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COUNTRY PROGRAMME SUMMARY

THE AGENCY'S TECHNICAL CO-OPERATION

PROGRAMME WITH

THAILAND

1984 - 1994

COUNTRY PROGRAMME SUMMARIES

EVALUATION SECTION

DEPARTMENT OF TECHNICAL CO-OPERATION

**THE AGENCY'S TECHNICAL CO-OPERATION
PROGRAMME WITH
THAILAND
1984 - 1994
COUNTRY PROGRAMME SUMMARIES**

This report contains a review of the Agency's technical co-operation activities in Thailand carried out during 1984 - 1994. 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.

THAILAND

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INTRODUCTION

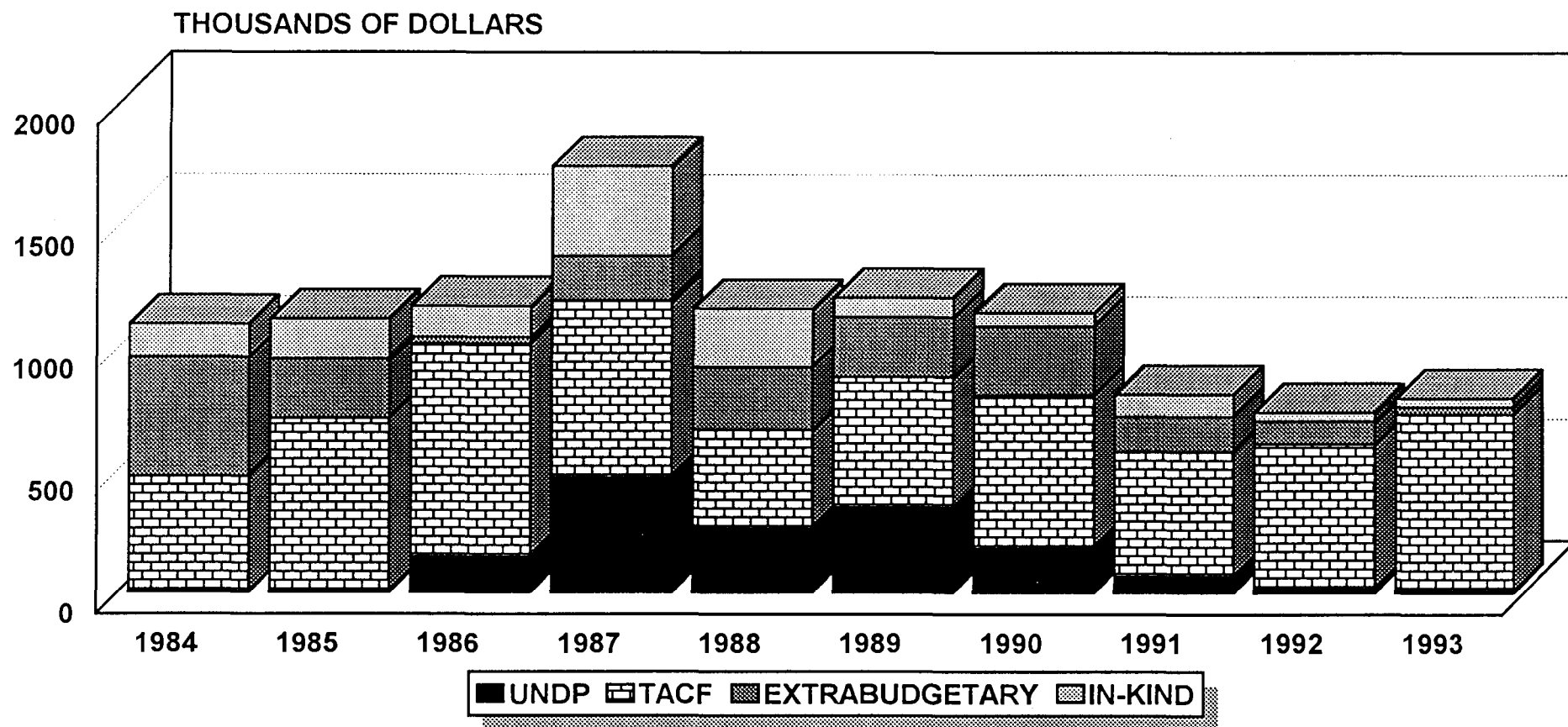
The country programme summary reported on here is one in the series of such studies being undertaken of the Agency's TC programme with Member States. With over \$16.1 million of Agency support received, Thailand ranks 3rd among all recipients of technical assistance during the period 1958 through 1993.

Of the assistance received over the past ten years, the largest share has been provided in the form of equipment (41%), complemented by training (35%) and expert services (24%). More than half of the resources were made available through the TACF (56%), the remainder was provided through UNDP (14%), through extrabudgetary contributions (18%), and through assistance in kind (12%).

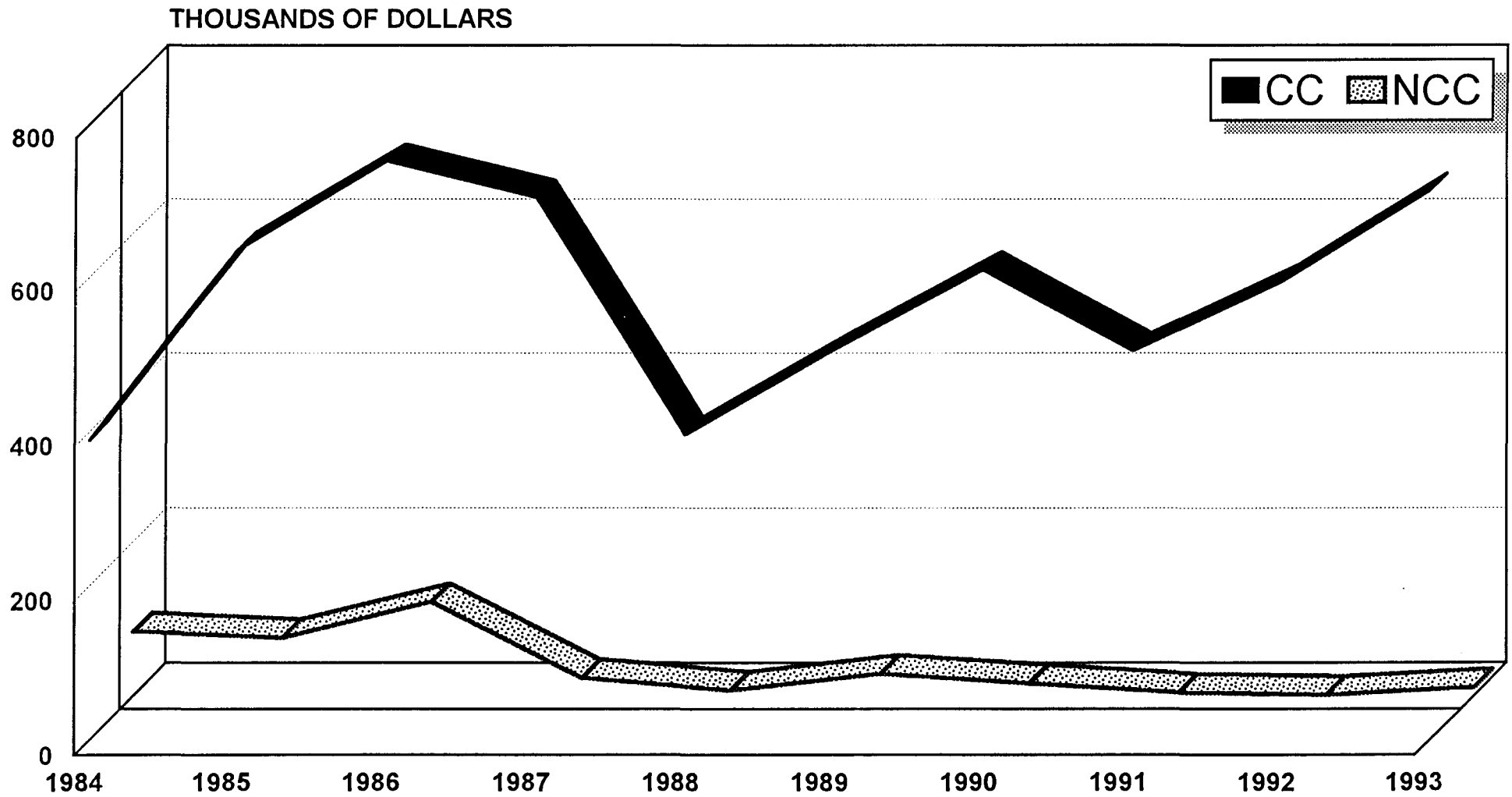
With regard to total disbursements -- by sector -- under those projects that were operational during the period 1984 through mid-March 1994, the major sector has been agriculture (33%), followed by nuclear physics and chemistry (19%), nuclear engineering and technology (19%) and nuclear medicine (15%). Smaller shares went to the sectors of nuclear safety (6%) and nuclear raw materials (5%).

Since 1984, scientists from Thailand have completed 169 assignments as Agency experts and training course lecturers or as participants in research co-ordination meetings. During the same period, Thailand has hosted 72 fellowships and scientific visits, as well as 31 regional and interregional group training events for a total of 351 participants.

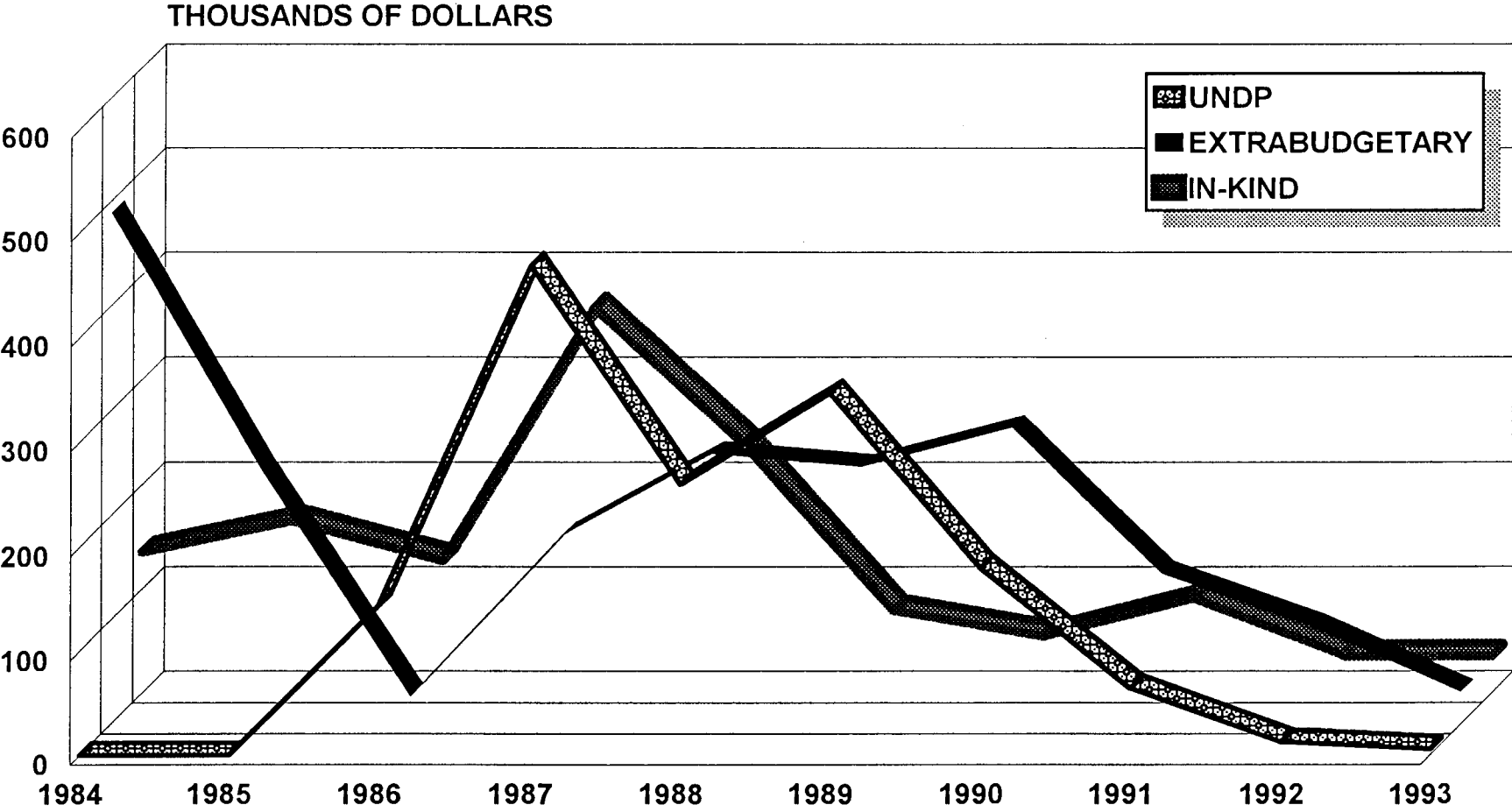
ASSISTANCE PROVIDED BY THE AGENCY TO THAILAND BY SOURCE (1984 - 1993)



