



**INTERNATIONAL ATOMIC ENERGY AGENCY**



XA9743864

IAEA-CPS-93/03  
16 April 1993  
Original: ENGLISH

## **COUNTRY PROGRAMME SUMMARY**

**THE AGENCY'S TECHNICAL CO-OPERATION  
PROGRAMME WITH  
NICARAGUA  
1983 - 1993  
COUNTRY PROGRAMME SUMMARIES**

**DEPARTMENT OF TECHNICAL CO-OPERATION**

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NICARAGUA  
  
1983 - 1993  
  
COUNTRY PROGRAMME SUMMARIES

EVALUATION SECTION  
**DEPARTMENT OF TECHNICAL CO-OPERATION**

**THE AGENCY'S TECHNICAL CO-OPERATION  
PROGRAMME WITH  
NICARAGUA  
1983 - 1993  
COUNTRY PROGRAMME SUMMARIES**

This report contains a review of the Agency's technical co-operation activities in Nicaragua carried out during 1983 - 1993. In terms of coverage and analytical depth, country programme summaries stand somewhere midway between in-depth country programme evaluations and individual project evaluations. They attempt to provide a comprehensive, descriptive picture of the Agency's co-operation with a Member State in a manner that will be particularly useful for programming decisions. The attempt is very much to describe -- largely through statistical data -- not to provide independent analysis and evaluation.

**NICARAGUA**

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## INTRODUCTION

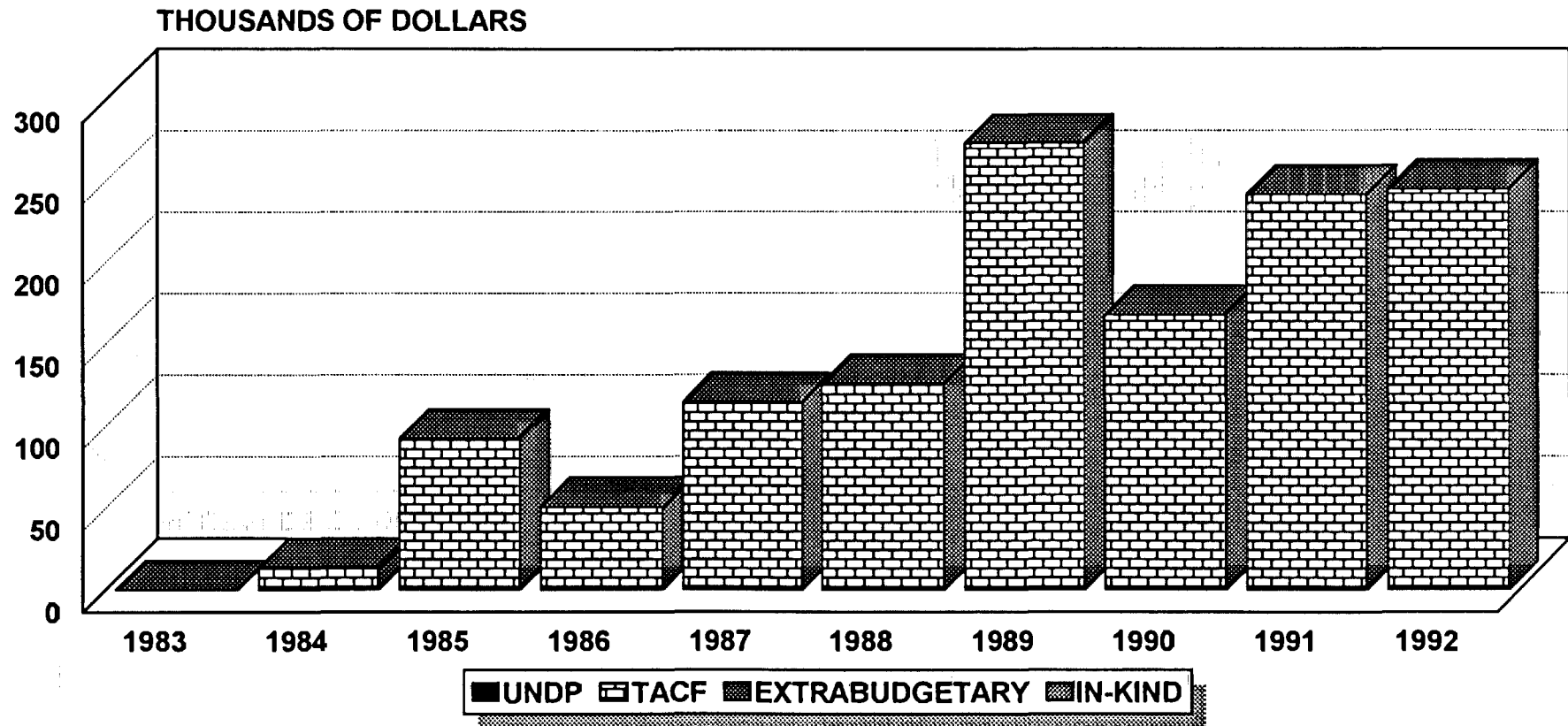
The country programme summary reported on here is one in the series of such studies being undertaken of the Agency's TC programme with Member States. With almost \$1.4 million of Agency support received, Nicaragua ranks 69<sup>th</sup> among all recipients of technical assistance during the period 1958 through 1992.

The best part of the assistance received during the past ten years has been provided in the form of equipment (75%), complemented by expert services (14%) and training (11%). The entire resources were made available through the TACF, 77% in convertible currency and 23% in NCC.

