

XA9333792



INTERNATIONAL ATOMIC ENERGY AGENCY

IAEA-CPS-92/20
18 November 1992
Original: ENGLISH

COUNTRY PROGRAMME SUMMARY

THE AGENCY'S TECHNICAL CO-OPERATION

PROGRAMME WITH

ETHIOPIA

1982 - 1992

COUNTRY PROGRAMME SUMMARIES

DEPARTMENT OF TECHNICAL CO-OPERATION

IAEA-CPS-92/2C
18 November 1992
Original: ENGLISH

COUNTRY PROGRAMME SUMMARY

THE AGENCY'S TECHNICAL CO-OPERATION

PROGRAMME WITH

ETHIOPIA

1982 - 1992

COUNTRY PROGRAMME SUMMARIES

EVALUATION SECTION

DEPARTMENT OF TECHNICAL CO-OPERATION

**THE AGENCY'S TECHNICAL CO-OPERATION
PROGRAMME WITH
ETHIOPIA
1982 - 1992
COUNTRY PROGRAMME SUMMARIES**

This report contains a review of the Agency's technical co-operation activities in Ethiopia carried out during 1982 - 1992. 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.

ETHIOPIA

INTRODUCTION	i
Assistance by Source	1
TACF Assistance	2
UNDP, Extrabudgetary and In Kind Assistance	3
TC Project Disbursements by Sector	4
Assistance by Type	5
Assistance by Component/Sector	6
Ethiopia's Ranking as TC Recipient	7
Top Five Recipients	8-9
Financial Summary of Assistance	10
Projects by Sector (Allotments/Disbursements)	11
Projects by Sector (Completed & Operational)	12
TC Project Components by Sector	13
Agency Fellows	14
Fellowships Longer than 12 M/M	15
Fellows Holding More than One Award	16
Training Course Participants	17
Multiple Participants in Training Courses	18
Projects Completed	19
Operational Projects	20
Counterpart Institutions (by Project)	21-22
Counterpart Institutions (by Institute)	23-24
Long-Term Assignments	25
Research Contracts/Agreements	26
Ethiopian Experts or Lecturers	27
Fellowships and Scientific Visits Hosted	28
Regional/Interregional Courses Hosted	29

T
A
B
L
E
O
F
C
O
N
T
E
N
T
S

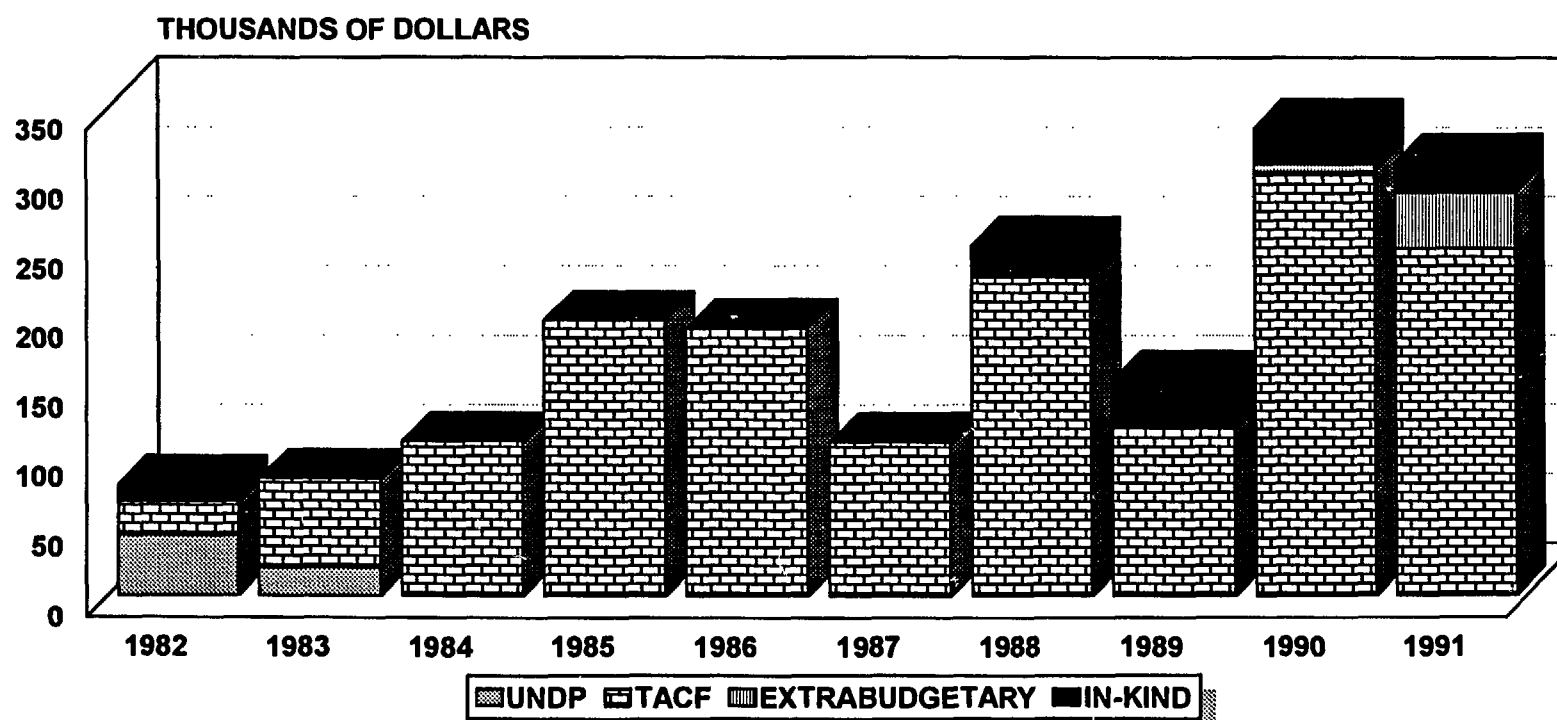
INTRODUCTION

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 some \$2.5 million of Agency support received, Ethiopia ranks 54th among all recipients of technical assistance in the period 1958 through 1991.

