

**AUSTRALIA NEW ZEALAND FOOD
AUTHORITY**

**EVALUATION OF APEC PILOT IN THE
TRAINING OF RISK ANALYSIS IN CONFORMITY
ASSESSMENT OF FOOD**

DRAFT REPORT

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1 EXECUTIVE SUMMARY

1.1 SUMMARY OF FINDINGS

In 1999, the Australia New Zealand Food Authority (ANZFA) undertook the development and delivery of the "Pilot in the Training of Risk Analysis in Conformity Assessment of Food". The program was funded by the Asia-Pacific Economic Cooperation (APEC), with the aim of further developing trade and investment between APEC countries. The course was provided to individuals from developing and developed APEC member economies. Two training courses were held, the first from 31st January 2000 to 18th February 2000, and the second from 6th March 2000 to 24th March 2000.

This report presents the findings of an evaluation of the course. The evaluation was undertaken by Health Outcomes International on behalf of ANZFA between November 2000 and February 2001. In conducting the evaluation, the views and opinions of a wide range of stakeholders were sought via personal interviews, telephone interviews and written questionnaires. The contribution of those participating in the review is gratefully acknowledged.

Course participants were selected from China, Chinese Taipei, Chinese Hong Kong, Indonesia, Papua New Guinea, the Philippines, Singapore, Thailand and Vietnam. The selection criteria used for the selection of participants are unclear to us, however it is apparent that those attending varied considerably in their seniority, experience and expectations of the course itself. Whilst there was a mixture of both men and women attending the course (14 men, 18 women) there does not appear to have been a deliberate policy of affirmative action in the selection of participants. Organisations were provided with some information about the content of the course, and employers were able to decide which employee/s to send. Employers indicated that the information provided was sufficient for them to select appropriate participants. However, clear criteria need to be developed and adhered to in order to maximise the benefits of the course to participants and their home economies. Participants also felt that they would like to have been sent some background reading materials prior to the course in order to help them to prepare for the course.

While it is apparent that the lead-time for the course was relatively short, and this presented some transitory problems for some of the course managers and presenters, the preparation undertaken appears to have been adequate, and no serious problems were encountered. The course managers consider that a slightly longer lead-time would have been preferable. Similarly, the two-week period between the courses was considered to be too short, and it is felt that a slightly longer interim period would have been appropriate. There is a need to ensure that any future courses have adequate time for their design and preparation, and to cater for the specific needs and interests of participants.

The course content focussed on risk analysis and its application, including such topics as HACCP, food hygiene, food processing and workplace training. The majority of the training was undertaken in a lecture format, though some site visits were also included. Representatives from Australia New Zealand Food Authority (ANZFA), Australian Quarantine Inspection Service (AQIS) and Therapeutic Goods Administration (TGA) conducted many of the sessions. In this regard, there was some confusion among presenters about the distribution of topics among organisations and individuals, although this did not present any major problems during the conduct of the course.

The participants were generally extremely satisfied with the course content, although many made suggestions about how the course could be made more relevant to them as individuals. However, there was little consistency in these comments, reflecting the individual interests and concerns of participants. It would be extremely difficult to adapt the content to cater for all such interests, and it appears that the current content caters for the common needs and interests of participants. However, any future courses might benefit from asking participants in advance if there are particular topics they would like to have covered, and to remain responsive to these interests. The one area in which participants provided

consistent feedback was in requesting that the course include more case studies, and practical exercises relating to the application of risk analysis principles. This could be facilitated by holding courses in less developed countries, where any case studies could be shown to have immediate relevance.

The course managers and course presenters feel that generally the course was both well managed and well received by the participants. The accommodation and meals provided were generally rated by the participants to be quite appropriate, although there was some dissatisfaction with the choice of meals at the beginning of course one, and the move to student accommodation in Melbourne city during week two of course one. Other aspects of the course management and delivery were also rated highly by participants, including:

- Most respondents to the participant survey agreed that the course was the right length;
- Nine of the ten respondents to the participant survey agreed that the course met their needs, or mostly met their needs;
- The majority of participant survey respondents agreed that the course helped them in the key course areas;
- The presentation of the course in English was considered to be somewhat of a problem by only one of the ten participant survey respondents, and the frequency of comments regarding difficulties in understanding presenters diminished as the courses continued;
- Participation of others from both participants' own economies and from other economies was generally seen as having been quite beneficial;
- There was considerable variation among the participants' perceived ideal length of each session, and this probably relates to participants' individual interests in various topics; and
- The vast majority of participants had found the presentations varied and the sessions well planned.

The use of both sessional and weekly monitoring forms as a means of monitoring course progress and participant satisfaction is strongly encouraged, and should be used to make changes as required.

While it is apparent that course managers have attempted to maintain contact and mentoring to course participants, these have been unsuccessful in many cases. The course appears to have had a mixed impact on the participants' working lives, as demonstrated by the participant survey. For example, only one respondent indicated that their work responsibilities have changed as a result of the course, but the majority of participants indicated that they have used the knowledge and skills they gained "mostly" or "a lot". Eight participants were able to identify factors such as lack of domestic resources, which have impacted on their ability to apply their new skills and knowledge, and working on the course projects was not identified to be of significant benefit. In ranking the course topics in terms of usefulness to their work, all topics were rated as being "mostly" or "a lot" useful by the majority of respondents. Most respondents were able to identify ways in which the course had helped them to train others, although only three indicated that they have trained more people since the course. The attendance of others from participants' and other economies was considered to have been beneficial. Employers indicated that they considered that their employee had benefited from attending the course, and were able to cite specific examples of the benefits achieved. All indicated that they would consider sending another participant to the course if it was run again.

ANZFA's funding submission to APEC identified a number of specific objectives for the project. These are presented below, together with an assessment of the extent to which each objective has been met, based on a synthesis of the views of a range of informants to the review.

- Respond to a need identified by APEC member economies in the region to provide training in risk analysis - in particular to trainers of enforcement officers who are in a position to instruct

personnel responsible for conformity assessment to ensure compliance of products, processes and premises.

The project is considered to have largely met this objective. The course content was consistent with the required subject matter, and was presented by recognised experts in a manner that promoted interest in and increased knowledge of relevant topics. However, the course could be improved through greater use of case studies and examples applicable to developing economies, rather than more advanced economies. At the same time, the criteria used for the selection of participants need to be more clearly defined to ensure that those attending are those most likely to benefit from and apply that knowledge when they return to normal duties.

- Increase awareness and competence in the application of risk analysis principles in food control systems.

The project provided participants with an extensive program on the principles of risk analysis and their application in developed countries. Again, however, the content of the course could be further improved by providing examples of specific relevance to the economies of participants and the environment in which they will be working when they return to normal duties. At the same time, it is acknowledged that the course provided an important theoretical and practical framework for the application of the principles presented to participants, though the application of those principles could be further explained and examined in a localised context. Employers have indicated that participants have benefited from their participation in the course, and that their level of knowledge and understanding of risk analysis principles in food control systems has been enhanced.

- Promote and facilitate increased trade in safe food.

It is not possible to assess the extent to which this objective has been met by the project at this time, due to:

- the relatively short time since the project was undertaken;
- the inability to attribute any causal relationship between participation in the course and changes of this type that may have occurred; and
- the potential for a wide range of other factors to affect this outcome, masking the effect (if any) of the course itself.

Within these limitations, however, it is reasonable to expect that the increased knowledge gained by participants and the contacts made with participants from other economies will contribute to the establishment of an environment where food safety will be enhanced, thereby promoting opportunities for increased trade in safe foods. However, it is likely to be some time before these benefits may be realised.

The expected outputs of the project were:

- Increased training skills in senior enforcement or policy officers, thereby providing efficient and effective training to enforcement officers in the field.

The project has provided a range of participants from different economies with new skills and knowledge. However, there is inconclusive evidence to demonstrate whether this knowledge has been applied to any great extent on their return to normal duties, or the extent to which enforcement officers in their home economies have been trained by course participants. A small sample of employers indicated positive outcomes from the participants' attendance at the course, and an expectation that these benefits will continue to accrue.

- A more informed approach to inspection techniques and assessment of the safety and quality of food products.

Participants were exposed to a wide range of principles and methods of food safety and quality assessment, and have indicated that this information was very valuable. Again, however, it

could be further improved by the use of case studies and examples of immediate relevance to their home environment.

- An exchange of information and skills among participants in the programs, leading to increased understanding of different APEC member economies' approaches to and priorities for food regulation.

Participants identified the interaction with members of other economies to be of particular interest and benefit, and highlighted this aspect of the course as being very useful.

- More efficient and effective systems which support an efficient flow of products and facilitate trade.

This outcome can only be assessed over a longer time period, and within the context of a number of factors that may contribute to or influence this outcome. However, participants have been provided with information and methods that support such an outcome, given the right circumstances in their home economies.

- Development of the technical infrastructure required to:
 - Underpin the certification of food products;
 - Identify problem areas in food production systems;
 - Address these problem areas, improve safety and quality, contributing to more effective methods of ensuring trade in safe food.

The project has provided participants with a sound conceptual and practical framework in each of these areas, and by so doing, is expected to assist in the development of a supportive infrastructure. The achievement of this outcome, however, requires both opportunity and commitment upon their return to their home economy for them to be able to apply the knowledge they have gained.

In summary, we have concluded from the review that, where measurable, the project has been largely successful in meeting the objectives set for it, but there are areas in which improvements can be made. These are addressed in the following recommendations.

1.2 SUMMARY OF RECOMMENDATIONS

- Recommendation 1: That strict criteria for the eligibility of participants be developed and adhered to as part of the selection process, to ensure that those attending are persons most likely to benefit.
- Recommendation 2: That sufficient time be given prior to the course to enable the content and coordination of topics to be presented in the course to be properly planned, including the specific topic areas to be covered by each presenter.
- Recommendation 3: That course presenters be provided with a profile of participants, including their current level of subject matter knowledge, expectations of the course, specific areas of interest, and fluency in English as part of the course planning process.
- Recommendation 4: That relevant course materials (including details of timetable, content and format) be provided to participants prior to their attendance at the course. This is particularly important where the course is to be presented in a language other than their first language.
- Recommendation 5: That course presenters adopt a flexible approach to their presentations, and be prepared to adapt or modify their content as required during the course, in order to maximise participants' understanding and knowledge.