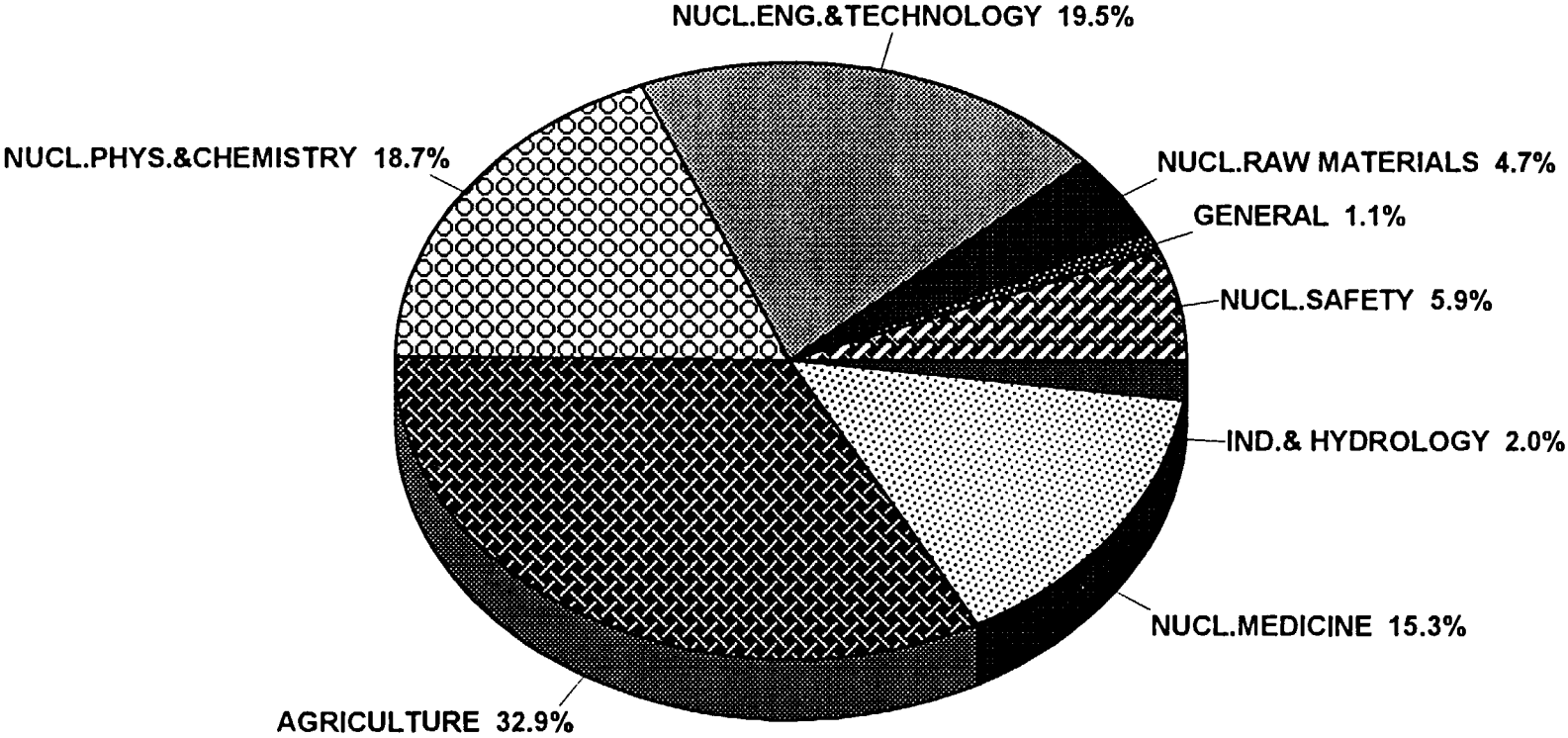
TACF ASSISTANCE PROVIDED TO THAILAND (1984 - 1993) BY CC AND NCC



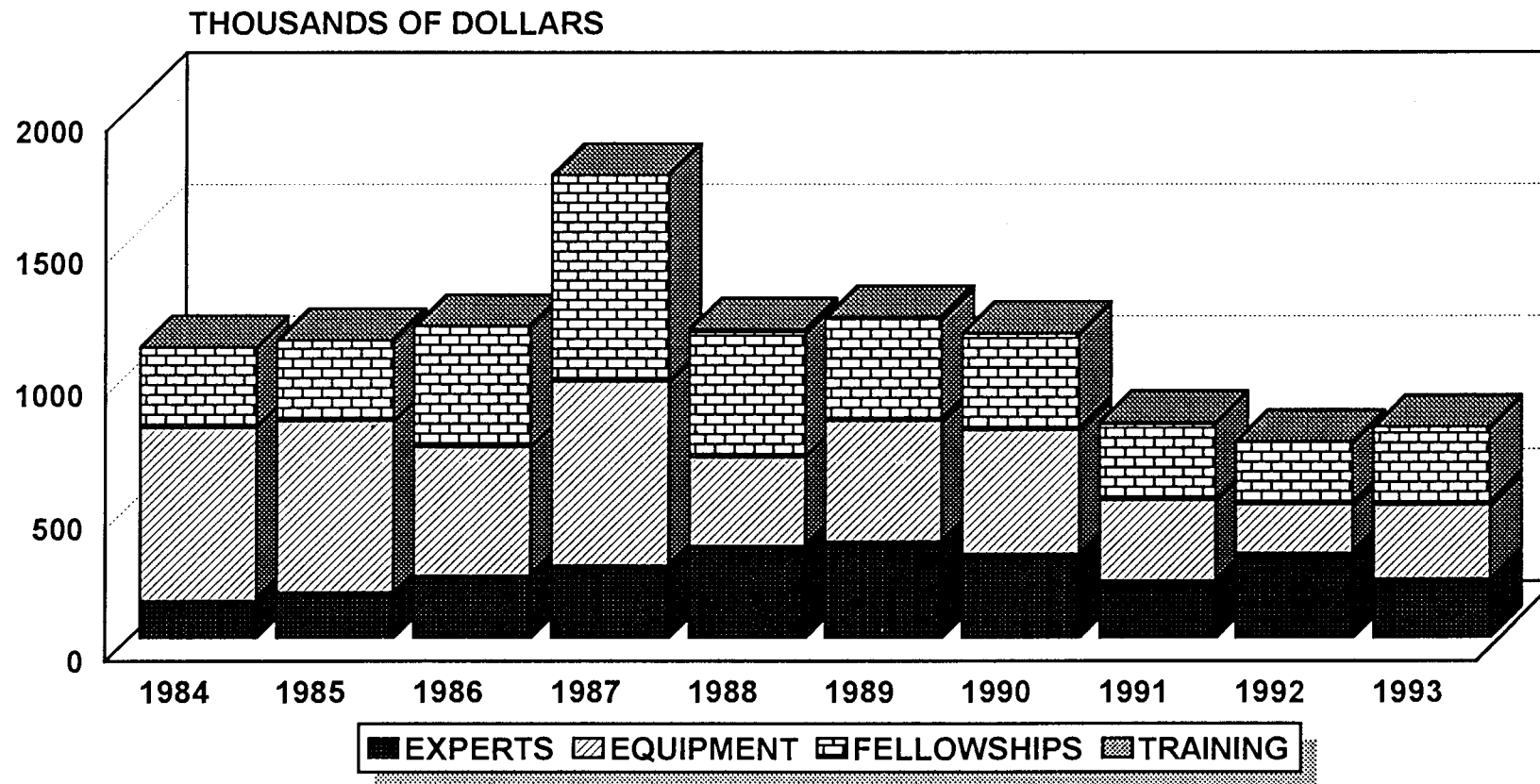
UNDP, EXTRABUDGETARY AND IN-KIND ASSISTANCE PROVIDED TO THAILAND (1984 - 1993)



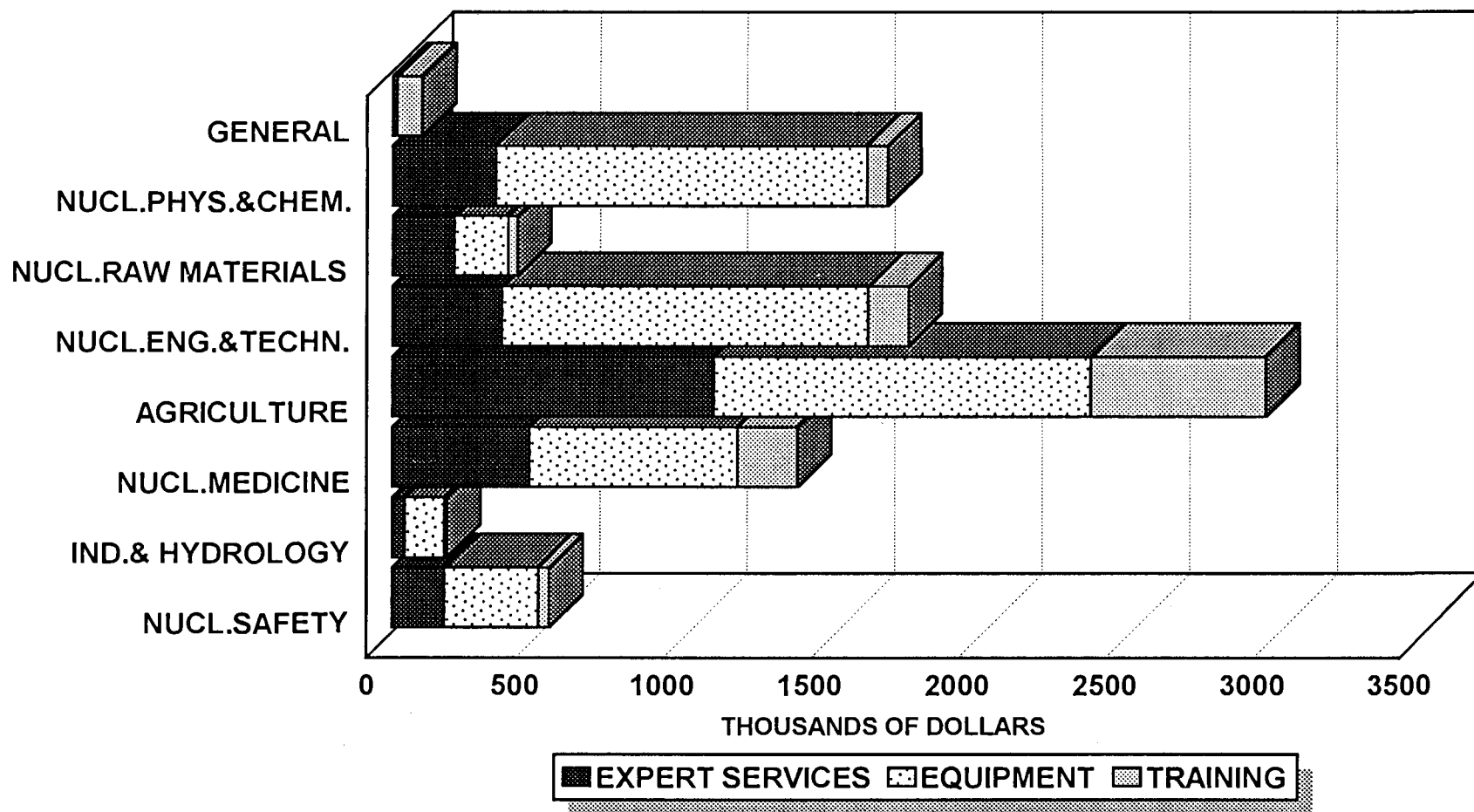
TC PROJECT DISBURSEMENTS IN THAILAND BY SECTOR (1984 - 1994)



ASSISTANCE PROVIDED BY THE AGENCY TO THAILAND BY TYPE (1984 - 1993)



EXPERT SERVICES, EQUIPMENT AND PROJECT-FUNDED TRAINING PROVIDED TO THAILAND BY SECTOR (1984 - 1994)



THE AGENCY'S TECHNICAL CO-OPERATION PROGRAMME WITH THAILAND

ALL SOURCES

THAILAND'S RANKING AS A TC RECIPIENT
1958 - 1993
(in \$1000)

YEAR	RANKING	AMOUNT
1958-83	11 th	5157.3
1984	3 rd	1094.6
1985	3 rd	1117.4
1986	3 rd	1169.4
1987	3 rd	1742.4
1988	4 th	1158.7
1989	3 rd	1205.3
1990	8 th	1142.8
1991	10 th	808.2
1992	15 th	735.9
1993	7 th	793.1
1958-93	3 rd	16125.1