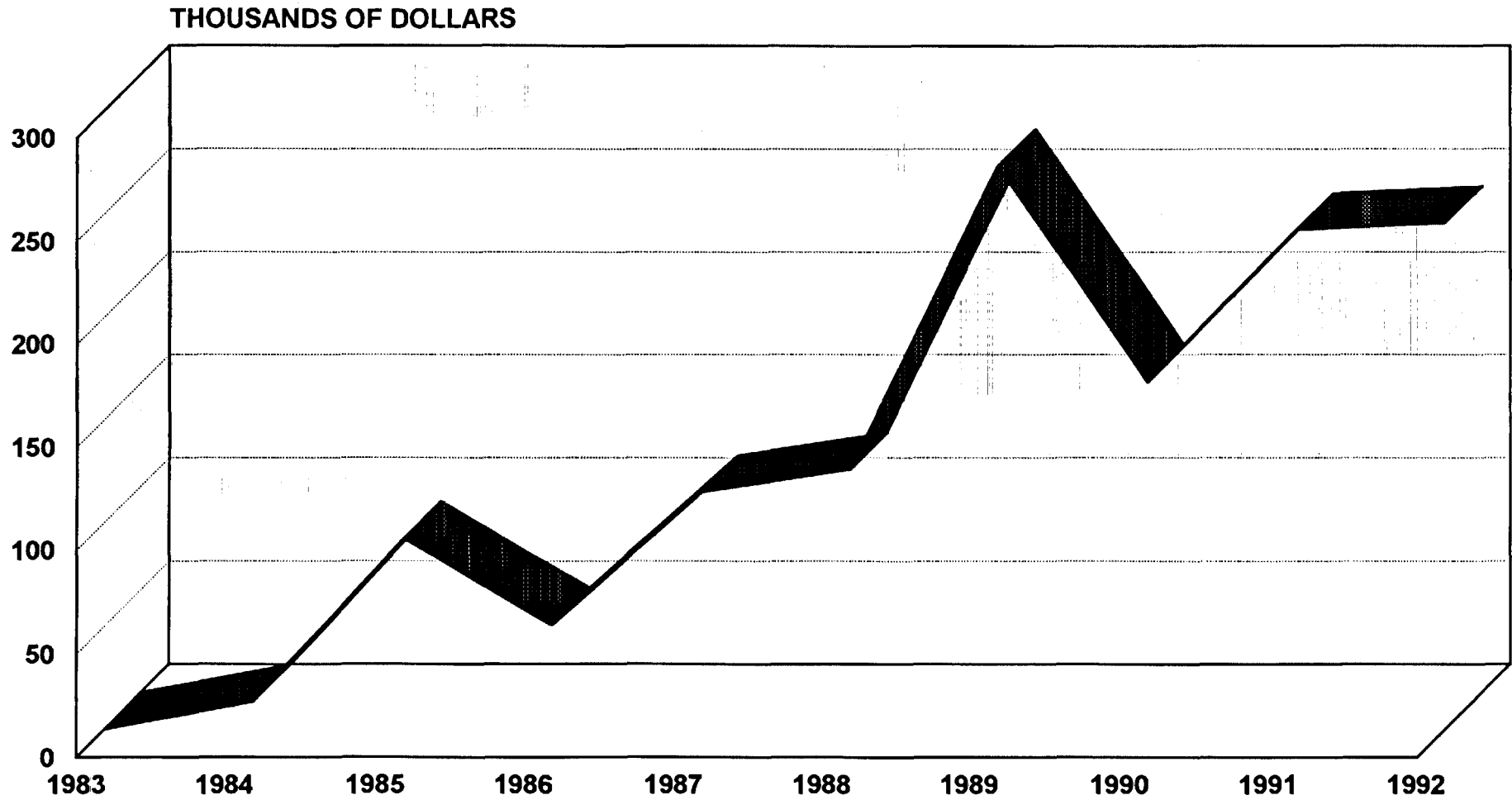
With regard to total disbursements -- by sector -- under those projects that were operational during the period 1983 through 1 April 1993, by far the major area has been hydrology (60%), with significantly smaller shares going to agriculture (18%), nuclear medicine (12%) and nuclear raw materials (10%).

During the same period, the country has hosted one regional training course for 12 participants (charged to the fellowships programme) and has conducted one national training course for 32 participants.

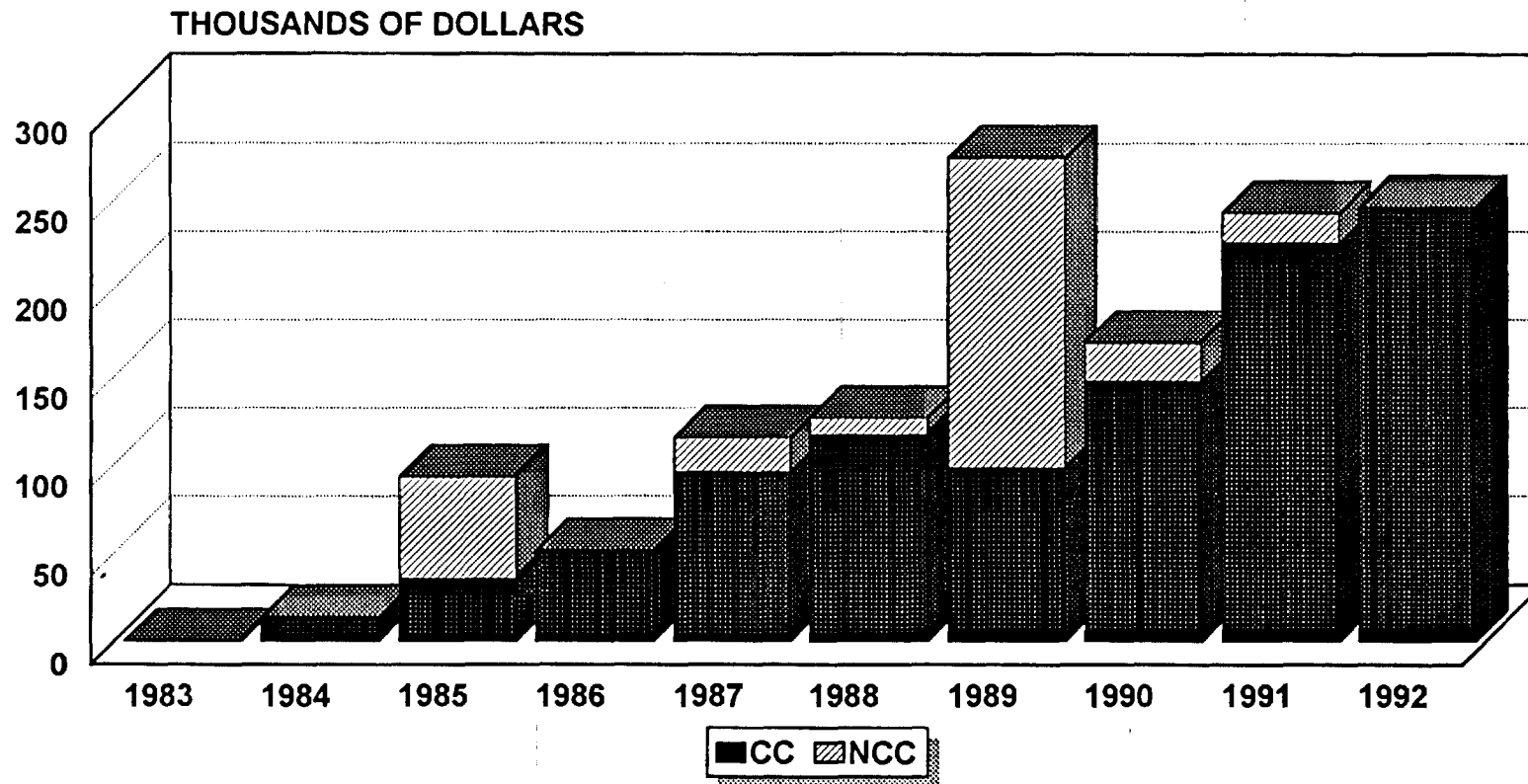
# ASSISTANCE PROVIDED BY THE AGENCY TO NICARAGUA BY SOURCE (1983 - 1992)