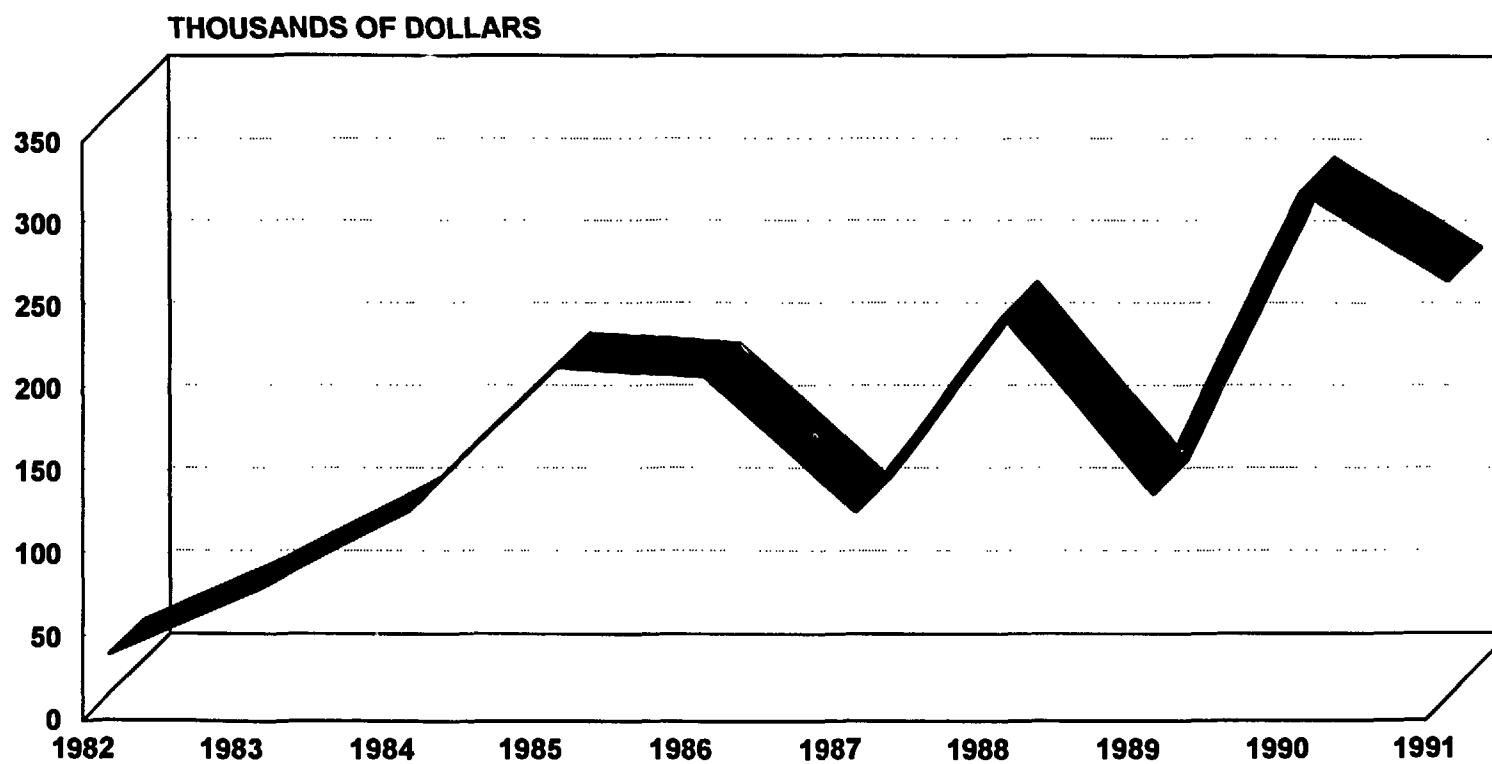
More than half of the assistance received during the past ten years has been provided in the form of equipment (55%), complemented by expert services (16%) and training (29%). The best part of the resources was provided by the Technical Assistance and Co-operation Fund (88%), the remainder was made available through assistance in kind (6%), UNDP and extrabudgetary contributions (3% each).

During the past ten years, project disbursements went to four major areas: agriculture (45%), nuclear medicine (35%), nuclear safety (14%) and nuclear engineering and technology (6%).