**"TOP FIVE" RECIPIENTS OF AGENCY ASSISTANCE
1958 - 1993 (in \$1000)**

ALL SOURCES

Year	I	II	III	IV	V	THAILAND
1958-83	BRA 8887.6	IND 7197.4	EGY 7024.5	PAK 6008.9	ARG 5912.2	11 th - 5157.3
1984	EGY 3625.9	PER 1750.4	THA 1094.6	CUB 1028.7	PHI 881.2	3 rd - 1094.6
1985	EGY 2494.8	PER 1120.7	THA 1117.4	BGD 1068.2	PHI 963.7	3 rd - 1117.4
1986	EGY 2317.0	BRA 1452.9	THA 1169.4	POL 1050.3	BGD 896.4	3 rd - 1169.4
1987	HUN 3452.6	EGY 1775.4	THA 1742.4	INS 1312.5	YUG 1223.2	3 rd - 1742.4
1988	EGY 1486.9	BUL 1361.6	CPR 1278.5	THA 1158.7	BRA 1096.7	4 th - 1158.7
1989	CPR 1542.3	EGY 1505.1	THA 1205.3	BRA 1096.5	INS 999.1	3 rd - 1205.3
1990	POL 2308.1	CPR 2005.0	VIE 1589.2	INS 1412.6	BRA 1229.1	8 th - 1142.8
1991	INS 1305.2	CPR 975.0	EGY 959.8	BRA 951.2	BUL 934.7	10 th - 808.2
1992	EGY 1586.3	INS 1342.1	CPR 1328.8	MEX 1127.8	POL 1036.4	15 th - 735.9
1993	INS 1285.9	CPR 1091.7	PAK 1012.2	EGY 905.3	IRA 810.1	7 th - 793.1
1958-93	EGY 24713.9	BRA 18541.4	THA 16125.1	INS 15011.8	PER 13772.0	3 rd - 16125.1

**"TOP FIVE" RECIPIENTS OF AGENCY ASSISTANCE
1958 - 1993 (in \$1000)**

TECHNICAL ASSISTANCE AND CO-OPERATION FUND

Year	I	II	III	IV	V	THAILAND
1958-83	EGY 3455.2	HUN 3221.6	PAK 2839.0	THA 2354.1	BRA 2158.9	4 th - 2354.1
1984	EGY 1197.2	CUB 655.6	ECU 565.6	BGD 506.3	BUL 472.4	6 th - 471.3
1985	BGD 991.8	VIE 745.0	THA 708.7	BRA 571.8	POR 538.7	3 rd - 708.7
1986	BRA 1381.8	THA 871.9	POL 833.5	BGD 823.9	SYR 751.8	2 nd - 871.9
1987	HUN 3305.2	DRK 986.8	BUL 888.5	INS 885.8	EGY 878.9	12 th - 725.9
1988	BUL 1195.6	PER 856.5	EGY 768.6	INS 751.7	MAL 656.0	18 th - 402.5
1989	EGY 990.9	CPR 868.2	POR 769.6	CHI 756.9	MAL 619.4	10 th - 534.1
1990	POL 1562.3	VIE 1518.8	DRK 1156.2	IRA 958.0	YUG 933.4	15 th - 625.8
1991	BUL 893.1	PAK 868.8	INS 855.1	VIE 817.6	CPR 814.5	21 st - 508.1
1992	EGY 1255.7	CPR 1009.0	VIE 872.8	INS 826.6	IRA 795.5	15 th - 593.4
1993	INS 1040.5	CPR 896.5	PAK 847.6	IRA 807.4	THA 721.5	5 th - 721.5
1958-93	EGY 11549.2	PAK 8963.2	VIE 8908.2	POL 8820.1	INS 8814.1	8 th - 8517.3

ASSISTANCE PROVIDED BY THE AGENCY TO THAILAND

Financial Summary 1984 - 1993
(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
1984	138.6	651.7	300.5	-	3.8	1 094.6	-	389.0	82.3	488.7	134.6	1 094.6
1985	169.5	645.8	302.1	-	-	1 117.4	-	634.7	74.0	244.1	164.6	1 117.4
1986	231.9	485.6	451.9	-	-	1 169.4	143.8	751.3	120.6	27.1	126.6	1 169.4
1987	271.6	690.6	780.2	-	-	1 742.4	467.7	703.5	22.4	181.3	367.5	1 742.4
1988	345.4	334.5	470.4	8.4	-	1 158.7	259.3	396.3	6.2	258.7	238.2	1 158.7
1989	361.0	453.8	384.7	5.8	-	1 205.3	346.4	506.5	27.6	246.3	78.5	1 205.3
1990	314.8	466.4	362.0	(0.4)	-	1 142.8	179.5	610.3	15.5	283.7	53.8	1 142.8
1991	214.4	303.0	285.6	5.2	-	808.2	64.7	504.6	3.5	144.7	90.7	808.2
1992	317.5	184.6	233.8	-	-	735.9	12.7	593.4	-	94.1	35.7	735.9
1993	220.2	280.2	292.7	-	-	793.1	5.7	711.6	9.9	31.3	34.6	793.1
1984-93	2 584.9	4 496.2	3 863.9	19.0	3.8	10 967.8	1 479.8	5 801.2	362.0	2 000.0	1 324.8	10 967.8

TECHNICAL CO-OPERATION PROJECTS IN THAILAND
BY SECTOR

PROJECTS COMPLETED AND OPERATIONAL 1984 - 1994

TOTAL PROJECT ALLOTMENTS AND DISBURSEMENTS
(as of mid-March 1994)

SECTOR	NO. OF PROJECTS	ALLOTMENTS \$	% OF TOTAL	DISBURSEMENTS \$	% OF TOTAL
General atomic energy development	2	307 500	3.1	98 097	1.1
Nuclear physics and chemistry	8	1 734 310	17.5	1 676 019	18.7
Nuclear raw materials	2	485 538	4.9	420 785	4.7
Nuclear engineering and technology	6	1 930 671	19.4	1 747 510	19.4
Nuclear techniques in agriculture	16	3 237 930	32.6	2 958 231	32.9
Nuclear medicine	13	1 355 374	13.7	1 371 106	15.3
Nuclear techniques in biology	-	-	-	-	-
Nuclear techniques in industry and hydrology	3	321 987	3.2	181 958	2.0
Nuclear safety	6	558 812	5.6	530 080	5.9
TOTAL	56	9 932 122	100.0	8 983 786	100.0

TECHNICAL CO-OPERATION PROJECTS IN THAILAND
 COMPLETED AND OPERATIONAL, BY SECTOR, 1984 - 1994
 (As of mid-March 1994)

Sector	No. of projects	Total project allotments \$	Total project disbursements \$
<u>Completed projects</u>			
General atomic energy development	-	-	-
Nuclear physics and chemistry	7	1 445 670	1 433 422
Nuclear raw materials	1	363 888	381 794
Nuclear engineering and technology	4	1 570 619	1 620 171
Nuclear techniques in agriculture	11	2 358 579	2 381 621
Nuclear medicine	8	691 199	716 026
Nuclear techniques in biology	-	-	-
Nuclear techniques in industry & hydrology	2	176 187	181 958
Nuclear safety	3	92 862	101 970
TOTAL	36	6 699 004	6 816 962
<u>Operational projects</u>			
General atomic energy development	2	307 500	98 097
Nuclear physics and chemistry	1	288 640	242 597
Nuclear raw materials	1	121 650	38 991
Nuclear engineering and technology	2	360 052	127 339
Nuclear techniques in agriculture	5	879 351	576 610
Nuclear medicine	5	664 175	655 080
Nuclear techniques in biology	-	-	-
Nuclear techniques in industry & hydrology	1	145 800	-
Nuclear safety	3	465 950	428 110
TOTAL	20	3 233 118	2 166 824

**EXPERT SERVICES, EQUIPMENT AND PROJECT-FUNDED TRAINING PROVIDED TO THAILAND, BY SECTOR
PROJECTS COMPLETED AND OPERATIONAL 1984 - 1994
(As of mid-March 1994)**

FIELD	TOTAL PROJECT ALLOTMENTS				TOTAL PROJECT DISBURSEMENTS			
	EXPERT SERVICES		EQUIPMENT	TRAINING	EXPERT SERVICES		EQUIPMENT	TRAINING
	M/M	\$	\$	\$	M/M	\$	\$	\$
General atomic energy development	6/00	65 100	-	242 400	2/02	15 905	-	82 192
Nuclear physics and chemistry	49/11	369 172	1 284 870	80 268	48/03	346 402	1 259 221	70 396
Nuclear raw materials	30/20	234 635	207 786	43 117	26/18	206 961	182 243	31 581
Nuclear engineering and technology	46/24	431 049	1 294 876	204 746	36/14	367 170	1 243 875	136 465
Nuclear techniques in agriculture	127/17	1 043 284	1 578 315	616 331	125/14	1 087 812	1 277 857	592 562
Nuclear medicine	51/24	403 773	732 573	219 028	50/03	461 835	705 579	203 692
Nuclear techniques in biology	-	-	-	-	-	-	-	-
Nuclear techniques in industry & hydrology	7/02	58 070	207 262	56 655	4/25	41 654	132 259	8 045
Nuclear safety	17/23	150 076	330 773	77 963	15/24	175 327	316 683	38 070
TOTAL	337/01	2 755 159	5 636 455	1 540 508	309/13	2 703 066	5 117 717	1 163 003

AGENCY FELLOWS FROM THAILAND

1984 - 1994¹
(As of mid-March 1994)

Sector	No. of fellowships	No. of months/days	Host countries
General atomic energy development	7	7/12	MAL, INS, ROK, AUL, JPN, IAEA
Nuclear physics	14	110/04	USA, AUL, GER, SIN, AUS, YUG, DEN, IAEA
Nuclear chemistry	19	101/11	USA, ITA, SIN, GRE, JPN, INS, BEL, SWI, AUL, CAN, GER, UK, IAEA
Nuclear raw materials	3	10/28	CAN
Nuclear engineering and technology	14	61/29	USA, SRL, AUS, AUL, INS, JPN, MEX, GER, UK, USSR
Nuclear techniques in agriculture	121	481/18	NET, USA, GER, JPN, SWE, POL, PHI, AUL, CPR, CAN, MAL, DEN, BEL, BRA, MEX, GUA, BGD, IND, PAK, HUN, SWI, GDR, FRA, ITA, NZE, UK, IAEA
Nuclear medicine	53	382/06	USA, NET, DEN, AUL, IND, GRE, CAN, HUN, SWI, UK
Nuclear techniques in biology	8	40/14	USA, JPN, HUN, FRA, AUS, UK, IAEA
Nuclear techniques in industry and hydrology	10	26/02	GER, JPN, USA, AUL, POL, GDR, FIN, UK, IAEA
Nuclear safety	25	193/18	AUL, USA, JPN, DEN, GER, FIN, MOC, SWE, INS, CAN, TUR, UK, IAEA
TOTAL	274	1415/22	

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

THAILAND
LONG-TERM FELLOWSHIPS
1984 - 1994
(As of mid-March 1994)

Name	Field of study		Host country	Date	Duration	Project
DHARMVANIJ	Reactor physics	1F	USA	Aug.87 - Aug.88	12/01	THA/4/008
INTASORN SANG.	Neutron physics	1E	USA	Oct.87 - Jan.89	15/02	-
KORNDUANGKAE0	Reactor physics	1F	USA	Jan.87 - Apr.88	15/02	-
LEENANUPAN	Analytical nuclear physics	1L	SIN	Jun.85 - May 86	12/00	THA/3/003
SOMSWASDI	Analytical nuclear physics	1L	IAEA GER	Feb.87 - May 88	14/28	-
WIBOOLSAKE	Neutron physics	1E	AUS	Sep.83 - Sep.84	12/01	THA/1/005
BANCHORNDHAVAKUL	Nuclear radiochemistry	2B	USA	Jun.86 - Aug.87	14/00	-
CHUEINTA	Analytical chemistry	2C	UK	Aug.84 - Sep.85	13/01	THA/5/021
BUSAMONGKOL	Research reactor fuel management	4B	USA	Mar.84 - Dec.85	21/02	-
CHALERMSUK	Gamma spectroscopy	4G	UK	Jul.87 - Nov.88	16/09	-
OWHANGSANTI	Quality assurance	4M	USA	Aug.87 - Aug.88	12/01	-
TANTISATYARAKS	Computer in nuclear physics	4G	USA	Jul.85 - Aug.86	13/01	-

THAILAND
LONG-TERM FELLOWSHIPS
1984 - 1994
(As of mid-March 1994)

Name	Field of study		Host country	Date	Duration	Project
AMORNPIMOL	Fertilizer efficiency studies	5B	IAEA	May 84 - Aug.85	15/02	THA/5/026
BIADUL	Pesticide residues	5G	USA	Sep.84 - Oct.86	25/13	THA/5/025
CHAIYAROJANA	Soil moisture	5B	USA	Jul.84 - Nov.85	16/01	-
CHAMRASKUL	Pesticide residues	5G	UK	Jul.84 - Aug.85	12/11	THA/5/025
CHAROEN	Food irradiation	5H	USA	Oct.87 - Oct.88	12/01	THA/5/029
CHINPITAK	Soil physics	5B	IAEA	Mar.86 - Mar.87	12/01	-
NOUCHPRAMOL	Chemical residues	5G	NET IAEA	Apr.84 - May 85	13/13	THA/5/021
PHADVIBULYA	Plant breeding	5C	IAEA	Apr.84 - May 85	13/29	-
SEGSARNVIRIYA	Insect genetics	5D	USA	Mar.87 - Feb.88	12/00	-
SUDATIS	Food preservation	5H	AUL	Jul.84 - Jul.85	12/01	-
UNIJITWATANA	Pesticide residues	5G	USA	Jan.87 - Mar.88	13/29	-
WONGCHINDA	Food irradiation	5H	NET	Feb.84 - Mar.85	12/22	THA/5/027

