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## **Nicaragua**

### **Country case study**

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2007

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## UNESCO

### PRESENT STATE OF EDUCATION FOR ALL:

#### THE CASE OF NICARAGUA

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**Summary:** As part of Nicaragua's efforts to meet the goals of education for all (EFA) during the period 2000-2006, the budget for the basic and secondary education system has been increased by 42%. However, progress towards meeting the goals has been mixed: the coverage of preschool and primary education has improved, but the indicators of retention and progress have worsened. Illiteracy has risen and the assessments of academic performance point to deficient quality. While there is no evidence of gender inequalities, considerable gaps are to be seen on comparing populations by area of residence and socio-economic sector. In institutional terms, advances are clearly to be seen in the definition of medium-term strategic policies and plans, and in the design of a system of education indicators. However, the sustainability of this progress is in question following the change of government, as are some notable efforts to promote equity, such as: the Social Protection Network, the community preschool education centres, and the school feeding programme (PINE). With respect to quality, matters for concern are the poor performance of pupils in the Spanish and mathematics academic performance tests, the significant increase in the number of uncertified teachers, and the precarious situation of educational establishments (about 75% of which do not offer the minimum conditions for teaching).

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## INTRODUCTION

In November 2003, Nicaragua was selected together with five other low-income countries to form part of the Education for All Fast Track Initiative (EFA-FTI).<sup>2</sup> With Nicaragua's incorporation in the initiative, the country received US \$7 million annually in the 2004-2005 period and \$10 million annually in 2006 and 2007, for the purpose of speeding achievement of the Millennium Development Goals.

As a result of the process of formulating and approving the proposal that enabled the country to enter the EFA-FTI, marked progress was made in aligning and harmonizing international cooperation, facilitating a sector-wide approach and mobilizing an additional \$90 million in cooperation.<sup>3</sup> This has been conducive in the last six-year period to a significant increase in the budget of the Ministry of Education, Culture and Sport (MECD), from \$108.7 million to \$154.7 million in the period 2000-2006 (equivalent to a 42% increase for those years).

However, as we shall see throughout this document, despite the increased resources, a series of challenges remains to be overcome in order to provide all Nicaraguan boys and girls of school age with good-quality education preparing them for life and work.

In this respect, the purpose of this report is to inform decision-makers and civil society about progress towards the EFA goals, critically examining efforts so far and identifying some strategies and actions considered necessary in order to achieve the goals.

The main sources of information used in this analysis were the official statistics of MECD and the most recent Household Survey (EMNV – living standard measurement survey – 2005), coupled with an extensive review of the most recent bibliographical reference material addressing the various themes of education for all in the country.

This report is made up of five sections. The first shows the general advances towards meeting the education for all goals in the period 2000-2006. The second describes the institutional framework designed to promote achievement of the goals: strategic plans and monitoring and accountability systems. The next contains an examination of the Government's policies and programmes for promoting equity in access, retention and quality of education for the children, young people and adults of Nicaragua in situations of greatest socio-economic disadvantage. The fourth section presents the main educational quality findings as regards results of academic performance tests, teachers lacking formal qualifications, school infrastructure, and so on. Finally we have the chief conclusions, suggestions and recommendations for advancing towards achievement of the EFA goals.

## MONITORING ADVANCES IN EFA IN NICARAGUA

Education is regarded as essential to ensuring the economic well-being of families and reducing social inequalities, prompting various bodies to support the establishment of basic objectives regarding access to minimum levels of education.

Six major EFA goals to be attained by 2015 have been laid down, covering: early childhood care and education; universal primary education; learning of young people and adults; literacy; gender equity; and quality in education. The Nicaraguan situation regarding each of the goals for the period 2005-2006 is described below. As observed in the last PREAL report (2006), there has been

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<sup>2</sup> The proposal that permitted the incorporation of Nicaragua in the EFA-FTI provided for a grants programme and a school improvement scheme. For more information on this, see Porta, Arcia and Horn (2002).

<sup>3</sup> For more information on Nicaragua's educational SWAp, see Anderson (2005) and Porta et al. (2004a).

progress in the Latin America region in terms of quantity but with quality falling behind. The theme of quality in education is consequently the subject of a special section.

## **EARLY CHILDHOOD CARE AND EDUCATION**

Regarding preschool coverage, the official MECD statistics show an increase in coverage of this educational level, from a net enrolment ratio<sup>4</sup> (NER) of 31.4% in 2000 to 41.8% in 2005 (Annex A1). This increase has been due to significant expansion of the community preschool education centres that serve over half the total intake and are mainly located in rural areas affected by extreme poverty (Porta et al., 2004b). This programme is outlined in Box 1.

For 2006, the reported preschool NER amounted to 51.4, which can be explained by the fact that Ministerial Agreement No. 094-2005 laid down six years as the official age of admission to primary education, bringing about a change in the method of calculation of the educational coverage indicators and affecting comparability with previous years. It is to be noted, however, that one of the unexpected effects of the change was a lower proportion of six-year-old children enrolled in the education system, since there is more resistance in rural areas to sending children at an early age (in the countryside six-year-olds represent only a third of primary enrolment; see Annex A2).

Despite progress, Nicaragua still needs to increase the numbers of children in preschool education, particularly since it has been established that attending a preschool centre makes boys and girls much more likely to see their cognitive capacities increased and to remain in school, as against those not attending.<sup>5</sup>

It is therefore suggested that awareness-raising campaigns be conducted that encourage Nicaraguan families to put their children in preschool education as a strategy for preparing boys and girls for the teaching and learning process, increasing their school attendance and reducing the high repetition rates recorded in the first grade of primary education.

### **BOX 1. THE COMMUNITY PRESCHOOL MODEL**

In the 1960s and 1970s, kindergarten education was provided basically in private centres, either in centres set up just for that level or in annexes to primary schools. As of 1979, the Department of Preschool Education was established and it was the period when criteria were set for serving children under six years old, and the coverage was extended countrywide.

Starting in 1995, two forms of schooling were devised, one formal and the other non-formal (preschool centres annexed to public and private schools). Experience of the non-formal approach gave rise to the community preschool model, as a viable alternative for offering school-age children educational service in a country with scant resources and with a child population growth outpacing its economic development.

This approach provides an educational service in marginal urban areas and rural areas of the country. Its purpose is to extend coverage and improve the quality of service for boys and girls, with the active participation of parents and the community. It functions on loaned premises (churches, community centres, private homes, children's canteens, etc.), with the assistance of voluntary women educators of a minimum academic level of fourth grade primary. They may be

<sup>4</sup> The age groups for access to preschool, primary and secondary education correspond to 3-6 years, 7-12 years and 13-17 years, respectively.

<sup>5</sup> For Nicaragua see UNICEF (1996) and Castro (2005). At international level, see Young (1996) and Heckman et al. (2005).

mothers, students or teachers, and they are selected by the community. This arrangement is backed financially by institutions and bodies, both national and international, working for the benefit of children. According to MECD statistics, 94% of teachers working under this scheme in 2004 were people without formal qualifications.

The community participation approach is justified not only on account of its potential to extend service coverage or reduce its cost, but chiefly because it represents an educational concept which, by closely involving the family and the community, extends the child's educational environment and makes the community the principal educational agent.

