







IAEA Technical Cooperation Fellows 2005–2008: Where are they now?

A Report on the Fellowship Survey 2005–2008

IAEA Department of Technical Cooperation



Technical Cooperation Programme

TABLE OF CONTENTS

Exe	cutive Summary	3
1.	Introduction	4
2.	Methodology	5
3.	Participation Statistics	5
3.	1 Participation statistics by year	6
3.	2 Participation statistics by gender	6
4.	Distribution of Fellows	6
4.	1 Distribution of fellows by region	6
4.	2 Location of the fellowships by host country	7
4.	3 Duration of the fellowship	7
4.	.4 Current working institution of the former fellows	8
5.	Impact and Quality of the IAEA Fellowship Programme	8
5.	1 Impact of the IAEA fellowship programme	8
5.	2 Quality of the IAEA fellowship programme	10

EXECUTIVE SUMMARY

In order to assess the impact and quality of the fellowship component of the International Atomic Energy Agency (IAEA) technical cooperation (TC) programme, the Department of Technical Cooperation conducts occasional surveys of former fellows. This survey covers fellowships from the years 2005 to 2008. All fellows have completed their training and have had time to judge in what ways their training has been useful for their work in their home country. Fellowship surveys act as a continuous systematic assessment, and are used to improve the TC programme and its outcomes.

This survey was carried out from 8 November to 13 December 2010. Fellows who received training between 2005 and 2008 were requested to complete a questionnaire that covered fields such as:

- Personal and professional information
- Current professional situation
- Preparatory activities for the fellowship programme
- Fellowship training programme
- Post programme activities
- After completion of training.

Of the 3050 fellows who were trained within the framework of the IAEA's technical cooperation programme between 2005 and 2008, nearly 40% could be contacted, and 27.7% responded to the 2005–2008 fellowship programme survey.

97.7% responded positively to the question as to whether they would recommend participation in the programme to colleagues. Among the reasons for participation were the following:

- personal development
- career development
- institutional development
- capacity enhancement
- financial improvement
- networking



1. INTRODUCTION

Through its technical cooperation (TC) programme, the IAEA supports capacity building for the personnel needed for the peaceful application of nuclear technology in IAEA Member States. Such capacity building can be provided through scientific visits, training courses, attendance at meetings, and fellowships.

Fellowships are awarded as part of a national or regional TC project and offer specialized training for junior professionals. Candidates apply for a specific activity within the framework of a project, with the support and clearance of the relevant national authorities. Fellowship opportunities encompass on-the-job training, long-term academic training, sandwich courses and e-learning. Fellowships normally last for a period of one month up to one year.

Preambular paragraph '(w)' of IAEA General Conference resolution <u>GC(54)/RES/9</u>, adopted at the 54th annual regular session of the IAEA General Conference, recognizes that human capital planning and development of human resources, expert services, fellowships and training courses continue to be important components of technical cooperation activities to ensure impact and sustainability.

This survey is the third in a series of surveys to assess the quality and effectiveness of IAEA TC fellowships, and follows surveys of fellows from the periods 2001–2002 and 2003–2004. This survey aims to assess the impact of the fellowship component of the IAEA TC programme on the former fellows' home institutions and countries, and on the TC project the fellowship was part of. The findings of the survey contribute to the improved, results-orientated management of the TC programme, addressing skills, career and institutional development.



2. METHODOLOGY

In 2010, IAEA TC fellows from the period 2005–2008 were requested participate in a survey on the usefulness of their training to their work in their home country. The fellows were requested to fill out an online questionnaire covering topics that included:

- where the former fellows were and what they were doing following the fellowship;
- the quality of the fellowship programme;
- the impact of the fellowship programme on the fellow as an individual, as well as on the home institution, the IAEA technical cooperation project and the home country.

Fellows were asked to submit the questionnaires within three weeks, and the deadline was subsequently extended for an additional two weeks. In total, the time for response was 8 November – 13 December 2010.

3. PARTICIPATION STATISTICS

847 complete responses were received during the five week response period, corresponding to 38.5% of the total number of fellows that could be reached by e-mail.