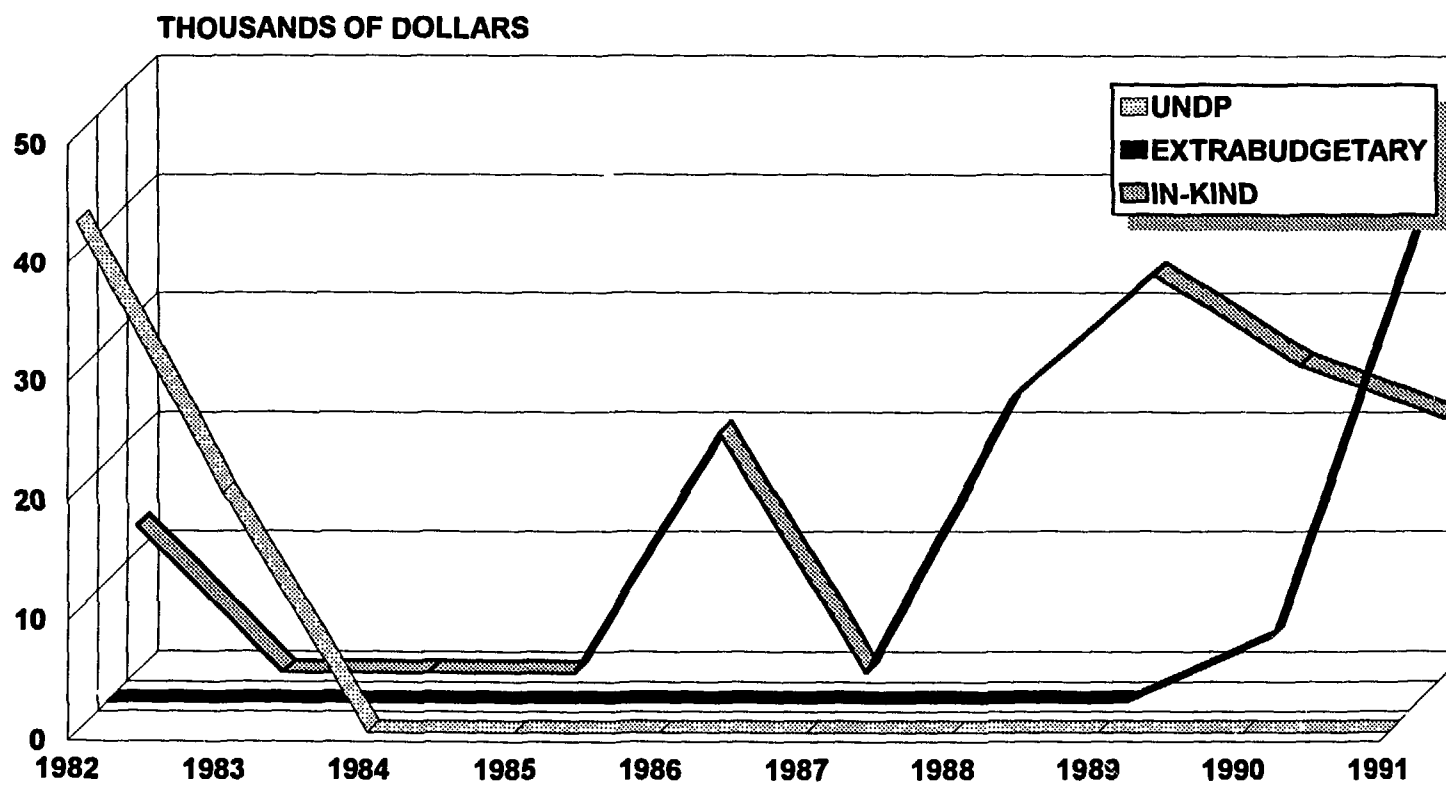
ASSISTANCE PROVIDED BY THE AGENCY TO ETHIOPIA BY SOURCE (1982 - 1991)



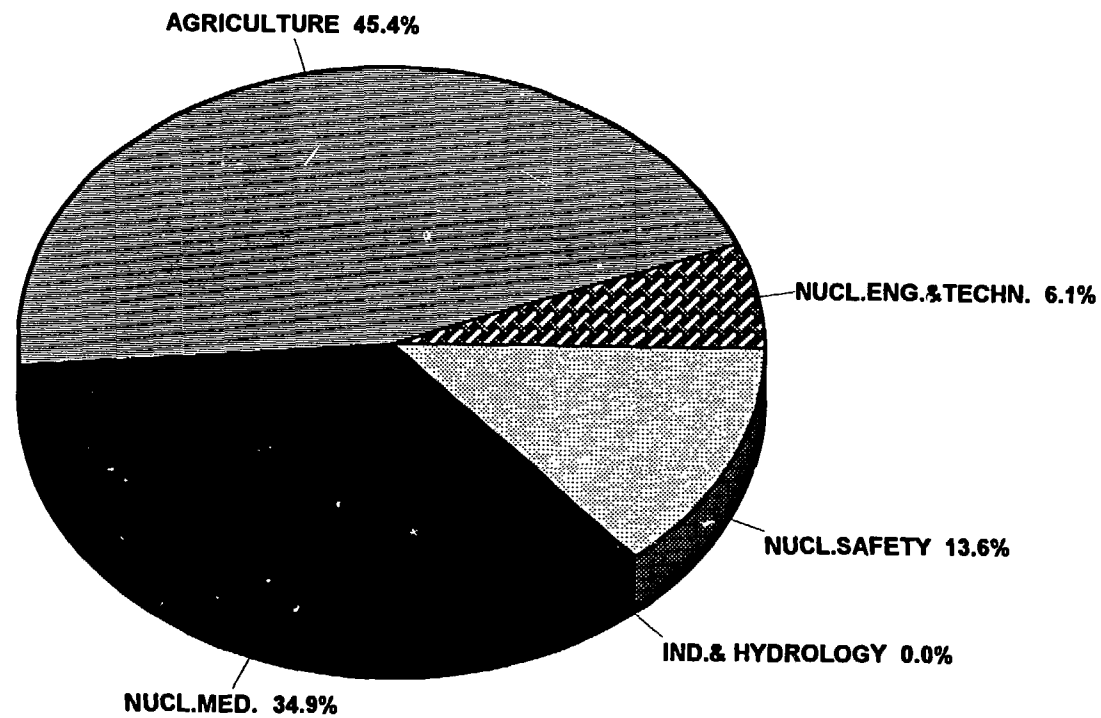
TACF ASSISTANCE PROVIDED TO ETHIOPIA (1982 - 1991)