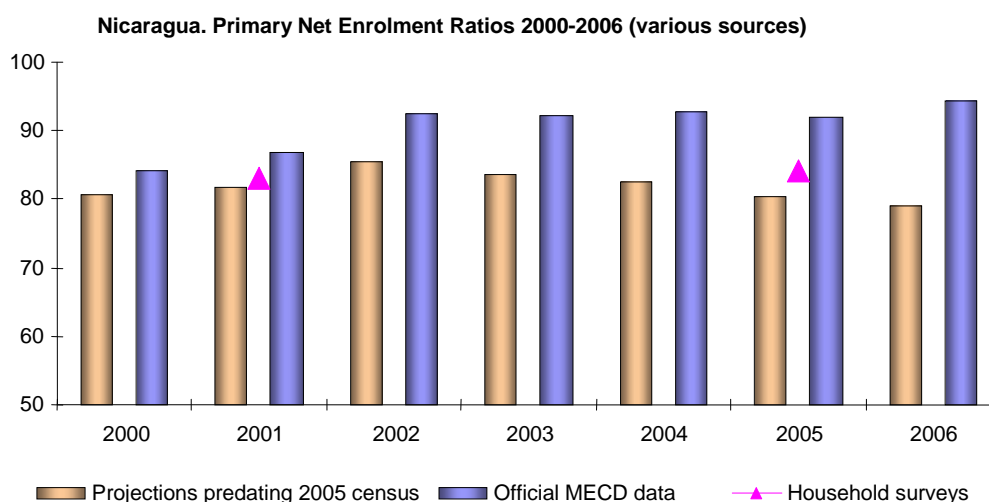
Source: MECD

## UNIVERSAL PRIMARY EDUCATION

Progress in achieving universal primary education shows mixed results, depending on the source of information used to calculate the NER. Studies using population projections predating the 2005 census pointed to a significant decline in the NER, estimated for 2005 at 80.3% (Porta et al., 2005b; Laguna and Gutiérrez, 2006b). Subsequent studies using the population data of the 2005 census put the NER at 91.9% for that year and at 94.4% in 2006, which has prompted much optimism in the MECD (2006b).

In this connection, a cause of concern is nevertheless the fact that, on the basis of the MECD population and enrolment data, net ratios of over 100% are obtained both at department level and by single ages, indicating a possible inconsistency that could be due to an over-registration of the intake. This situation may be confirmed once the findings of the Enrolment Audit conducted in late 2006 (Annexes A5 and A6) are known.

Similarly, it is important to observe that the foregoing data differ from the preliminary results of the EMNV 2005, which put the NER at 84.1% for 2005 (see chart). Given this situation, it is considered advisable to seek technical assistance for reviewing educational indicators in successive years to make them coherent and consistent with the results of the National Population Census and the actual situation in Nicaragua.



Source: MECD, EMNV 05, INEC Projections

However, to achieve the universal completion of primary education it is necessary to guarantee that pupils not only enter primary school but also succeed in staying on there and progressing through that level of education. It is therefore worrying to see that, in the 2000-2006 period, primary

repetition and dropout increased, mainly affecting male pupils and the rural areas, especially in the first grades of primary education (see Annex A3). In this respect, it should be noted that, according to Laguna and Gutiérrez (2006b) estimates, the Government of Nicaragua spends \$12 million annually on primary repetition (which represents about 8% of the total MECD budget).

To remedy this situation the MECD has undertaken an educational upgrading programme for the first and second grades of formal education (MECD, 2006d). It nevertheless has to be acknowledged that, even though its implementation has been considered successful in an internal report by the primary education directorate, the programme does not seem to have had any effect on the efficiency indicators.<sup>6</sup>

As a result of the high rates of school dropout and repetition, a considerably lower primary completion ratio than the school coverage recorded was observed in 2005. It was 65.6%, meaning that 66 out of every 100 pupils, with respect to the official population, complete their primary education (at 12 years). Girls and urban residents are those achieving the highest primary completion ratios.

Some MECD specialists and authorities attribute the rise in repetition to the policy decision to do away with automatic transition to higher grades. However, the findings of Castro (2005) indicate that this policy alone does not suffice to explain the level of repetition in schools, since this is a complex problem involving a multiplicity of factors such as: the quality of the teachers; the ability of the directors of establishments to follow up, supervise and advise teachers; the decisions of the families to take their children out of school; the MECD support and follow-up structures, and so on.

## **LEARNING OF YOUNG PEOPLE AND ADULTS**

In order to find their place in the world of work, young people and adults increasingly need, besides acquiring knowledge, to develop general skills that include being able to communicate and to solve problems, learning languages, and adapting to change.

In this respect, the curriculum reform that the MECD has promoted in recent years has provided for the introduction of technical secondary school-leaving certificates, together with an improved linkage between the secondary education subsystem (under MECD auspices) and the National Technological Institute (INATEC). Progress so far has nevertheless been limited, as can be seen from the fact that there is little in the way of supply of technical education.

In 2005 the technical and vocational education supply of the Technical Education and Vocational Training subsystem catered for only 1.6% of the corresponding age group (15-24 years) in 313 establishments (30 state and 283 private centres). This low coverage may be explained by a disregard for the training of technicians on the part of Nicaraguan society and the lack of policies and incentives promoting technical education and vocational training.<sup>7</sup> In addition, it has to be emphasized that a technical education is less lucrative for the individual than a university education, and, because the labour market neither requires nor lays a premium on the certification of knowledge, technical education continues to be the Cinderella of the Nicaraguan education system.<sup>8</sup>

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<sup>6</sup> With PAINIC/UE [EU institutional support programme for Nicaragua] funds, an evaluation is being conducted that more precisely investigates the programme's achievements.

<sup>7</sup> In this connection, see Laguna and Porta (2004).

<sup>8</sup> See: Emilio Porta, "Enfoque sectorial en educación" (Sector-wide approach in education), *La Prensa*, Managua, 7 January 2004 (opinion section).

Meanwhile, it is important to highlight the progress made in extending the coverage of secondary education in the 2000-2006 period, with an NER rising from 36.8% to 44.0%. Despite this, nearly half of adolescents aged 13 to 18 years are outside the education system.

## LITERACY TEACHING

Using the 2001 Household Survey, the World Bank estimated that 18.7% of the Nicaraguan population aged 10 years and above was illiterate (equivalent to 715,272 individuals), the rural area of the country being particularly affected and even more so that of the two Atlantic Regions (World Bank, 2003).

Given this situation, the MECD has made efforts to extend the coverage of the adult education programme, maintaining an average enrolment of nearly 75,000 from 1997 to 2006.<sup>9</sup> In addition, in 2005 and 2006 a literacy programme was promoted as part of a voluntary social scheme to be carried out by pupils in the fourth and fifth years of secondary before completion of their course.<sup>10</sup> The present administration is thinking of doing away with this and replacing it with an aggressive literacy programme supported by the Cuban Government and aimed at declaring Nicaragua an “illiteracy-free territory” in three years.

Despite those measures, the findings of the 2005 National Population and Housing Census (INEC, 2006) indicate that for 2005 the illiteracy rate of the Nicaraguan population aged 10 years and above was 20.6%, equivalent to 772,025 individuals. A possible explanation of the increase in adult illiteracy is that in recent years nearly 800,000 boys and girls aged 3 to 18 years have been outside the education system (Porta, Gutiérrez and Laguna, 2004c), generating a vicious circle of illiteracy borne out by the fact that about 40% of present illiteracy corresponds to the 10-29 age range, matching the institutional action scope of the MECD in the past two decades (Annex A4).