- Recommendation 6: That the course content be adapted, where required, to suit the specific interest and needs of participants, as indicated by participants' application forms.
- Recommendation 7: That a greater emphasis be placed in the course content on scientific risk assessment, with more use of case studies and practical examples. The studies used should relate to products produced by the countries represented by participants to maximise their relevance and application.
- Recommendation 8: That, where practical, study materials be provided to participants as early as practical prior to sessions to enable participants' to familiarise themselves with particular topics prior to their presentation.
- Recommendation 9: That course managers pay particular attention to the dietary and accommodation requirements of participants, as well as the facilities in which training is to be provided. Attention also to be given to the application of adult training methods suited to the cultural background of participants.
- Recommendation 10: That both sessional and weekly evaluation forms be used to monitor participants' views about course content, delivery and administration, including amenities, with appropriate changes made in response to their comments.
- Recommendation 11: That, when the course is delivered in a language other than participants' first language, presenters be careful to present their topics at a pace and using language appropriate to their audience's needs.
- Recommendation 12: That prior notice be given of the requirement for follow-up work after the course, and that the nature and content of that follow-up work be designed in consultation with the participants' employers at the outset to ensure adequate and appropriate resources for the follow-up work to be done.
- Recommendation 13: That follow-up of participants and their employers be undertaken as an integral part of program evaluation to inform future course design.
- Recommendation 14: That the practice of having participants from a range of countries attending the course be continued and encouraged.
- Recommendation 15: That consideration be given to holding future courses in less developed countries to facilitate development of case studies and examples of immediate relevance to participants.

2 INTRODUCTION

2.1 BACKGROUND

The first stage in the development of the Pilot in the Training of Risk Analysis in Conformity Assessment of Foods (the training course) emerged when the Australia New Zealand Food Authority (ANZFA) obtained funds from AUSAID to travel to a number of Asian/Pacific countries in order to obtain information relating to local needs in the area of food safety. The ANZFA delegation travelled to countries in the Asia Pacific region including the Philippines, Indonesia, Papua New Guinea and Thailand. The two key areas of need identified as a result of this were:

1. The need for developing countries to implement Risk Analysis principles in order to participate in World Trade Organisation agreements; and
2. The potential for Risk Analysis principles to be developed and then utilised for a wider range of objectives.

This knowledge led to ANZFA sponsoring the development and delivery of a pilot training program relating to various aspects of risk analysis associated with food safety. The program was funded by the Asia-Pacific Economic Cooperation (APEC), with the aim of further developing trade and investment between APEC countries. The course was to be provided to individuals from developing and developed APEC member economies.

Two training courses were held at the Chisholm Institute in Melbourne, the first from 31st January 2000 to 18th February 2000, and the second from 6th March 2000 to 24th March 2000.

Part of the APEC requirements for funding of the project was that the training be evaluated, and in November 2000, this task was awarded to Health Outcomes International (HOI).

2.2 METHODOLOGY

The methodology utilised to complete the evaluation comprised a series of discrete stages, being:

STAGE 1 - PROJECT INITIATION.

During this stage, relevant personnel at ANZFA were contacted, the project methodology finalised, and relevant documentation accessed.

STAGE 2 - DOCUMENT REVIEW AND ANALYSIS

Documentation including original ANZFA funding submissions to APEC, the Chisholm Institute's submission, participant application forms, weekly evaluation forms, session evaluation forms and various other documents were reviewed with the aim of informing the development of the participant and employer surveys, as well as interview formats for use during the following stages.

The weekly evaluation forms, which had been completed during the courses, were available for all three weeks of course one, and for the first two weeks of course two. Some minor changes had been made to the format of the evaluation form for the second week of course two, and no forms were available for the third week of course two. Session evaluation forms were available in relation to eight of the course one sessions, but no session evaluation forms were available for course two.

The documentation was reviewed and, where applicable, data from the evaluation forms entered onto a database for later analysis.

STAGE 3 - STAKEHOLDER SURVEY AND DEVELOPMENT OF TOOLS

During this stage, the participant survey was developed in conjunction with an educator with specialist experience in teaching students from Asian countries. The survey comprised four sections: Participant Demographics; Before the Course; During the Course; and Since Completing the Course. A copy of the form is provided in Appendix E of this report. A brief survey was also developed to collect information from the participants' employers, including:

- The process by which participants were selected to attend the course;
- Employers' perception of the benefits of the course; and
- Whether they would send another employee to the course, and whether any changes should be made to the course.

A copy of the employer survey is provided in Appendix F.

STAGE 4 - CONDUCT STAKEHOLDER CONSULTATIONS

A series of interviews were conducted with representatives from the Chisholm Institute, ANZFA, the Australian Quarantine Inspection Service (AQIS) and Therapeutic Goods Administration (TGA) who had been responsible for the development, management and presentation of various topics of the course. These interviews were conducted either in person or by telephone. A list of those participating is provided below.

The participant survey was lodged on the internet, and e-mails sent to all participants with email/internet access. Other participants were faxed a copy of the survey.

Ten participant survey responses were received from respondents with the following demography:

- Six females and four males;
- Five aged 30-39, three aged 40-49 and two aged 50 or over; and
- Six participants from course one, and four from course two.

After a three-week period, participants were sent another fax thanking them for their attention to the survey (which also acted as a reminder for those who had not yet forwarded the information), and requesting contact details for their employer, to enable us to contact them for further information.

The participants' employer survey was faxed at this time, with a request that it be returned as quickly as possible. The response level to this survey was relatively low, possibly due to reasons including staff turnover, difficulties with English and the length of time elapsed since the course. Four responses were received, and have been incorporated in the report. However, caution should be exercised about the representativeness of this relatively small sample.

STAGE 5 - ANALYSE DATA AND DRAFT REPORT

The survey responses provided on the internet were accessed after the due date had elapsed, and these were analysed together with the responses returned by fax. The responses to weekly and session evaluation forms which had been provided to the team during Stage 2 of the project were also analysed in conjunction with the more recent responses.

The employer survey responses that had been received were taken into account, and analysed together with other information informing the project team about the impact of the course.

STAGE 6 - DEVELOPMENT AND SUBMISSION OF FINAL REPORT

The information collected and analysed during the previous stages was compiled into a draft report, which was circulated for comment from relevant stakeholders. Following the incorporation of relevant comments, a final report was produced.

2.3 ACKNOWLEDGMENTS

We would like to thank the following individuals for their contributions to the evaluation:

- Scott Crerar, ANZFA
- Liz Dean, ANZFA
- Patricia Fox, ANZFA
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- Simon Brooke Taylor, ANZFA
- Richard Souness, ANZFA
- Bev Jeffreys, Chisholm Institute
- Noel Wilkins, Chisholm Institute
- Peter Maple, AQIS
- Slava Zeman, AQIS
- Les Davies, TGA
- Jack Dempsey, TGA
- The participants of course one and course two who responded to our contacts
- The employers who responded to our survey.

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3 BACKGROUND TO THE TRAINING COURSE

3.1 OBJECTIVES

The training course was developed by the Australia New Zealand Food Authority (ANZFA), and was designed to cover domestic, import and export controls, and the application of risk analysis principles, through the use of lectures, tutorials and on-site visits. As specified by ANZFA's funding submission to APEC, the objectives of the project were:

- Respond to a need identified by APEC member economies in the region to provide training in risk analysis - in particular to trainers of enforcement officers who are in a position to instruct personnel responsible for conformity assessment to ensure compliance of products, processes and premises;
- Increase awareness and competence in the application of risk analysis principles in food control systems; and
- Promote and facilitate increased trade in safe food.

The expected outputs of the project were:

- Increased training skills in senior enforcement or policy officers, thereby providing efficient and effective training to enforcement officers in the field;
- A more informed approach to inspection techniques and assessment of the safety and quality of food products;
- An exchange of information and skills among participants in the programs, leading to increased understanding of different APEC member economies' approaches to and priorities for food regulation;
- More efficient and effective systems which support an efficient flow of products and facilitate trade;
- Development of the technical infrastructure required to:
 - Underpin the certification of food products;
 - Identify problem areas in food production systems;
 - Address these problem areas, improve safety and quality, contributing to more effective methods of ensuring trade in safe food.

3.2 TIMETABLE AND VENUE

Following a tendering process, the Chisholm Institute in Melbourne was engaged to conduct the training courses. The Institute, which provides a range of education and training programs to the food industry, provided training, accommodation and meals to the participants. Accommodation was provided in the Edmund Barton Centre, and participants shared executive rooms with private bathrooms. Two courses were run at Chisholm, the first from 31st January 2000 to 18th February 2000, and the second from 6th March 2000 to 24th March 2000.

3.3 COURSE CONTENT

The major content of the course consisted of:

- Introduction to International, Australian and New Zealand Agrifood Regulatory Framework;
- Food Hygiene and Sanitation;
- Principles of Food Processing;
- HACCP;
- Workplace Training Instruction;
- Presentations by Australia New Zealand Food Authority (ANZFA), Australian Quarantine Inspection Service (AQIS), Therapeutic Goods Administration (TGA), Food safety Victoria, Local government, and the Bureau of Resource Science;
- Site Visits; and
- Group Project Work.

The detailed course schedule is presented in detail in Appendix A.

3.4 PROFILE OF PARTICIPANTS

As identified in the original ANZFA project brief, there were to be 14 participants in each of the two (identical) courses, and participants were to be from countries with the greatest potential to benefit from the implementation of food safety procedures. The first course was intended to include five participants from Indonesia, five from the Republic of the Philippines, and four from Thailand, though in actuality there were six from Indonesia, five from the Philippines and four from Thailand. The second course was intended to cater for five from the People's Republic of China, five from Vietnam and four from Papua New Guinea. In fact, six attended from Vietnam, five from China, two from Papua New Guinea, one from Chinese Hong Kong, two from Chinese Taipei and one from Singapore. This grouping of countries was done deliberately, and designed to align countries more likely to participate in trade. A total of 14 men and 18 women attended the courses, although gender representation varied considerably between countries.

Some of the participants were fully sponsored, in that their flights and accommodation were paid for as well as their attendance at the course. Other participants had their attendance paid for, but their employer organisations were responsible for paying for travel and accommodation.

4 ACTIVITIES LEADING UP TO THE COURSE

4.1 COURSE DEVELOPMENT

The APEC Support Program provides financial support to Australian government departments or statutory bodies that support the participation of developing economies in the Asia Pacific Economic Cooperation (APEC).

An application for APEC funding under this program for the conduct of the courses was developed by the Committee on Trade and Investment/Sub-Committee on Standards and Conformance during 1998. The Australia New Zealand Food Authority (ANZFA) acted as the project overseer. The project was seen as being relevant to the APEC objectives, because it had the potential to increase trade between APEC member economies. The purpose of the project, as listed in the initial application, was:

- To provide training for the trainers of officers conducting inspections within food control systems in the application of principles of risk analysis:
 - In conformity assessment;
 - In day to day operations in relation to domestic and international trade in food;
 - In facilitating the transfer of food products; and
 - In deployment of resources in order to achieve the greatest level of effectiveness in protecting public health and safety.