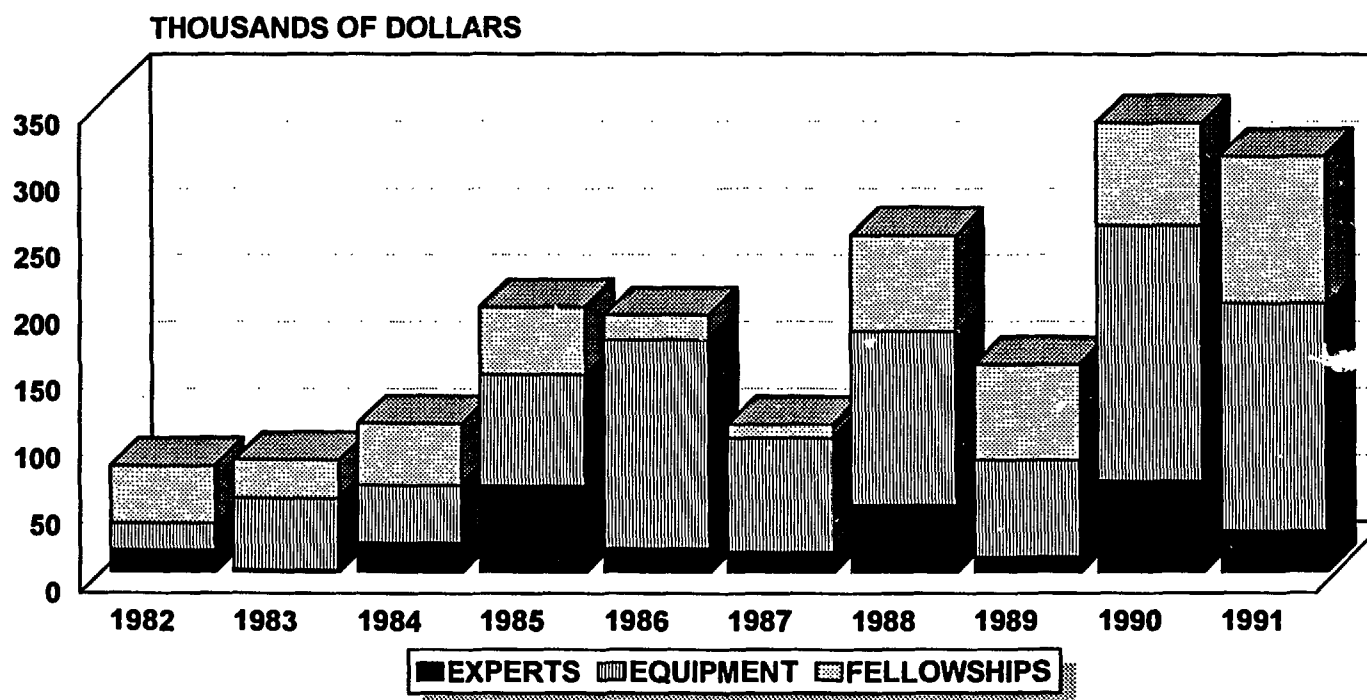
UNDP, EXTRABUDGETARY AND IN-KIND ASSISTANCE PROVIDED TO ETHIOPIA (1982 - 1991)



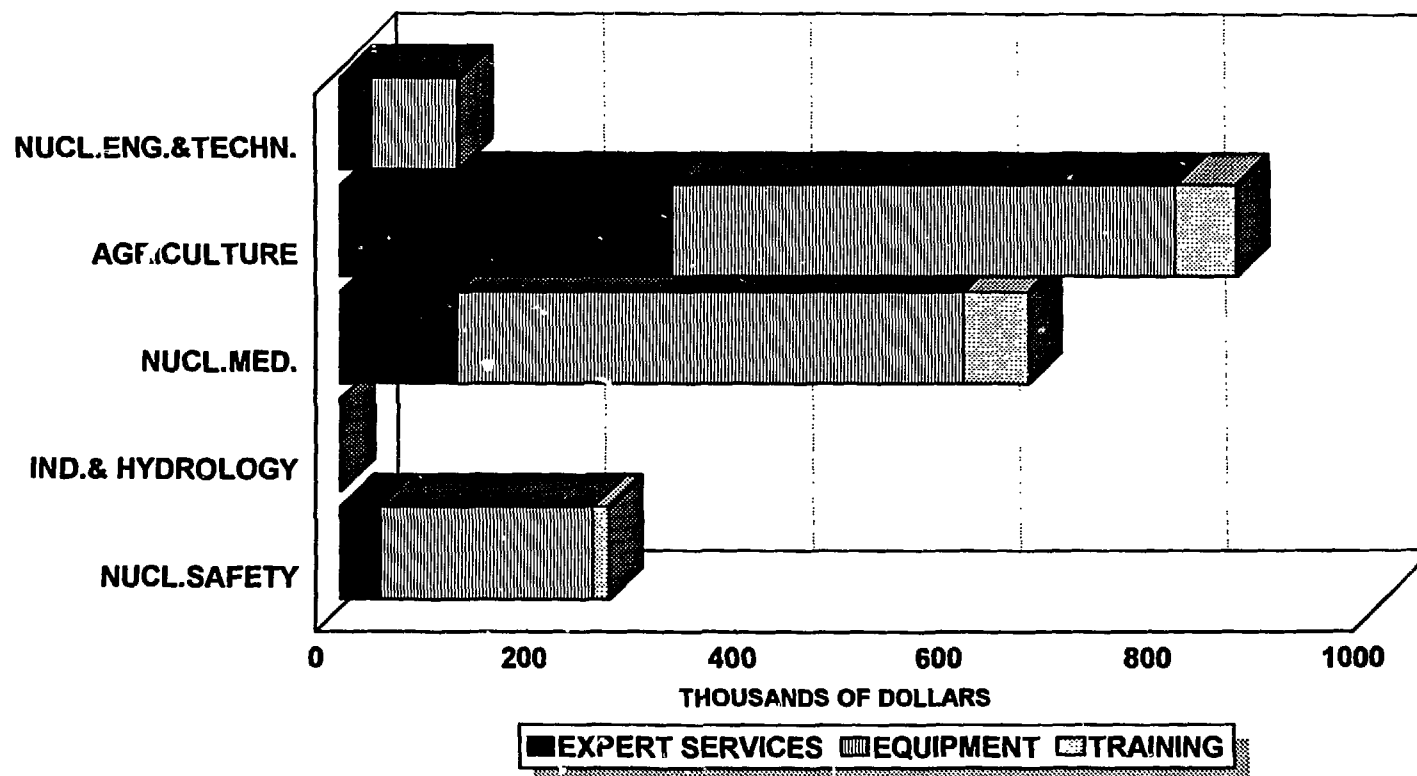
TC PROJECT DISBURSEMENTS IN ETHIOPIA BY SECTOR (1982 - 1991)