Data	
Total number of fellows trained between 2005 and 2008	3050
Number of fellows approached by e-mail:	
2005	598
2006	713
2007	675
2008	683
Total	2669
of which undeliverable	469
Total fellows reached	2200
Response received	847
Response rate of total fellows	27.8%
Response rate of reached fellows	38.5%

Table 1: 2010 survey participation statistics.

3.1 Participation statistics by year

The 847 fellows that completed the survey were assigned to the four consecutive years in which they started their training:¹ 151 fellows (18.4%) in 2005, 167 (20.4%) in 2006, 227 (27.7%) in 2007 and 275 (33.5%) in 2008.

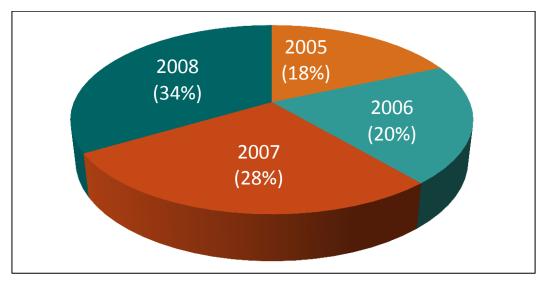


Figure 1: Year of start of fellowship by responding fellows.

3.2 Participation statistics by gender

Of the total number of fellows between 2005 and 2008 one third (N=504, 33%) were woman.

4. DISTRIBUTION OF FELLOWS

4.1 Distribution of fellows by region

In total, the fellows trained between 2005 and 2008 came from 115 countries from all four TC regions. Africa had the highest number of fellows (1057), followed by Asia and the Pacific (784 fellows), Europe (604 fellows) and Latin America (603 fellows).

Region	Number of fellows
Africa	1 057
Asia and the Pacific	784
Europe	604
Latin America	603

Table 2. Total number of IAEA TC fellows by region

¹ IAEA, "Survey Results & Analysis for 2010 IAEA Fellowship Programme Evaluation", 2010, question 2 related to the beginning of the fellowship programme

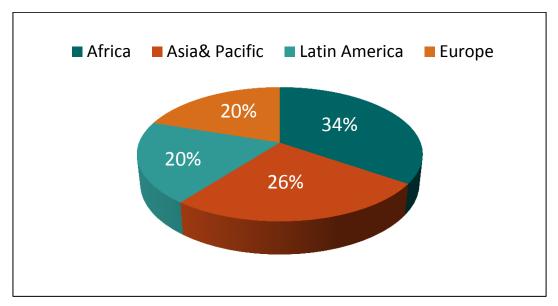


Figure 2: Percentage of IAEA TC fellows by region

4.2 Location of the fellowships by host country

A total of 144 countries hosted fellows during 2005–2008. Table 2 highlights those that provided most fellowships, with Austria (including fellows who were trained at IAEA) having the highest percentage.

Country	Number of fellowships	Percentage
1. Austria	112	14.00%
2. Germany	51	6.40%
3. Spain	44	5.50%
4. United Kingdom	43	5.40%
5. South Africa	40	5.00%
6. France	38	4.80%
7. United States of America	37	4.60%
8. Italy	30	3.80%
9. Brazil	28	3.50%
10. Czech Republic	26	3.30%

Table 3: Top ten fellowship host locations, 2005–2008.

4.3 Duration of the fellowship

The duration of a fellowship should normally be up to 12 months, but exceptions can be made with a range from 5 days to 48 months. Between 2005 and 2008, 171 fellows received training for a period between 12 and 24 months, 17 fellows were trained from 24 to 36 months and only 4 fellows were trained for over 36 months.

While most fellowships consist of practical or on-the-job training, long term fellowships provide academic training (MSc or PhD) or specialized training to build nuclear knowledge capacity in the Member State.

4.4 Current working institution of the former fellows

In response to the query regarding their current professional situation, most former fellows (63.2%) replied that they were working in government institutions following the training.