# TACF ASSISTANCE PROVIDED TO NICARAGUA (1983 - 1992)

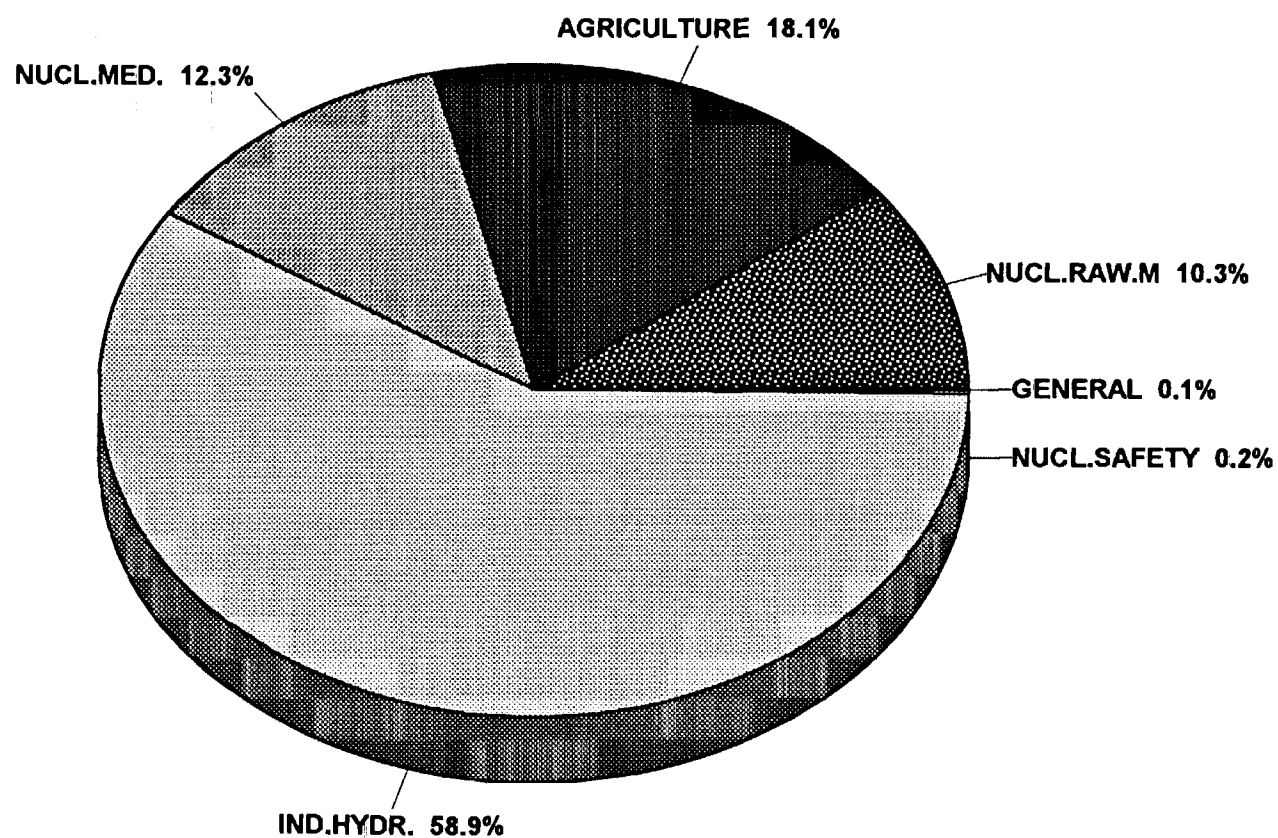


# TACF ASSISTANCE PROVIDED TO NICARAGUA BY CC AND NCC (1983 - 