until the aggregate reaches reaches US\$5.1 million, and 30% thereafter
8. PPF advance	640,000	
9. Unallocated	9,360,000	
Total	89,000,000	

ECUADOR: FIRST SOCIAL SECTOR DEVELOPMENT PROJECT

**SELECTED DOCUMENTS AND DATA AVAILABLE
IN THE PROJECT FILE**

PROJECT DOCUMENTS

MINISTERIO DE EDUCACION Y CULTURA

A.1 Solicitud de Crédito al Banco Mundial:

Mejoramiento de la Calidad y Eficiencia de la Educación Básica, Julio 1991

Anexo 1: Documentos Legales de Base, Abril 1991.

Anexo 2: Establecimiento de un Sistema de Medición de Logros Académicos. Componente 1.1, Abril 1991.

Anexo 3: Infraestructura Física para la RED CEM Urbana. Sub-componente 1.2.1, Abril 1991.

Anexo 4: Capacitación de Maestros. Sub-componente 1.2.2, Abril 1991.

Anexo 5: Educación Pre-escolar. Sub-componente 1.2.3, Abril 1991.

Anexo 6: Educación Especial. Sub-componente 1.2.4, Abril 1991.

Anexo 7: Diseño y Producción de Materiales Educativos Impresos. Componente 1.3, Abril 1991.

Anexo 8: Fortalecimiento Institucional del MEC. Componente 2.1, Abril 1991.

SECAP

B.1 Componente 1

Apoyo a la Pequeña Empresa Manufacurera, Enero 1991.

- 1 Diagnóstico Sectorial
- 2 Asistencia Técnica en Productividad y Calidad
- 3 Centros Tecnológicos
- 4 Consorcios de Exportación

B.2 Componente 2

Capacitación para el Sector Informal, Enero 1991

- 1 Capacitación Ocupacional y Educación Básica de Adultos
- 2 Capacitación Popular y Fortalecimiento de Microempresas
- 3 Capacitación Popular y Fortalecimiento de Microempresas, Actualizado Mayo 1991
- 4 Capacitación Ocupacional y Educación Básica de Adultos, Actualizado

B.3 Componente 3

Fortalecimiento Técnico del SECAP, Enero 1991

- 1 Capacitación y Perfeccionamiento de Docentes
- 2 Diseño Curricular
- 3 Medios de Enseñanza

SELECTED DOCUMENTS AND DATA AVAILABLE
IN THE PROJECT FILE
(Continued)

- 4 Complementación de Centros y Nuevas Especialidades
- 5 Sistema de Documentación e Información
- 6 Monitoreo del Mercado de Trabajo
- 7 Planificación, Evaluación, y control de Gestión
- 8 Acciones Móviles
- 9 Control y Seguimiento de Gestión, revised
- 10 Evaluación Impacto a Egresados del SECAP
- 11 Sistema Continuo de Monitoreo del Mercado de Trabajo
- 12 Sistemas de Procedimientos para el Control Interno del SECAP

B.4 Proyecto BIRF - INEM

Encuesta de Condiciones de Vida

B.5 Informe de Actividades Cumplidas por el SECAP a Traves de Convenios, Acuerdos y Proyectos Específicos, July 1991

B.6 Proyecto: Acuerdo de Asistencia Técnica

"El Valor Economico de la Capacitación Profesional en las Areas de Electricidad y Electrónica," Octubre 1990

B.7 Vera Alarcón & Ortiz Mosquera, "El SECAP Moderno y Su Futuro," Julio 1991

BACKGROUND DOCUMENTS

CIEDC:

- C1 Diagnóstico de la Realidad Educativa Primaria Regular Rural, Febrero 1990**
- C2 Estadísticas Educativas del Nivel Primario (anexo 2), Enero 1990**
- C3 Formación de Recursos Humanos para el Desarrollo, Agosto 1988**

CINDE:

- C4 Highlights of an Evaluation of Project PROMESA, February 1990**
- C5 Involving Parents in the Process of Creating Appropriate Environment for the Healthy Development of Children at Risk: The Crucial Link Between Families and Schools, February 1990**
- C6 Policies and Programs, 1988**

CONUEP:

- C7 Evaluación de la Situación Actual y Perspectivas para el Corto y Mediano Plazo de las Universidades y Escuelas Politécnicas, Mayo 1991.**

IDB:

- C8 Programa de Mejoramiento de la Educación Básica, Septiembre 1989**
- C9 Larrea, Carlos, "Necesidades Basicas, Pobreza y Subempleo en el Area Urbana del Ecuador,"**

SELECTED DOCUMENTS AND DATA AVAILABLE
IN THE PROJECT FILE
(Continued)

Ministerio de Educación y Cultura:

C10 Evaluación del Ciclo Básico

Ministerio de Trabajo y Recursos Humanos:

C11 Encuesta Permanente de Hogares, Nacional Urbana 1989

SECAP:

- C12 Evaluación de la Capacidad Operativa del Servicio Ecuatoriano de Capacitación Profesional SECAP: Resumen por Regiones, Julio 1990
- C13 Evaluación de la Capacidad Operativa del Servicio Ecuatoriano de Capacitación Profesional SECAP: Segunda Parte: Anexos, Julio 1990
- C14 Evaluación de Impacto Electricidad y Electronica: Fundamentos, Metodología y Resultados, Junio 1990
- C15 Hacia un Sistema de Información del Mercado de Trabajo, Agosto 1990
- C16 Metodos de Formación - Producción, Septiembre 1990
- C17 Sobre la Situación Económica del SECAP, Abril 1990