## GENDER EQUITY

In Nicaragua there are no acute problems of gender inequity in access to education. However, there is evidence of disparities in access to education in terms of the area of residence (to the detriment of rural areas) and even more so according to the socio-economic standing of families. As to retention in school, there is evidence of significant gender gaps to the detriment of males. This situation is aggravated in secondary education since more young men are forced to enter the world of work.

In primary education the biggest differences are to be seen at departmental level, the RAAN (North Atlantic Autonomous Region), Nueva Segovia and Jinotega being identified as the departments with the lowest primary coverage (Annex A5). Meanwhile in secondary education the coverage difference between the sexes is greater to the detriment of boys, whose secondary NER in 2005 was 39% as against 45% in the case of girls. This situation is replicated in university-level education, where it is estimated (on the basis of the 2005 EMNV) that women account for 57.7% of total enrolment.

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<sup>9</sup> Handa et al. (2006) find that the highest academic performance is that of the lowest-income pupils. The results also reveal that the training received has helped them to improve their relations outside the home, seek better employment and take a more active attitude in the education of their sons and daughters.

<sup>10</sup> See: “Arranca plan para enseñar a leer” [Plan for teaching to read gets under way], *La Prensa*, Managua, 17 August 2005 (national section).

Illiteracy affects men (20.7%) more than women (20.3%). Nevertheless, an examination of the gaps according to area of residence shows that illiteracy continues to be eminently rural with 33.6% versus 11.1% in towns and cities.

While it is true that there are some pilot programmes to address educational inequality regarding access to education, such as the Social Protection Network, it is noteworthy that the recent administrations have failed to define clear policies in favour of greater educational equity nationwide, merely applying differentiated incentives according to area of residence, socio-economic standing, sex and age.

Table. Follow-up and monitoring of education for all indicators<sup>11</sup>

No.	EFA Indicators	2000	2001	2002	2003	2004	2005	2006/p
1	Gross preschool enrolment ratio	31.8	31.4	34.5	25.6	38.8	41.8	54.4
2	% of new first-grade entrants who have attended preschool centres	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
3	Gross or apparent enrolment ratio in first grade of primary	n.d.	n.d.	n.d.	n.d.	80.6	79.9	n.d.
4	Net enrolment ratio in first grade of primary	n.d.	n.d.	n.d.	n.d.	43.3	43.3	
5	Gross primary enrolment ratio	107.9	110.9	117.7	117.2	118.3	117.9	122.8
6	Net primary enrolment ratio	84.2	86.8	92.5	92.1	92.7	91.9	94.4
7	Public expenditure on education (\$ millions)	108.7	102.6	104.2	117.5	125.1	151.3	154.7
	As percentage of GDP	2.8%	2.5%	2.6%	2.9%	2.8%	3.1%	3.0%
8	Public expenditure on primary education as % of total public expenditure on education	51.0%	47.8%	35.9%	31.8%	36.8%	35.2%	37.4%
9	% of qualified primary teachers	n.d.	n.d.	74.2	n.a.	73.7	n.d.	n.d.
10	% of primary teachers certified to teach in accordance with national standards	n.a.	n.a.	74.2	n.a.	73.7	n.a.	n.a.
11	Primary pupil/teacher ratio	n.a.	n.a.	35	n.a.	34	n.d.	n.a.
12	Repetition rates per primary grade*							
	Grade 1	8.4	10.6	15.5	14.6	17.8	17.8	n.d.
	Grade 2	5.0	6.1	8.7	8.3	10.2	10.2	n.d.
	Grade 3	4.6	6.8	9.2	8.6	10.6	8.7	n.d.
	Grade 4	3.8	6.1	7.5	7.2	7.9	6.2	n.d.
	Grade 5	3.1	4.0	5.5	5.2	6.3	4.7	n.d.
	Grade 6	1.5	2.0	2.7	2.4	2.9	2.4	n.d.
13	Survival rate to grade 5	n.d.	n.d.	52.2	51.4	52.1	51.9	n.d.
14	Coefficient of efficiency	n.d.	n.d.	n.d.	0.61	0.62	0.60	n.d.
15	% of children having reached at least grade 4 primary who have acquired a set of basic learning skills at national level	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
16	Literacy rate of 15 to 24-year-olds**	n.a.	86.4	n.a.	n.a.	n.a.	n.d.	90.4
17	Illiteracy rate (15 years and over)**	n.a.	22.3	n.a.	n.a.	n.a.	n.d.	20.2
18	Literacy gender parity index**	n.a.	104.0	n.a.	n.a.	n.a.	n.d.	95.0

Notes: n.d.: Not available; n.a.: Not applicable; p: Preliminary data.

\* Data of previous year

\*\* EMNV 2001 and 2000.

Source: Educational Statistics Department, MECD.

<sup>11</sup> The efficiency coefficient is the ideal number of pupil-years necessary for a cohort to complete the primary education cycle. It is calculated as the number of pupils of the cohort who pass the sixth grade for the theoretical duration of the course (6 years). These values were obtained from the UNESCO tool EPSSIM v2.1.

## COVERAGE GOAL ATTAINMENT PROJECTIONS

With the Financial Needs Model (MNF) developed by Porta in 2003 to calculate the budgetary needs faced by the MECD when it comes to attaining the medium- and long-term institutional goals,<sup>12</sup> it can be projected that Nicaragua could achieve the goal of complete primary education by 2013 if the good performance in increasing primary enrolment is kept up.

Graph. Projected attainment of the goal of universal primary education



Source: Own elaboration based on the MNF

## INSTITUTIONAL FRAMEWORK

In Nicaragua a set of strategies and actions has been designed to meet the EFA goals. Noteworthy among them are the National Education Plan for the period 2001-2015, the Poverty Reduction Strategy Paper (PRSP), the National Development Plan, and the MECD 2005-2008 Joint Work Plan (PCT). The latter reflects the priorities of the education sector under the responsibility of the MECD for that period and constitutes the programme framework guiding public educational management. As a complement to the PCT, Annual Operative Plans (POAs) have been drawn up for 2005, 2006 and 2007.

The PCT and the respective POAs follow the educational policy laid down in 2004, which was based on the National Education Plan and the EFA goals, being structured into three educational policies: (a) Policy No. 1, Educational transformation: relevance and quality; (b) Policy No. 2, Extension of supply and stimulation of demand: access, adaptability and equity; and (c) Policy No. 3, Improved governance: participation, results, accountability and efficiency. However, the new ministerial administration has recently announced that the MECD's educational policies in the next five years will be: "more education, better education, a different kind of education and the whole of education".<sup>13</sup> In this regard, it should be noted that this type of approach by incoming governments – when they fail to follow up on previously established policies – makes it difficult to achieve sustainable progress over time and diminishes the confidence of the donor community in the plans proposed by the ministry. It is important to observe here that the change in educational policies

<sup>12</sup> The MNF uses the System Dynamics (SD) approach, which offers the possibility of analysing each component of the education system separately, so that its inputs and results and the relations between the components of the system can be studied more comprehensively. For more information on the MNF, see Porta and Arcia (2003).

<sup>13</sup> See "De Castilla presenta políticas educativas" [(New education minister Miguel) De Castilla presents education policies], *La Prensa*, Managua, 12 January 2007 (national section).

invalidates the Joint Work Plan and the POA for 2007 that the MECD had agreed on with international cooperation entities. This could delay financial disbursements this year and will make it harder to monitor progress in educational policy since the execution reports for previous years will not match the new institutional policies of the MECD.