THAILAND
LONG-TERM FELLOWSHIPS
1984 - 1994
(As of mid-March 1994)

Name	Field of study		Host country	Date	Duration	Project
WONGPIYASATID	Plant breeding	5C	USA	Sep.87 - Sep.88	12/00	-
WORAKIT	Microbial methanogenesis	5G	USA	Apr.84 - Jul.85	16/00	-
AUWANIT	Radioimmunoassay	6B	USA	Jun.86 - Sep.87	15/00	-
CHANTARAPITAK	Nuclear medicine	6B	USA	Jun.90 - Jun.91	12/03	RAS/0/014
CHERDCHU	Parasitic diseases	6D	USA	Sep.84 - Sep.84	12/00	-
CHUMANOCHAN	Radiopharmacy	6G	USA	Aug.84 - Aug.85	12/01	THA/6/015
JAMSIL	Radioimmunoassay	6B	UK	Nov.84 - May 86	17/28	THA/6/015
LERTHIRUNWONG	Radiopharmacy	6G	USA	Aug.86 - Jul.88	22/20	-
MAIRIANG	Nuclear medicine	6B	UK	Nov.84 - Jan.86	13/28	-
MEKARIYA	Radioimmunoassay	6B	UK	Jan.86 - Apr.87	14/05	-
PATTAMASIRIKUL	Radiotherapy	6C	USA	Dec.86 - Dec.87	12/23	-
PORAMATIKUL	Radiopharmacy	6G	USA	Aug.86 - Aug.87	12/18	THA/4/008
ROJPORNPRADIT	Radiotherapy	6C	UK	Dec.89 - Dec.90	12/00	THA/6/025

THAILAND
LONG-TERM FELLOWSHIPS
1984 - 1994
(As of mid-March 1994)

Name	Field of study		Host country	Date	Duration	Project
SAESOW	Radiopharmacy	6G	USA	Aug.86 - Aug.87	12/01	-
SAHACHJESDAKUL	Medical physics	6B	USA	Aug.86 - Sep.87	13/01	-
TANGVANICH	Nuclear medicine	6B	USA	Jun.84 - Sep.85	14/21	THA/6/015
TOJINDA	Nuclear medicine	6B	UK	May 87 - Jul.88	14/04	-
VAJANAMARHUTUE	Nuclear medicine	6B	UK	Jul.85 - Feb.87	19/02	THA/6/013
VINIJSORN	Radiation therapy dosimetry	6F	UK	Feb.83 - Mar.84	12/22	-
WACHARASIN	Nuclear medicine	6B	USA	Jul.83 - Aug.84	14/00	THA/6/014
THONGPHASUK	Tissue sterilization and banking	7E	USA	Aug.87 - Oct.88	14/00	THA/8/009
CHANKOW	Health physics	9C	AUL	Nov.85 - Dec.86	12/24	-
JERACHANCHAI	Radiation protection	9C	USA	Sep.87 - Oct.88	13/00	THA/4/008
PORNTEPKASEMSAN	Environmental protection	9G	USA	Feb.86 - May 87	14/26	THA/9/008
PORNTEPKASEMSAN	Radiation protection	9C	USA	Jul.91 - Jul.92	12/03	RAS/0/014
SIRIPIROM	Radiation protection	9C	USA	Mar.88 - Jul.89	16/02	-

THAILAND
LONG-TERM FELLOWSHIPS
1984 - 1994
(As of mid-March 1994)

Name	Field of study		Host country	Date	Duration	Project
SRIYOTHA	Environmental radionuclides	9G	NZE AUL	Oct.83 - Oct.84	12/04	THA/9/008
SUPAOKIT	Environmental monitoring	9G	USA	Aug.86 - Oct.87	14/01	-
SUPAPINYOPONG	Radiation protection	9C	UK	Jul.86 - Oct.87	15/01	-
THIANGTRONGJIT	Radioactive waste management	9E	USA	Dec.88 - Dec.89	12/16	THA/9/013
TRUNAVONGSANONT	Radiation dosimetry	9C	USA	Apr.85 - Aug.86	16/00	THA/9/008

THAI NATIONALS WHO WERE AWARDED MORE THAN ONE
FELLOWSHIP OR SCIENTIFIC VISIT
1984 - 1994
(As of mid-March 1994)

Name	Field of study	Host country	Date	Duration	Project	
AUNGURARAT	1. Isotope production	4H	GDR	Jun.85 - Nov.85	5/16	THA/4/008
	2. Production of isotopes	4H	USA MEX GER	Nov.92 - Dec.92	1/01	RAS/0/018
BUSAMONGKOL	1. Research reactor fuel management	4B	USA	Mar.84 - Dec.85	21/02	-
	2. Research reactors	4B	JPN	Feb.92 - Apr.92	1/29	THA/4/012
CHAMRASKUL	1. Pesticide residues	5G	UK	Jul.84 - Aug.85	12/11	THA/5/025
	2. Pesticide residues	5G	UK	Apr.91 - Oct.91	6/02	RAS/0/018
CHAROEN	1. Food irradiation	5H	USA	Oct.87 - Oct.88	12/01	THA/5/029
	2. Food preservation	5H	USA	Jul.93 - Aug.93	0/29	THA/0/003
CHIRAPATPIMOL	1. Analytical chemistry	2C	SIN	Jan.86 - Apr.86	3/02	THA/1/006
	2. Analytical nuclear physics	1L	USA	Jan.88 - May 88	3/20	THA/1/005
CHIRAVATHANAPONG	1. Entomology	5D	MEX GUA	Jan.87	0/19	-
	2. Food preservation	5H	IAEA HUN NET BEL FRA	Nov.91	0/12	THA/5/040
CHVAJARERPUN	1. General industrial applications	8C	POL GDR FIN UK	Jul.89 - Aug.89	1/02	RAS/8/061
	2. Nuclear centres and laboratories	0H	MAL INS ROK	Feb.92	0/20	THA/4/012

THAI NATIONALS WHO WERE AWARDED MORE THAN ONE
FELLOWSHIP OR SCIENTIFIC VISIT
1984 - 1994
(As of mid-March 1994)

Name	Field of study		Host country	Date	Duration	Project
INTASORN SANG.	1. Teaching of nuclear physics	1A	SWE	Sep.83 - Jun.84	10/00	-
	2. Neutron physics	1E	USA	Oct.87 - Jan.89	15/02	-
JAMSIL	1. Radioimmunoassay	6B	UK	Nov.84 - May 86	17/28	THA/6/015
	2. Medical physics	6F	UK	Oct.90 - Mar.91	4/22	RAS/0/014
KAMONPATANA	1. Animal production and fisheries	5E	AUL	Oct.90 - Nov.90	0/19	THA/5/031
	2. Animal production and fisheries	5E	NZE INS	Jan.92	0/05	RAS/0/018
KEOBOONRUENG	1. Plant breeding	5C	GER	Jul.84 - Oct.84	4/00	THA/5/023
	2. Plant breeding	5C	USA	May 90	0/19	RAS/0/014
LAMSEEJAN	1. Mutation breeding	5C	USA	Sep.88 - Dec.88	2/21	THA/5/031
	2. Plant breeding and genetics	5C	IAEA ITA FRA DEN	Aug.90 - Sep.90	0/26	THA/5/037
MAHISARAKUL	1. Plant physiology	5B	JPN	Oct.85 - Nov.85	0/26	THA/5/026
	2. Soil science	5B	PHI MAL	May 90 - Jul.90	2/01	THA/5/031
MEKARIYA	1. Radioimmunoassay	6B	UK	Jan.86 - Apr.87	14/05	-
	2. Nuclear medicine	6B	UK	Jun.93 - Nov.93	5/01	THA/6/027
NOUCHPRAMOOL	1. Chemical residues	5G	NET	Apr.84 - May 85	13/13	THA/5/021
	2. Nuclear analytical chemistry	2C	IAEA UK	Sep.88 - May 89	8/00	THA/5/030
PHADVIBULYA	1. Plant breeding	5C	IAEA	Apr.84 - May 85	13/29	-
	2. Plant breeding and genetics	5C	UK	Nov.92 - Mar.93	4/00	RAS/0/018

THAI NATIONALS WHO WERE AWARDED MORE THAN ONE
FELLOWSHIP OR SCIENTIFIC VISIT
1984 - 1994
(As of mid-March 1994)

Name	Field of study		Host country	Date	Duration	Project
PORAMATIKUL	1. Radiopharmacy	6G	USA	Aug.86 - Aug.87	12/18	THA/4/008
	2. Production and control of radiopharmaceuticals	6G	GRE	Sep.91 - Jan.92	3/21	THA/2/010
PORNTEPKASEMSAN	1. Environmental protection	9G	USA	Feb.86 - May 87	14/26	THA/9/008
	2. Radiation protection	9C	USA	Jul.91 - Jul.92	12/03	RAS/0/014
RATANAMART	1. Nuclear medicine	6B	USA	Jun.84 - Mar.85	9/02	THA/6/018
	2. Nuclear medicine	6B	AUL	Aug.90 - Oct.90	2/01	THA/6/026
RATTAGOOOL	1. Food irradiation	5H	AUL USA CPR	Mar.86 - Apr.86	0/19	THA/5/027
	2. Food irradiation	5H	BEL NET UK	Apr.89	0/13	THA/5/027
SATRUSAJANG	1. Soil/plant relationships	5B	USA	May 86	0/24	THA/5/026
	2. Statistic in agriculture science	5B	USA	Apr.90 - May 90	2/00	THA/5/031
SINAKHOM	1. Environmental monitoring	9G	USA BEL	Jan.85 - Apr.85	3/11	-
	2. Environmental protection	9G	UK	May 91 - Jul.91	2/03	RAS/0/018
SRISUKSAWAD	1. Environmental protection	9G	USA	Mar.88 - Dec.88	9/01	THA/9/009
	2. Surface water hydrology	8N	USA	Mar.93 - Jun.93	3/01	RAS/8/065
TAYAPUTCH	1. Environmental fate of pesticides	5G	USA IAEA	Apr.84 - Oct.84	6/07	THA/5/025
	2. Soil sciences	5B	USA	May 89	0/12	THA/5/035

THAI NATIONALS WHO WERE AWARDED MORE THAN ONE
FELLOWSHIP OR SCIENTIFIC VISIT
1984 - 1994
(As of mid-March 1994)

Name	Field of study	Host country	Date	Duration	Project
THIANGTRONGJIT	1. Radioactive waste management 2. Nuclear centres and laboratories	9E 0H USA INS ROK AUL	Dec.88 - Dec.89 Feb.92	12/16 0/19	THA/9/013 THA/4/012
UKOSKIT	1. Radioimmunoassay 2. Nuclear medicine	6B 6B IND UK AUL	May 89 - Jun.89 Feb.93 - Aug.93	0/26 5/28	RAS/0/014 RAS/0/018
UNGSUNANTWIWAT	1. Food preservation 2. Food preservation	5H 5H CAN CAN	Sep.91 - Oct.91 Started: Mar.94	1/05 1/00	THA/5/040 THA/0/003
VIRAWAT	1. Production and control of radiopharmaceuticals 2. Radioisotope production	2G 2G GRE CAN	Mar.86 - Sep.86 Sep.90 - Oct.90	6/01 1/00	THA/4/008 RAS/0/014
WIBOOLSAKE	1. Neutron physics 2. Theoretical physics	1E 1B AUS GER	Sep.83 - Sep.84 Nov.92 - Jun.93	12/01 7/01	THA/1/005 RAS/0/018
YAMKATE	1. Disposal of radioactive waste 2. Treatment and disposal of radioactive wastes	9E 9E USA CAN UK TUR	Mar.87 - Apr.87 May 92 - Jun.92	0/24 0/26	THA/9/009 THA/9/015

AGENCY TRAINING COURSES WITH THAI PARTICIPATION

1984 - 1994
(As of mid-March 1994)

Field	Number of participants	Number of courses
General atomic energy development	38	25
Nuclear physics	18	15
Nuclear chemistry	6	4
Nuclear raw materials	5	4
Nuclear engineering and technology	37	32
Nuclear techniques in agriculture	41	33
Nuclear medicine	52	26
Nuclear techniques in biology	17	10
Nuclear techniques in industry & hydrology	157	95
Nuclear safety	40	39
TOTAL	411	283

MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES
BY THAI NATIONALS
1984 - 1994
(As of mid-March 1994)