ASSISTANCE PROVIDED BY THE AGENCY TO ETHIOPIA BY TYPE (1982 -1991)



EXPERT SERVICES, EQUIPMENT AND PROJECT-FUNDED TRAINING PROVIDED TO ETHIOPIA BY SECTOR (1982 - 1992)



THE AGENCY'S TECHNICAL CO-OPERATION PROGRAMME WITH ETHIOPIA

A.I. SOURCES

ETHIOPIA'S RANKING AS A TC RECIPIENT
1958 - 1991
(in \$1000)

YEAR	RANKING	AMOUNT
1958-81	50 th	663.0
1982	57 th	78.8
1983	61 st	83.3
1984	57 th	110.4
1985	42 nd	197.2
1986	44 th	191.2
1987	63 rd	109.7
1988	39 th	250.8
1989	57 th	154.2
1990	40 th	335.5
1991	39 th	310.6
1958-91	54 th	2484.7

**"TOP FIVE" RECIPIENTS OF AGENCY ASSISTANCE
1958 - 1991 (in \$1000)**

ALL SOURCES

Year	I	II	III	IV	V	ETHIOPIA
1958-91	BRA 7907.9	IND 6670.7	ARG 5200.4	PAK 5091.2	CHI 5005.7	50 th - 663.0
1982	EGY 807.5	PER 746.4	CUB 715.7	COL 667.7	THA 654.3	57 th - 78.8
1983	EGY 2077.9	PER 1116.8	VIE 948.1	PHI 778.6	IRA 722.1	61 st - 83.3
1984	EGY 3625.9	PER 1750.4	THA 1094.6	CUB 1028.7	PHI 881.2	57 th - 110.4
1985	EGY 2494.8	PER 1120.7	THA 1117.4	BGD 1068.2	PHI 963.7	42 nd - 197.2
1986	EGY 2317.0	BRA 1452.9	THA 1169.4	POL 1050.3	BGD 896.4	44 th - 191.2
1987	HUN 3452.6	EGY 1775.4	THA 1742.4	INS 1312.5	YUG 1223.2	63 rd - 109.7
1988	EGY 1486.9	BUL 1361.6	CPR 1278.5	THA 1158.7	BRA 1096.7	39 th - 250.8
1989	CPR 1542.3	EGY 1505.1	THA 1205.3	BRA 1096.5	INS 999.1	57 th - 154.2
1990	POL 2308.1	CPR 2005.0	VIE 1589.2	INS 1412.6	BRA 1229.1	40 th - 335.5
1991	INS 1305.2	CPR 975.0	EGY 959.8	BRA 951.2	BUL 934.7	39 th - 310.6
1958-91	EGY 22222.3	BRA 17021.1	THA 14596.1	PER 12631.1	INS 12383.8	54 th - 2484.7

***TOP FIVE* RECIPIENTS OF AGENCY ASSISTANCE
1958 - 1991 (in \$1000)**

TECHNICAL ASSISTANCE AND CO-OPERATION FUND

Year	I	II	III	IV	V	ETHIOPIA
1958-81	HUN 2533.0	PAK 2010.9	EGY 1898.7	THA 1712.8	BRA 1704.8	63 rd - 249.6
1982	EGY 507.1	HUN 438.2	CUB 430.7	ECU 398.4	ZAM 354.9	66 th - 23.8
1983	EGY 1049.4	VIE 897.4	POL 667.8	PAK 498.5	PHI 430.0	58 th - 63.4
1984	EGY 1197.2	CUB 655.6	ECU 565.6	BGD 506.3	B'IL 472.4	52 nd - 110.4
1985	BGD 991.8	VIE 745.0	THA 708.7	BRA 571.8	POR 538.7	31 st - 197.2
1986	BRA 1381.8	THA 871.9	POL 833.5	BGD 823.9	SYR 751.8	41 st - 191.2
1987	HUN 3305.2	DRK 986.8	BUL 888.5	INS 885.8	EGY 878.9	60 th - 109.7
1988	BUL 1195.6	PER 856.5	EGY 768.6	INS 751.7	MAL 656.0	33 rd - 228.1
1989	EGY 990.9	CPR 868.2	POR 769.6	CHI 756.9	MAL 619.4	57 th - 120.9
1990	POL 1562.3	VIE 1518.8	DRK 1156.2	IRA 958.0	YUG 933.4	34 th - 304.4
1991	BUL 893.1	PAK 868.8	INS 855.1	VIE 817.6	CPR 814.5	44 th - 249.5
1958-91	EGY 9591.3	HUN 8256.5	POL 7793.5	BRA 7433.5	PAK 7346.0	53 rd - 1848.2

ASSISTANCE PROVIDED BY THE AGENCY TO ETHIOPIA

Financial Summary 1982 - 1991
(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
1982	16.0	20.2	42.6	-	-	78.8	42.8	23.8	-	-	12.2	78.8
1983	1.2	53.4	28.7	-	-	83.3	19.9	29.4	34.0	-	-	83.3
1984	21.7	42.7	46.0	-	-	110.4	-	108.6	1.8	-	-	110.4
1985	63.9	83.1	50.2	-	-	197.2	-	191.6	5.6	-	-	197.2
1986	17.5	155.4	18.3	-	-	191.2	-	168.7	22.5	-	-	191.2
1987	15.1	84.6	10.0	-	-	109.7	-	97.3	12.4	-	-	109.7
1988	49.5	129.4	71.9	-	-	250.8	-	224.3	3.8	-	22.7	250.8
1989	11.3	71.6	71.3	-	-	154.2	-	116.2	4.7	-	33.3	154.2
1990	67.5	190.8	77.2	-	-	335.5	-	304.4	-	5.4	25.7	335.5
1991	30.0	170.4	110.2	-	-	310.6	-	249.5	-	39.9	21.2	310.6
1982-91	293.7	1 001.6	526.4	-	-	1 821.7	62.7	1 513.8	84.8	45.3	115.1	1 821.7

