

## 4. POSTGRADUATES

Postgraduates include specialization courses, master's degrees and doctorates. In the region there are over 8,000 programmes, master's degrees being the most prevalent, since they represent 51% of all programmes. In terms of enrolments, the region has total of more than 180,000 postgraduate students, 75% of whom belong to the public sector. In the case of doctorates, nearly all the enrolments (almost 90%) belong to the public sector. In this dimension, therefore, it is the public sector too that deserves the credit for the development of this fourth educational level.

OJO: FAVOR ACOMODAR CUADRO

Table 4-1

Programmes and postgraduate enrolment in the region. 1994

	P r o g r a m m e s	E n r o l m e n t	% o f p u b l i c s e c t o r
	N o	N o	
D o c t o r a t e	1 4 7 1	2 2 0 9 4	8 8 4
M	4	1	7

a	,	0	6
s	4	1	.
t	3	,	0
e	7	9	
r		6	
,		8	
s			
S	2	6	7
p	,	1	0
e	7	,	.
c	0	3	7
i	7	1	
a		1	
l			
i			
z			
a			
t			
i			
o			
n			
T	8	1	7
o	,	8	5
t	6	5	.
a	1	,	6
l	5	3	
s		9	
		3	

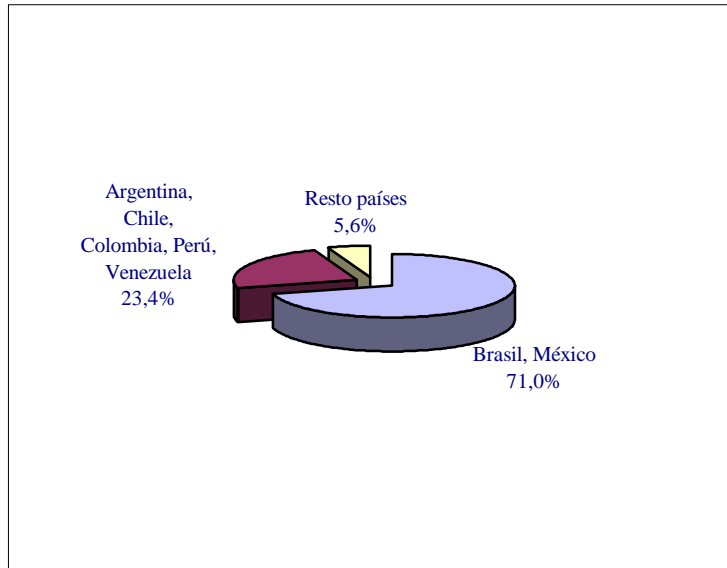
Source: Tables 17 and 18 of Appendix II

Now, this small but important development in the field of postgraduates in the region encompasses some large disparities between the countries. Brazil and Mexico stand out above the others and there are a further six countries that occupy intermediate ranges: Argentina, Chile, Colombia, Cuba, Peru and Venezuela. In the rest of the countries - the great majority of them Central American, in addition to Paraguay and Uruguay - the volume of enrolments is small.

#### *The dimension of doctorates and master's degrees*

The dimension of doctorates and master's degrees. If doctorates and master's degrees only are taken account, these being the most important in terms of research activity, it can be seen that the distances between the countries is even wider.

Figure 4.1  
Enrolment for Doctorates and Master's degrees by groups of countries. 1994.



Source: Table 18, Appendix II

In the first place there is Brazil, which stands out above all the other countries and accounts for nearly 30% of all the region's enrolments. This country - together with Mexico - makes up the group of countries that comprises 71% of the enrolments for master's degree and doctorate programmes in the whole region. A second group of countries is made up of Argentina, Chile, Colombia, Peru and Venezuela, with a much lower level of enrolment in doctorate and master's degree programmes; and lastly the ten remaining countries which only account for 5% of regional enrolments in master's degrees and doctorates.