- 63% Government Ministry/IAEA/Research Institute
- 26% University/University Research Institute
- 5% Other sectors
- 2% Private sector
- 1.6% International/regional organization
- 0.7% Non-Governmental Organization
- 0.5% Self-employed/consultant

5. IMPACT AND QUALITY OF THE IAEA FELLOWSHIP PROGRAMME

5.1 Impact of the IAEA fellowship programme

Taking into account the results and comments of the current and previous surveys, it is clear that the fellowship programme is extremely important "*for youngsters to work in well reputed organisations, to build careers and skills and through work, to bring nations closer together*".²

More than half of the fellows rated gaining more ideas and useful knowledge for their jobs through this programme as 'very high'. Also, almost half of these fellows rated enhancing their skills according to the needs of the TC project under which their fellowship was funded as 'very high'. The acquired experience that contributed to the country's needs was rated as 'very high' by 50.7% of fellows. The provision of training, knowledge and work experience to improve the situation in developing countries is a major accomplishment of the IAEA's technical cooperation programme.³

From the data received, 49.4% of the fellows rated improving their abilities in relation to work performance as 'very high' and 37.5% rated being able to make a direct contribution to solving scientific, technical, or development-related problems in their country as 'very high'.⁴

² IAEA, "Survey Results & Analysis for 2010 IAEA Fellowship Programme Evaluation", 2010, question 43 related to additional comments for improvement of the IAEA fellowship programme

 $^{^{3}}$ In the survey, fellows were asked to rate a number of statements about the impact of the IAEA fellowship programme, on a scale of 1 - 6, where 6 is the maximum. The results reflect scores of 6.

⁴ In the survey, fellows were asked to rate a number of statements about the impact of the IAEA fellowship programme, on a scale of 1 - 6, where 6 is the maximum. The results reflect scores of 6

More than one third of the fellows stated that after completing the fellowship training they were involved in other related IAEA technical cooperation activities, such as the ones highlighted in Figure 4.

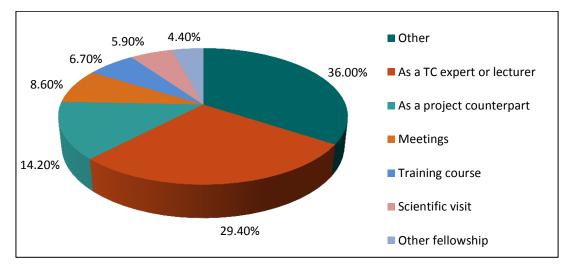


Figure 4: Percentage of fellows involved in other IAEA TC activities.

647 fellows noted that they had improved their professional network through the fellowship programme. 60% of connections were made with host institutions or laboratory staff, 40% with other fellows, 30% with the country's National Liaison Officer and 25% with IAEA staff.⁵

758 fellows (97.7% of all responding fellows) responded positively to the question on whether they would recommend participation in the IAEA fellowship programme to other colleagues. As the IAEA is constantly working to improve the fellowship programme and to offer quality training to applicants, fellows were asked to elaborate on their reasons for recommending the TC training programme (Fig. 5).

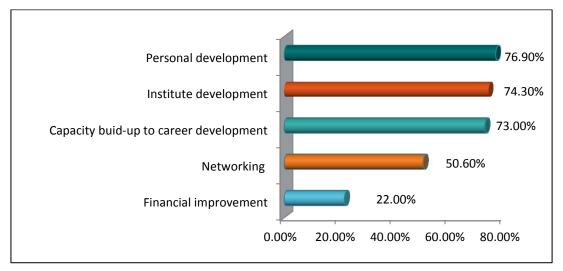


Figure 5. Fellow reasons for recommending the TC training programme.

Fellows rated the impact of the IAEA fellowship programme as 'high' and 'very high':

⁵ In the survey, fellows were requested to choose one or more answers if necessary.

- 35% of the fellows' skill enhancement was recognized as 'high' inside their organizations;
- 35.5% of the fellows rated the usefulness of contacts made during the study period as 'very high';
- 30.8% benefited from the programme by improving their language skills.⁶



5.2 Quality of the IAEA fellowship programme

Training programme

The following aspects of the IAEA fellowship programme were rated as 'very high' by the former fellows:

•	Suitability of the host institution	60%
٠	Suitability of the training programme	47%
•	Quality of the guidance received	48%
•	Quality and adequacy of available facilities	49%
•	Preparation of the living arrangements	38%
•	Assistance received from the IAEA	58%
•	Assistance received from host authorities	50%
•	Assistance received from their home country	41%

 $^{^{6}}$ In the survey, fellows were asked to rate a number of statements about the impact of the IAEA fellowship programme, on a scale of 1 - 6, where 6 is the maximum. The results reflect scores of 6.