Name	Course No.	Course title	Year	Location
ADULVIT	RAS/8/008 (030)	UNDP regional industrial training-demonstration on radiation curing of surface of wood products	1984/85	INS
	RAS/8/062 (018)	Regional executive management seminar on industrial radiation curing technology	1990	INS
ARAMRATTANA	INT/0/035 (001)	ITC on electric system expansion planning	1984	USA
	INT/4/086 (001)	Interregional study tour on research reactor utilization	1986	FRA GFR USSR YUG
ASAVASENA	RAS/8/061 (010)	RTC on non-destructive testing of surface methods (level II)	1987	INS
	RAS/8/061 (072)	RTC on non-destructive testing of ultrasonics (level III)	1990	INS
BOONKERD	RAS/5/021 (005)	Regional RCM on the use of isotopes in studies to improve yield and nitrogen fixation of grain legumes in the tropics and sub-tropics of Asia	1992	CPR
	RAS/5/021 (007)	Regional RCM on the use of isotopes in studies to improve yield and nitrogen fixation of grain legumes in the tropics and sub-tropics of Asia	1993	AUL
BOONNAMSIRI	RAS/6/007 (001)	Regional train-the-trainers course in medical radioimmunoassay	1985	CPR
	RAS/6/010 (001)	Regional train-the-trainers course on data processing in radioimmunoassay	1987	INS
BUNNAK	INT/9/062 (001)	ITC on radiation protection	1984	IND
	INT/9/088 (001)	ITC on radiological accident consequence assessment	1988	IRE
	INT/9/103 (001)	ITC on safety in nuclear power plant operation	1990	USA
BUSAMONGKOL	INT/8/003 (001)	ITC on applications of nuclear analytical techniques to air pollution	1991	USA
	RAS/1/006 (001)	RWS on neutron activation analysis	1985	IND
CHANACHAI	INT/6/029 (001)	ITC on nuclear medicine	1984	USSR
	RAS/6/016 (003)	RTC on the use of computers in nuclear medicine	1992	AUL

**MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES
BY THAI NATIONALS
1984 - 1994
(As of mid-March 1994)**

Name	Course No.	Course title	Year	Location
CHANTARAPRACHOOM	INT/9/099 (001)	ITC on management of radioactive wastes with regard to radioisotope applications	1989	GFR
	RAS/9/009 (001)	RTC on national infrastructure for radioactive waste management	1991	INS
CHARNBANCHEE	RAS/0/015 (003)	RTC on research reactor safety principles	1990	IND
	RAS/8/008 (029)	RTC on non-destructive testing	1984	SIN
CHVAJARERNPUN	RAS/8/008 (028)	RTC on tracer technology in industry	1984	IND
	RAS/8/008 (049)	Regional first executive management seminar on industrial tracer applications	1986	SIN BGD INS MAL ROK
JUMPANGERN	RAS/6/006 (001)	RTC on the brachytherapy of the uterine cancer using manual and remote after-loading techniques	1986	MAL
	RAS/6/017 (001)	RTC on radiotherapy for medical physicists	1989	PAK
KAJORNRITH	RAS/4/011 (007)	RTC on calculation and measurement of neutron flux spectrum for research reactors	1993	INS
	RAS/4/013 (001)	RTC on use of personal computers in research reactor operation	1991	INS
KANYUKT	INT/4/074 (001)	IWS on the conversion of research reactors to low enrichment uranium fuels	1985	VEN
	INT/9/120 (001)	ITC on decontamination of research reactors and small nuclear facilities	1991	FRA
KHAOTHIAR	RAS/5/020 (007)	RWS on harmonization of regulations to facilitate trade in irradiated food	1993	AUL
	RAS/8/008 (043)	Regional third UNDP/IAEA/RCA training demonstration on industrial sterilization of medical products	1986	IND
KHUNARAK	INT/7/009 (001)	ITC on radiation cytogenetics in biomedical and environmental health and radiation protection problems	1987	JPN
	INT/9/098 (001)	ITC on safety and regulation of unsealed sources of radioactive material	1989	IRE

MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES
BY THAI NATIONALS
1984 - 1994
(As of mid-March 1994)

Name	Course No.	Course title	Year	Location
KIATISAKWATANA	INT/4/096 (001)	ITC on advanced interfacing in nuclear experiments	1988	DOM
	INT/4/105 (001)	Advanced ITC on nuclear electronics	1991	MEX
KIATKAMJORNWONG	RAS/8/062 (018)	Regional executive management seminar on industrial radiation curing technology		
	RAS/8/064 (003)	RTC on radiation curing of surface coatings		
KOMOLSUK	INT/9/134 (001)	ITC on management of occupational exposure to ionizing radiation	1993	USA
	RAS/9/011 (001)	RTC on safety and regulation of radiation sources	1991	MAL
KOMSON	INT/5/087 (001)	ITC on the use of isotopes and radiation in integrated pest management, especially the sterile insect technique	1984	USA
	INT/5/104 (001)	Study tour on radiation disinfection of grain	1986	NET HUN USSR
KORNDUANGKAE0	INT/1/049 (001)	ITC on nuclear data and measurement techniques in nuclear reactor and personal neutron dosimetry	1992	RUS
	INT/4/094 (001)	ITC on research reactor core conversion to low enriched uranium fuels	1990	AUL
KRAILAKSANAWARAPAR	RAS/0/011 (001)	Regional overview course on regulatory aspects of radiation and nuclear safety	1986	MAL
	RAS/9/006 (003)	RTC on development of infrastructures for ensuring radiation protection	1990	AUL
	RAS/9/006 (005)	RWS on development of training techniques and methods of instruction in radiation protection	1992	AUL
	RAS/9/006 (011)	RWS on applications of the ICRP's 1990 recommendations for radiation protection	1993	MAL
KUNANOPPARAT	RAS/8/061 (077)	RTC on industrial radiation sterilization - quality control and compatibility of materials	1990	IND
	RAS/8/061 (104)	RWS on industrial sterilization - regulatory aspects	1991	THA

**MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES
BY THAI NATIONALS
1984 - 1994
(As of mid-March 1994)**

Name	Course No.	Course title	Year	Location
LEENANUPAN, V.	INT/1/025 (001)	ITC on the research and application of energy dispersive X-ray fluorescence analysis	1984	SIN
	RAS/8/062 (003)	Regional (RCA) workshop on the use of IBM personal computers for laboratory automation and data acquisition	1987	IND
LEENANUPAN, Y.	RAS/0/010 (001)	RWS on IAEA technical co-operation practices and procedures	1984	THA
	RAS/0/017 (001)	RWS on project management and evaluation techniques for IC projects	1990	INS
	RAS/0/020 (001)	RWS on project design, evaluation and management of IAEA technical co-operation projects in the Asia and Pacific region	1994	MAL
LEEPOWPANTH	RAS/8/008 (048)	Regional second industrial training-demonstration on on-stream analysis and control of mineral concentrations employing nucleonic systems	1985/86	AUL PHI
	RAS/8/061 (071)	Regional executive management seminar on the use of nucleonic control system for mineral processing	1990	PHI
MAHAPANYAWONG	INT/9/083 (001)	ITC on planning, preparedness and response to nuclear accidents or radiological emergencies	1987	USA
	RAS/9/006 (006)	RTC on the basic technique of radiation protection	1991	JPN
NAIYUTTI	INT/9/090 (001)	ITC on the determination of radionuclides in food and environmental samples	1988	GFR
	RAS/0/015 (001)	RWS on environmental sampling and measurements of radioactivity for monitoring purposes	1989	IND
NAVIKHACHEEVIN	RAS/0/015 (016)	RWS on trouble shooting and repair of gamma cameras	1993	IND
	RAS/4/008 (001)	RWS on maintenance on nuclear medical instruments	1990	IND
PATRASHAKORN	INT/1/035 (001)	ITC on the preparation of nuclear data for use in reactor calculations	1986	IND
	RAS/4/011 (003)	RTC on computer application on research reactor control and calculation	1991	INS

**MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES
BY THAI NATIONALS
1984 - 1994
(As of mid-March 1994)**

Name	Course No.	Course title	Year	Location
PHANTHUNA	RAS/0/015 (006)	RTC on nuclear power pre-project activities and manpower development	1991	ROK
	RAS/5/020 (002)	RWS on technoeconomic feasibility of using electron beam vs. isotopic sources of radiation for food processing	1990	JPN
PIRABUL - SUNDARACHUMPAKA	RAS/8/062 (001)	Regional (RCA) workshop on photon, electron and neutron dosimetry in radiotherapy	1987	ROK
	RAS/9/006 (009)	RWS on computer-assisted planning and dosimetry for carcinoma of the cervix	1992	IND
PONGKASEM	RAS/0/015 (015)	RWS on applied aspects of neutron scattering	1993	IND
	RAS/4/011 (006)	RTC on materials characterization using low and medium neutron flux reactors	1992	CPR
	RAS/8/067 (001)	RTC on nuclear methods in materials development	1993	CPR
PONGPAT, P.	INT/9/135 (001)	ITC on physical protection of nuclear facilities and materials	1993	USA
	RAS/9/006 (001)	RTC on development of infrastructures for ensuring radiation protection	1988	AUL
PRICHAKAS	RAS/6/007 (001)	Regional train-the-trainers course in medical radioimmunoassay	1985	CPR
	RAS/6/010 (001)	Regional train-the-trainers course on data processing in radioimmunoassay	1987	INS
	RAS/6/011 (004)	RTC on diagnosis of viral hepatitis infection by radioimmunoassay	1991	CPR
RAPEEPATANA	INT/9/048 (001)	ITC on planning, preparedness and response to radiological emergencies	1984	USA
	RAS/0/015 (004)	RTC on nuclear power project planning and implementation	1990	ROK
RATTAGOO	RAS/5/017 (001)	Study tour on food irradiation development	1986	CPR
	RAS/5/020 (008)	Regional RCM for RPF1 - phase III	1993	ROK
REUNGIWATSAI	RAS/7/003 (003)	RTC on radiation sterilization of tissue grafts for clinical use in health care	1990	ROK
	RAS/7/003 (004)	RTC on radiation sterilization of tissue grafts with emphasis on clinical and sterility quality assurance criteria	1992	CPR

**MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES
BY THAI NATIONALS
1984 - 1994
(As of mid-March 1994)**

Name	Course No.	Course title	Year	Location
SALISDISOUK	RAS/0/013 (002)	RTC on electric system expansion planning	1989	MAL ROK
	RAS/0/013 (005)	Fourth RWS on energy, electricity and nuclear power planning	1990	
SANGARIYAVANICH	RAS/0/015 (009)	RWS on neutron transmutation doping technology	1992	CPR IND
	RAS/1/007 (001)	RTC on the use of reactor neutron beams in the study of materials	1986	
SANGSURIYAN	INT/6/037 (001)	ITC on modern aspects in radiopharmacy	1989	CZE IND
	RAS/6/012 (001)	RTC on radioimmunoassay and its clinical applications (RCA)	1986	
SRISUVANANDA	RAS/8/061 (076)	RTC on non-destructive testing of radiography (level III)	1990	PHI INS
	RAS/8/061 (105)	RTC on non-destructive testing of magnetic particle and liquid penetrant (level III)	1991	
SUNTONSAN	RAS/8/008 (054)	Sixth RTC on non-destructive testing (level II)	1986	JPN MAL INS
	RAS/8/061 (053)	RTC on non-destructive testing of radiography (level III)	1989	
	RAS/8/061 (072)	RTC on non-destructive testing of ultrasonics (level III)	1990	
SURBSUK	INT/4/076 (001)	Interregional study tour on spent fuel management	1986	CZE FRA GFR SWE UK ROK
	RAS/0/013 (001)	RTC on nuclear power project planning and implementation	1988	
TANIPANICHSKUL	INT/9/056 (001)	ITC on the uses of probabilistic safety assessment (PSA) in decision making - managerial perspective	1985	UK
	INT/9/100 (001)	ITC on radioactivity measurements for environmental monitoring purposes	1989	FRA
	INT/9/127 (001)	ITC on safe operation and utilization of research reactors	1992	FRA

**MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES
BY THAI NATIONALS
1984 - 1994
(As of mid-March 1994)**

Name	Course No.	Course title	Year	Location
TAPONETHONG	INT/9/115 (001)	ITC on physical protection of nuclear facilities and materials	1991	USA
	INT/9/137 (001)	ITC on interim storage of spent fuel from nuclear power plants and research reactors	1993	FRA
	RAS/8/062 (010)	RWS on neutron radiography	1989	JPN
THAVARASOOK	RAS/5/021 (005)	Regional RCM on the use of isotopes in studies to improve yield and nitrogen fixation of grain legumes in the tropics and sub-tropics of Asia	1992	CPR
	RAS/5/021 (007)	Regional RCM on the use of isotopes in studies to improve yield and nitrogen fixation of grain legumes in the tropics and sub-tropics of Asia	1993	AUL
THONGMITR	INT/1/014 (001)	Interregional seminar and workshop on calibration procedures in secondary standards dosimetry laboratory	1987	TUR
	INT/1/033 (001)	Interregional study tour on primary and secondary standards dosimetry laboratories for technical staff of SSDLs	1985	GFR HUN USSR SWE AUL
	RAS/4/014 (001)	RTC on standardization of dose measurements through secondary standards dosimetry laboratories (SSDLs)	1993	AUL
THUNTAWEWADTHANANON	INT/9/093 (001)	ITC on safety and regulation of sealed sources of radioactive material	1989	USA
	RAS/0/015 (018)	RWS on radon monitoring	1993	CPR
	RAS/9/012 (001)	RTC on dosimetric assessment of internal contamination	1992	AUL
TRIPROM	RAS/6/007 (001)	Regional train-the-trainers course in medical radioimmunoassay	1985	CPR
	RAS/6/010 (001)	Regional train-the-trainers course on data processing in radioimmunoassay	1987	INS
VONGSMARN	RAS/4/007 (001)	Regional train-the-trainers workshop on the maintenance of nuclear instruments	1984	MAL
	RAS/8/061 (012)	RTC on radiation engineering - electron beam facilities	1987	JPN