Table 4.2  
Master's and Doctorates classified by groups of countries. (a) 1994

R	C	E	T
a	o	n	o
n	u	r	t
g	n	o	a
e	t	l	l
	r	m	s
o	i	e	b
f	e	n	y
	s	t	
e		N	g
n		o	r
r			o

o l m e n t		u p s	o f	
			c o u n t r i e s	N o
		%		
3 0 - 5 5 t h o u s a n d	B	5	8	7
	r	4	7	0
	a	6	9	.
	z	2	6	9
	i	1	3	2
	l	3		
	y	3		
	M	3		
	e	4		
	x	1		
i				
c				
o				
4 . 5 0 0 - 7 t h o u s a n d	A	5	2	2
	r	7	9	3
	g	1	,	.
	e	5	0	4
	n	4	6	
	t	4	8	
	i	9		
	n	8		
	a	6		
	C	6		
	h	3		
	i	1		
	l	4		
	e	6		
C	5			
o	1			
l	4			
o	6			
m	,			
b	0			
i	2			
a	7			
P				
e				
r				
u				
V				
e				

n e z u e l a				
1	B	1		
-	o	,	4	3
3	l	3	,	.
t	i	0	7	8
h	v	6	3	
o	i	1	7	
u	a	,		
s	C	0		
a	o	2		
n	s	2		
d	t	2		
	a	,		
	R	4		
	i	0		
	c	9		
	a			
	C			
	u			
	b			
	a			
	E	4		
	l	6		
		0		
U	S	4	2	1
n	a	5	,	.
d	l	1	2	8
e	v	1	9	
r	a	5	5	
5	d	1		
0	o	1		
0	r	8		
	G	1		
	u	3		
	a	3		
	t	0		
	e	3		
	m	1		
	a	8		
	l	4		
	a	0		
	H	4		
	o			
	n			
	d			
	u			
	r			
	a			
	s			
	N			
	i			
	c			
	a			
	r			
	a			
	g			
	u			
	a			

	P a n a m a U r u g u a y P a r a g u a y		
Totals		1	1
(master's + doctorates)		2	0
		4	0
		,	%
		0	
		6	
		2	

Source: Tables 17 and 18 of Appendix II

(a) Information not available for Ecuador and Dominican Rep.

More than undergraduate studies, postgraduate studies operate on a scale system, i.e. the conditions for setting up postgraduate studies involve levels of resources that not all countries are in a position to commit. This is why academic integration processes by subregions are essential if the need to develop this education level in accordance with the research and development needs of open societies is to be seriously considered.

In general terms, the development of postgraduates was associated with the implementation and consolidation of the Science and Technology Systems of the countries, through agencies such as CNPq and CAPES in Brazil, the ONCYT's in other countries, and later the FONDECYT's.