The objectives of the project, as listed in the application, were:

- To respond to a need identified by member economies in the region to provide training in risk analysis- in particular to trainers of "enforcement officers".
- To provide training to experienced personnel in regulatory systems who are in a position to train personnel responsible for conformity assessment to ensure compliance of products, processes and premises and to increase awareness and competence in the application of risk analysis principles.
- The discipline of "risk analysis" underpins the requirements of the WTO Agreements on Technical Barriers to Trade and on the Application of Sanitary and Phytosanitary measures and increasing expertise in the application of risk analysis in food control measures will assist in the implementation of these Agreements and contribute to the facilitation of trade in food.

ANZFA tendered for organisations to facilitate the training in October 1999, once APEC funding had been secured. The tender was awarded in mid-November 1999 to the Chisholm Institute in Melbourne, which delivers training in Food Technology and Food Processing, and is the Curriculum Maintenance Manager for the Food Industry.

4.2 SELECTION OF PARTICIPANTS

During November and December 1999, ANZFA sent documentation calling for participants to relevant organisations in the selected countries. We have not been able to identify the selection criteria used to nominate participants for the course. However, it is evident from the seniority, interests and experience of participants that the resultant group of participants varied considerably in their characteristics, knowledge and expectations of the course.

A survey of employers conducted as part of this review yielded four responses, a relatively small sample, and while it is difficult to draw conclusions because of the low number of responses, the information is useful anecdotally. Three of the responding employers were involved in the selection of a participant to attend the course, and the remaining employer, while not involved in the process, knew how the participant selection was undertaken. A variety of explanations were given as to how participants were selected, with relevant involvement in the food industry indicated by three, seniority indicated by two, and involvement in training also indicated by two. All four respondents indicated that they were provided with sufficient information to help them decide whom to send to the course, with none denoting that they would have liked to have received additional information.

From the information provided, there does not appear to have been a deliberate policy of affirmative action in the selection of women to attend the course. In fact, 14 men and 18 women participated in the two courses, but this appears to have been more coincidental than the result of particular choice. Gender representation varied considerably between countries. The technical nature of the course is such that gender may not be relevant to the selection of participants, nor to the design of the course itself.

The registration forms collected a range of information regarding participants' current work responsibilities, food sectors of interest, and areas in which participants hoped to gain skills and knowledge. Consideration was also given to cultural sensitivities, and the registration form requested information about the participants' dietary, religious and physical requirements. Responses were received during December 1999 and January 2000.

The responses received indicated that the priority area of interest for participants was processed foods, followed by meat, then dairy, with grains and market gardening the areas of least interest. The participants' work responsibilities largely centred on the implementation and enforcement of standards, in some cases relating to specific industries such as meat or processed foods.

The view was expressed by some of the course managers and sponsors that some of the attending participants may not have been the most appropriate individuals to have attended, and that some countries may have selected personnel who were too senior to benefit fully from the information provided at the course.

Recommendation 1: That strict criteria for the eligibility of participants be developed and adhered to as part of the selection process, to ensure that those attending are persons most likely to benefit.

4.3 COURSE PRESENTERS' PERSPECTIVES

4.3.1 PREPARATION TIME GIVEN

Of the ANZFA, AQIS and TGA staff members who presented at the course, some indicated that they would have liked a longer lead-time to prepare their presentations. However, others noted that they are often called upon to give similar presentations and had most of the necessary materials to hand. It was also suggested that adequate notice might have been provided to senior staff at ANZFA, but that some presenters were not informed until close to the time of the course. This problem may have been exacerbated by the fact that some of the coordinating individuals consider the skills and knowledge of the trainers to be so good that they would have needed minimal time to prepare, though the presenters may have in fact preferred a longer preparation time.

4.3.2 LEVEL OF INFORMATION PROVIDED

The presenters' responses indicated some discrepancy about the amount of information they were provided in regard to participants' knowledge, background, interests and expectations. Most stated that they were provided with some verbal information relating to the participants' home countries, their level of English and their background in the food safety area. One individual stated that a significant amount of information was provided, but others consider that they should have been provided with more information relating to the aims and objectives of the course, the participants' level of English and their employment backgrounds. One individual commented that it was left up to the presenters to gauge the level at which they should "pitch" their presentations, but that this was not a problem considering the level of experience of most of the presenters.

4.3.3 COORDINATION OF TOPICS

Several presenters commented on the lack of information provided on what the scope of their sessions was meant to cover, and how it related to other topics presented. In several instances, they felt that there was some overlap with other presenters' topics, and that the boundaries were not clearly defined. In most instances, these issues were resolved through informal discussions with other presenters, but this was more fortuitous because of their proximity, rather than planned.

Recommendation 2: That sufficient time be given prior to the course to enable the content and coordination of topics to be presented in the course to be properly planned, including the specific topic areas to be covered by each presenter.

Recommendation 3: That course presenters be provided with a profile of participants, including their current level of subject matter knowledge, expectations of the course, specific areas of interest, and fluency in English as part of the course planning process.

4.4 COURSE MANAGERS' PERSPECTIVES

From the course managers' perspective, the brief time period between notification of successful tenderer and course commencement was not ideal, but they recognise that it was necessary considering the time constraints on the project. It is felt that a lead-time of eight to twelve weeks would be more appropriate, particularly for implementation of a pilot project. The areas in which it is felt that more time would have been of most benefit include the organisation of site visits, which was hampered by occupational health and safety concerns and confidentiality issues.

It is felt that the project brief provided was adequate in terms of outlining the expectations of both ANZFA and APEC, and in providing details about the nature of the project. It is felt that the positive relationship existing between ANZFA and the project managers in the lead-up to the course was also beneficial to the course's development.

They also consider that the two-week period between the courses was too short, and that a longer period in which to reflect and potentially make more changes to the course structure and content would have been useful. The course managers suggest that, in retrospect, it would have been useful to be able to provide trainers with more information about the participants, their level of English, and their level of skill/knowledge in regard to food safety and risk analysis. While course managers were appreciative of the information they received about the participants, they feel that there may be a need in the future to provide more information, for example regarding participants' level of English and expectations of the meals and accommodation provided.

4.5 PARTICIPANTS' PERSPECTIVES

The participant survey distributed as part of this evaluation collected information about the participants' experiences prior to the course commencing. Responses were received from ten of the participants, which provide an understanding of the process from the participants' point of view.

In response to questions about how they learned about the training course, four of the participants recalled that they heard about the course from various APEC contacts, and four stated that they received communication from ANZFA. Participants were also asked for their perspectives on why they were chosen to attend the course. In response, six stated that they considered that they had the appropriate knowledge, skills or training; three stated that they were in senior positions; and three stated that they would be able to train others after the course (some respondents identified more than one reason).

While all participants identified that they had received some information prior to the course, four individuals identified that they would have liked to receive some background information on risk analysis or related topics, three would have liked to receive more detailed information about the course schedule and one would have liked more travel information.

Recommendation 4: That relevant course materials (including details of timetable, content and format) be provided to participants prior to their attendance at the course. This is particularly important where the course is to be presented in a language other than their first language.

Deleted: The survey sent to participants' employers also requested information about the process by which participants were selected to attend the course. However, the low response rate to this survey does not enable a proper analysis of this process to be presented from the employers' point of view.

4.6 SUMMARY

The overall purpose of the course, and other similar objectives funded by APEC, is to facilitate trade between developing countries. The submission developed by ANZFA for the Pilot in the Training of Risk Analysis in Conformity Assessment of Foods demonstrates that the course was intended to provide training in risk analysis for officers responsible for food safety in developing countries.

Course participants were called for from China, Chinese Taipei, Chinese Hong Kong, Indonesia, Papua New Guinea, the Philippines, Singapore, Thailand and Vietnam. It appears that some of the participants may not have been the most appropriate individuals to attend, perhaps with some being too senior and already having knowledge of much of the course content. Organisations were provided with some information about the content of the course, and employers were able to decide which employee/s to send. Employers indicated that the information provided was sufficient for them to select appropriate participants. Participants felt that they would like to have been sent some background reading materials, in order to help them to prepare for the course.

While it is apparent that the lead-time for the course was fairly brief, and this presented some transitory problem for some of the course managers and presenters, the preparation undertaken appears to have been adequate, and no serious problems were encountered. The course managers consider that a slightly longer lead-time would have been preferable. Similarly, the two-week period between the courses was considered to be too short, and it is felt that a slightly longer interim period would have been more appropriate.

5 COURSE CONTENT

5.1 DESCRIPTION OF COURSE CONTENT

The content of the course consisted of the following major topics:

- Introduction to International, Australian and New Zealand Agrifood Regulatory Framework;
- Food Hygiene and Sanitation;
- Principles of Food Processing;
- HACCP;
- Workplace Training Instruction;
- Presentations by Australia New Zealand Food Authority (ANZFA), Australian Quarantine Inspection Service (AQIS), Therapeutic Goods Administration (TGA), Food safety Victoria, Local government, and the Bureau of Resource Science;
- Site Visits; and
- Group Project Work.

A detailed outline of the course content is presented in Appendix A.

5.2 COURSE PRESENTERS' PERSPECTIVES

The majority of the course content was presented by representatives from the Australia New Zealand Food Authority (ANZFA), Australian Quarantine Inspection Service (AQIS) and Therapeutic Goods Administration (TGA), with other presentations by organisations including the Bureau of Resource Science and Food Safety Victoria.

Some of the presenters commented that there was a need for a more coordinated approach to the distribution of topics among the various agencies and presenters. Some individuals recall that there was some confusion prior to the commencement of the first course as to which agencies and individuals were responsible for presenting on each area. However, all presenters concede that any such problems related only to the planning stage, and that the actual presentation of the course content was appropriate and effective.

A few individuals noted that the conduct of the two courses meant that they were able to adapt their presentations for the second course, and found this to be more effective. The changes mentioned included the use of a more interactive approach and more consideration of the language barrier (speaking more slowly and asking more questions). The participants' interest in being provided with more case studies, and opportunities to undertake practical exercises was appreciated by the presenters. However, the problems associated with the differences between conditions in Australia and in developing Asian countries are seen to cause problems in the provision of too many Australian examples.

Recommendation 5: That course presenters adopt a flexible approach to their presentations, and be prepared to adapt or modify their content as required during the course, in order to maximise participants' understanding and knowledge.