MULTIPLE PARTICIPATION IN AGENCY TRAINING COURSES
BY THAI NATIONALS
1984 - 1994
(As of mid-March 1994)

Name	Course No.	Course title	Year	Location
WANITSUKSOMBUT	RAS/0/015 (007)	RTC on environmental monitoring related to the assessment of the safety of nuclear facilities	1991	CPR
	RAS/8/061 (104)	RWS on industrial sterilization - regulatory aspects	1991	THA
	RAS/9/006 (004)	RWS on intercomparison for personal dosimeters	1990	JPN
WATANASRIYAKUL	RAS/8/061 (008)	RTC on non-destructive testing of ultrasonics (level II)	1987	ROK
	RAS/8/062 (026)	RWS on weld defect sizing using NDT	1991	JPN
YAMCHAREONWONG	RAS/8/061 (005)	RTC on non-destructive testing of radiography (level II)	1987	IND
	RAS/8/061 (053)	RTC on non-destructive testing of radiography (level III)	1989	MAL

PROJECTS COMPLETED IN THAILAND SINCE 1984
(As of mid-March 1994)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS				COMPLETED
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING	
			M/M	\$	\$	\$	M/M	\$	\$	\$	
1981	THA/1/004	Secondary standards dosimetry laboratory	15/14	99 825	339 775	29 425	15/13	82 750	338 801	27 580	1993
1982	THA/1/005	Nuclear physics	15/16	100 180	351 422	3 993	15/14	91 025	351 328	5 865	1990
1984	THA/1/006	Nuclear physics	-	-	25 069	-	-	-	25 069	-	1986
1987	THA/1/007	Accelerator-based research	1/21	11 985	-	-	1/21	15 943	-	-	1988
1988	THA/1/008	Calibration and standardization of radionuclides	-	-	96 299	-	-	-	96 021	-	1993
1983	THA/2/008	Nuclear chemistry training	1/18	13 910	110 568	-	1/20	17 432	111 659	-	1990
1986	THA/2/009	Radiochemistry training	11/00	103 897	159 322	-	10/22	109 939	160 010	-	1994
1979	THA/3/003	Nuclear raw material prospecting	25/20	181 085	167 786	15 017	25/18	198 997	167 781	15 016	1993
1980	THA/4/008	Radioisotope production facility	8/00	48 940	1 042 970	69 429	8/02	60 975	1 041 397	69 454	1992

PROJECTS COMPLETED IN THAILAND SINCE 1984
(As of mid-March 1994)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS				COMPLETED
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING	
			M/M	\$	\$	\$	M/M	\$	\$	\$	
1983	THA/4/009	Nuclear electronics training laboratory	5/15	51 030	41 538	-	5/15	52 766	41 482	-	1993
1986	THA/4/010	Upgrading of a research reactor	11/13	103 744	109 741	28 344	11/12	117 218	109 706	28 292	1993
1991	THA/4/012	Relocation of the nuclear research centre	5/01	45 310	-	29 573	5/01	69 841	-	29 040	1993
1979	THA/5/021	Pesticide residues	7/15	29 000	118 000	-	7/16	42 376	116 585	-	1984
1981	THA/5/025	Pesticide residue study	-	-	13 224	-	-	-	13 224	-	1984
1982	THA/5/026	Radioisotopes in agriculture	5/17	38 159	89 278	9 000	5/25	38 146	93 330	9 426	1988
1983	THA/5/027	Fish production and preservation	6/14	60 904	46 159	23 418	6/23	60 742	46 159	23 418	1991
1984	THA/5/028	Isotopes in animal science	4/00	27 300	58 500	9 502	4/01	21 188	58 910	9 501	1988
1984	THA/5/029	Food irradiation	5/16	33 108	61 261	-	5/16	33 108	61 131	-	1989
1985	THA/5/030	Environmental pollution	2/03	14 909	86 666	-	2/03	23 780	86 666	-	1991

PROJECTS COMPLETED IN THAILAND SINCE 1984
(As of mid-March 1994)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS				COMPLETED
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING	
			M/M	\$	\$	\$	M/M	\$	\$	\$	
1985	THA/5/031	Improving food and agricultural production	70/00	582 626	553 317	343 856	70/00	582 626	553 317	343 856	1993
1987	THA/5/032	Mutation breeding	1/04	8 025	65 798	-	1/05	8 211	65 798	-	1992
1989	THA/5/036	Animal diseases	1/03	13 329	44 930	-	1/06	13 607	45 053	-	1993
1989	THA/5/037	Mutation breeding of cereals and legumes	1/06	9 780	-	18 530	1/00	10 942	-	20 521	1991
1980	THA/6/013	Radioimmunoassay	3/00	23 610	47 879	-	3/01	23 610	47 879	-	1985
1981	THA/6/014	Nuclear medicine teaching facilities	3/00	16 200	48 000	-	2/29	16 148	47 638	-	1984
1983	THA/6/016	Nuclear medicine	3/01	20 957	130 602	-	3/01	20 957	130 602	-	1988
1984	THA/6/017	Medical physics (SSDL)	7/00	48 496	115 061	10 391	7/02	65 357	115 408	8 731	1991
1984	THA/6/018	Nuclear cardiology	4/00	26 400	91 000	-	4/04	29 132	91 633	-	1988
1986	THA/6/020	Radioimmunoassay control laboratory	3/00	20 700	29 000	-	2/29	16 636	29 914	-	1988
1986	THA/6/021	Digoxin radioimmunoassay quality control	3/00	21 300	3 573	-	3/01	22 341	6 037	-	1989

PROJECTS COMPLETED IN THAILAND SINCE 1984
(As of mid-March 1994)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS				COMPLETED
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING	
			M/M	\$	\$	\$	M/M	\$	\$	\$	
1986	THA/6/022	Dynamic studies in nuclear medicine	2/29	20 760	6 200	11 070	2/29	27 320	5 903	10 780	1991
1982	THA/8/009	Radiation sterilization of medical supplies	3/16	24 490	20 637	-	3/09	29 200	20 637	-	1990
1987	THA/8/010	Training centre for non-destructive testing	1/16	11 380	111 625	8 055	1/16	12 454	111 622	8 045	1992
1982	THA/9/008	Environmental radio-activity monitoring	-	-	40 286	-	-	-	40 286	-	1985
1983	THA/9/009	Radioactive waste management	2/16	15 716	-	-	2/16	23 724	-	-	1989
1988	THA/9/013	Radioactive waste management	1/14	10 560	26 300	-	1/11	11 702	26 258	-	1991
	TOTAL	36 Projects	243/18	1 837 615	4 251 786	609 603	243/21	1 950 193	4 257 244	609 525	

OPERATIONAL PROJECTS IN THAILAND
(As of mid-March 1994)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS			
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING
			M/M	\$	\$	\$	M/M	\$	\$	\$
1993	THA/0/003	Manpower development	-	-	-	242 400	-	-	-	82 192
1993	THA/0/004	Nuclear power plant pre-feasibility study	6/00	65 100	-	-	2/02	15 905	-	-
1991	THA/2/010	Production and quality control of radio-pharmaceuticals	4/02	39 375	202 415	46 850	3/03	29 313	176 333	36 951
1993	THA/3/004	Computer processing of airborne radiometric data in Thailand	5/00	53 550	40 000	28 100	1/00	7 964	14 462	16 565
1991	THA/4/011	Training centre for applications of low-energy accelerator	4/00	42 300	100 627	-	2/05	19 165	51 290	-
1993	THA/4/013	Establishment of a nuclear research centre	12/25	139 725	-	77 400	4/09	47 205	-	9 679
1987	THA/5/034	Process control of food irradiation	6/00	48 000	5 154	47 642	6/05	80 156	5 154	47 642
1988	THA/5/035	Pesticide residues	2/14	27 201	103 098	57 725	2/14	27 927	102 079	57 686
1991	THA/5/038	Integrated control of fruit flies	9/00	86 400	68 900	78 600	7/25	88 457	16 992	66 520

OPERATIONAL PROJECTS IN THAILAND
(As of mid-March 1994)

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS			
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING
			M/M	\$	\$	\$	M/M	\$	\$	\$
1991	THA/5/039	Establishment of a new gamma greenhouse	2/14	24 030	250 000	-	1/02	16 033	-	-
1991	THA/5/040	Food irradiation on a commercial scale	3/01	40 513	14 030	28 058	2/23	40 513	13 459	13 992
1988	THA/6/024	Treatment planning and clinical dosimetry	1/19	15 900	56 698	-	1/07	10 701	53 271	-
1989	THA/6/025	Medical physics and clinical dosimetry for radiotherapy	5/00	41 400	3 800	39 930	5/02	61 640	3 711	39 930
1989	THA/6/026	Nuclear medicine training	6/23	58 730	-	76 618	6/23	86 843	-	76 291
1989	THA/6/027	Radioimmunoassay reagent production	7/12	68 170	150 760	69 019	6/23	65 750	150 903	67 960
1993	THA/6/028	Establishment of radio-immunoassay centre	2/00	21 150	50 000	12 000	1/02	15 400	22 680	-
1993	THA/8/011	Isotope-aided studies of ground water resources	2/00	22 200	75 000	48 600	-	-	-	-
1988	THA/9/014	Monitoring of airborne radionuclides	5/28	48 210	174 187	17 063	5/29	66 099	160 125	17 063

**OPERATIONAL PROJECTS IN THAILAND
(As of mid-March 1994)**

STARTED	PROJECT NO.	TITLE	ALLOTMENTS				DISBURSEMENTS			
			EXPERTS		EQUIPMENT	TRAINING	EXPERTS		EQUIPMENT	TRAINING
			M/M	\$	\$	\$	M/M	\$	\$	\$
1991	THA/9/015	Upgrading of waste processing facility	5/00	48 150	90 000	60 900	4/00	46 672	90 014	21 007
1991	THA/9/016	Strengthening of radiation protection	2/25	27 440	-	-	1/28	27 130	-	-
	TOTAL	20 Projects	93/13	917 544	1 384 669	930 905	65/22	752 873	860 473	553 478

COUNTERPART INSTITUTIONS IN THAILAND (I)
(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>GENERAL ATOMIC ENERGY DEVELOPMENT</u>		
THA/0/003	Office of Atomic Energy for Peace, Bangkok	LEENANUPAN
THA/0/004	Electricity Generating Authority of Thailand, Nonthaburi	VANGSURIYA
<u>NUCLEAR PHYSICS AND CHEMISTRY</u>		
THA/1/004	Office of Atomic Energy for Peace, Radiation Measurement Division, Bangkok	THONGMITR
THA/1/005	Chiang Mai University, Faculty of Science, Department of Physics, Chiang Mai	VILAITHONG
THA/1/006	Chiang Mai University, Faculty of Science, Department of Physics, Chiang Mai	VILAITHONG
THA/1/007	1. Chiang Mai University, Faculty of Science, Department of Physics, Chiang Mai 2. Chulalongkorn University, Faculty of Engineering, Department of Nuclear Technology, Bangkok	VILAITHONG SUMITRA
THA/1/008	Office of Atomic Energy for Peace, Radiation Measurement Division, Bangkok	THONGMITR
THA/2/008	Prince of Songkla University, Faculty of Science, Department of Chemistry, Songkla	WONGNAWA
THA/2/009	Chiang Mai University, Faculty of Science, Department of Chemistry, Chiang Mai	SRIYOTHA

COUNTERPART INSTITUTIONS IN THAILAND (I)
(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>NUCLEAR PHYSICS AND CHEMISTRY (cont'd)</u>		
THA/2/010	Office of Atomic Energy for Peace, Isotope Production Division, Bangkok	THONGYOI
<u>NUCLEAR RAW MATERIALS</u>		
THA/3/003	Ministry of Industry, Department of Mineral Resources, Economic Geology Division, Bangkok	CHOTIKANATIS
THA/3/004	Ministry of Industry, Department of Mineral Resources, Economic Geology Division, Bangkok	CHOTIKANATIS
<u>NUCLEAR ENGINEERING AND TECHNOLOGY</u>		
THA/4/008	Office of Atomic Energy for Peace, Isotope Production Division, Bangkok	MONGKOLPHANTHA
THA/4/009	Mahidol University, Ramathibodi Hospital, School of Medical Physics, Department of Radiology, Bangkok	PIRABUL-SUNDARACHUMPAKA
THA/4/010	Office of Atomic Energy for Peace, Reactor Operation Division, Bangkok	SRIPETDEE
THA/4/011	Chiang Mai University, Faculty of Science, Department of Physics, Chiang Mai	VILAITHONG CHIRAPATPIMOL
THA/4/012	Office of Atomic Energy for Peace, Bangkok	ATISOOK
THA/4/013	Office of Atomic Energy for Peace, Bangkok	MONGKOLPHANTHA