1992)

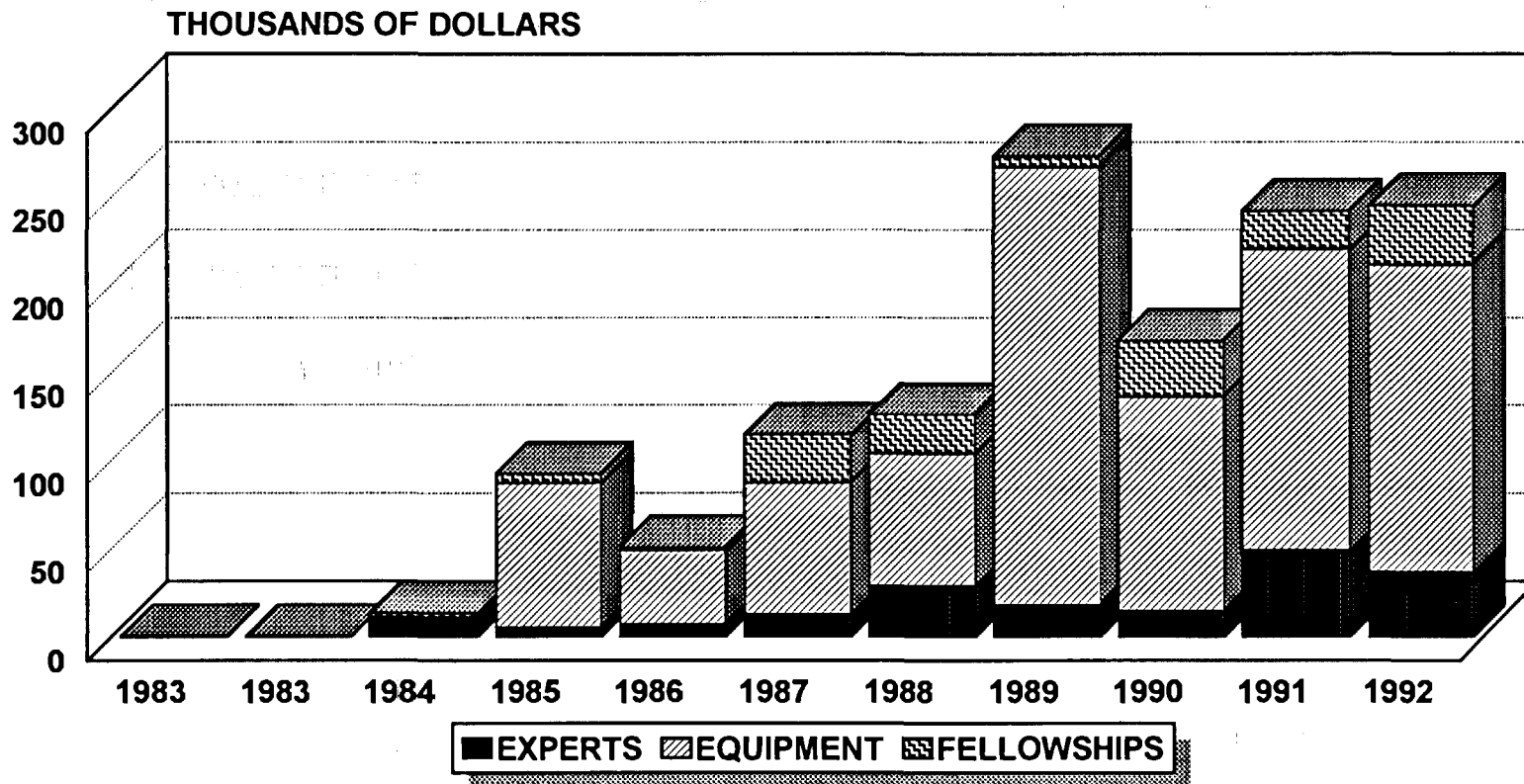




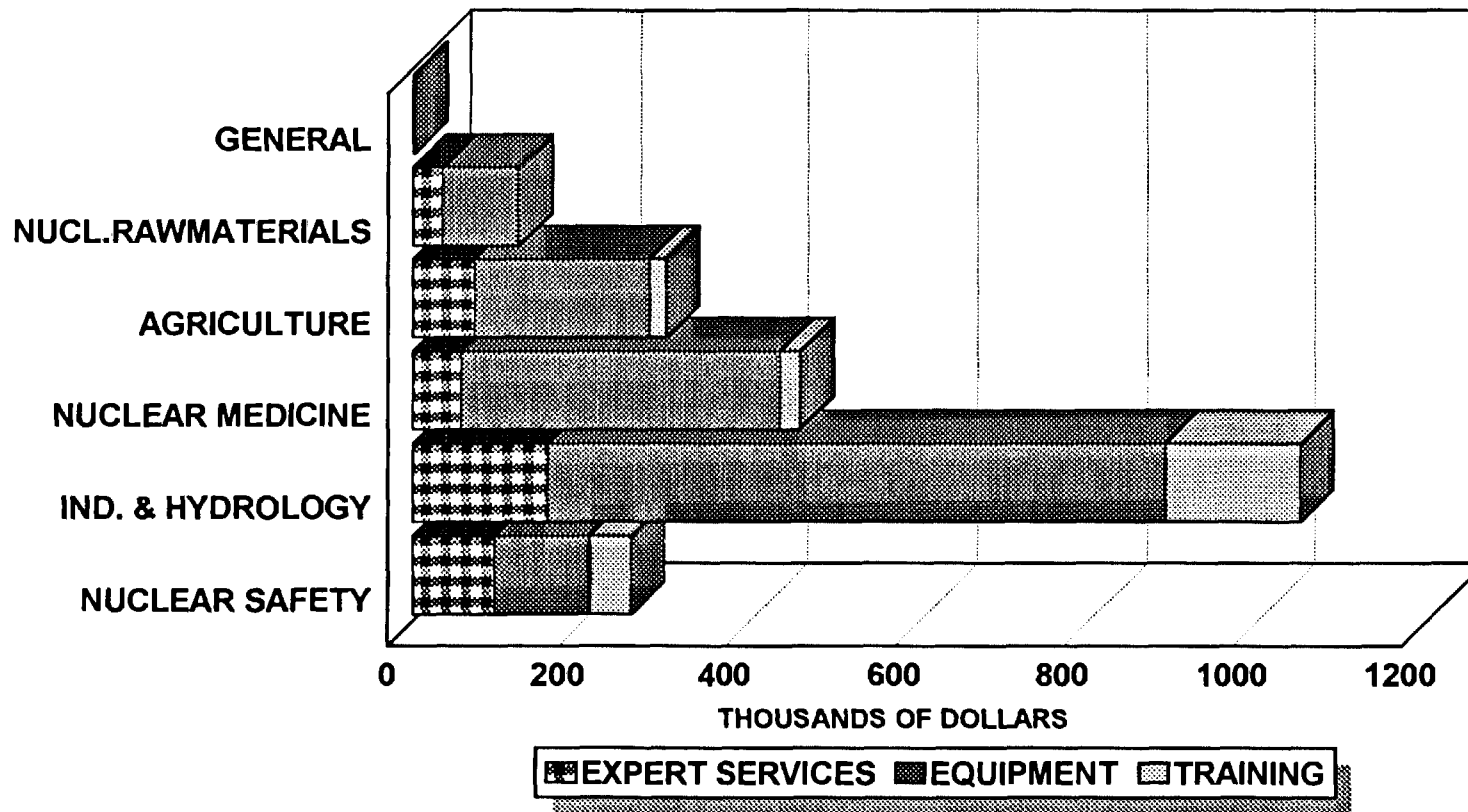
# TC PROJECT DISBURSEMENTS IN NICARAGUA BY SECTOR (1983 - 1992)