5.3 COURSE MANAGERS' PERSPECTIVES

The course managers played a minimal role in the determination of the content of the course, though they were responsible for the organisation of site visits. Most parties consider that it may have been beneficial if the course managers, course sponsors and course presenters had spent more time conferring on the content of the course, the way it was to be divided amongst presenters, and the notification of presenters.

5.4 PARTICIPANTS' PERSPECTIVES

Information on the participants' perspectives on the content of the course was collected through the session evaluation forms, weekly evaluation forms distributed during the course, and the participant survey developed by Health Outcomes International and distributed during the evaluation process. The responses generally indicate a high degree of satisfaction with the course, though some participants provided suggestions as to ways in which the course could be improved. As with other aspects of this evaluation, the possibility that some participants may have misread the questions, or have written an answer that does not properly translate their thoughts must be considered when interpreting the responses.

5.4.1 PARTICIPANT SURVEY

As part of the participant survey distributed during the evaluation process, participants were asked whether the content of the course was what they had expected prior to commencing the course. Two respondents replied "yes", three responded "mostly" and five replied "somewhat". Those who replied "somewhat" also provided the following explanations:

"I would like to know more about your experiences and difficulties in implementation of risk analysis into your system."

"Not enough, not intensive enough in risk analysis itself."

"It would be more beneficial if the period of risk analysis can cover more exercises for participants to get accustomed to the process of conducting risk analysis and sharing experiences between lecturers and participants on conducting RA [Risk Analysis]."

This interest in being provided with more information about the practical application of risk analysis principles was reinforced by answers to other questions in the participant survey, and also answers provided in the weekly and session evaluation forms.

Where participants were asked whether the structure of the course helped their understanding of the subject, six stated "yes", three stated "mostly" and one replied "somewhat". Four respondents offered suggestions as to ways in which the structure of the course could be changed, being:

"It would be better if we also visited government institutions at the 3rd week as field studies, including visited laboratory."

"Time allocation and content of each topics are not suitable. Some important topics don't have enough time to go into detail."

"Additional workshop on practical applications of risk analysis should have been included for better understanding of the application of risk analysis. This can be achieved through case studies or problem situations where the participants have to evaluate and formulate solutions."

"The period of GMP and HACCP should be shortened as most participants have background on this topic."

Again, participants' interest in a greater focus on the practical application of risk analysis through the conduct of activities such as case studies is apparent from the responses.

Participants were also asked whether they had identified any other topics that should be included in the course, since the time they completed it. Four respondents provided suggestions, as follows:

"Conducting of import risk analysis."

"1. History of risk analysis; 2. Codex and risk analysis; and 3. Give more practical application examples."

"Implementation of Risk Analysis and Case study for experience exchange."

"Model programs to assess risks like the USDA pathogen modelling program to assess the likelihood of growth of pathogens in foods."

5.4.2 WEEKLY EVALUATION FORMS

The following table indicates participants' responses where they were asked whether the training course was meeting their needs, as part of the weekly evaluation forms. The vast majority of respondents indicated that the training course was meeting their needs. Because of the anonymous nature of the evaluation questionnaires, it is not possible to determine whether the same individual answered "partly" on three occasions.

Table 1 - Responses to the question "Is the Training Program meeting your needs"

	Course 1 Wk 1	Course 1 Wk 2	Course 1 Wk 3	Course 2 Wk 1	Course 2 Wk 2
Yes	12	14	13	14	15
Partly	1	1	1		
No response	2		1	1	

It is interesting to note that while the majority of individuals stated that the course was meeting their needs, in the comments section following, many respondents provided some constructive criticism. The majority of these comments expressed, for example, a desire to spend more time on particular topics, or to undertake more case studies. Examples of these comments include:

"The assumption on knowledge of trainers is varied, sometime you thought we have basic knowledge, sometimes you don't, so information that you transferred may fluctuate."

"Risk analysis is chemical and microbiological doesn't have enough time for case study and do exercise."

"Any changes in the schedule/program should be notified in advance."

It is also interesting to note that the frequency of such comments decreased during course one (seven during week one, five during week two and three during week three). None of the course two participants gave any negative or critical comments in response to this question.

The question "Have you any suggestions for improvements or additions to the program at this stage" received many responses from course one participants (12 during weeks one and two, and eight during week three) and slightly less from course two (11 during week one and 3 during week two). There was wide variation in the range of these responses. The table below indicates the nature of these responses.

Table 2 - Responses to "Any suggestions for improvements or additions to the program at this stage"

	Course management	Training structure (case studies; photocopies etc)	Course content
Course 1 Wk 1	1	6	3
Course 1 Wk 2	1	3	9
Course 1 Wk 3	1	1	6
Course 2 Wk 1		6	5
Course 2 Wk 2		1	2

Responses relating to course management referred to speakers speaking too quickly; a request for sporting activities to be arranged; and the training room arrangements. Those relating to training structure were primarily concerned with requests for more case studies or site visits to be included in the course (nine comments), or for photocopied material to be distributed prior to lessons (four comments).

Responses relating to course content were extremely varied, and these have been reproduced in Appendix B. While a few consistent themes emerged, the details were generally too inconsistent to allow for recommendations to be drawn. Roughly grouped, the key areas around which suggestions were made related to:

- A need for more case studies to be done or examples to be provided (seven comments);
- Suggestions for changes to be made to the order in which topics were presented (six comments);
- Suggestions for changes to be made to the length of sessions (five comments); and
- Suggestions for additional subjectmatter to be included in the course (four comments).

Participants were also asked which sessions had been of most value and of least value to them, and why. The responses regarding most valuable sessions were, interestingly, quite congruent amongst the first course, but to a lesser degree amongst course two. This may be coincidental, or may be because, for example, course one participants consulted each other in the completion of evaluation forms. The following table indicates sessions of most value (some participants noted more than one session):

Table 3 - Responses to the question "Which session has been of most value to you?"

	All sessions	ANZFA	HACCP	TGA	AQIS	Blank	Other
Course 1 Wk 1	4	4	6				
Course 1 Wk 2	3	10		9			2
Course 1 Wk 3	2				7	3	3
Course 2 Wk 1	2						13
Course 2 Wk 2		8			6		8

Fewer participants identified particular sessions as being of least value, and contributing factors for this may include a lack of willingness to suggest that any component was not of value, or that all sessions were genuinely perceived as being of great value. Those sessions that were identified as being of least value include CSIRO presentation (three comments), local government Environmental Health Officer presentation, Food Safety Victoria presentation, site visit, program orientation, food processing, workplace training and navigating the internet (one comment each). Two of those participants who

nominated the CSIRO presentation as being of least value indicated that this was because "He just talk about the services of their centre" and "It was just like an organisation promotion to us".

Where participants were asked about the relevance of the sessions, the majority of participants indicated that the sessions were relevant to the program. For week one of course two however, ten participants did not provide a response, while five indicated that the sessions were relevant. The following table indicates the responses to this question.

Table 4 - Responses to the question "Have the sessions been relevant to the program?"

	Yes	Partly	Blank
Course 1 Wk 1	12	3	
Course 1 Wk 2	14		1
Course 1 Wk 3	10		5
Course 2 Wk 1	5		10
Course 2 Wk 2	12		4

When asked which activities they had enjoyed the most, there appears to have been some confusion among participants as to the distinction between this question and the question "Which session has been of most value to you?" While some participants nominated activities such as social events, case studies and site visits, the majority named a variety of the training sessions, and many left the question blank.

5.4.3 SESSION EVALUATION FORMS

The session evaluation forms were provided to course one participants after each of eight individual's presentations, and a copy of this form is presented in Appendix C. The forms collected information related to program content, the trainer/facilitator, the learning resources provided, and whether the participants would recommend the course to others. Participants were able to indicate how strongly they agreed or disagreed with each of the statements by marking a number from 1 (strongly disagree) to 4 (strongly agree). All statements were worded positively in order to minimise confusion for the participants, most of whom speak English as a second language. The following tables indicate the average responses (out of a possible 4) for each trainer, in each of the areas for which information was collected. These averages have then been totalled to indicate participant satisfaction with each trainer in each area.

Table 5 - Feedback related to program content

Trainer	Met stated outcomes	Met my needs	Understand content	Sufficient information	Total ^(a)
Les Davies	3.4	3.3	3.3	3.4	13.43
Janis Baines	3.5	3.3	3.5	3.2	13.6
Rusty Bransford	3.6	3.6	3.9	3.7	14.9
Tania Martin	3.7	3.6	3.5	3.5	14.3
Slava Zeman	3.7	3.8	3.7	3.8	15
Scott Crerar	3.5	3.5	3.5	3.3	13.8
Peter Maple	3.9	3.9	3.9	3.8	15.5
Jack Dempsey	3.1	3.3	3.3	3.2	12.9

(a) Out of a maximum possible of 16

Table 6 - Feedback related to the trainer/facilitator performance

Trainer	Answer questions	Topic knowledge	Examples & activities	Prepared & organised	Spoke clearly	Total ^(a)
Les Davies	3.5	3.7	3.4	3.7	3.7	17.9
Janis Baines	3.5	3.7	3.3	3.6	3.5	17.6
Rusty Bransford	3.8	3.9	3.6	3.9	3.9	19.2
Tania Martin	3.3	3.7	3.5	3.8	3.7	18.0
Slava Zeman	3.6	3.7	3.3	3.7	3.8	18.1
Scott Crerar	3.5	3.7	3.5	3.5	3.6	17.8
Peter Maple	3.9	3.9	3.9	3.9	3.9	19.5
Jack Dempsey	3.4	3.5	3.1	3.3	3.3	16.5

(a) Out of a maximum possible of 20

Table 7 - Feedback related to learning resources/whether would recommend

Trainer	Professionally presented	Will use for reference	Improved the session	Will recommend session	Total ^(a)
Les Davies	3.6	3.5	3.4	3.7	14.2
Janis Baines	3.5	3.6	3.4	3.7	14.2
Rusty Bransford	4.0	3.9	3.8	4.0	15.6
Tania Martin	3.8	3.8	3.2	3.7	14.5
Slava Zeman	3.7	3.8	3.6	3.8	15.0
Scott Crerar	3.6	3.8	3.5	3.7	14.6
Peter Maple	3.9	4.0	3.9	4.0	15.8
Jack Dempsey	3.3	3.5	3.2	3.3	13.3

(a) Out of a maximum possible of 16

The results indicate that generally, participants were very satisfied with all aspects of the presentations. All presenters scored very highly, and in no cases did any individual indicate complete dissatisfaction with any aspect of the course or the presentations.

Recommendation 6: That the course content be adapted, where required, to suit the specific interest and needs of participants, as indicated by participants' application forms.