While it is true that the process of formulating and approving the National Education Plan was done with the extensive participation of civil society, it has to be acknowledged that its monitoring and follow-up have not been so dynamic. The first known report was that issued by PREAL in 2004 as part of a series of reports on educational progress that this institution produced in the region. Subsequently, in 2005, the Institute of Education of the Central American University (IDEUCA) came up with a report to monitor implementation of the National Education Plan and the EFA goals, an initiative in which the present Minister of Education participated.

For its part, the MECD began in 2004 publishing annually “The State of the Basic and Secondary Education System”, in addition to a series of working documents intended to amplify debate on education and to report on progress and identify the main obstacles encountered by Nicaragua in education.

Likewise, it may be noted that, with the participation of the international community, the MECD has issued periodical reports on progress in implementing the PCT and its respective POAs. These reports deal with the EFA goals and are used to discuss the support given by international cooperation entities to the education sector through the execution of a sector-wide approach (SWAp).

Another important development was that in March 2006 the National Assembly adopted the first General Law on Education, which lays down the general lines of education and of the national education system, the powers and obligations of the State, and the rights and responsibilities of individuals and society with regard to their educational function. The Law likewise regulates all educational activities engaged in by natural or legal persons, public or private, in the country.

The major aspects of the Law include the financing of education, and it is stipulated that the budget for education other than higher education will increase annually, taking inflation into account, but no fixed amount is set. Negotiations between the Government, political parties and the IMF led to an amendment to Articles 91 and 102 of the Law, which allocated to education an increase equivalent to 5% of tax revenue and provided that teachers would receive an annual pay increase bringing them up to the Central American average in five years.

It is likewise noteworthy that the Law establishes five education subsystems: Basic Education and Teacher Training Subsystem; Technical Education Subsystem; Higher Education Subsystem; Regional Autonomous Education Subsystem (SEAR); and Non-formal Subsystem.

## **MONITORING AND ACCOUNTABILITY SYSTEMS**

In preparing the 2005-2008 PCT, the MECD considered it appropriate to establish a set of quantitative and qualitative goals consistent with the commitments made both nationally and internationally, enabling progress to be monitored in the various lines of action provided for under the three major educational policies. Subsequently, in order to incorporate additional indicators better reflecting some key aspects, it drew up Proposed Indicators of Education in Nicaragua (MECD, 2006e).

In addition, as part of the efforts to be accountable to Nicaraguan society, the baseline has been designed and put in place for the “school reports”, the purpose of which will be to provide the

various actors of the education system with significant information on the performance of schools and contribute to greater involvement and participation of parents in the education of their children (MECD, 2006b). In this initiative the MECD has received technical assistance from the World Bank, and a programme impact assessment is planned. The school reports have so far not been delivered to the schools but this is expected to occur by mid-2007.

The MECD website provides extensive information on the state of education at national, departmental and municipal level, on the teaching situation, on school infrastructure, and on educational research findings.

## **SWAp<sup>14</sup>**

Internationally speaking, the lack of progress in the development of many poor countries has prompted a critical review of development assistance over the past five decades. Much of this analysis has centred on the low efficiency of development cooperation and the limited impact of the structural adjustment programmes on the poorest population sectors.

This ongoing review has led many agencies to explore new mechanisms for supporting the developing countries. This gave rise to the idea of promoting initiatives under a practice known as the “Sector-wide approach” (SWAp), which is intended to make external cooperation more effective and efficient and to strengthen local capacities in a coordinated and coherent manner. The scheme has been extensively used in countries of Asia and Africa with some success.

In 2003, by Presidential Agreement N° 71-2003, sectoral coordination committees were formed through which an official process of coordination was begun between the Government, the cooperation agencies and civil society. Specifically, for the education sector committee, the following is stated: “As of the earliest meetings, the MECD and the participants showed interest in promoting initiatives with a sector-wide approach, under an open and flexible arrangement that may complement different schemes used by the agencies, and decided that their implementation would require: (a) a clear definition of policies and action; (b) an adequate estimation of funding requirements, within a context of limited financial and human resources; (c) a results-based action plan; (d) collaboration and coordination agreements between cooperation personnel and the Government; and (e) funds-in-trust arrangements for the channelling of resources”.<sup>15</sup>

As a result of the work of the sectoral coordination committees, the MECD has managed to reach a consensus on a PCT and POAs that have enabled it to make more external resources available for education, with external donations and loans accounting for 36% of the total budget in 2005, as against 21% in 2003 (before implementation of the SWAp). It should likewise be emphasized that, to guarantee sustainability of the programme support actions contemplated under the SWAp, which are medium-term, most of them are being executed by the MECD departments and not through project coordination units.

The Government of Nicaragua recognizes that linkage between the education subsystems is difficult despite the fact that Nicaraguan legislation provides for such interaction, with a National Education Council for the purpose. There is, for instance, scant linkage of action between the subsystems for progress in achieving the EFA goals. There is also a need to improve the coordination of efforts and

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<sup>14</sup> See Andersen (2005), Emilio Porta, “Enfoque sectorial en educación” [Sector-wide approach in education], *La Prensa*, Managua, 7 January 2004 (opinion section).

<sup>15</sup> See Andersen, Kasper (2005) and Porta et al. (2004).

action with civil society in order to achieve better educational results within the sector-wide approach strategy.<sup>16</sup>

## DECENTRALIZATION

March 2002 saw the adoption of the Educational Participation Law, the purpose of which is to legalize school autonomy and to encourage and regulate the participation of civil society in education, especially parents, educators and students. This Law provided that in 2006 all public establishments would be incorporated in the educational participation regime.

In 2005, under Ministerial Agreements 315-2005, 316-2005, 317-2005 and 318-2005, the educational participation regime was joined by 644 schools, making a cumulative total of 4,727 educational centres, which is equivalent to 70% of public schools and 79% of total public enrolment (not including community centres).

As pledged in the election campaign by the present Government, in early 2007 school autonomy was abolished,<sup>17</sup> without there having been any weighing up of the findings of various impact studies on that mode of study, the argument being that such schooling was to blame for the irregular practice of charging school fees. In this connection, it should be pointed out that “charges are not a phenomenon peculiar to the autonomous centres since, according to preliminary data from the 2005 EMNV, it emerges that 26% of pupils attending centralized establishments reported having been charged fees. It can therefore be asserted that school autonomy does not generate such charges; they come about as a result of the scant school supervision exerted by the MECD and the failure of some principals to abide by the law”.<sup>18</sup>

It is noteworthy that Nicaragua’s school autonomy process was positively assessed four times by the World Bank. The last assessment was made by Arcia, Porta and Laguna in 2004 (Arcia et al., 2004b) and examined the impact of school autonomy on primary and secondary educational centres in terms of participation by the community, pedagogical and administrative aspects, and pupil performance. Among the main findings of the study are: (a) school autonomy has a slight but significant impact on the academic performance of pupils; (b) the autonomous centres have lower dropout and repetition rates than the centralized centres over time; and (c) the autonomous centres show a greater perception of influence in decision-making.

A recent MECD report states that “since the 1997-2005 period the autonomous centres have recorded lower repetition and dropout rates than the centralized schools, which can be put down to the presence of incentives conducive to improved performance of these efficiency indicators in schools. Such performance has been maintained even though the number of schools under the educational participation regime increased markedly in that period” (MECD, 2006b).