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# EXPERT SERVICES, EQUIPMENT AND PROJECT-FUNDED TRAINING PROVIDED TO NICARAGUA BY SECTOR (1983 - 1993)



THE AGENCY'S TECHNICAL CO-OPERATION PROGRAMME WITH NICARAGUA

ALL SOURCES

NICARAGUA'S RANKING AS A TC RECIPIENT  
1958 - 1992  
(in \$1000)

YEAR	RANKING	AMOUNT
1958-82	79 <sup>th</sup>	54.2
1983	-	-
1984	76 <sup>th</sup>	13.2
1985	62 <sup>nd</sup>	92.3
1986	66 <sup>th</sup>	50.4
1987	60 <sup>th</sup>	114.5
1988	56 <sup>th</sup>	125.7
1989	40 <sup>th</sup>	273.3
1990	57 <sup>th</sup>	168.0
1991	46 <sup>th</sup>	242.0
1992	49 <sup>th</sup>	245.3
1958-92	69 <sup>th</sup>	1378.9

**"TOP FIVE" RECIPIENTS OF AGENCY ASSISTANCE  
1958 - 1992 (in \$1000)**

**ALL SOURCES**

Year	I	II	III	IV	V	NICARAGUA
1958-82	BRA 8507.3	IND 6849.4	ARG 5528.2	PAK 5492.7	CHI 5240.1	79 <sup>th</sup> - 54.2
1983	EGY 2077.9	PER 1116.8	VIE 948.1	PHI 778.6	IRA 722.1	-
1984	EGY 3625.9	PER 1750.4	THA 1094.6	CUB 1028.7	PHI 881.2	76 <sup>th</sup> - 13.2
1985	EGY 2494.8	PER 1120.7	THA 1117.4	BGD 1068.2	PHI 963.7	62 <sup>nd</sup> - 92.3
1986	EGY 2317.0	BRA 1452.9	THA 1169.4	POL 1050.3	BGD 896.4	66 <sup>th</sup> - 50.4
1987	HUN 3452.6	EGY 1775.4	THA 1742.4	INS 1312.5	YUG 1223.2	60 <sup>th</sup> - 114.5
1988	EGY 1486.9	BUL 1361.6	CPR 1278.5	THA 1158.7	BRA 1096.7	56 <sup>th</sup> - 125.7
1989	CPR 1542.3	EGY 1505.1	THA 1205.3	BRA 1096.5	INS 999.1	40 <sup>th</sup> - 273.3
1990	POL 2308.1	CPR 2005.0	VIE 1589.2	INS 1412.6	BRA 1229.1	57 <sup>th</sup> - 168.0
1991	INS 1305.2	CPR 975.0	EGY 959.8	BRA 951.2	BUL 934.7	46 <sup>th</sup> - 242.0
1992	EGY 1586.3	INS 1342.1	CPR 1328.8	MEX 1127.8	POL 1036.4	49 <sup>th</sup> - 245.3
1958-92	EGY 23808.6	BRA 17736.8	THA 15332.0	INS 13725.9	PER 13129.6	69 <sup>th</sup> - 1378.9

**"TOP FIVE" RECIPIENTS OF AGENCY ASSISTANCE  
1958 - 1992 (in \$1000)**

**TECHNICAL ASSISTANCE AND CO-OPERATION FUND**

Year	I	II	III	IV	V	NICARAGUA
1958-82	HUN 2971.7	EGY 2405.8	PAK 2340.5	THA 2000.3	BRA 1983.5	76 <sup>th</sup> - 54.2
1983	EGY 1049.4	VIE 897.4	POL 667.8	PAK 498.5	PHI 430.0	-
1984	EGY 1197.2	CUB 655.6	ECU 565.6	BGD 506.3	BUL 472.4	74 <sup>th</sup> - 13.2
1985	BGD 991.8	VIE 745.0	THA 708.7	BRA 571.8	POR 538.7	58 <sup>th</sup> - 92.3
1986	BRA 1381.8	THA 871.9	POL 833.5	BGD 823.9	SYR 751.8	65 <sup>th</sup> - 50.4
1987	HUN 3305.2	DRK 986.8	BUL 888.5	INS 885.8	EGY 878.9	58 <sup>th</sup> - 114.5
1988	BUL 1195.6	PER 856.5	EGY 768.6	INS 751.7	MAL 656.0	51 <sup>st</sup> - 125.7
1989	EGY 990.9	CPR 868.2	POR 769.6	CHI 756.9	MAL 619.4	33 <sup>rd</sup> - 273.3
1990	POL 1562.3	VIE 1518.8	DRK 1156.2	IRA 958.0	YUG 933.4	53 <sup>rd</sup> - 168.0
1991	BUL 893.1	PAK 868.8	INS 855.1	VIE 817.6	CPR 814.5	45 <sup>th</sup> - 242.0
1992	EGY 1255.7	CPR 1009.0	VIE 872.8	INS 826.6	IRA 795.5	44 <sup>th</sup> - 245.3
1958-92	EGY 10847.0	HUN 8743.7	POL 8486.4	VIE 8199.9	PAK 8115.6	63 <sup>rd</sup> - 1378.9