Recommendation 7: That a greater emphasis be placed in the course content on scientific risk assessment, with more use of case studies and practical examples. The studies used should relate to products produced by the countries represented by participants to maximise their relevance and application.

Recommendation 8: That, where practical, study materials be provided to participants as early as practical prior to sessions to enable participants' to familiarise themselves with particular topics prior to their presentation.

5.5 SUMMARY

The course content focussed on risk analysis and its application, including such topics as HACCP, food hygiene, food processing and workplace training. The majority of the training was undertaken in a lecture format, though some site visits were also included. Representatives from Australia New Zealand Food Authority (ANZFA), Australian Quarantine Inspection Service (AQIS) and Therapeutic Goods Administration (TGA) conducted many of the sessions. There was some initial confusion among presenters about the distribution of topics between organisations and individuals, although this did not present any major problems during the conduct of the course.

The participants were generally extremely satisfied with the content of the course, although many provided suggestions about how the course could be made more relevant to them as individuals. However, there was little consistency in these comments, reflecting the individual interests and concerns of participants. Consideration should be given in future courses to integrating overviews of how other countries' regulatory systems work into the practical examples and case studies, rather than taking up core course time. It would be extremely difficult to adapt the content to cater for all such interests, and it appears that the current content caters for the common needs and interests of participants. However, any future courses might benefit from asking participants in advance if there are particular topics they would like to have covered, and to remain responsive to these interests. The one area in which participants provided consistent feedback was in requesting that the course include more case studies and practical exercises relating to the application of risk analysis principles.

6 COURSE MANAGEMENT AND DELIVERY

6.1 AMENITIES AND RELATED ACTIVITIES

While the content of the training is obviously the most important aspect of the course in terms of its success from ANZFA and APEC's point of view, the importance of the amenities provided should not be underestimated. It is well known that the environment in which people are housed, the food they are provided, and the setting of the training itself impact significantly on their satisfaction with such an experience.

6.1.1 ACCOMMODATION

The comments made on the weekly feedback sheets indicate that the participants were very satisfied with the accommodation provided at the Edmund Barton Centre (on campus at the Chisholm Institute). Many comments were provided on these sheets, including:

"Accommodation is perfect."

"The accommodation was very good."

During the first course, participants were moved to accommodation at Victoria Hall in the city for one week of the course. However, this was not successful, and many negative comments were made on the weekly feedback sheets, including:

"Accommodation in Victoria Hall - toilets and bath are common except the one far from the bedroom. Tables and stainless surfaces are dirty."

"The accommodation at Victoria Hall was not good since the dining room was dusty, untidy and the odour of the rooms was so distinct, and I am not used to this kind of accommodation. It will be better to go back to the Edmund Barton Centre rather than stay in the city."

"Accommodation at EBC very nice compare than Victoria Hall."

This was not repeated during the second course, and there were no negative comments received about the accommodation during the second course.

6.1.2 MEALS

The original participant registration forms provided by ANZFA requested information about participants' special dietary, religious or physical requirements, and the Chisholm Institute also provided a cross-cultural coordinator to oversee the participants' needs. However, it appears that there was some "trial and error" in the provision of meals to the participants during the first course. The provision of sandwiches for lunch, and western style hot meals for dinner was considered unsuitable by many of the participants, who wanted a selection of (for example) rice and noodle dishes available for lunch. This was indicated by the comments provided on the first weekly feedback sheet, in which eleven participants indicated they were unhappy with the food in some respect. Comments included:

"Dinner is great; breakfast should have more variety; lunch should have more changed every week."

"I notice that for some ladies, the total/day calorie given is too much. Besides, we expect that rice or noodle is served also in our meal/menu."

"The meals were quite very good except no variation for breakfast and lunch."

"Lunch should not be the same type of sandwich every day. Too much for dinner to finish it."

"Asians have light dinner and heavy lunch, if it could be possible to make the menu for dinner for lunch and have the dinner taken outside."

The menu was changed during the second week, to include more rice, noodle and vegetable dishes for lunch and dinner, and the participants' comments in response to the second and third weeks indicated their satisfaction with the changes, for example:

"Seems to me that the menu was a bit changed to a more Asian one. Thanks."

"The organisers and coordinators are very receptive."

"Meals are different from one to others."

The revised menu was provided during the second course, and the participants' satisfaction with this is indicated by the fact that there were fewer negative comments about the food from this group. Three participants indicated that they would like to have dinner earlier, two commented about the breakfast menu always being the same and two requested more vegetables in the food.

Recommendation 9: That course managers pay particular attention to the dietary and accommodation requirements of participants, as well as the facilities in which training is to be provided. Attention also to be given to the application of adult training methods suited to the cultural background of participants.

6.2 COURSE PRESENTERS' PERSPECTIVES

All the presenters stated that the facilities were adequate, and most considered the facilities to be excellent. A few individuals encountered problems relating to equipment, but these were not considered to be problematic. The organisation of the course, including the accommodation and facilities was generally considered to be excellent, and a number of individuals commented on the willingness of the course managers to assist the presenters.

Many presenters commented on or queried the appropriateness of some of the individuals who attended the course. For example, it is felt that some of the attending individuals may have been in more senior positions than would have been most appropriate. It was suggested that this is more reflective of the process by which individuals are selected to attend overseas training exercises, rather than the process by which participants were called for by ANZFA. However, some presenters expressed concern about the impact this may have on the ability of some participants to apply their knowledge after returning to their home country.

6.3 COURSE MANAGERS' PERSPECTIVES

The course managers feel that overall, the course was delivered very successfully, and that the participants were appreciative of the service received and the knowledge gained during the course. However, it is felt that it would have been more appropriate for the development of the project to have a lead-time of eight to twelve weeks between time of notification of successful tenderer, and the course commencement. The course duration of three weeks was seen as being appropriate for the group, however for those with extensive prior knowledge it may have been too long, and for those with not enough prior knowledge the timeframe may be too short.

It is felt that some of the attending participants may have been too senior to be able to fully benefit from the information provided during the course. However, it is also recognised that despite this, the particular mix of participants was successful, and that the course size of approximately 15 to 16 participants was appropriate. It is felt that both the presenters and managers were able to tailor the course to the needs of those attending.

The course managers recognise that the distribution of session materials to participants some time prior to the session would be beneficial, as the participants were keen to undertake some preparation before the sessions.

The course managers encouraged and facilitated interaction between those attending from different countries. It is felt that the combination of participants from various countries was effective. Social activities such as visits to Philip Island and Ballarat were organised, and it is felt that these were extremely successful in contributing to the social interaction of participants.

6.4 PARTICIPANTS' PERSPECTIVES

Information on the participants' perspectives on the management and delivery of the course was collected through the weekly evaluation forms distributed during the course and the participant survey developed by Health Outcomes International and distributed during the evaluation process. The responses indicate a high degree of satisfaction with the course delivery, and some participants provided suggestions as to ways in which the course could be improved. As with other aspects of this evaluation, the possibility that some participants may have misread the questions, or have written an answer that does not properly translate their thoughts must be considered when interpreting the responses.

6.4.1 PARTICIPANT SURVEY

Participants were asked a range of questions on the participant survey relating to course management. Where they were asked about the appropriateness of the length of the course, six of the ten respondents stated that it was the right length, three said it was too short and one said it was too long. Five respondents provided comments after this question, and four of these included suggestions that the course focus more on practical application of the knowledge acquired.

When asked if the course met their needs, six replied "mostly", three replied "yes" and one replied "somewhat". Three individuals provided positive comments about the course and the benefits it provided them, while one stated "So many theories, not practices" and another suggested they would like to gain knowledge about Australia or ANZFA's experience with risk analysis of imported and exported foods. The key objectives of the course were broken down into four key areas, and participants were asked to what extent the course had helped them in each of these areas. The following table indicates participants' responses to this question.

Table 8 - Responses to the question "To what extent did the course help you in..."

	A lot	Mostly	A little bit	Not at all
Understand risk analysis	5	5		
Apply risk analysis	2	6	2	
Exchange information and skills	3	6	1	
Develop better technical infrastructure	1	7	2	

The respondents did not rate the delivery of the course in English as having significantly reduced their understanding of the information provided. Four stated that they understood all the information, five stated that they understood most of the information, and one stated that they understood some of the information. This individual also stated that while they are used to reading and writing in English, they find it more difficult to listen to or to present in English.

Respondents were also asked whether they felt that the participation of people from other economies in the course helped them to gain an increased understanding of food regulation in those economies. In

response, two stated "a lot", five stated "mostly" and three stated "a little bit". While two individuals provided comments to the effect that it was of great benefit, two others stated that:

"Some participants are reluctant in discussing their food regulators" and

"It would be better if the first time the participants give presentation about food regulation - control in their countries to gain an increased understanding about other countries."

Whether participants attended course one or course two does not appear to have affected their responses to this question. Similar responses were received in relation to the perceived benefits of the participation of others from the same economy, with three stating "a lot", five stating "mostly" and two stating "a little bit". Those who replied "a little bit both" qualified this response by stating that they knew the other participants very well prior to attending. Six individuals provided comments about the positive impact of attending with others from the same economy, and one suggested that future courses could be run with more participants from a smaller number of economies.

6.4.2 WEEKLY EVALUATION FORMS

SESSIONS

Where the weekly evaluation forms asked whether the length of sessions had been appropriate, there was considerable variation among the answers provided, as demonstrated by the following table. While those who answered in the negative in most cases provided suggestions as to how the length of sessions could be improved, there was little consistency among these comments. This probably indicates participants' individual interests.

Table 9 - Responses to "Has the length of sessions been correct"

	Yes	No	Partially/Blank
Course 1 Wk 1	7	8	
Course 1 Wk 2	6	6	3
Course 1 Wk 3	3	5	7
Course 2 Wk 1	3	1	11

In response to the question "Have you found the presentations varied", the majority of participants indicated that they had found the presentations varied, as shown by the following table.

Table 10 - Responses to "Have you found the presentations varied"

	Yes	No	Blank
Course 1 Wk 1	12	2	1
Course 1 Wk 2	13	2	
Course 1 Wk 3	8	3	4
Course 2 Wk 1	3	2	9
Course 2 Wk 2	11	1	4

However, there may have been some confusion as to the meaning of the questions, as indicated by one response: "Yes, because the technical aspects and the training methodology were mixed up which sometimes creates confusion (lack of order/organisation) on the part of the participants".

When asked whether the printed resources distributed had been useful, the vast majority of participants indicated that they had been. During the first two weeks of the first course, some individuals requested

for materials to be distributed prior to sessions, and the fact that such comments were not made at other times suggests that the course managers undertook this.