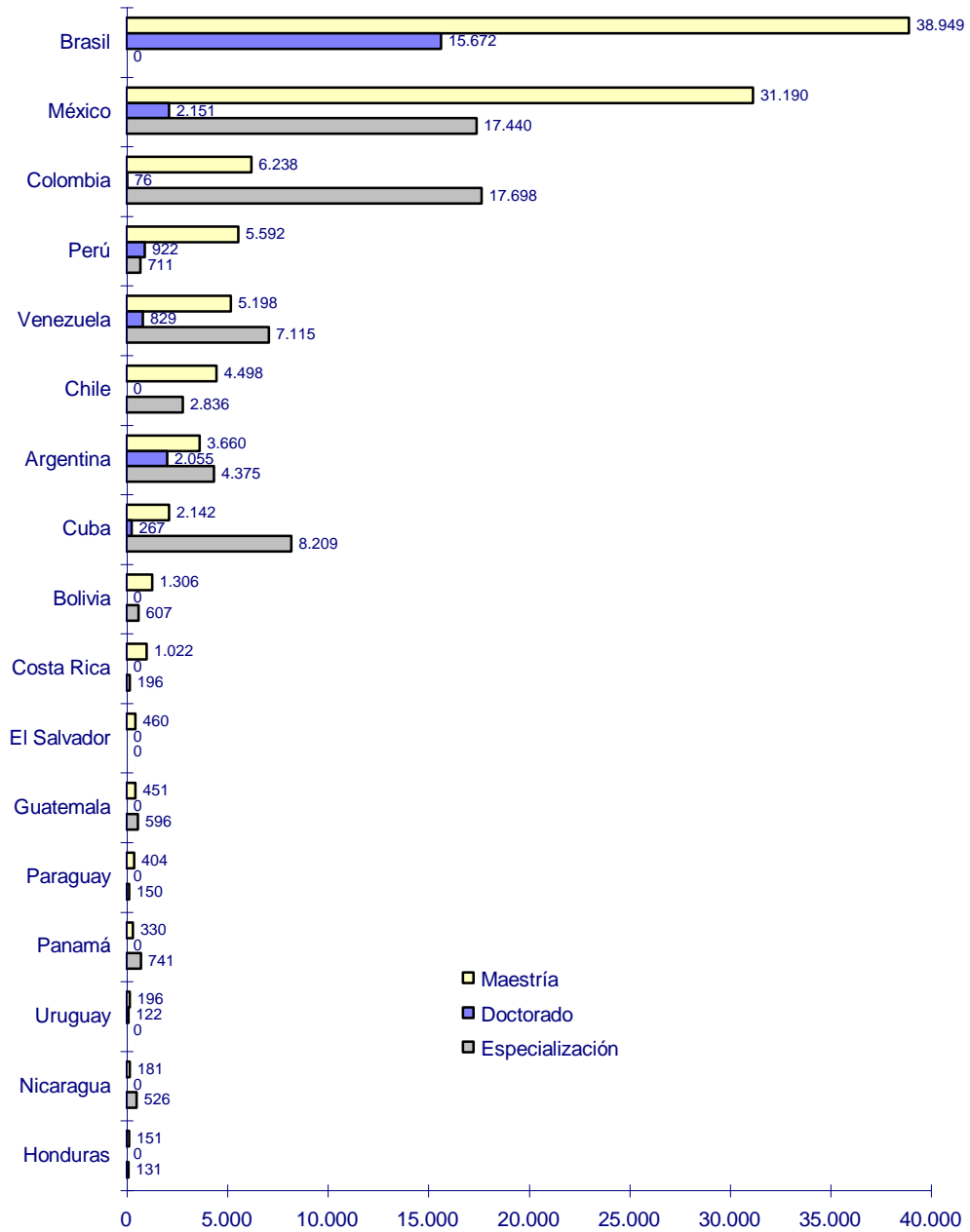
The case of Brazil has been the most important in the region, not just in quantitative but also in qualitative terms. With a differentiated research financing structure, Brazil made use of the institutional support it had in the years of economic affluence in order to consolidate postgraduate centres within the country. Other cases, such as Colombia, Mexico and Venezuela, unlike Brazil, tended to use the resources of the financing agencies to support

research, with a more "individualized" orientation, that is through scholarships to study abroad. This outward-looking model of postgraduate in general has a low multiplier effect. Therefore in the eighties the countries began to change their approach. In Colombia in particular, at the end of the eighties, national postgraduate development policies were implemented, especially for master's degrees and doctorates that carried less weight compared with the other NHES's of similar dimensions. Argentina, on the other hand, by contrast with the high rate of undergraduate schooling, did not have the same development in the area of academic postgraduates. Some authors have attributed that situation to the fact that postgraduates are not taken into account there as a formal requisite for moving up in careers within the universities, an aspect which has been fundamental in the internal demand for postgraduates in other countries in the region.

Figure 4.1  
Enrolment for postgraduates by level. 1994

**OJO: CAMBIAR NOMBRES PAISES, COMAS Y  
PUNTOS  
MASTER'S, DOCTORATE, SPECIALIZATION**





Source: Table 18, Appendix II  
 N.B. Enrolment for doctorates in the case of Chile is included under Master's degrees.