TECHNICAL CO-OPERATION PROJECTS IN ETHIOPIA
BY SECTOR

PROJECTS COMPLETED AND OPERATIONAL 1982 - 1992

TOTAL PROJECT ALLOTMENTS AND DISBURSEMENTS
(as of mid-November 1992)

SECTOR	NO. OF PROJECTS	ALLOTMENTS \$	% OF TOTAL	DISBURSEMENTS \$	% OF TOTAL
General atomic energy development	-	-	-	-	-
Nuclear physics and chemistry	-	-	-	-	-
Nuclear raw materials	-	-	-	-	-
Nuclear engineering and technology	2	184 950	7.5	115 439	6.1
Nuclear techniques in agriculture	4	919 753	37.4	865 156	45.4
Nuclear medicine	3	888 985	36.2	664 181	34.9
Nuclear techniques in biology	-	-	-	-	-
Nuclear techniques in industry and hydrology	1	33 550	1.4	459	-
Nuclear safety	2	431 045	17.5	258 401	13.6
TOTAL	12	2 456 283	100.0	1 903 636	100.0

TECHNICAL CO-OPERATION PROJECTS IN ETHIOPIA
 COMPLETED AND OPERATIONAL, BY SECTOR, 1982 - 1992
 (As of mid-November 1992)

Sector	No. of projects	Total project allotments \$	Total project disbursements \$
<u>Completed projects</u>			
General atomic energy development	-	-	-
Nuclear physics and chemistry	-	-	-
Nuclear raw materials	-	-	-
Nuclear engineering and technology	-	-	-
Nuclear techniques in agriculture	3	766 953	792 018
Nuclear medicine	1	514 730	512 024
Nuclear techniques in biology	-	-	-
Nuclear techniques in industry & hydrology	-	-	-
Nuclear safety	1	125 645	122 521
TOTAL	5	1 407 328	1 426 563
<u>Operational projects</u>			
General atomic energy development	-	-	-
Nuclear physics and chemistry	-	-	-
Nuclear raw materials	-	-	-
Nuclear engineering and technology	2	184 950	115 439
Nuclear techniques in agriculture	1	152 800	73 138
Nuclear medicine	2	374 255	152 157
Nuclear techniques in biology	-	-	-
Nuclear techniques in industry & hydrology	1	33 550	459
Nuclear safety	1	305 400	135 880
TOTAL	7	1 050 955	477 073

**EXPERT SERVICES, EQUIPMENT AND PROJECT-FUNDED TRAINING PROVIDED TO ETHIOPIA, BY SECTOR
PROJECTS COMPLETED AND OPERATIONAL 1982 - 1992
(As of mid-November 1992)**

FIELD	TOTAL PROJECT ALLOTMENTS				TOTAL PROJECT DISBURSEMENTS			
	EXPERT SERVICES		EQUIPMENT	TRAINING	EXPERT SERVICES		EQUIPMENT	TRAINING
	M/M	\$	\$	\$	M/M	\$	\$	\$
General atomic energy development	-	-	-	-	-	-	-	-
Nuclear physics and chemistry	-	-	-	-	-	-	-	-
Nuclear raw materials	-	-	-	-	-	-	-	-
Nuclear engineering and technology	6/00	60 150	105 000	19 800	2/28	30 147	83 278	2 014
Nuclear techniques in agriculture	58/13	348 979	511 784	58 990	52/13	320 228	485 938	58 990
Nuclear medicine	20/23	140 235	628 820	119 930	17/15	112 941	488 430	62 810
Nuclear techniques in biology	-	-	-	-	-	-	-	-
Nuclear techniques in industry & hydrology	3/00	26 550	7 000	-	-	-	459	-
Nuclear safety	5/08	36 160	367 800	27 085	4/20	37 713	205 052	15 636
TOTAL	93/14	612 074	1 620 404	225 805	77/16	501 029	1 263 157	139 450

AGENCY FELLOWS FROM ETHIOPIA

1982 - 1992¹
(As of mid-November 1992)

Sector	No. of fellowships	No. of months/days	Host countries
General atomic energy development	-	-	-
Nuclear physics	-	-	-
Nuclear chemistry	1	15/00	UK
Nuclear raw materials	1	4/00	CAN
Nuclear engineering and technology	4	34/02	HUN, UK, IAEA
Nuclear techniques in agriculture	8	65/09	NZE, AUL, THA, NET, UK, IAEA
Nuclear medicine	14	144/01	SUD, IND, EGY, SWE, UK
Nuclear techniques in biology	-	-	-
Nuclear techniques in industry and hydrology	-	-	-
Nuclear safety	10	59/29	SWE, CZE, AUS, USA, UK, IAEA
TOTAL	38	322/11	

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

ETHIOPIA
FELLOWSHIPS LONGER THAN 12 M/M
1982 - 1992
(As of mid-November 1992)

Name	Field of study	Host country	Date	Duration	Project
WOLDE	Radiochemistry	UK	Feb.88 - May 89	15/00	-
MEBRATE, Y.	Nuclear instrumentation, electronics and reactor control	UK	Started: Oct.92	12/00	RAF/0/003
MJLUGETA	Animal parasitology	UK	Sep.82 - Dec.83	15/17	ETH/5/006
TSIGIE	Nitrogen fixation	UK	Aug.90 - Sep.92	25/22	RAF/0/003
AGEGNEHU	Radiotherapy	EGY	Oct.90 - Oct.91	12/01	ETH/6/004
BALCHA	Radiotherapy	EGY	Oct.90 - Oct.91	12/01	ETH/6/004
JORGE LAGEBO	Radiopharmacy	IND	Jan.89 - Jul.90	18/02	RAF/0/003
MENGISTU K. MARIAM	Radiotherapy	EGY	Oct.90 - Oct.91	12/01	ETH/6/004
SOLOMON	Radiotherapy	EGY	Oct.89 - Dec.91	26/03	ETH/6/004
WASSIE	Nuclear medicine	UK	Oct.90 - Sep.91	12/00	RAF/0/003
WOLDEHAWARIAT	Nuclear medicine	UK	Mar.82 - Mar.83	12/01	-
WOLDESELASSIE	Nuclear medicine instruments	UK	Mar.84 - Mar.85	12/01	ETH/6/003
MENGESHA	Radiation protection	UK	Aug.85 - Oct.86	13/03	-