The vast majority of participants indicated that the sessions had been well planned, as indicated by the following table. Those who indicated that sessions had been partly well planned gave comments such as "Mostly (Thursday, Friday programs were changed a bit)", "Not for duo lecturer" and "Not quite well because there were many changes made in the schedule. But it's good that there were changes because these made the sessions even more useful and productive."

Table 11 - Responses to "Have the sessions been well planned"

	Yes	Partly	No	Blank
Course 1 Wk 1	9	5		1
Course 1 Wk 2	12	3		
Course 1 Wk 3	9	2		4
Course 2 Wk 1	14			1
Course 2 Wk 2	12	3		1

TRAINERS/PRESENTERS

The large majority of participants indicated that the course presenters had been easy to understand. During the first week of course one, there were six individuals who identified that the trainers were not easy to understand, or who requested that they speak more slowly. In the following two weeks, no respondents indicated that the trainers were not easy to understand. During course two, there were thirteen respondents out of fifteen during week one and fifteen out of sixteen during week two who indicated that the trainers were easy to understand. This pattern of responses probably relates to the presenters' growing awareness of the need to speak slowly, and of ways to make themselves more easily understood.

OTHER COMMENTS

The final question on the weekly evaluation forms asked participants whether they would like to make any other comments, and a variety of comments were received. These related to three key areas:

- Suggested changes to either the subject matter, or the order in which topics were presented (fifteen comments);
- Suggested changes to various aspects of the management of the course, such as the food, accommodation, training areas, session times and resource provision (nine comments); and
- Thanks to staff and expressions of appreciation for attending the course (nine comments).

Within these areas, there was not sufficient congruence among responses to allow for conclusions to be drawn.

Recommendation 10: That both sessional and weekly evaluation forms be used to monitor participants' views about course content, delivery and administration, including amenities, with appropriate changes made in response to their comments.

Recommendation 11: That, when the course is delivered in a language other than participants' first language, presenters be careful to present their topics at a pace and using language appropriate to their audience's needs.

6.5 SUMMARY

The course managers and course presenters feel that generally the course was both well managed and well received by the participants. The accommodation and meals provided were generally rated by the participants to be quite appropriate, although there was some dissatisfaction with the choice of meals at the beginning of course one, and the move to student accommodation in Melbourne city during week two of course one. Other aspects of the course management and delivery were also rated highly by participants, including:

- Most respondents to the participant survey agreed that the course was the right length;
- Nine of the ten respondents to the participant survey agreed that the course met their needs, or mostly met their needs;
- The majority of participant survey respondents agreed that the course helped them in the key course areas;
- The presentation of the course in English was only considered to be somewhat of a problem by one of the ten participant survey respondents, and the frequency of comments regarding difficulties in understanding presenters diminished as the courses continued;
- Participation of others from both participants' own economies and from other economies was generally seen as having been quite beneficial;
- There was considerable variation among the participants' perceived ideal length of each session, and this probably relates to participants' individual interests in various topics; and
- The majority of participants had found the presentations varied and the sessions well planned.

7 POST-COURSE ACTIVITIES

7.1 FOLLOW-UP ACTION

Participants were asked in the participant survey whether training materials were provided in their own language for them to take home. There was considerable variation in the answers provided to this question. Five responded "no", three responded "yes" and two did not provide an answer. This confusion may have resulted from the fact that English language training materials were provided to participants to take home.

The course managers stated that while they persisted in attempts to provide ongoing mentoring to participants, this was not particularly successful. The majority of email and fax messages sent have not been replied to, although some participants have responded to messages and maintained some contact. It is possible that those individuals who responded to the participant survey were also those who had responded to contact from course managers. Seven participant survey respondents stated that they have had "a little bit" of interaction with the course organisers or trainers, two indicated that they have had no interaction at all, and one stated that they have had "mostly" interaction. Of those who had had some interaction, six stated that the trainer initiated this, and two stated that they had initiated it themselves. However, it must be recognised that those who were able to receive and respond to the survey would be those who were also able or willing to receive and respond to contact from the course organisers or trainers.

Most of the presenters stated that they distributed their contact details to participants in order to facilitate follow up interaction. Two of these individuals were contacted with requests for information shortly after the course, but no presenters have had ongoing contact since that time.

Recommendation 12: That prior notice be given of the requirement for follow-up work after the course, and that the nature and content of that follow-up work be designed in consultation with the participants' employers at the outset to ensure adequate and appropriate resources for the follow-up work to be done.

7.2 APPLICATION TO THE WORKPLACE

7.2.1 PARTICIPANTS' PERSPECTIVES

Interestingly, only one participant indicated that their job responsibilities have changed as a result of attending the course (used to be training coordinator; now developing HACCP plans), although two participants commented on minor changes that have occurred to their positions.

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One individual stated that they have used the knowledge and skills gained during the course "a lot", while seven stated that they have used them "mostly" and two stated they have used them "a little bit". Nine of the ten respondents provided comments as to ways in which they have used the knowledge and skills, and these are as follows:

"In revision some standards that I am responsible for, we concerned more about the hazards that may happen in the process and establish the prevention."

"Conducted seminar on food safety and quality; seminar on food safety for children; and seminar on MRLs for cereals, fruits and vegetables."

"Conduct IRA."

"Write some papers to introduce the principles of risk analysis."

"In relation to the interest of Indonesia calculating estimating MRLs proposed by any members of WTO."

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"Review import management measure for food safety."

"Use risk analysis application, example from the course for information in my risk analysis work, and also use for information when providing a training course."

"Evaluation of the risks of the identified hazards during HACCP Plan development of food products; Identification of potential hazards in the raw materials."

"At this time, we are still in progress making guideline on Principles of Application of Risk Analysis and Practical Risk Analysis for Food Inspector."

Eight participants nominated factors that may have limited the skills that they acquired during the course, and these can be clearly defined into a lack of resources, skills and information (five comments), a lack of time to implement and undertake new procedures (two comments) and a lack of funds (one comment).

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The following table illustrates respondents' ranking of how useful topics presented at the course have been to them in their work. The results indicate that the large majority have found the topics covered in the course to be useful to them in the workplace.

Table 12 - Respondents' ranking of benefit of topics to them in their work

	Not at all	A little bit	Mostly	A lot
Hazard Identification		1	4	5
Bureau Resource Sciences		2	8	
Overview of Risk Analysis		1	6	3
Food Hygiene Regs- Case Study 1			6	4
Import/Export Control		3	4	3
Microbiological Risk Analysis		1	5	4
Import/Export Control		2	5	3
Interpretation of Hazard Evaluations		1	8	1

Three respondents indicated that they have trained more people, two that they have trained the same number, and two that they have trained fewer people. Three respondents did not provide an answer to this question. When asked to identify the number of people to whom they have provided training, two did not answer, three answered between 0-9 people, two answered 10-19 people, one answered 20-29 people and two answered 30 people or more. When asked to identify ways in which the course had helped them to train others, seven individuals were able to provide a response, and some identified more than one way in which the course had helped. All seven said they had better knowledge of the topic, five stated that they had more confidence, and four said they had better presentation skills.

Participants were asked what additional materials would be of benefit to them in their role as trainers, and an array of responses were received, including:

"Budget for training course; audio-visual materials; computer and internet."

"1. Principal for the Assessment of Risk to Human Health from Exposure to Chemical. 2. The AQIS Import Risk Analysis Process. 3. Benefits and Costs."

"Reference materials on the conduct of exposure studies."

"Data about food-borne disease cases in the world; New information on new emerging pathogens bacteria or hazardous substances; References about Genetic Modified Organism, especially in food (advantages/disadvantages)."

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When asked about what further training would be of benefit, responses provided were:

"Information technology."

"Risk analysis with regarding to animal."

"To change experience and discussion on the techniques of Risk Analysis for import and export food safety."

"How to conduct Exposure studies in order to gather exposure data on certain food safety hazards."

The conduct of the participants' projects generally appears to have been somewhat unsuccessful, for a number of reasons. In response to the question 'How beneficial have you found working on your project to be' in the participant survey, the answers indicated that while two respondents have not had enough time to work on their projects, five have found this "mostly" helpful and one "a bit" helpful. It is possible that the two respondents who did not provide a response to this question may not have continued to work on their projects. It would seem that prior to attending the course, participants were not aware that they would be expected to undertake work of this type once back in their positions. Course managers have suggested that including the selection of a project into the process of applying to attend the course would be beneficial.

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7.2.2 EMPLOYERS' PERSPECTIVES

Four employers responded to a survey undertaken as part of this review. All stated that they had received feedback from the participants about the course, and in each case the employer indicated that both the participant and their organisation had benefited from attendance at the course. Reasons given for this include:

"The training seems to extend his knowledge and gives him more confidence..."

"The course is informative to the participant...It's helpful for the participant to understand different systems in various economies by exchanging views..."

"She can apply the knowledge from the course to her job and transfer the knowledge to others..."

"The risk analysis... is now able to be implemented...It is really broaden our view in making decision for standard development"

"It is expected that it would be helpful in promoting and facilitating trade of food"

All four employers indicated that they would consider sending another participant to the course if it was run again.

Recommendation 13: That follow-up of participants and their employers be undertaken as an integral part of program evaluation to inform future course design.

7.3 INTERACTION BETWEEN PARTICIPANTS

Interestingly, all respondents indicated that they have had some further interaction with other participants from their own economy in regard to risk analysis or food safety matters, with seven stating that they have had "a little bit" of interaction and three stating that they have had "a lot". Two respondents commented that they worked with others to run a training course, and one commented that they worked with others on the course project.

Significantly fewer respondents have had contact with participants from other economies, with seven having had no contact, two having had "a bit" of contact, and one having had "a lot" of contact. One individual commented "I did not have time to communicate with them as I was busy with my work assignments".

Recommendation 14: That the practice of having participants from a range of countries attending the course be continued and encouraged.

7.4 SUMMARY

While it is apparent that course managers have attempted to maintain contact and mentoring to course participants, these have been unsuccessful in many cases. The course appears to have had a mixed impact on the participants' working lives, as demonstrated by the participant survey. For example, only one respondent indicated that their work responsibilities have changed as a result of the course, but the majority of participants indicating that they have used the knowledge and skills they gained "mostly" or "a lot". Eight participants were able to identify factors such as lack of domestic resources, which have impacted on their ability to apply their new skills and knowledge, and working on the course projects was not considered to be of significant benefit. In ranking the course topics in terms of usefulness to their work, all topics were rated as being "mostly" or "a lot" useful by the majority of respondents. Most respondents were able to identify ways in which the course had helped them to train others, although only three indicated that they have trained more people since the course. The attendance of others from participants' and other economies was considered to have been beneficial.