COUNTERPART INSTITUTIONS IN THAILAND (I)
(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>AGRICULTURE</u>		
THA/5/021	Office of Atomic Energy for Peace, Waste Disposal Division, Bangkok	LEELHAPHUNT
THA/5/025	Office of Atomic Energy for Peace, Waste Disposal Division, Bangkok	MONGKOLPHANTHA
THA/5/026	Ministry of Agriculture and Cooperatives, Department of Agriculture, Bangkok	SNITWONGSE
THA/5/027	Ministry of Agriculture and Cooperatives, Department of Fisheries, Bangkok	RATTAGOOL
THA/5/028	Khon Kaen University, Faculty of Agriculture, Department of Animal Science, Khon Kaen	SIMARAKS
THA/5/029	Ministry of Agriculture and Cooperatives, Department of Agriculture, Bangkok	BUANGSUWON
THA/5/030	Office of Atomic Energy for Peace, Waste Disposal Division, Bangkok	LEELHAPHUNT
THA/5/031	<ol style="list-style-type: none"> 1. Ministry of Agriculture and Cooperatives, Department of Agriculture, Bangkok 2. Ministry of Agriculture and Cooperatives, Department of Livestock Production, Bangkok 3. Office of Atomic Energy for Peace, Bangkok 4. Chiang Mai University, Chiang Mai 5. Khon Kaen University Khon Kaen 	SNITWONGSE - - - -
THA/5/032	Ministry of Agriculture and Cooperatives, Department of Agriculture, Bangkok	KEOBOONRUENG

COUNTERPART INSTITUTIONS IN THAILAND (I)

(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>AGRICULTURE</u> (cont'd)		
THA/5/034	1. Ministry of Public Health, Food and Drug Administration, Bangkok	VANASATIT GOMOLSEVIN
	2. Ministry of Public Health, Department of Medical Sciences, Division of Food Analysis, Bangkok	NINGNOI
THA/5/035	Ministry of Agriculture and Cooperatives, Department of Agriculture, Bangkok	TAYAPUTCH
THA/5/036	Chulalongkorn University, Faculty of Veterinary Sciences, Bangkok	VIRAKUL
THA/5/037	Kasetsart University, Faculty of Science, Department of Applied Radiation and Isotopes, Bangkok	LAMSEEJAN
THA/5/038	1. Office of Atomic Energy for Peace, Bangkok	BANDITSING
	2. Department of Agricultural Extension, Bangkok	SRI-ARUNOTHAI
THA/5/039	Kasetsart University, Faculty of Science, Department of Applied Radiation and Isotopes, Bangkok	LAMSEEJAN
THA/5/040	Office of Atomic Energy for Peace, Thai Irradiation Centre, Bangkok	NOUCHPRAMOOL
<u>NUCLEAR MEDICINE</u>		
THA/6/013	Mahidol University, Ramathibodi Hospital, Bangkok	KUMPONPANTH
THA/6/014	Prince of Songkla University, Faculty of Medicine, Songkla	SUKTHOMYA

COUNTERPART INSTITUTIONS IN THAILAND (I)
(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
	<u>NUCLEAR MEDICINE (cont'd)</u>	
THA/6/016	Chiang Mai University, Faculty of Medicine, Department of Radiology, Chiang Mai	PIYACHON
THA/6/017	Ministry of Public Health, Department of Medical Sciences, Division of Radiation Protection Services, Bangkok	CHUMNONGCHUAB
THA/6/018	Mahidol University, Siriraj Hospital, Bangkok	PLEEHACHINDA
THA/6/020	Office of Atomic Energy for Peace, Isotope Production Division, Bangkok	SUPRAROP
THA/6/021	Ministry of Public Health, Department of Medical Sciences, Bangkok	SANGKAWIBHA
THA/6/022	Chulalongkorn University, Faculty of Medicine, Department of Radiology, Bangkok	POSHYACHINDA
THA/6/024	Chiang Mai University, Faculty of Medicine, Chiang Mai	LORVIDHAYA
THA/6/025	1. Chulalongkorn University, Faculty of Medicine, Department of Radiology, Bangkok 2. Mahidol University, Ramathibodi Hospital, Bangkok	THITATHAN PIRABUL-SUNDARACHUMPAKA
THA/6/026	1. Mahidol University, Siriraj Hospital, Bangkok 2. Chulalongkorn University, Faculty of Medicine, Department of Radiology, Bangkok	PLEEHACHINDA POSHYACHINDA

COUNTERPART INSTITUTIONS IN THAILAND (I)
(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>NUCLEAR MEDICINE (cont'd)</u>		
THA/6/027	1. Office of Atomic Energy for Peace, Isotope Production Division, Bangkok 2. Ministry of Health, Soi Bamrasnaradura Hospital, Nonthaburi	SUPRAROP CHAROENSIRIWATANA
THA/6/028	Chulalongkorn University, Faculty of Medicine, Department of Radiology, Bangkok	POSHYACHINDA
<u>NUCLEAR TECHNIQUES IN INDUSTRY AND HYDROLOGY</u>		
THA/8/009	Office of Atomic Energy for Peace, Biological Science Division, Bangkok	THONGPHASUK
THA/8/010	Office of Atomic Energy for Peace, Reactor Operation Division, Bangkok	SRIPETDEE
THA/8/011	Ministry of Industry, Department of Mineral Resources, Groundwater Division, Bangkok	BUAPENG
<u>NUCLEAR SAFETY</u>		
THA/9/008	Office of Atomic Energy for Peace, Waste Disposal Division, Bangkok	SINAKHOM
THA/9/009	Office of Atomic Energy for Peace, Waste Disposal Division, Bangkok	YAMKATE
THA/9/013	Office of Atomic Energy for Peace, Waste Disposal Division, Bangkok	YAMKATE

COUNTERPART INSTITUTIONS IN THAILAND (I)
(By Project)

<u>Project No.</u>	<u>Institute</u>	<u>Counterpart(s)</u>
<u>NUCLEAR SAFETY</u> (cont'd)		
THA/9/014	Office of Atomic Energy for Peace, Radiation Measurement Division, Bangkok	MAHAPANYAWONG
THA/9/015	Office of Atomic Energy for Peace, Waste Disposal Division, Bangkok	YAMKATE
THA/9/016	Office of Atomic Energy for Peace, Bangkok	ATISOOK

COUNTERPART INSTITUTIONS IN THAILAND (II)
(By Institute)

BANGKOK

Office of Atomic Energy for Peace
Bangkok

THA/0/003	Manpower Development
THA/4/012	Relocation of the Nuclear Research Centre
THA/4/013	Establishment of a Nuclear Research Centre
THA/5/031	Improving Food and Agricultural Production
THA/5/038	Integrated Control of Fruit Flies
THA/9/016	Strengthening of Radiation Protection

Office of Atomic Energy for Peace
Radiation Measurement Division
Bangkok

THA/1/004	Secondary Standards Dosimetry Laboratory
THA/1/008	Calibration and Standardization of Radionuclides
THA/9/014	Monitoring of Airborne Radionuclides

Office of Atomic Energy for Peace
Isotope Production Division
Bangkok

THA/2/010	Production and Quality Control of Radiopharmaceuticals
THA/4/008	Radioisotope Production Facility
THA/6/020	Radioimmunoassay Control Laboratory
THA/6/027	Radioimmunoassay Reagent Production

Office of Atomic Energy for Peace
Reactor Operation Division
Bangkok

THA/4/010	Upgrading of a Research Reactor
THA/8/010	Training Centre for Non-destructive Testing

Office of Atomic Energy for Peace
Thai Irradiation Centre
Bangkok

THA/5/040	Food Irradiation on a Commercial Scale
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COUNTERPART INSTITUTIONS IN THAILAND (II)
(By Institute)

BANGKOK

Office of Atomic Energy for Peace
Biological Science Division
Bangkok

THA/8/009 Radiation Sterilization of Medical Supplies

Office of Atomic Energy for Peace
Waste Disposal Division
Bangkok

THA/5/021 Pesticide Residues
THA/5/025 Pesticide Residue Study
THA/5/030 Environmental Pollution
THA/9/008 Environmental Radioactivity Monitoring
THA/9/009 Radioactive Waste Management
THA/9/013 Radioactive Waste Management
THA/9/015 Upgrading of Waste Processing Facility

Ministry of Industry
Department of Mineral Resources
Economic Geology Division
Bangkok

THA/3/003 Nuclear Raw Material Prospecting
THA/3/004 Computer Processing of Airborne Radiometric Data in Thailand

Ministry of Industry
Department of Mineral Resources
Groundwater Division
Bangkok

THA/8/011 Isotope-aided Studies of Groundwater Resources

Ministry of Agriculture and Cooperatives
Department of Fisheries
Bangkok

THA/5/027 Fish Production and Preservation

COUNTERPART INSTITUTIONS IN THAILAND (II)
(By Institute)

BANGKOK

Ministry of Agriculture and Cooperatives
Department of Agriculture
Bangkok

THA/5/026	Radioisotopes in Agriculture
THA/5/029	Food Irradiation
THA/5/031	Improving Food and Agricultural Production
THA/5/032	Mutation Breeding
THA/5/035	Pesticide Residues

Ministry of Agriculture and Cooperatives
Department of Livestock Production
Bangkok

THA/5/031	Improving Food and Agricultural Production
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Ministry of Public Health
Food and Drug Administration
Bangkok

THA/5/034	Process Control of Food Irradiation
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Ministry of Public Health
Department of Medical Sciences
Bangkok

THA/6/021	Digoxin Radioimmunoassay Quality Control
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Ministry of Public Health
Department of Medical Sciences
Division of Food Analysis
Bangkok

THA/5/034	Process Control of Food Irradiation
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Ministry of Public Health
Department of Medical Sciences
Division of Radiation Protection Services
Bangkok

THA/6/017	Medical Physics (SSDL)
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COUNTERPART INSTITUTIONS IN THAILAND (II)
(By Institute)

BANGKOK

Chulalongkorn University
Faculty of Engineering
Department of Nuclear Technology
Bangkok

THA/1/007 Accelerator-based Research

Chulalongkorn University
Faculty of Veterinary Science
Bangkok

THA/5/036 Animal Diseases

Chulalongkorn University
Faculty of Medicine
Department of Radiology
Bangkok

THA/6/022 Dynamic Studies in Nuclear Medicine
THA/6/025 Medical Physics and Clinical Dosimetry for Radiotherapy
THA/6/026 Nuclear Medicine Training
THA/6/028 Establishment of Radioimmunoassay Centre

Mahidol University
Ramathibodi Hospital
Bangkok

THA/4/009 Nuclear Electronics Training Laboratory
THA/6/013 Radioimmunoassay
THA/6/025 Medical Physics and Clinical Dosimetry for Radiotherapy

Mahidol University
Siriraj Hospital
Bangkok

THA/6/018 Nuclear Cardiology
THA/6/026 Nuclear Medicine Training

COUNTERPART INSTITUTIONS IN THAILAND (II)
(By Institute)

BANGKOK

Kasetsart University
Faculty of Science
Department of Applied Radiation and Isotopes
Bangkok

THA/5/037 Mutation Breeding of Cereals and Legumes
THA/5/039 Establishment of a New Gamma Greenhouse

Department of Agricultural Extension
Bangkok

THA/5/038 Integrated Control of Fruit Fly

CHIANG MAI

Chiang Mai University
Chiang Mai

THA/5/031 Improving Food and Agricultural Production

Chiang Mai University
Faculty of Science
Department of Physics
Chiang Mai

THA/1/005 Nuclear Physics
THA/1/006 Nuclear Physics
THA/1/007 Accelerator-based Research
THA/4/011 Training Centre for Applications of Low-energy Accelerator

Chiang Mai University
Faculty of Science
Department of Chemistry
Chiang Mai

THA/2/009 Radiochemistry Training

COUNTERPART INSTITUTIONS IN THAILAND (II)
(By Institute)

CHIANG MAI

**Chiang Mai University
Faculty of Medicine
Chiang Mai**

THA/6/016 Nuclear Medicine
THA/6/024 Treatment Planning and Clinical Dosimetry

SONGKLA

**Prince of Songkla University
Faculty of Science
Department of Chemistry
Songkla**

THA/2/008 Nuclear Chemistry Training

**Prince of Songkla University
Faculty of Medicine
Songkla**

THA/6/014 Nuclear Medicine Teaching Facilities

NONTHABURI

**Electricity Generating Authority of Thailand
Nonthaburi**

THA/0/004 Nuclear Power Plant Pre-feasibility Study

**Ministry of Health
Soi Bamrasnaradura Hospital
Nonthaburi**

THA/6/027 Radioimmunoassay Reagent Production

COUNTERPART INSTITUTIONS IN THAILAND (II)
(By Institute)

KHON KAEN

Khon Kaen University
Khon Kaen

THA/6/031 Improving Food and Agricultural Production

Khon Kaen University
Faculty of Agriculture
Department of Animal Science
Khon Kaen

THA/5/028 Isotopes in Animal Science

**THE AGENCY'S TECHNICAL CO-OPERATION PROGRAMME WITH
THAILAND
(1984 - 1994)**

LONG-TERM ASSIGNMENTS

THA/5/031 Improving Food and Agricultural Production

- Task 010 - Chief Technical Adviser
C.G. LAMM (DEN) Jan 86 - Dec 90 20.8 months
Representing the Executing Agency, the Chief Technical Adviser, in close co-operation with the Project Director, shall:
 - Advise the Project Committee on overall direction, co-ordination and implementation of the project.
 - Prepare a detailed work plan of the project.
 - Supervise and co-ordinate the work of experts assigned to the project.
 - Manage and execute and monitor the project in accordance with the timing specified in the work plan.
 - Prepare the annual work plan and Government and UNDP project budgets.
 - Co-ordinate the work of the participating institutions on technical matters.
 - Advise and assist the Technical Co-ordinators and Committees on the planning, implementation and conduct of the various research activities.
 - Prepare semi-annual project progress reports and the draft terminal report.
 - Be a member of the Project Committee.
 - Assist and advise counterparts on technical matters within his expertise.