UNESCO:

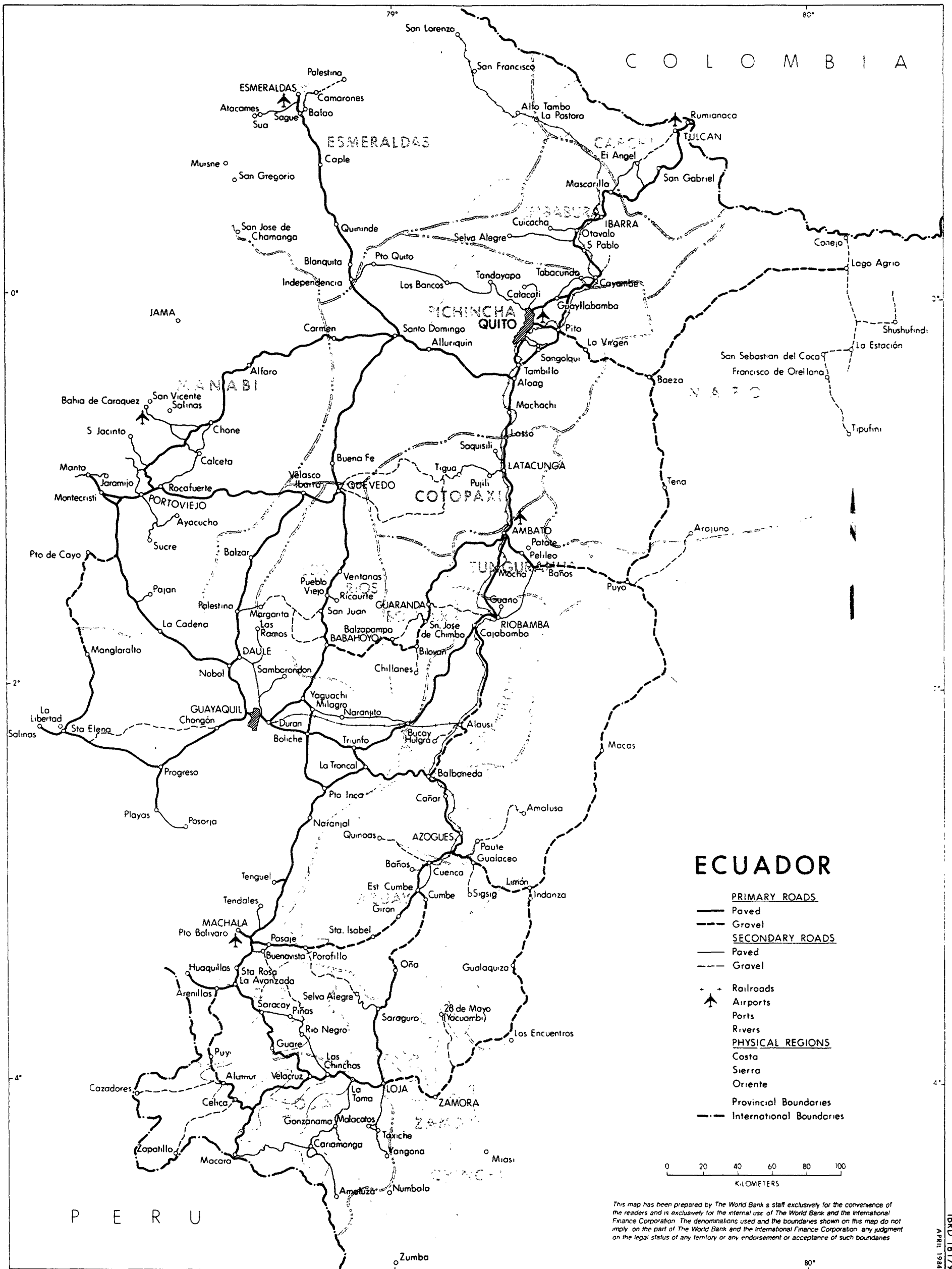
- C18 Desarrollo Educativo: Problemas y Prioridades, Volumen I: Conclusiones y Proposiciones (Resumen), Mayo 1986
- C19 Desarrollo Educativo: Problemas y Prioridades, Volumen II: Documento Principal, Mayo 1986

World Bank Papers:

- C20 Gomez-Castellanos, L. & G. Psacharapoulos, Earnings and Education in Ecuador: Evidence from the 1987 Household Survey, October 1989
- C21 La Política Social en el Ecuador: Problemas y Prioridades, November 1989
- C22 Schiefelbein, Ernesto, "Acceso, Permanencia, Repetición y Eficiencia en la Educación Básica," Febrero 1989

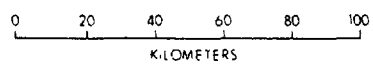
Working Papers:

- C23 Corradine R., "Physical Infrastructure for Urban Basic Education"
- C24 Monge J., "Informe de la Investigación de Mercado sobre el Uso de Textos Escolares," July 1991.



ECUADOR

- PRIMARY ROADS**
- Paved
- - - Gravel
- SECONDARY ROADS**
- Paved
- - - Gravel
- - - Railroads
- ▲ Airports
- Ports
- Rivers
- PHYSICAL REGIONS**
- Costa
- Sierra
- Oriente
- Provincial Boundaries
- - - International Boundaries



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