## MUNICIPALIZATION OF EDUCATION

As of 2004, the MECD involved the municipal governments in running the education system, transferring to them responsibilities and human and financial resources to enable them to assume their new powers. The main purpose of this strategy was to secure the effective participation of

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<sup>16</sup> Government of Nicaragua (2004).

<sup>17</sup> “Su primer decreto: Muerte a la Autonomía” [The Minister of Education’s first decree: Death to Autonomy], *El Nuevo Diario*, Managua, 12 January 2007 (national section).

<sup>18</sup> See: Emilio Porta, “No destruir la autonomía escolar” [Do not destroy school autonomy], *La Prensa*, Managua, 11 December 2006 (opinion section).

local governments and actors in educational management in order to improve both the management and the quality of education.

This process of decentralization to the municipalities of the Atlantic Coast Autonomous Regions has been implemented gradually. In 2004 a total of 20 municipalities were incorporated, while in 2005 it was decided to postpone the signing of the relevant agreements in order to redesign the strategies on the basis of the experience acquired. The year 2006 saw the signing of 46 agreements between the MECD and local councils, 486 municipal delegates and technicians being trained in educational planning and the preparation of Educational Development Plans.

Local management capacity in education was also strengthened by involving the education committees of each municipality – consisting of teachers, principals, pupils, parents, councillors, and delegates of the police and governmental institutions – in the preparation of Municipal Educational Plans. The plans drawn up with the assistance of this extended municipal educational community provided for a diagnosis of the main municipal problems and lines of action for resolving them.

It should be noted that the present ministerial administration stated its intention of abolishing autonomy and municipalization, which amounts to a step backwards in local and school management, making it impossible for local schools and actors to take on additional teachers to meet the demands of increased enrolment and to administer their resources.

## **POLICIES FOR PROMOTING EQUITY**

At Central American level, Porta and Laguna (2006) identify Nicaragua as the country of the region with the second greatest educational inequality and that which is marked by the biggest differences in the probability of remaining in the education system according to income quintile and area of residence. Furthermore, it should be noted that Nicaragua also stands out in Central America as the country that has progressed least in the past decade in the matter of increasing the average enrolment of its population.

Looking at the possible obstacles preventing Nicaraguan boys and girls from entering and remaining in school, the EMNV 2005 states that the main reasons for non-retention among the 7-12 age group are economic problems and lack of interest.<sup>19</sup> To illustrate how significant economic problems are, it suffices to observe that, as a basis for the EMNV 2005, the average annual cost of primary education was put at C\$806.59 cordobas, equivalent to 22% of the extreme poverty line. While it is true that public education is free, there are private costs such as school supplies, school uniforms and transport, among others, significantly restricting the possibility for the children of the poor to attend school. In addition, it is important to emphasize that, because child labour is a reality in Nicaragua, there is an opportunity cost when it comes to the use of time since going to school rules out going to work.

In recent years the Government of Nicaragua has attempted to reduce the high private costs faced by households and has carried out a number of grant schemes. For example, through the APRENDE project the MECD gave more than 8,000 grants to primary and secondary schoolchildren from households living in extreme poverty in rural areas until the project ceased functioning in 2005. Regrettably, these grants were not absorbed by any other funding source.

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<sup>19</sup> Porta and Laguna (2006) observe that in Nicaragua and Guatemala the lack of economic resources is the main factor keeping boys and girls away from school.

Noteworthy too is the execution of the Social Protection Network (RPS), which made cash payments to families in extreme poverty in country areas on condition that they sent their children to school. Assessments made of this programme indicate that it markedly increased the enrolment and retention at school of the boys and girls who benefited from it, with a greater impact on the 7-8 year age group. A reduction of about 9% in child labour<sup>20</sup> and in the number of hours devoted to work<sup>21</sup> has likewise been confirmed.

Another strategy promoted by the MECD to increase equity in access to preschool education was that of the community preschool classes. Despite the high proportion of teachers lacking formal qualification, studies conducted by the MECD/APRENDE and PAININ show that the boys and girls attending community preschool classes fare better in the cognitive and socio-affective development tests and have higher retention rates than their peers who did not have any preschool education (Castro op. cit., 2005).

To reduce the high preschool and primary dropout rates, the MECD has implemented an Integral School Feeding Programme (PINE), which increased the coverage of 230,000 children served in 2002 to 787,456 in 2006, representing approximately 3.4 times as much (MECD, 2006b). A school feeding programme has likewise been laid on for the most disadvantaged areas to reduce the probability of school dropout, particularly among pupils from families living in extreme poverty. Three surveys have so far been conducted on the WFP-assisted part of the programme, it being found that the distribution of food at school helped boost retention and attendance rates between 2002 and 2006, the respective averages being 98% and 82%. However, there have been no studies showing the possible impact of this programme on the learning of the boys and girls concerned.

Notwithstanding the good results obtained from the above support programmes and the existence of some special programmes for children working on “La Chureca” (Managua’s main rubbish dump) and at traffic lights, estimates of the 2005 Survey of Child and Adolescent Labour (ENTIA) show that more than 50,000 children and adolescents aged between 7 and 17 years are outside the school system because they are working.

Furthermore, it is to be noted that Nicaragua still lacks an articulated and coherent strategy for addressing this problem. Recognizing this situation, the MECD had in its PCT contemplated conducting a study to assess the differences between the support programmes executed so far, the idea being to present the donor community with a consolidated programme. Regrettably, however, no progress has been recorded so far. With the change of administration the launching of the Zero Hunger programme was announced and it is hoped that this will fill the gap.

In addition, it must be pointed out that the support programmes executed so far have come under projects financed by the international community and that, once the funding ends, they tend to disappear, cutting off aid from thousands of children and young people. The suspension of the APRENDE grants and the months during which the school PINE ceased to operate in 2004 for want of funding clearly illustrate this.

As to efforts to reduce repetition in primary education, as already observed, automatic transition to the next grade was applied in the past. However, an inadequate communication strategy and rejection of the principle by a significant proportion of teachers led to abolition of the policy in 2003. Regrettably, with the exception of the Primary and Secondary Grade Reinforcement Programme of late 2005, no strategies have been designed to avoid a resurgence of primary repetition.

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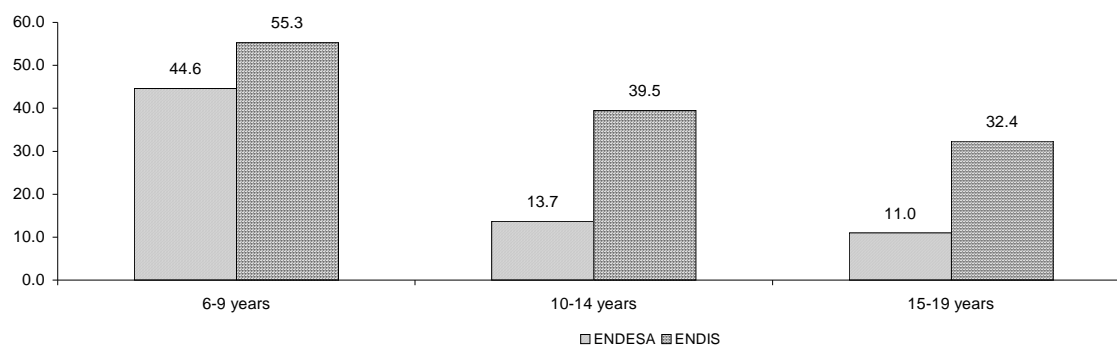
<sup>20</sup> A recent survey (ENTIA 2005) reveals that in Nicaragua there are 266,000 working children and adolescents.