Compared to the results of earlier surveys, almost twice the number of respondents to this survey has expressed satisfaction with the instructions and explanations received from IAEA project staff or the host institution prior to travelling and upon arrival at the host institution. This reflects the IAEA's ongoing efforts to improve the fellowship experience.

Regarding their expectations of the training programme, the fellows expressed the following opinions:

- 76.8% found that it matched their expectations;
- 21.1% regarded it as somewhat different from what they had expected;
- 2.2% saw it as totally different from what they had expected.

Asked to elaborate on 'somewhat different' or 'totally different', over 16% of the fellows indicated that some of the training was not highly specific, the software was different and it was more like on-the-job training. Around 13% thought the training lacked practical work, not enough guidance was offered and that training courses differed from the original descriptions.

Many responses suggested that the period of training be lengthened in order for fellows to have the opportunity to cover the whole curricula, or to work with all the equipment that was available.

86% of fellows reported that there had not been any changes to the original training programme; where changes had occurred (13%), they were due to unscheduled extensions, visits, unexpected work opportunities or changes to the content of the programme.

86.5% of the fellows stated that they had a focal person at the host institution to consult or to discuss the progress of their training.

Language challenges

Most fellows (88.4%) did not experience any language difficulties. Minor problems were overcome and then turned into a useful opportunity for language improvement.

The remaining percentage found themselves in some peculiar situations due to the fact that they were placed in host institutions where English was not often used. Some fellows found it difficult to understand the terminology and the discussions during the courses.

Others found it difficult to communicate with the people from the hospitals or outside the fellowship training centres. There were a few cases when the host institutes did not have documentation in English, which made it harder for fellows to conduct research.

Gender-related challenges

Hardly any of the fellows reported any gender-related issues; a number of the fellows took issue with the size of the groups.

Obtaining a visa

The great majority of fellows (91.3%) did not report any problems obtaining a visa. The difficulties for the other 8.7% were due to lengthy processes, or the need to go to another country because there was no embassy in their home country. Late receipt of a visa may also contribute to a fellow's concern.

Outcomes: Signs of long term changes

The IAEA seeks to increase, through its fellowship training, the capacity and opportunities for professionals to contribute to nuclear science and technology development in their home countries. To measure achievement, the IAEA needs to continue monitoring the status and activities of former fellows after they return to their home countries.

The results of the present survey show that 94.7% of the survey respondents returned to their home countries after completing their training. At the time of the survey, almost 90% of the fellows were still working in the same institution that endorsed their fellowship training.



The graphic below compares the areas of training versus the current job area. It can be observed that nearly all the fellows are working in the same area in which they were trained.

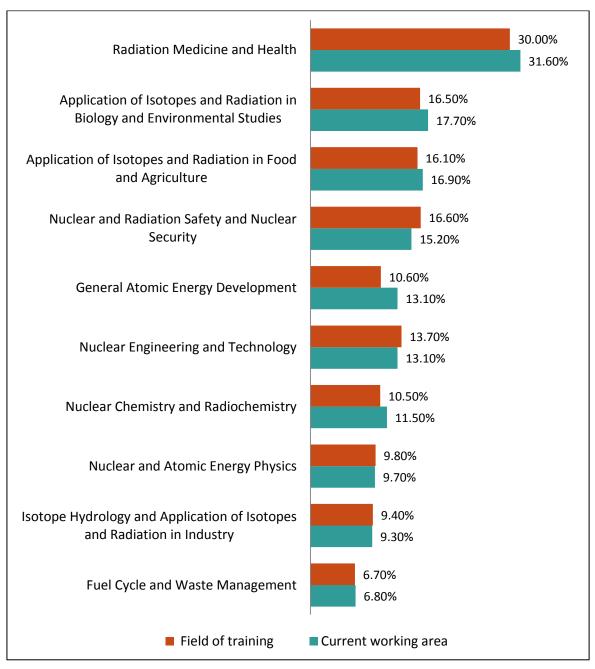


Figure 7: Field in which training was received, and current job field.

Department of Technical Cooperation, International Atomic Energy Agency P.O. Box 100, Vienna International Centre, 1400, Vienna, Austria

Email: official.mail@iaea.org

www.iaea.org/technicalcooperation

2014