ETHIOPIAN NATIONALS WHO WERE AWARDED MORE THAN ONE
FELLOWSHIP OR SCIENTIFIC VISIT
1982 - 1992
(As of mid-November 1992)

Name	Field of study	Host country	Date	Duration	Project
AGEGNEHU	1. Nuclear medicine technology 2. Radiotherapy	CAN EGY	May 81 - May 82 Oct.90 - Oct.91	11/22 12/01	- ETH/6/004
BIRHANU TESSENA	1. Radiation protection 2. Environmental monitoring	IAEA IAEA AUS	Sep.84 - Mar.85 Feb.88 - Jun.88	6/00 3/26	ETH/9/004 ETH/9/004
DESTA	1. Nuclear instrumentation 2. Nuclear instrumentation, electronics and reactor control	IAEA HUN	Sep.89 - May 90 Started: Nov.92	8/02 6/00	RAF/0/003 ETH/4/003
TILAHUN	1. Animal parasitology 2. Radiation protection	UK CZE IAEA	Apr.82 - Jul.82 Feb.86 - Mar.86	3/00 0/29	ETH/5/006 ETH/9/004
WOLDE	1. Radiation protection 2. Radiochemistry	IAEA UK	Sep.86 - Nov.86 Feb.88 - May 89	2/14 15/00	ETH/9/004 -

AGENCY TRAINING COURSES WITH ETHIOPIAN PARTICIPATION

1982 - 1992
(As of mid-November 1992)

Field	Number of participants	Number of courses
General atomic energy development	4	4
Nuclear physics	4	4
Nuclear chemistry	-	-
Nuclear raw materials	-	-
Nuclear engineering and technology	4	3
Nuclear techniques in agriculture	15	15
Nuclear medicine	2	2
Nuclear techniques in biology	-	-
Nuclear techniques in industry & hydrology	1	1
Nuclear safety	14	13
TOTAL	44	42

**MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES
BY ETHIOPIAN NATIONALS
1982 - 1992
(As of mid-November 1992)**

Name	Course No.	Course title	Year	Location
BAYOU	INT/1/033 (001)	Interregional study tour on primary and secondary dosimetry laboratories for technical staff of SSDLs	1985	GER HUN USSR
	RAF/9/003 (001)	RTC on radiation protection	1987	SWE EGY
MEBRATE, Y.	RAF/9/005 (004)	RWS on basic radiation and development of national infrastructure for radiation safety	1990	NIR
	RAF/9/005 (006)	RWS on trouble shooting and maintenance of Vinten TLD equipment	1991	AUS
MENGESHA	INT/9/077 (001)	ITC for radiation protection officers in regulatory bodies	1987	GDR
	INT/9/093 (001)	ITC on safety and regulation of sealed sources of radioactive material	1989	USA
	RAF/9/005 (002)	Meeting on regional co-operation in radiation protection in Africa	1989	URT
	RAF/9/005 (008)	Regional meeting on co-operation in radiation protection in Africa	1992	URT
	RAF/9/010 (001)	RTC on radioactive waste management: A systems approach	1992	EGY

PROJECTS COMPLETED IN ETHIOPIA SINCE 1982
(As of mid-November 1992)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS				COMPLETED
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING	
			M/M	\$	\$	\$	M/M	\$	\$	\$	
1978	ETH/5/006	Application of nuclear techniques	37/12	171 654	141 004	51 676	37/12	171 654	141 004	51 676	1982
1984	ETH/5/007	Animal science	9/02	67 970	144 080	7 314	9/02	98 629	143 910	7 314	1992
1985	ETH/5/008	Isotopes in agriculture	3/13	25 195	158 060	-	3/13	23 864	153 967	-	1991
1980	ETH/6/003	Radioisotopes in medicine	16/02	98 810	415 920	-	16/11	100 206	411 818	-	1992
1983	ETH/9/004	Radiation protection	4/08	28 060	86 500	11 085	3/27	25 306	87 648	9 567	1990
	TOTAL	5 projects	70/07	391 689	945 564	70 075	70/05	419 659	938 347	68 557	

OPERATIONAL PROJECTS IN ETHIOPIA
(As of mid-November 1992)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS			
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING
			M/M	\$	\$	\$	M/M	\$	\$	\$
1988	ETH/4/002	Nuclear instrumentation	2/00	23 850	40 000	-	1/00	13 857	31 480	-
1991	ETH/4/003	Establishment of a national nuclear instrumentation unit	4/00	36 300	65 000	19 800	1/28	16 290	51 798	2 014
1991	ETH/5/009	Animal science (phase II)	8/16	84 160	68 640	-	2/16	26 081	47 057	-
1988	ETH/6/004	Radiation therapy	2/21	23 275	123 600	88 730	1/04	12 735	-	62 810
1991	ETH/6/005	Radioisotopes in medicine (phase II)	2/00	18 150	89 300	31 200	-	-	76 612	-
1991	ETH/8/002	Isotope investigations in selected geothermal fields	3/00	26 550	7 000	-	-	-	459	-
1988	ETH/9/005	Radiation protection and environmental monitoring	1/00	8 100	281 300	16 000	0/23	12 407	117 404	6 069
	TOTAL	7 projects	23/07	220 385	674 840	155 730	7/11	81 370	324 810	70 893

Footnote-a/ project not yet upgraded:

ETH/1/002 Teaching applied nuclear physics

COUNTERPART INSTITUTIONS IN ETHIOPIA (I)
(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>NUCLEAR ENGINEERING AND TECHNOLOGY</u>		
ETH/4/002	Addis Ababa University, Institute of Pathobiology, Radiation Protection Service and Radiation Control Department, Addis Ababa	MENGESHA
ETH/4/003	Ethiopian Science and Technology Commission, National Scientific Equipment Centre, Addis Ababa	KEBEDE DESTA
<u>AGRICULTURE</u>		
ETH/5/006	Addis Ababa University, Institute of Pathobiology, Radiobiology Department, Addis Ababa	TEKLEMARIAM
ETH/5/007	1. National Veterinary Institute Debre Zeit 2. Institute of Agricultural Research, Addis Ababa	MEBRATU DEBELA
ETH/5/008	Institute of Agricultural Research, Department of Soil Science and Water Management, Addis Ababa	BEYENE
ETH/5/009	1. Institute of Agricultural Research, Holefta 2. Addis Ababa University, Faculty of Veterinary Medicine, Debre Zeit	GETACHEW KASSA
<u>NUCLEAR MEDICINE</u>		
ETH/6/003	Addis Ababa University, Department of Internal Medicine, Black Lion Hospital Addis Ababa	ABDULKADIR DEMENA
ETH/6/004	Addis Ababa University, Department of Internal Medicine, Black Lion Hospital Addis Ababa	ABDULKADIR

COUNTERPART INSTITUTIONS IN ETHIOPIA (I)
(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>NUCLEAR MEDICINE (cont'd)</u>		
ETH/6/005	Addis Ababa University, Department of Internal Medicine, Black Lion Hospital, Addis Ababa	TSEGA DEMENA
<u>NUCLEAR TECHNIQUES IN HYDROLOGY</u>		
ETH/8/002	Ethiopian Institute of Geological Surveys, Addis Ababa	-
<u>NUCLEAR SAFETY</u>		
ETH/9/004	Addis Ababa University, Institute of Pathobiology, Radiation Protection Service and Radiation Control Department, Addis Ababa	BAYOU MENGESHA
ETH/9/005	Addis Ababa University, Institute of Pathobiology, Radiation Protection Service and Radiation Control Department, Addis Ababa	SHIBRU TEDLA MENGESHA

COUNTERPART INSTITUTIONS IN ETHIOPIA (II)
(By Institute)

ADDIS ABABA

**Addis Ababa University
Institute of Pathobiology
Radiation Protection Service and Radiation Control Department
Addis Ababa**

ETH/4/002 Nuclear Instrumentation
ETH/9/004 Radiation Protection
ETH/9/005 Radiation Protection and Environmental Monitoring

**Addis Ababa University
Institute of Pathobiology
Radiobiology Department
Addis Ababa**

ETH/5/006 Application of Nuclear Techniques

**Addis Ababa University
Department of Internal Medicine
Black Lion Hospital
Addis Ababa**

ETH/6/003 Radioisotopes in Medicine
ETH/6/004 Radiation Therapy
ETH/6/005 Radioisotopes in Medicine (Phase II)

**Ethiopian Science and Technology Commission
National Scientific Equipment Centre
Addis Ababa**

ETH/4/003 Establishment of a National Nuclear Instrumentation Unit

**Institute of Agricultural Research
Addis Ababa**

ETH/5/007 Animal Science

**Institute of Agricultural Research
Department of Soil Science and Water Management
Addis Ababa**

ETH/5/008 Isotopes in Agriculture

COUNTERPART INSTITUTIONS IN ETHIOPIA (II)
(By Institute)

ADDIS ABABA (cont'd)

Ethiopian Institute of Geological Surveys
Addis Ababa

ETH/8/002 Isotope Investigations in Selected Geothermal Fields

DEBRE ZEIT

National Veterinary Institute
Debre Zeit

ETH/5/007 Animal Science

Addis Ababa University
Faculty of Veterinary Medicine
Debre Zeit

ETH/5/009 Animal Science (Phase II)

HOLETTA

Institute of Agricultural Research
Holetta

ETH/5/009 Animal Science (Phase II)

THE AGENCY'S TECHNICAL CO-OPERATION PROGRAMME WITH ETHIOPIA

**LONG-TERM EXPERT ASSIGNMENTS
(1982 - 1992)**

NONE

RESEARCH CONTRACTS/AGREEMENTS IN ETHIOPIA SINCE 1982 ¹
(As of mid-November 1992)

Field of activity	No. of contracts/ agreements	Amount allocated \$
Nuclear engineering and technology	1	11 000
Nuclear techniques in agriculture	7	45 003
Safety in nuclear energy	1	5 000
TOTAL	9	61 003

¹ New awards since 1982

**SCIENTISTS FROM ETHIOPIA SERVING AS AGENCY
TECHNICAL CO-OPERATION EXPERTS OR
TRAINING COURSE LECTURERS
1982 - 1992
(As of mid-November 1992)**

Name	No. of assignments	Project(s)
AYNALEM	1	EGY/6/004
KIFLE TEKLE MARIAM	1	EGY/6/004
MULETTA	1	EGY/6/004
TULEMA	1	RAF/5/010
WOLDESELISSIE	1	ETH/6/003
TOTAL	5	

**AGENCY FELLOWSHIPS AND SCIENTIFIC VISITS
HOSTED BY ETHIOPIA
1982 - 1992
(As of mid-November 1992)**

NONE

**REGIONAL AND INTERREGIONAL TRAINING EVENTS
HOSTED BY ETHIOPIA
1982 - 1992
(As of mid-November 1992)**

Course No.	Course Title	Participants	Year
RAF/5/006 (002)	RTC on the use of personal computers in the analysis of animal production data	13	1992
RAF/5/011 (002)	RTC on the diagnosis of rinderpest	18	1988
RAF/6/004 (001)	RTC on radioimmunoassay	11	1990
	TOTAL	42	