- Task 013 - Local Staff (Administrative Assistance)
P. MILINDACHINTA (THA) May 86 - Dec 90 56 months
A. CHANTANASIRI (THA) Sep 87 - Nov 88 14 months

- Task 170 - National Chief Technical Adviser
P. SNITWONGSE (THA) Aug 88 - Dec 90 29 months

**THE AGENCY'S TECHNICAL CO-OPERATION PROGRAMME WITH
THAILAND
(1984 - 1994)**

LONG-TERM ASSIGNMENTS

THA/3/003 Nuclear Raw Material Prospecting

- Task 05 - Uranium Exploration
R.W. OSTERSTOCK (USA) Sep 87 - Sep 88 12 months
 - To supervise and guide planning and implementation of long-term uranium exploration, making full use of airborne radiometric survey data presently being obtained.
 - To guide geological mapping, geochemical surveys and geophysical surveys, including bore-hole logging as necessary.
 - To plan and guide training of counterpart geologists.

RESEARCH CONTRACTS/AGREEMENTS IN THAILAND SINCE 1984 ¹
(As of mid-March 1994)

Field of activity	No. of contracts/ agreements	Amount allocated \$
Nuclear physics	5	35 100
Nuclear chemistry	6	44 000
Nuclear engineering and technology	6	49 500
Nuclear techniques in agriculture	36	409 600
Nuclear medicine	20	190 300
Nuclear techniques in biology	8	116 800
Nuclear techniques in industry & hydrology	5	36 900
Safety in nuclear energy	5	36 800
TOTAL	91	919 000

¹/ New awards since 1984

**SCIENTISTS FROM THAILAND SERVING AS AGENCY
TECHNICAL CO-OPERATION EXPERTS AND
TRAINING COURSE LECTURERS
OR
PARTICIPATING IN CO-ORDINATION MEETINGS
1984 - 1994
(As of mid-March 1994)**

Name	No. of assignments	Project(s)
APISITTIKASEM	2	RAS/8/061
ARAMRATTANA	51	INT/0/037, RAS/8/008, RAS/8/011, RAS/8/061, RAS/8/062
BOONBAWORN RATANAKUL	1	INT/0/037
BOONKERD	4	DRK/5/003, NIR/5/015, UGA/5/014
CHANTANASIRI	1	THA/5/031
CHAROENSIRIWATANA	2	PHI/2/007, RAS/6/011
CHIMKLAI	3	RAS/0/012, RAS/0/013
CHIRAPATPIMOL	4	BGD/1/010, DRK/1/002, MYA/1/013, SRL/0/002
CHOTIKANATIS	1	THA/3/003
CHVAJARERNPUN, A.	5	RAS/8/008, RAS/8/061
CHVAJARERNPUN, J.	6	RAS/8/011, RAS/8/062
DEEMA	1	RAS/8/062
DHARMVANIJ	1	RAS/4/011
DUMRONGPISUTIKUL	1	RAS/6/011
HEMARAKSHA	1	THA/5/031
JINAWATH	1	RAS/8/062
JIRASURAT	1	PHI/5/022
KAMONPATANA	2	CPR/5/007, THA/5/036
KASEMSANTA	2	RAS/8/008, RAS/8/011
KEINMEESUKE	4	INT/4/054, RAS/4/008
KIATGRAJAI	1	RAS/8/008
KIRODPON	1	RAS/9/006

**SCIENTISTS FROM THAILAND SERVING AS AGENCY
TECHNICAL CO-OPERATION EXPERTS AND
TRAINING COURSE LECTURERS
OR
PARTICIPATING IN CO-ORDINATION MEETINGS
1984 - 1994
(As of mid-March 1994)**

Name	No. of assignments	Project(s)
KOONTONG	1	THA/5/031
KRISANACHINDA	4	RAS/4/008, VIE/6/017
LEENANUPAN	1	RAS/8/071
LUSANANDANA	1	THA/5/031
MAHAPANYAWONG	1	RAS/9/006
MEEKARIYA	1	RAS/6/011
MEEPRASERT	1	THA/5/031
MILINDACHINTA	1	THA/5/031
MONGA	1	INT/0/037
MONGKOLPHANTHA	1	RAS/8/071
NATSUMA	1	RAS/0/010
NAVANUGRAHA	1	RAS/8/008
PAIRSUWAN	1	MYA/1/013
PATRASHAKORN	1	INT/0/045
PLEEHACHINDA	1	RAS/6/011
PLUEKSAWAN	1	INT/0/037
PONGPAEW	1	RLA/8/006
PONGPAT	3	RAS/9/006, THA/9/016
POSHYACHINDA	5	RAS/6/011, RAS/6/018
POTHISIRI	4	RAS/5/020
PREECHAKAS	1	RAS/6/011
PRICHAKAS	1	RAS/6/018
PUPIAM	1	RAS/8/062

**SCIENTISTS FROM THAILAND SERVING AS AGENCY
TECHNICAL CO-OPERATION EXPERTS AND
TRAINING COURSE LECTURERS
OR
PARTICIPATING IN CO-ORDINATION MEETINGS
1984 - 1994
(As of mid-March 1994)**

Name	No. of assignments	Project(s)
RAJATANAVIN	1	RAS/6/011
RATIVANICH	1	RAS/8/062
SALISDISOUK	2	INT/0/037, RAS/0/013
SAROHAWIKASIT	1	INT/0/037
SIRI-UPATHUM	5	RAS/8/062, RAS/8/070
SNITWONGSE	1	THA/5/031
SOMSWASDI	3	INT/0/043, INT/4/096, RAS/1/009
SNSUK	1	RAS/8/070
SRIPETDEE	5	RAS/8/061, RAS/8/071
SUNTORNWAT	2	RAS/8/008
TABMANIE	1	RAS/0/013
TAMMACHART	1	RAS/8/061
THAMTHARAI	2	RAS/0/015, RAS/8/071
VAJARADUL	3	BGD/7/005, RAS/7/003
VILAAITHONG	3	CUB/0/003, CUB/1/005, MYA/1/013
WANITSUKSOMBUT	2	RAS/9/006
WATANASRIYAKUL	1	RAS/8/061
WONGTHONGSUK	1	THA/5/031
YUTHAMANOP	1	RAS/9/006
ZHANG HAI LUN	1	RAS/8/062
TOTAL	169	

**AGENCY FELLOWSHIPS (FE) AND SCIENTIFIC VISITS (SV)
HOSTED BY THAILAND
1984 - 1994
(As of mid-March 1994)**

Recipient country	No. FE	No. SV	TOTAL ¹
BANGLADESH	3	1	4
CHINA	-	5	5
CUBA	-	1	1
DEM.P.R.KOREA	4	-	4
ETHIOPIA	-	1	1
GUATEMALA	-	1	1
INDONESIA	-	3	3
KENYA	-	1	1
MALAYSIA	-	3	3
MEXICO	1	-	1
MONGOLIA	1	-	1
MOROCCO	-	4	4
MYANMAR	14	1	15
NIGERIA	-	1	1
PAKISTAN	-	1	1
PHILIPPINES	8	-	8
SINGAPORE	1	-	1
SRI LANKA	1	1	2
SUDAN	-	1	1
SYRIA	-	1	1
TANZANIA	-	1	1
UGANDA	1	-	1
URUGUAY	-	1	1
VENEZUELA	-	1	1
VIET NAM	4	5	9
TOTAL	38	34	72

1./ Includes trainees who have completed or at least started their studies.

**REGIONAL AND INTERREGIONAL TRAINING EVENTS
HOSTED BY THAILAND
1984 - 1994
(As of mid-March 1994)**

Course No.	Course Title	Partici- pants	Year
INT/1/040 (001)	ITC on the use of neutron generators in material and analytical research	13	1986
INT/4/100 (001)	ITC on interfacing in nuclear experiments	18	1989
INT/4/102 (001)	ITC on interfacing in nuclear experiments	17	1990
RAS/0/010 (001)	RWS on IAEA technical co-operation practices and procedures	11	1984
RAS/1/009 (001)	Advanced RTC on gamma-ray spectroscopy	11	1988
RAS/4/009 (001)	RTC on research reactor operators	14	1989
RAS/4/012 (002)	RWS on evaluation and testing of commercial MCA cards	5	1991
RAS/5/020 (003)	RWS on public information of food irradiation	13	1991
RAS/5/021 (003)	RWS on rhizobium technology	11	1991
RAS/5/021 (004)	Regional RCM on the use of isotopes in studies to improve yield and nitrogen fixation of grain legumes in the tropics and sub-tropics of Asia	6	1991
RAS/5/024 (001)	RTC on nuclear and associated techniques for pesticide research	15	1992

**REGIONAL AND INTERREGIONAL TRAINING EVENTS
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1984 - 1994
(As of mid-March 1994)**

Course No.	Course Title	Partici- pants	Year
RAS/6/011 (001)	RTC on the use and preparation of bulk reagents for radioimmunoassay of thyroid-related hormones	13	1986
RAS/6/011 (002)	RTC on external quality assessment schemes for radioimmunoassay of thyroid hormones	12	1989
RAS/6/011 (003)	RTC on optimization of production techniques and distribution schemes for reagents for radioimmunoassay	13	1989
RAS/6/019 (001)	RTC on application of recent nuclear techniques in the diagnosis of communicable diseases	14	1992
RAS/6/021 (001)	RTC on radiotherapy treatment planning	20	1993
RAS/7/003 (002)	RWS on radiation and nuclear techniques for sterilization and clinical quality control of tissue grafts in tissue banking	13	1989
RAS/8/008 (027)	Regional training-demonstration on the use of nucleonic control systems in the paper industry	11	1984
RAS/8/008 (036)	Regional executive management seminar for paper	7	1984
RAS/8/008 (039)	Fourth regional training-demonstration workshop on the use of nucleonic control systems in paper industries	12	1985

**REGIONAL AND INTERREGIONAL TRAINING EVENTS
HOSTED BY THAILAND
1984 - 1994
(As of mid-March 1994)**

Course No.	Course Title	Partici- pants	Year
RAS/8/008 (050)	Fifth regional training-demonstration workshop on the use of nucleonic control systems in the paper industry	13	1986
RAS/8/061 (011)	RTC on industrial radiation sterilization - quality control and sterility assurance	12	1987
RAS/8/061 (016)	RTC on nucleonic control systems in the paper industry	8	1987
RAS/8/061 (048)	RTC on industrial radiation sterilization - quality control and sterility assurance	11	1989
RAS/8/061 (055)	Regional executive management seminar on nucleonic control systems in paper industry	5	1989
RAS/8/061 (073)	RTC on industrial radiation sterilization - quality control and sterility assurance	15	1990
RAS/8/061 (104)	RWS on industrial sterilization - regulatory aspects	17	1991
RAS/8/062 (031)	RWS on non-destructive examination of non-metallic materials	10	1991
RAS/8/064 (001)	RTC on the application of nucleonic control systems to coal processing operations	4	1989
RAS/8/064 (004)	Regional executive management seminar on the application of nucleonic control systems to coal processing operations	3	1989

**REGIONAL AND INTERREGIONAL TRAINING EVENTS
HOSTED BY THAILAND
1984 - 1994
(As of mid-March 1994)**

Course No.	Course Title	Partici- pants	Year
RAS/8/064 (005)	RWS on the application of nucleonic control systems to coal processing operations	4	1989
	TOTAL	351	

In addition, eleven national training events were organized under project THA/5/031, Improving Food and Agricultural Production:

- 001 - NTC on the biotechnology in development of stress tolerant food crops (1987)
- 002 - NWS on plant mutation breeding (1988)
- 003 - NWS on the use of isotopes and radiation in studies on soil-plant relationship (1988)
- 004 - NWS on the use of nuclear and related technology to improve livestock production (1988)
- 005 - NWS on soil science (1988)
- 006 - Third NWS on plant mutation breeding (1989)
- 007 - First NWS on ruminant reproduction and parasitology (1989)
- 008 - Second NWS on the use of isotope techniques in soil science (1989)
- 009 - National seminar on improvement of production of ruminants (1990)
- 010 - National seminar on soil science (1990)
- 011 - National seminar on plant breeding (1990)