ASSISTANCE PROVIDED BY THE AGENCY TO NICARAGUA

Financial Summary 1983 - 1992  
(In thousands of dollars)

Year	ASSISTANCE PROVIDED, BY TYPE						ASSISTANCE PROVIDED, BY SOURCE					
	Experts	Equipment	Fellowships	Group training	Sub-contracts	Total	UNDP	TACF CC	TACF NCC	Extra-budgetary	In-kind	Total
1983	-	-	-	-	-	-	-	-	-	-	-	-
1984	11.1	-	2.1	-	-	13.2	-	13.2	-	-	-	13.2
1985	5.1	81.9	5.3	-	-	92.3	-	34.8	57.5	-	-	92.3
1986	7.0	41.9	1.5	-	-	50.4	-	50.4	-	-	-	50.4
1987	12.8	74.2	27.5	-	-	114.5	-	94.7	19.8	-	-	114.5
1988	28.5	75.2	22.0	-	-	125.7	-	115.7	10.0	-	-	125.7
1989	17.6	249.3	6.4	-	-	273.3	-	97.1	176.2	-	-	273.3
1990	14.6	121.5	31.9	-	-	168.0	-	146.1	21.9	-	-	168.0
1991	48.8	171.4	21.8	-	-	242.0	-	224.6	17.4	-	-	242.0
1992	36.5	174.8	34.0	-	-	245.3	-	245.3	-	-	-	245.3
1983-92	182.0	990.2	152.5	-	-	1 324.7	-	1 021.9	302.8	-	-	1 324.7

TECHNICAL CO-OPERATION PROJECTS IN NICARAGUA  
BY SECTOR

PROJECTS COMPLETED AND OPERATIONAL 1983 - 1993

TOTAL PROJECT ALLOTMENTS AND DISBURSEMENTS  
(as of 1 April 1993)

SECTOR	NO. OF PROJECTS	ALLOTMENTS \$	% OF TOTAL	DISBURSEMENTS \$	% OF TOTAL
General atomic energy development	1	1 610	0.1	1 720	0.1
Nuclear physics and chemistry	-	-	-	-	-
Nuclear raw materials	1	124 483	5.7	131 079	10.3
Nuclear engineering and technology	-	-	-	-	-
Nuclear techniques in agriculture	3	299 200	13.6	229 996	18.1
Nuclear medicine	3	459 869	21.0	156 562	12.4
Nuclear techniques in biology	-	-	-	-	-
Nuclear techniques in industry and hydrology	7	1 051 542	47.9	747 121	58.9
Nuclear safety	1	257 750	11.7	1 983	0.2
TOTAL	16	2 194 454	100.0	1 268 461	100.0



TECHNICAL CO-OPERATION PROJECTS IN NICARAGUA  
 COMPLETED AND OPERATIONAL, BY SECTOR, 1983 - 1993  
 (As of 1 April 1993)

Sector	No. of projects	Total project allotments \$	Total project disbursements \$
<u>Completed projects</u>			
General atomic energy development	1	1 610	1 720
Nuclear physics and chemistry	-	-	-
Nuclear raw materials	1	124 483	131 079
Nuclear engineering and technology	-	-	-
Nuclear techniques in agriculture	1	27 417	32 161
Nuclear medicine	-	-	-
Nuclear techniques in biology	-	-	-
Nuclear techniques in industry & hydrology	2	303 615	295 379
Nuclear safety	-	-	-
TOTAL	5	457 125	460 339
<u>Operational projects</u>			
General atomic energy development	-	-	-
Nuclear physics and chemistry	-	-	-
Nuclear raw materials	-	-	-
Nuclear engineering and technology	-	-	-
Nuclear techniques in agriculture	2	271 783	197 835
Nuclear medicine	3	459 869	156 562
Nuclear techniques in biology	-	-	-
Nuclear techniques in industry & hydrology	5	747 927	451 742
Nuclear safety	1	257 750	1 983
TOTAL	11	1 737 329	808 122

**EXPERT SERVICES, EQUIPMENT AND PROJECT-FUNDED TRAINING PROVIDED TO NICARAGUA, BY SECTOR  
PROJECTS COMPLETED AND OPERATIONAL 1983 - 1993  
(As of 1 April 1993)**

FIELD	TOTAL PROJECT ALLOTMENTS				TOTAL PROJECT DISBURSEMENTS			
	EXPERT SERVICES		EQUIPMENT	TRAINING	EXPERT SERVICES		EQUIPMENT	TRAINING
	M/M	\$	\$	\$	M/M	\$	\$	\$
General atomic energy development	0/07	1 610	-	-	0/07	1 720	-	-
Nuclear physics and chemistry	-	-	-	-	-	-	-	-
Nuclear raw materials	4/16	35 295	89 188	-	4/16	41 891	89 188	-
Nuclear engineering and technology	-	-	-	-	-	-	-	-
Nuclear techniques in agriculture	8/02	73 560	205 940	19 700	5/02	53 191	176 805	-
Nuclear medicine	6/09	57 765	378 347	23 757	2/09	19 131	132 574	4 857
Nuclear techniques in biology	-	-	-	-	-	-	-	-
Nuclear techniques in industry & hydrology	17/22	158 810	732 674	160 058	9/13	80 253	591 432	75 436
Nuclear safety	9/00	97 650	110 000	50 100	-	-	-	1 983
<b>TOTAL</b>	<b>45/26</b>	<b>424 690</b>	<b>1 516 149</b>	<b>253 615</b>	<b>21/17</b>	<b>196 186</b>	<b>989 999</b>	<b>82 276</b>

AGENCY FELLOWS FROM NICARAGUA

1983 - 1993<sup>1</sup>  
(As of 1 April 1993)

Sector	No. of fellowships	No. of months/days	Host countries
General atomic energy development	-	-	-
Nuclear physics	-	-	-
Nuclear chemistry	-	-	-
Nuclear raw materials	-	-	-
Nuclear engineering and technology	-	-	-
Nuclear techniques in agriculture	2	4/01	BRA, COL
Nuclear medicine	9	61/26	PER, BRA, MEX, CUB, SWE, FRA, SPA, UK
Nuclear techniques in biology	-	-	-
Nuclear techniques in industry and hydrology	10	52/19	SPA, MEX, GER, BRA, IAEA
Nuclear safety	1	0/05	IAEA
TOTAL	22	118/21	

<sup>1/</sup> Only includes fellows who have completed or at least started training.