<sup>21</sup> For further reference see BID (2002), Maluccio (2002) and Laguna (2003).

In secondary education the gaps in access caused by geographical factors are another major challenge for the MECD. In this connection, it is noteworthy that in Nicaragua very limited use has been made of distance teaching schemes or flexible arrangements such as “telesecondary” courses enabling such education to be taken to the remotest parts of the country. In 2004 telesecondary enrolment amounted to a mere 872 pupils, which rose to 1,510 in 2005.

With regard to the incorporation in the school system of minors with special needs, the MECD, by means of the special education programme, is promoting their integration into mainstream schools with the intention of doing away with segregation, seeking equity and furthering egalitarian participation in the community by children and adolescents with disabilities. However, this programme has been neglected and left underfunded. It comes as no surprise here to observe that, on account of the lack of attention going to this segment of the population, the ENDIS 2003 (National Disability Survey) shows us that boys and girls suffering from any type of disability record high rates of illiteracy, as against their peers without disability problems.

Chart. Percentage of illiteracy by age group and source of information



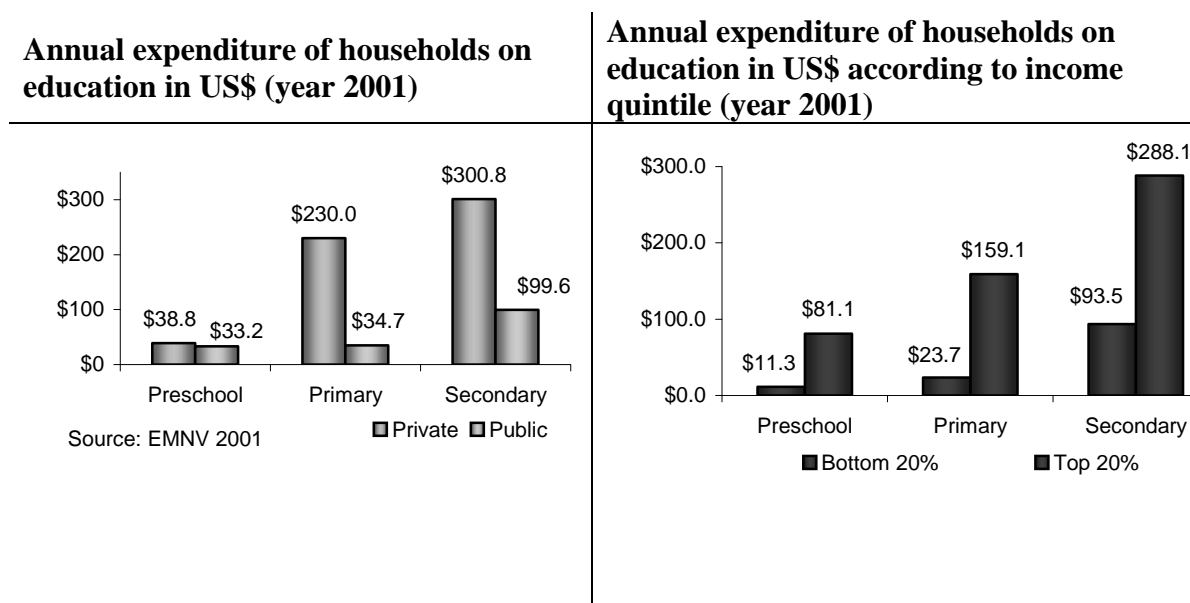
Source: ENDIS 2003.

In terms of educational investment, Laguna and Gutiérrez (2006b) state that “there are marked differences in investment per pupil according to educational level, it being observed that the investment made in one tertiary education student is equivalent to that for 7 primary, 19 secondary or 45 preschool pupils”. In this regard, Porta and Laguna (2006) state that Nicaragua has the most regressive financing system in the region, estimating that 0.5% of GDP (i.e. \$25 million) goes to benefit the top income distribution quintile.<sup>22</sup>

On the basis of the household surveys conducted in 1998 and 2001, it is estimated that Nicaraguan families devote between 2.8% and 3.9% of GDP to basic and secondary education costs, which implies that the country’s total investment in education ranges from 4.7 to 6.5 GDP points (MECD, 2006e). Likewise the charts below reflect the differences in investment in education by families putting their children in private schools as against those sending them to public schools, corresponding to six times more in primary and three times more in secondary. Furthermore, it is observed that families in the upper 20% income bracket invest more resources in their children’s education.

<sup>22</sup> For a detailed analysis of the funding of universities, see Porta (2004).

Charts. Differences in investment in education by households and income quintiles



Source: MECD (2006e)

## QUALITY

As to measuring the quality of learning, the assessment of the academic performance of Nicaraguan pupils carried out by the MECD in 2002 observes that Nicaraguan pupils in grades 3 and 6 have little command of most of the content assessed in the subjects of Spanish and mathematics (MECD, 2004b). In grade 3 the situation is that 71% and 61% of pupils in Spanish and mathematics are at the basic level.<sup>23</sup> In grade 3, as in grade 6, most pupils are at the basic level, and in mathematics, the more difficult subject, 88% are at the basic level. The highest marks were scored in urban areas and in private schools.

Using the preceding results, Arcia, Porta and Laguna (2004) find that the main factors associated with educational achievement are: leadership of the principal, teacher motivation, the personal characteristics of pupils (personal motivation, low absenteeism), and a secure physical environment for schooling.

The results of the academic performance tests have been sent out to the participating schools, and academic guides have been prepared to remedy the weaknesses identified in the 2002 assessments. Likewise, training programmes have been promoted in educational management as a strategy for stimulating educational leadership in public school principals.

During 2006 the second application of national-level standard tests took place and Nicaragua participated in the international SERCE (Second Regional Comparative and Explanatory Study) testing organized by LLECE/UNESCO, which will provide key inputs for defining strategies of the present Government regarding educational quality (MECD, 2006c).

<sup>23</sup> The results of the tests were classified into three levels: Basic, Intermediate and Proficient. The basic-level pupil has a very limited grasp of the subject and a level of knowledge well below what the curriculum requires, while the standard of knowledge of the proficient pupil is fully in keeping with the curriculum.

## SCHOOL INFRASTRUCTURE AND EQUIPMENT

According to the MECD (2006d), Nicaragua has 10,721 schools in all, 85% of them being publicly owned, the remaining 15% being private schools (subsidized or not). As to geographical distribution, 79% are in rural areas and the other 21% in towns or cities.

Likewise, in order to reduce the distances between home and school and to provide better educational infrastructure for Nicaraguan children, the Government of Nicaragua has replaced, built or rehabilitated some 5,528 classrooms in the 2000-2005 period.<sup>24</sup>

Despite the improved infrastructure, the MECD estimates that about 75% of public educational establishments lack the minimum conditions for teaching, which is illustrated by the facts that: (a) only 37% of the country's educational establishments have drinking water, and (b) only 30% countrywide have an electricity supply. This situation widens the gaps in access to and knowledge of the new information and communication technologies (use of computers and the Internet), which are increasingly becoming a fundamental tool for life in the twenty-first century.

The possession of textbooks by pupils is one of the factors best explaining their educational achievement. In the past decade, the MECD has distributed just over eight million textbooks to primary pupils thanks to World Bank financing (APRENDE project). The EMNV 2005 shows that some 95% of primary pupils have had access to texts.