Employers indicated that they considered that their employee had benefited from attending the course, and were able to cite specific examples of the benefits achieved. All indicated that they would consider sending another participant to the course if it was run again.

8 FUTURE DIRECTIONS

8.1 PARTICIPANTS' COMMENTS ON FUTURE COURSES

The final question asked of participants in the participant survey was "If APEC were to run the course again, do you have any other suggestions about how it could be improved?" Eight of the ten respondents provided suggestions, as follows:

"The instructors and organisers should have more experience in holding the International training course so they can arrange the program more suitable."

"Staying on the City of Melbourne for overnight was not OK because the accommodation was not clean and did not feel comfortable for the participants. The courses offered were alright."

"Spend more time on RA period eg. exercise, case study, management of risk."

"It would be better to have more countries in one course rather than more people of few countries."

"I would like to suggest adding the following topic: 1. Workshops on Safety Assessment of Foods 2. To exchange experience on the techniques of Risk Analysis 3. Discussion the suitable conducting model of Risk Analysis for import and export food safety."

"The course should be more intensive and specific objective/target (not too broad). The course can be shorter, or the course can be divided into 2-3 levels: general and intensive."

"Additional topics on the case of softwares for risk analysis like the USDA pathogen modelling program which could help evaluate the risk (microbiological) of the product."

"Stressing the course in practices; Prioritise only in 1 topic, such as Risk Analysis in Microbiology."

Recommendation 15: That consideration be given to holding future courses in less developed countries to facilitate development of case studies and examples of immediate relevance to participants.

8.2 EMPLOYERS' COMMENTS ON FUTURE COURSES

All four employers surveyed indicated that they would consider sending another participant to the course if it was run again. Suggestions were provided in regard to changes that they would like to see made to the course. In three cases, the suggestions related to the course providing a greater focus on import and/or exports. These comments included:

"To discuss conducting suitable model of Risk Analysis for import and export food safety"

"You may include the risk analysis in animal/plant health, especially to calculate the risk of importing a certain kind of animal..."

"The content should cover Import Risk Analysis"

Generally, the information provided indicates that the employers were particularly satisfied with the training their employees received during the course.

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APPENDIX A - OUTLINE OF COURSE CONTENT

WELCOME

- Formalities
- Chisholm Institute/ faculty introduction
- Participants' introduction
- Tour of campus

INTRODUCTION

- 3-week course outline/ timetable/ objectives/ outcomes etc.
- Group project details, ie part 1: Course Project; part 2: Home Economy project by end of project, ie 6 months
- Questions/ answers

INTRODUCTION TO INTERNATIONAL, AUST/NZ AGRIFOOD REGULATORY FRAMEWORK

Jurisdiction, duties and responsibilities of International Regulatory Bodies:

- United States of America Food and Drug Authority (USFDA)
 - International standards and regulations
- Codex Alimentarius Commission
 - International standards for food safety, and fair trading in food
 - Impact on Aust and NZ food standards and regulations
- Food and Agriculture Organisation (FAO)
 - Direct Development assistance for agricultural development
 - Collection, analysis and dissemination of information
 - Advice to governments on food standards, fair trade, environmental management
 - Maximum Residual Limits (MRL) for agricultural and veterinary chemicals
- World Trade Organisation (WTO)
 - Regional trade agreements/ Sanitary and Phytosanitary Measures (SPS) Agreement
 - Administration and Monitoring of trade agreements
 - GATT
- World Health Organisation (WHO)
- International Standards Organisation (ISO)
 - Standards 9000 (Including HACCP)
 - Elements
 - Registration

JURISDICTION, DUTIES AND RESPONSIBILITIES OF AUSTRALIAN AND NZ REGULATORY BODIES

- Federal/State Legislation
 - New Zealand Food (Amendment Act) 1996
 - State and territory food legislation and relationship to the Model Food Act
- Australia New Zealand Food Authority (ANZFA)

- Australian Quarantine Inspection Service (AQIS)
- Therapeutic Goods Administration (TGA)
- Standards Australia
- Bureau of Resource Science (BRS)
 - Links to International organisations

INTRODUCTION TO INTERNATIONAL, AUST/NZ AGRIFOOD REGULATIONS AND STANDARDS

- Food safety
- Customs and Quarantine
- Fair trade
- Environmental management
- Trade measurement
- Packaging and labelling legislation
- Food Premises Codes
- Etc

FOOD HYGIENE AND SANITATION

- Revision including identification of food safety hazards in readiness for HACCP sessions
- Food contamination
- Personal hygiene
- Safe food handling
- Cleaning and sanitation of food premises
- Food hygiene practicum x2

BRIEFING FOR SITE VISIT 1

- Presentation and tour of Yakult
- Conformity to Good Manufacturing Practices (GMP)

SITE VISIT 1- YAKULT DANDENONG

WORKPLACE TRAINER

- Principles of Adult learning
- Determining the content of training program
- Designing a training program
- Development of training resources
- Training techniques

EVENING EXCHANGE OF INFORMATION WORKSHOP

- Questions and Answers re the program
- Sharing of skills and experiences with other participants

HACCP 1

- Introduction/ background/ purpose
- 7 principles of HACCP
- Defining hazards to human health: biological, chemical, physical, operational
- Principle 1, conducting hazard analysis; identify and assess all hazards/ determining risk

HACCP 2

- Principle 2, Identify Critical Control Points (CCP)
- Process Flow Charts and CCP Decision Tree

PRINCIPLES OF FOOD PROCESSING

- Dehydration/ concentration/evaporation
- Canning
- Fermentation
- Irradiation
- Food spoilage
- Potential problems within production systems

HACCP 3

- Principle 3: Establish critical limits
- Principle 4: Preventative action and monitoring requirements
- Principle 5: Correction action

HACCP 4

- Principle 6: Record keeping
- Principle 7: Verifying and validating the HACCP process
- Workshop: constructing a hazard audit table
- Introduction to risk analysis

APPLIED HACCP 1- PRACTICUM

- Product production in Chisholm Food Factory

APPLIED HACCP 2- WORKSHOP

- Produce Simple Process Flow Chart reflecting CCP and hazard Audit Table reflecting above principles based on HACCP 1 practicum

ANZFA PRESENTATION

- Development, maintenance and enforcement of Food Standards Code and other standards and codes including level playing field for Australian and new Zealand food producers
- Links and partnerships with related regulatory bodies, industry and community and the transmission of information and issues, ie changes in risk and surveillance category lists, membership of WTO and impact of CODEX on activities
- Policy development for Imported food inspection (with AQIS)

- Australian Market basket Survey and Survey of the microbiological status of foods in collaboration with AGAL
- Coordination of a risk-based food surveillance system
- Conduct research and surveys
- Scientific information on safety of various foods
 - Food components and technology, chemical residues and contaminants
 - Food production processes and packaging
 - Consumption habits/statistics
- Coordination and monitoring of food recall system

ANZFA WORKSHOPS: DEVELOPING REGULATIONS AND STANDARDS (THE AUSTRALIAN/NEW ZEALAND EXPERIENCE)

- Participants learn how to review/ develop existing own country standards in light of what they have experienced or gain skills how to develop from scratch
 - Performance and risk based regulations through Industry/community consultation process
 - Selfregulation
 - Minimisation of regulatory/conformity costs to industry
 - Consistency with international regulations

EVENING EXCHANGE OF INFORMATION WITH ANZFA

- Question/answer/panel session

ANZFA: RISK ANALYSIS FOR REGULATORS

- Determination/ calculation of risk for the agrifood sector
- Risk Assessment scientific processes in identify hazards and their risk
- Risk management: risk control intervention
- Risk Communication

ACTION LEARNING SET: PROJECTS

- Forming project groups
- Determining scope of projects
- Developing initial strategies

Group Project 1

- Participants are to determine and undertake a project of direct relevance to their workstations, which applies the concepts of the project, ie Agrifood Regulations and Standards, Food Hygiene and Sanitation, and the Principles of Risk Analysis. Group Project 1 will be completed during the course and will involve food industry site visits and on campus activities/practicals

Group Project 2

- Participants are to determine and undertake a project of direct application to their workstations. This project will apply the skills gained in the training program in their home economies to train colleagues/subordinates and achieve an outcome specific to the individual.

BRIEFING FOR SITE VISIT 2

- Check sheet to be utilised to find out how Australian industry conforms to standards and regulations
- Sourcing data for projects

SITE VISIT 2

- Host company to explain method of compliance

THERAPEUTIC GOODS ADMINISTRATION (TGA) PRESENTATION

- Therapeutic Goods Act (1989)
- Complimentary state legislation
- Establishment and maintenance of a national system of controls
- Therapeutic Goods regulations
- Code of Good manufacturing Practice
- Australian Register of Therapeutic Goods (ARTG)
- Low risk and Non-prescription Drug products related to food
- Assessment and registration of chemicals in Australia
- Agricultural and veterinary chemicals- Acceptable Daily Intakes (ADI) list
- Good chemical management
- Use, control, handling of agrifood chemicals
- Maximum Permitted Concentration (MPC)
- Maximum Residual Limit (MRL)
- Good Agricultural Practice (GAP)

THERAPEUTIC GOODS ADMINISTRATION (TGA) WORKSHOP

EVENING EXCHANGE OF INFORMATION WITH TGA

- Question/ answer/ panel session

WORKPLACE TRAINER

- Principles of Adult learning
- Determining the content of training program
- Designing a training program
- Development of training resources
- Training techniques

FOOD SAFETY VICTORIA PRESENTATION

- Development of legislation, the Victorian experience (Food Amendment Act)

LOCAL GOVERNMENT PRESENTATION: ENVIRONMENTAL HEALTH OFFICER PRESENTATION

- Food Premises Code (Auditing Compliance)

AUSTRALIAN QUARANTINE INSPECTION SERVICE (AQIS) PRESENTATION

-

- Customs and Quarantine legislation
- Export/ Import legislation
- Inspection and sampling of imported foods
- Quarantine
- Pest control/ minimisation and management
- Control orders
- Certification
- Auditing

AUSTRALIAN QUARANTINE INSPECTION SERVICE (AQIS) WORKSHOP

EVENING EXCHANGE OF INFORMATION WITH AQIS

- Question/ answer/ panel session

BUREAU OF RESOURCE SCIENCE PRESENTATION

- Scientific information and data

WORKPLACE TRAINER

- Principles of Adult learning
- Determining the content of training program
- Designing a training program
- Development of training resources
- Training techniques

BRIEFING FOR SITE VISIT 3

- Participants to source information required for projects

SITE VISIT 3

- Last opportunity to gather information for group projects

ACTION LEARNING SET: PROJECTS

- Progressing with projects, especially group project 2

WORKPLACE TRAINER

- Principles of Adult learning
- Determining the content of training program
- Designing a training program
- Development of training resources
- Training techniques

AQIS: COMPLIANCE AUDITING

- Chisholm Food factory or other site as appropriate

ACTION LEARNING SET: PROJECTS

- Finalisation of projects

PRESENTATIONS

- Individual/group intentions for group project 2

BRIEFING ON CONTINUATION OF PROJECT

- Where to from here? - mentoring, group projects etc

COURSE EVALUATION

APPENDIX B - PARTICIPANTS' SUGGESTIONS FOR IMPROVEMENT

COURSE 1 WEEK 1

"Should have more examples of problems that Australia is facing."