NICARAGUA  
LONG-TERM FELLOWSHIPS  
1983 - 1993  
(As of 1 April 1992)

Name	Field of study	Host country	Date	Duration	Project
BONILLA SILVA	Radiotherapy	SPA	Started: Feb.93	12/00	RLA/0/015
SILVA BERRIOS	Radiotherapy	MEX	Mar.87 - Sep.88	18/02	NIC/6/002

**NICARAGUAN NATIONALS WHO WERE AWARDED MORE THAN ONE  
FELLOWSHIP OR SCIENTIFIC VISIT  
1983 - 1993  
(As of 1 April 1993)**

**NONE**

AGENCY TRAINING COURSES WITH NICARAGUAN PARTICIPATION

1983 - 1993  
(As of 1 April 1993)

Field	Number of participants	Number of courses
General atomic energy development	1	1
Nuclear physics	1	1
Nuclear chemistry	-	-
Nuclear raw materials	-	-
Nuclear engineering and technology	-	-
Nuclear techniques in agriculture	4	4
Nuclear medicine	1	1
Nuclear techniques in biology	-	-
Nuclear techniques in industry & hydrology	1	1
Nuclear safety	4	4
TOTAL	12	12

**MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES**  
**BY NICARAGUAN NATIONALS**  
 1983 - 1993  
 (As of 1 April 1993)

Name	Course No.	Course title	Year	Location
ROMERO LOPEZ	INT/9/116 (001) RLA/9/015 (001)	ITC on radiation protection and nuclear safety RTC on safety and regulation of radiation sources	1991 1993	ARG MEX

**PROJECTS COMPLETED IN NICARAGUA SINCE 1983**  
(As of 1 April 1993)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS				COMPLETED
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING	
			M/M	\$	\$	\$	M/M	\$	\$	\$	
1985	NIC/0/003	Natural resources	0/07	1 610	-	-	0/07	1 720	-	-	1985
1987	NIC/3/003	Uranium exploration	4/16	35 295	89 188	-	4/16	41 891	89 188	-	1992
1986	NIC/5/002	Water balance studies	1/00	6 955	20 462	-	0/27	11 612	20 549	-	1988
1984	NIC/8/002	Isotopes in hydrology	2/20	17 900	237 627	-	2/17	12 923	237 626	-	1989
1987	NIC/8/003	Isotopic hydrology in mining	1/00	7 050	41 038	-	0/19	4 422	40 408	-	1988
	TOTAL	5 projects	9/13	68 810	388 315	-	8/26	72 568	387 771	-	



OPERATIONAL PROJECTS IN NICARAGUA  
(As of 1 April 1993)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS			
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING
			M/M	\$	\$	\$	M/M	\$	\$	\$
1991	NIC/5/003	Improvement of crop yields	5/00	46 650	120 798	19 700	3/09	33 402	99 154	-
1991	NIC/5/004	Immunoassay techniques in the diagnosis of animal diseases	2/02	19 955	64 680	-	0/26	8 177	57 102	-
1984	NIC/6/002	Nuclear medicine services	2/04	14 440	107 594	4 857	2/04	16 872	104 793	4 857
1988	NIC/6/003	Nuclear medicine diagnostic services	0/03	885	-	-	0/03	1 829	-	-
1991	NIC/6/004	Upgrading radiotherapy services	4/02	42 440	270 753	18 900	0/02	430	27 781	-
1989	NIC/8/004	Isotope hydrology studies of the Managua aquifers	1/27	15 810	116 571	24 158	1/27	17 619	112 586	24 158
1989	NIC/8/005	Studies on geothermal fields	3/05	27 150	90 438	36 600	1/29	15 266	85 683	17 365
1991	NIC/8/006	Isotope laboratory for hydrological and other studies	4/00	37 800	145 000	34 500	2/05	28 799	115 129	33 913

**OPERATIONAL PROJECTS IN NICARAGUA  
(As of 1 April 1993)**

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS			
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING
			M/M	\$	\$	\$	M/M	\$	\$	\$
1993	NIC/8/007	Isotopic hydrology studies of Las Sierras aquifers (phase II)	2/00	21 150	27 000	27 900	0/03	612	-	-
1993	NIC/8/008	Hydrogeological model for Momotombo and other geothermal fields	3/00	31 950	75 000	36 900	0/03	612	-	-
1993	NIC/9/003	National radiation protection system	9/00	97 650	110 000	50 100	-	-	-	1 983
	<b>TOTAL</b>	11 projects	36/13	355 880	1 127 834	253 615	12/21	123 618	602 228	82 276