## FLEXIBILITY AND INNOVATION

To increase primary education coverage, the MECD included in its 2006 POA awareness-raising campaigns for parents the design of a new plan to provide remedial teaching for grade 1 and grade 2 pupils who have performed poorly, a new plan to prepare pupils for admission to grade 1, and follow-up for activities relating to grade 1 enrolment at the appropriate age, to plans to extend coverage, and to the distribution of textbooks, desks and educational materials for children, among other things.

As to the design of flexible arrangements, those for the “*bachillerato por madurez*” (secondary diploma for people older than the usual age) and distance secondary education have been reinforced, in addition to which work has been completed on designing the curriculum of the secondary technological courses adjusted to the economic potentials of the respective geographical areas, so as to enable young people to learn a skill making it easier for them to find their place in the labour market.

Noteworthy innovations are the School Technology Centres (CTEs), of which there were 140 countrywide in late 2006, the Telesecondary Programme for remote and poverty-affected rural areas, the radio schools, and the Teacher at Home programme, among others. It has to be said, however, that the coverage of these programmes is limited and that there is no guarantee of the funding needed to ensure consolidation and mass expansion. In 2006 a mere 11,145 pupils enjoyed flexible education facilities.

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<sup>24</sup> This number comprises the joint outlays by treasury funds, FISE [Emergency Social Investment Fund] and the donor community. With its own funds, the MECD has contributed close to half the outlay for a total of 2,091 schools.

## **CURRICULUM REFORM**

Since the past government administration, the MECD has been working on a curriculum change proposal involving the implementation of a flexible curriculum adapted to the characteristics, needs and expectations of pupils. For this purpose new educational materials are being prepared for teachers and pupils in the form of learning guides, workbooks and methodological guides. So far this has been introduced on a pilot basis in 140 primary and secondary schools throughout the country.

A matter for concern is the relative instability of the Nicaraguan curriculum, since each new government sees the need to redesign it. There has thus been a switch in the past from a standards-oriented to a skills-oriented curriculum, and at present the possibility is being raised and studied again of not implementing the skills-oriented curriculum now in its pilot phase.<sup>25</sup>

## **ASSESSMENT OF ACADEMIC PERFORMANCE**

As stated, two major assessments were conducted in 2006, one at the national and the other at the international level. Analysis of the results of these assessments will provide inputs for (a) comparing the level of progress in knowledge acquired by grade 3 and grade 6 pupils in mathematics and Spanish; (b) identifying more clearly a set of factors that may determine the success or failure of pupils of both sexes; and (c) providing the authorities and society in general with reliable feedback for decision-making.

It is expected that by mid-2007 these results will be shared with the educational community, donor organizations and key actors in the Nicaraguan education system. It is likewise hoped that they will provide useful input for the decision to change the present curriculum being reshaped by the new administration.

## **TEACHERS<sup>26</sup>**

One of the keys to quality education is good teacher training. Therefore the modification of teaching practices by the teachers so that they play a more effective mediation role between knowledge and the pupil is a challenge running right across the education system. The results obtained in the standardized tests of 2002 show that, although teachers have accepted and are applying in the classroom the teaching methods promoted by the MECD, they have a poor command of the subjects taught. Only 47% of teachers say they have a good command of the geometry taught in grade 3, while barely 39% fully grasp probability theory as taught in grade 6.<sup>27</sup>

It is surprising that, for all the effort made in the last six years to qualify 8,835 teachers and the significant increase in their average pay, which rose from the equivalent of 60% of the cost-of-living index in 2000 to 103.4% in 2006, the proportion of uncertified primary and secondary teachers continues to rise, from 15.7% in 1997 to 33.7% in 2004 (MECD, 2006b).

As a measure to reverse this trend, the previous administration introduced in 2006 the Certification of Pedagogical Aptitude (CAP) programme, with a total of 4,345 teachers being registered at the

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<sup>25</sup> See “De Castilla presenta políticas educativas” [De Castilla presents education policies], *La Prensa*, Managua, 12 January 2007 (national section).

<sup>26</sup> For a study on the teaching situation, see Laguna (2005).

<sup>27</sup> See: Emilio Porta, “Informe sobre calidad académica” [Report on academic quality], *La Prensa*, Managua, 26 November 2003 (opinion section).

full secondary and basic cycle levels,<sup>28</sup> while the present administration has announced that it will not take on any more uncertified teachers.<sup>29</sup>

Since the pay increases have not had the hoped-for effect of reducing the numbers of uncertified teachers and improving school repetition and dropout rates, it would be advisable to consider the possibility of establishing substantial pay differentials between uncertified and certified teachers, and to come up with economic incentives for uncertified teachers to attain higher educational levels and improve the learning level of their pupils. Elvir et al. (2006) propose as a priority for advancing towards the professionalization of teachers: “To reform the pay structure for all educators in initial basic and secondary education, establishing as the minimum salary the complete ‘basic basket’ [of goods and services forming the cost-of-living index], to which would be added incentives according to categories, experience, performance and quality, territorial location, and levels of specialization”.

## CONCLUSIONS

The main lessons and recommendations emerging from the analysis conducted in this document are:

1. To increase preschool education coverage, it is recommended that maximum use be made of school infrastructure by running third-level classes in the evenings, that awareness-raising campaigns for parents be increased, and that programmes to bring down the direct costs faced by households when sending their children to school continue to be expanded.
2. The mixed results observed in the indicators of primary coverage reveal the need to provide the MECD with technical assistance for reporting indicators that are coherent and consistent with the actual situation in Nicaragua.
3. It is recommended that efforts be made to reduce primary repetition and dropout. A possible option is to design special programmes enabling pupils to attend classes out of normal school hours, on Saturdays or in holiday periods.
4. Progress should be made towards increasing the availability of technical secondary courses, offering an educational alternative for young people wishing to enter the labour market.
5. Literacy programmes should be stepped up, with more focus on rural areas and the Caribbean Coast regions.
6. It is recommended that equity be included as a major policy informing the various methods and programmes of the Nicaraguan education system.
7. With regard to quality, it is important to move towards defining a stable curriculum that is not at the mercy of changes of government; and it is recommended that great caution be exercised regarding repeated curriculum reform, which can put a constant strain on teachers and pupils.
8. In order to reduce the number of uncertified teachers, significant pay differentials should be established that encourage teachers to achieve higher educational standards and improve the level of learning of their pupils.

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<sup>28</sup> See MECD (2006b) for other measures to reduce the number of uncertified teachers.

<sup>29</sup> See “Educación sin aulas ni fondos” [Education without classrooms or funds], *La Prensa*, Managua, 17 January 2007 (national section).

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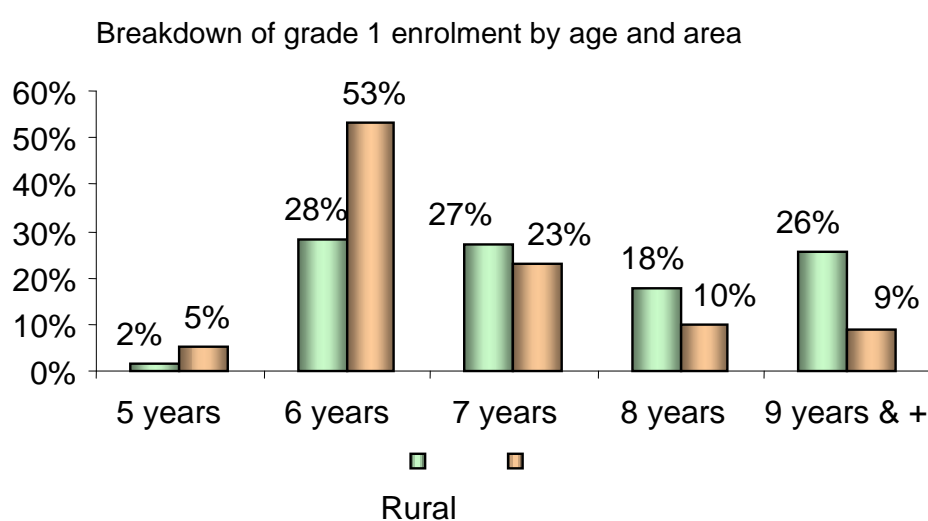
### STATISTICAL ANNEX

#### A1. Net enrolment ratios by programmes. Nicaragua 1997-2006

Programmes	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Preschool	25.1	27.2	30.5	31.8	31.4	34.5	35.6	38.7	41.8	54.4
Primary	77.6	78.4	81.5	86.8	86.8	92.5	92.1	92.7	91.9	94.4
Secondary	33.1	34.8	36.1	36.8	38.5	40.3	41.1	42.5	44.4	44.0

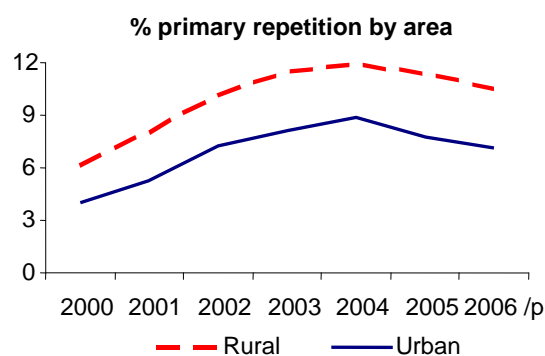
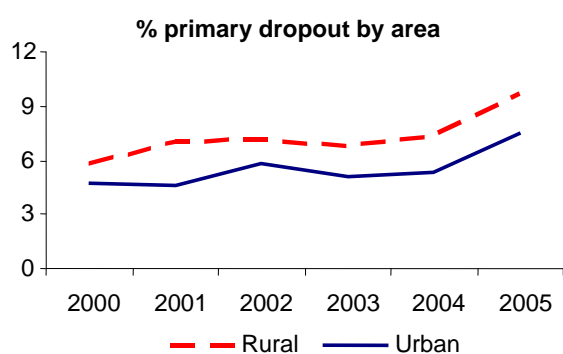
Source: MECD (2006a)

#### A2. Breakdown of enrolment in the first grade of primary education by age and area



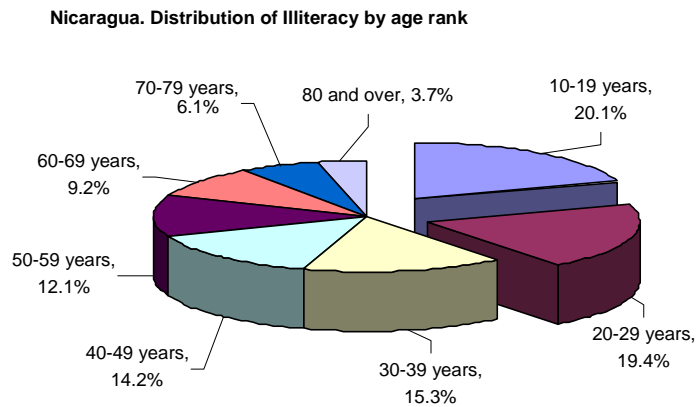
Source: Department of Educational Statistics, MECD.

#### A3. Dropout and Repetition by area



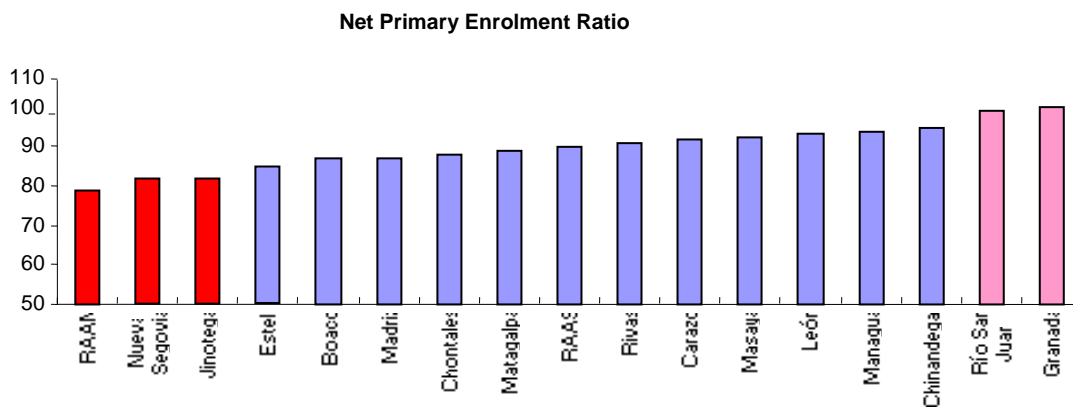
Source: Department of Educational Statistics, MECD

A4. Nicaragua 2005. Distribution of illiteracy by age group (10 years and over)



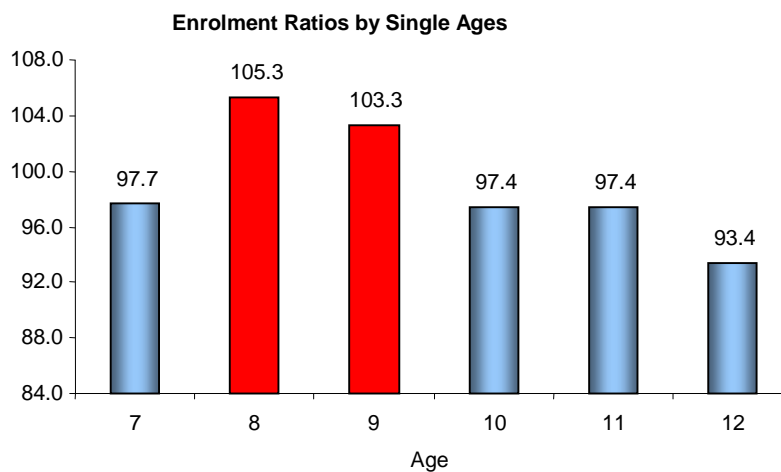
Source: National Population Census 2005.

A5. 2005 Primary NER by territorial department



Source: Laguna and Gutiérrez (2006b)

A6. Enrolment ratios by single ages



Source: MECD and National Population Census 2005

A7. Enrolment by educational level and poverty status

<b>Education programme</b>	<b>Extremely poor</b>	<b>Not extremely poor</b>	<b>Not poor</b>
Preschool	45.0	36.7	18.3
Special education	0.0	21.3	78.7
Adult education	31.0	42.8	26.2
Primary	18.2	38.3	43.6
Secondary	6.4	24.6	69.0
Basic technical	0.0	1.0	99.0
Secondary technical	2.9	11.1	86.1
Teacher training	5.7	25.2	69.1
Higher technical	0.0	20.3	79.7
University	0.6	5.5	93.9
Postgraduate	0.0	0.0	100.0
Master's	0.0	0.0	100.0
% Population of 3 to 17 years enrolled	13.1	30.9	56.0

Source: EMNV 2005.