**COUNTERPART INSTITUTIONS IN NICARAGUA (I)**  
(By Institute)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>GENERAL ATOMIC ENERGY DEVELOPMENT</u>		
NIC/0/003	1. Nicaraguan Institute of Mining, Managua	DARCE RIVERA
	2. National Agrometeorological Programme, Ministry of Agricultural Development and Reform, Managua	GUTIERREZ
<u>NUCLEAR RAW MATERIALS</u>		
NIC/3/003	Nicaraguan Institute of Mining, Directorate General for Geology, Managua	PICADO SAVIO
<u>AGRICULTURE</u>		
NIC/5/002	Directorate General for Agriculture, National Agrometeorological Programme, Managua	MANAUX
NIC/5/003	National Agricultural University, Faculty of Natural Resources and the Environment, Managua	TALAVERA SILES
NIC/5/004	Directorate for Animal Health, Centre for Veterinary Diagnosis and Research, Managua	-
<u>NUCLEAR MEDICINE</u>		
NIC/6/002	Ministry of Public Health, Managua	CALDERON GUTIERREZ TERCERO TALAVERA
NIC/6/003	Ministry of Public Health, Directorate General for Medical Care, Hospital Concepción, Managua	BARRETO CABRERA ARTOLA
NIC/6/004	Ministry of Public Health, Directorate General for Medical Care, Hospital Concepción, Managua	SILVA BERRIOS

**COUNTERPART INSTITUTIONS IN NICARAGUA (1)**

(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>NUCLEAR TECHNIQUES IN HYDROLOGY</u>		
NIC/8/002	Nicaraguan Institute for Territorial Studies, Managua	RODRIGUEZ ALVARADO
NIC/8/003	Nicaraguan Institute of Mining, Directorate General for Geology, Managua	MARTINEZ GONZALEZ
NIC/8/004	Nicaraguan Institute for Territorial Studies, Managua	LOPEZ GUZMAN CASTILLO HERNANDEZ
NIC/8/005	Nicaraguan Institute of Energy, General Directorate for Energy Resources, Geothermic Resources Managua	ARCIA LACAYO REYES BENDANA
NIC/8/006	National Autonomous University of Nicaragua, Centre for Research and Water Resources, Managua	MONENEGRO GUILLEN LACAYO
NIC/8/007	Nicaraguan Institute for Territorial Studies, Managua	LOPEZ GUZMAN
NIC/8/008	Nicaraguan Institute of Energy, General Directorate for Energy Resources, Geothermic Resources, Managua	ARCIA LACAYO
<u>NUCLEAR SAFETY</u>		
NIC/9/003	Ministry of Public Health, Managua	MORALES MORALES

**COUNTERPART INSTITUTIONS IN NICARAGUA (II)**  
(By Institute)

**MANAGUA**

**Nicaraguan Institute of Mining  
Managua**

NIC/0/003      Natural Resources

**Nicaraguan Institute of Mining  
Directorate General for Geology  
Managua**

NIC/3/003      Uranium Exploration  
NIC/8/003      Isotopic Hydrology in Mining

**Ministry of Public Health  
Managua**

NIC/6/002      Nuclear Medicine Services  
NIC/9/003      National Radiation Protection System

**Ministry of Public Health  
Directorate General for Medical Care  
Hospital Concepción  
Managua**

NIC/6/003      Nuclear Medicine Diagnostic Services  
NIC/6/004      Upgrading Radiotherapy Services

**Nicaraguan Institute for Territorial Studies  
Managua**

NIC/8/002      Isotopes in Hydrology  
NIC/8/004      Isotope Hydrology Studies of the Managua Aquifers  
NIC/8/007      Isotope Hydrology Studies of the Managua Aquifers (Phase II)

**Nicaraguan Institute of Energy  
General Directorate for Energy Resources  
Geothermic Resources  
Managua**

NIC/8/005      Studies on Geothermal Fields  
NIC/8/008      Hydrogeological Model for Momotombo and Other Geothermal  
Fields

**COUNTERPART INSTITUTIONS IN NICARAGUA (II)**  
(By Institute)

**MANAGUA (cont'd)**

**National Agrometeorological Programme**  
**Ministry of Agricultural Development and Reform**  
**Managua**

NIC/0/003      Natural Resources

**Directorate General for Agriculture**  
**National Agrometeorological Programme**  
**Managua**

NIC/5/002      Water Balance Studies

**Directorate for Animal Health**  
**Centre for Veterinary Diagnosis and Research**  
**Managua**

NIC/5/004      Immunoassay Techniques in the Diagnosis of Animal Diseases

**National Agricultural University**  
**Faculty of Natural Resources and the Environment**  
**Managua**

NIC/5/003      Improvement of Crop Yields

**National Autonomous University of Nicaragua**  
**Centre for Research and Water Resources**  
**Managua**

NIC/8/006      Isotope Laboratory for Hydrological and Other Studies

**THE AGENCY'S TECHNICAL CO-OPERATION PROGRAMME WITH NICARAGUA**

**LONG-TERM EXPERT ASSIGNMENTS**

**(1983 - 1993)**

**NONE**

**RESEARCH CONTRACTS/AGREEMENTS IN NICARAGUA SINCE 1983**

**(As of 1 April 1993)**

**NONE**



**SCIENTISTS FROM NICARAGUA SERVING AS AGENCY  
TECHNICAL CO-OPERATION EXPERTS OR  
TRAINING COURSE LECTURERS  
1983 - 1993  
(As of 1 April 1993)**

**NONE**

**AGENCY FELLOWSHIPS AND SCIENTIFIC VISITS  
HOSTED BY NICARAGUA  
1983 - 1993  
(As of 1 April 1993)**

Recipient country	No. of fellowships	No. of scientific visits	TOTAL <sup>1</sup>
COLOMBIA	1	-	1
DOMINICAN REPUBLIC	2	-	2
EL SALVADOR	3	-	3
GUATEMALA	2	-	2
MEXICO	2	-	2
PANAMA	2	-	2
TOTAL	12	-	12

1./ Participants in a regional training course, charged to the fellowships programme.

**REGIONAL AND INTERREGIONAL TRAINING EVENTS  
HOSTED BY NICARAGUA  
1983 - 1993  
(As of 1 April 1993)**

Course No.	Course Title	Partici- pants	Year
RLA/1/004	RTC on nuclear science development (participants charged to fellowships programme)	12	1983

In addition, a national training course on the use of isotope techniques in soil-plant relationships was held for 32 participants in 1992 under project NIC/5/003, Improvement of Crop Yields.