"Except that second, third will be into details of risk analysis, application/practical of risk analysis."

"It should be have knowledge about apply food safety on HACCP to food industry."

"1. The presentations on GMP and HACCP can be shortened to 1-1.5 days. 2. The presentation of each session should show the content or topic to present first then explain in detail and in sequence. 3. The trainer should be more well prepared on what he/she is going to present rather than think of anything and speak out. 4. The site visit should be more valuable if the factory could explain how they implement GMP and HACCP and the benefits gained from this system in the factory."

COURSE 1 WEEK 2

"Please lengthen the time for discussions and working on risk analysis (presented by TGA and ANZFA)- being the core subject matter of this program, greater emphasis on the detailed procedure on how to go in risk analysis should be done. Presenting this topic in portions/fractions would help in better learning of the subject matter."

"I would like to suggest that the first half of the program be the technical aspect and the training presentation method to follow next. In this order I guess the participants will have a much better focus and understanding of the project objectives and better organisation if planning their own training program. By opinion, I would recommend that this suggestion be approved to the next and subsequent trainees of this program for much better effectiveness."

"It would be more beneficial if the program can have more time for ANZFA/TGA presentations so participants can have the opportunity to practice an exercise and ANZFA/TGA can present the actual model of risk analysis that they work, eg how and when they get the information, what sort of information they use etc, in real practice on risk analysis of certain subjects that they've ever done."

"The first week could be devoted to introduction to recognition and standards, then orientation to HACCP and food hygiene, principles of food processing and preservation, then followed by site visits to processing establishments, then discussion of the visit. The second week could be devoted to the agencies involved in food hygiene from local governments/states then ANZFA and TGA, the last or course is AQIS. The last (3rd week) could be devoted to training and project development."

"It should be addition program presentation in local government and procedure how they control and monitoring for food business in market place."

"How to develop risk analysis step by step."

"A comprehensive case study for risk assessment should be clearly demonstrated or explained particularly showing the computation for ADI, acute RFD, RDI and other parameters. Topics presented were all important but the manner/sequence should be presented systematically according to day to be presented. Say for example: the action learning should be discussed during the first week meeting and not in between the scheduled topics."

"I expect the Wednesday 16 afternoon program to be confirmed for site visit (fruits and vegetables if possible)."

"Risk analysis should be more emphasised in the lecture and to present more case studies."

COURSE 1 WEEK 3

"Please add more time for AQIS to discuss on how Australia is doing the inspection and audit of import."

"Could we have a case study on a real scenario/problems in export and import of food in and out of Australia."

"To set the time appropriate to the content to present that mean in session AQIS."

"Presentation of ANZFA and AQIS should be in the same week for the correlation of content and be in the first week. If participants have any problem about subject there's time to ask and have a better understanding when going site visits. In terms of risk analysis, AQIS should also give example on how AQIS conduct risk analysis on imported products including quarantine aspects."

"For each session it's not continuous. My suggestion is first week for general point of view about regulations and basic, second week should be ANZFA and AQIS together and also workplace trainer, third week os local government... and workplace trainer."

COURSE 2 WEEK 1

"Better if program contains epidemiology."

"More practical applications and the background knowledges such as history and development of risk analysis should be added."

"Please give some time to introduce Australia's probabilistic and point estimate. I think it would be more valuable and more effective."

"Risk analysis/risk assessment/risk management/risk control."

"More case studies should be included to illustrate how risk analysis is being done and how risk management options are being evaluated."

"I think we should have more sessions on how to identify hazards and risk analysis, more case studies."

COURSE 2 WEEK 2

"Tell the background history and development trend at risk analysis."

"Risk management incorporating principles of risk analysis could be strengthened."

APPENDIX C - SESSION EVALUATION FORM (ADMINISTERED DURING THE COURSE)

Program/Session Evaluation Form

Presenter's Name

Topic

We would appreciate your thoughtful responses to these questions to help us improve the course.

Please indicate the extent to which you agree or disagree with each statement by placing a circle around the appropriate number.

1 Means you **strongly disagree** 4 Means you **strongly agree**

Program Content	Strongly Disagree		Strongly Agree	
The session met the stated learning outcomes	1	2	3	4
The session met my needs	1	2	3	4
I was able to understand the session content	1	2	3	4
Sufficient information was provided to meet my needs	1	2	3	4
Comments _____				

Trainer/Facilitator	Strongly Disagree		Strongly Agree	
Was able to answer my questions	1	2	3	4
Demonstrated a good knowledge of his/her topic	1	2	3	4
Used appropriate examples and activities to help explain the session's content	1	2	3	4
Was well prepared and organised	1	2	3	4
Spoke clearly	1	2	3	4
Comments _____				

Learning Resources: eg handouts, publications, transparencies, etc

	Strongly Disagree		Strongly Agree	
Were professional presented	1	2	3	4
Will be used for future reference	1	2	3	4
Improved the session	1	2	3	4

General

	Strongly Disagree		Strongly Agree	
I will recommend this session to others	1	2	3	4

Parts of the session, which were of most interest to me were,

The parts of the session, which were of least interest to me were,

My suggestion/s for improvements to the session is/are (optional)

Thankyou for your constructive feed back.

Noel Wilkins will collect these forms from you

APPENDIX D - WEEKLY EVALUATION FORM (ADMINISTERED DURING THE COURSE)

Evaluation - week 1

As this is a pilot program, your feedback is very important to us. Please complete the following:

Accommodation and meals:

Are they meeting your requirements? _____

Please comment:

Training Facilities:

Have the rooms been appropriate for each session? _____

If not, why?

Training Program:

Is it meeting your needs? _____

Please comment:

Have you any suggestions for improvement or additions to the program at this stage:

Training Sessions:

Which session has been of most value to you? _____

Why? Please comment: _____

Which session has been of least value to you? _____

Why? Please comment: _____

Has the length of the sessions been correct? _____
Please comment: _____

Have the sessions been relevant to the program? Please comment:

Which activities have you enjoyed the most? _____

Have you found the presentations varied? _____

Have the resources/printed materials been useful? _____

Have the sessions been well planned? _____

Trainers/presenters:

Have you found the trainers easy to understand? _____
Please comment: _____

Are there any other comments you would like to make?

Thank you for completing this - it will help us with the rest of the program.

APPENDIX E - PARTICIPANT SURVEY
(ADMINISTERED BY HEALTH OUTCOMES INTERNATIONAL)

APEC - FOOD RISK ANALYSIS TRAINING
PARTICIPANT QUESTIONNAIRE

Thank you for taking the time to complete this survey

Please complete the survey and either post a copy to us at:

Health Outcomes International
PO Box 1038
KENT TOWN SA 5071

Or fax it to us on: 61 8 8363 9011

I. DEMOGRAPHICS

1. Which gender are you?

? Female ? Male

2. What age group are you in?

? 20 to 29 ? 30 to 39 ? 40 to 49 ? 50 or over

3. Which region are you from?

? Asia ? Pacific ? Other

4. Which course did you do?

? Course 1 – February 2000 ? Course 2 – March 2000

II. BEFORE THE COURSE

We would like to know your expectations of the course and your pre-course experiences. This will enable us to determine how well the course met the expectations of participants.

5. How did you hear about the course?

6. Why do you think you were selected to attend the course? (For example, in best position to train others; most senior member of staff; had best understanding of risk analysis).

7. What information materials did you receive before attending the course?

8. What additional information materials would you like to have received before attending the course?

III. DURING THE COURSE

Thank you for providing the session evaluations during your attendance at the course. We would like some general information on the course itself to enable us to evaluate the content.

9a. Was the content of the course what you expected before you started the course?

? No ? Somewhat ? Mostly ? Yes

9b. If not, how did it differ from your expectations?

10. The course was structured as follows:

- Week 1:** Introduction to Agrifood Framework and Standards
Food Hygiene and Sanitation
Workplace Trainer
HACCP
Principles of Food Processing and Preservation
- Week 2:** ANZFA Presentations
TGA Presentations
Food Safety Victoria Presentations
- Week 3:** AQIS Presentations
AQIS Compliance Auditing
Participant Presentations

10a. Did this structure help your understanding of the subject?

? No ? Somewhat ? Mostly ? Yes

10b. If not, how do you think the course structure could be improved?

11. Was the course too short, long enough or too long?

? Too Short ? Right Length ? Too Long

Comments:

12. Overall, did the course meet your needs?

? No ? Somewhat ? Mostly ? Yes

13. To what extent did the course help you in the following areas?

- | | | | | |
|---|--------------|----------------|----------|---------|
| 1. Understand risk analysis | ? Not at all | ? A little bit | ? Mostly | ? A lot |
| 2. Apply risk analysis | ? Not at all | ? A little bit | ? Mostly | ? A lot |
| 3. Exchange information and skills amongst participants | ? Not at all | ? A little bit | ? Mostly | ? A lot |
| 4. Develop better technical infrastructure | ? Not at all | ? A little bit | ? Mostly | ? A lot |

14. Did the presentation of the course in English reduce your understanding of the information?

? Understood very little ? Understood some ? Understood most ? Understood all

Comments:

15. Did the presence of participants from other economies help you to gain an increased understanding of food regulation in those economies?

? Not at all ? A little bit ? Mostly ? A lot

Comments:

16a. Was the presence of other participants in the course from your home economy beneficial to you?

? Not at all ? A little bit ? Mostly ? A lot

16b. Why or why not?

Comments:

IV. SINCE COMPLETING THE COURSE

Please complete the following questions to help us to determine the practical application of the information provided during the course.

17. What are your current job responsibilities?

18a. Have your job responsibilities changed as a result of your attending the course?

? No ? Yes

18b. If yes, in what way?

19a. To what extent have you used the knowledge and skills you gained from doing the course?

? Not at all ? A little bit ? Mostly ? A lot

19b. Please provide some examples of how you have used your new knowledge and skills.

20. What factors may have limited the use of the skills you acquired during the course?

21. Have you had any contact with any of the course organisers or trainers to discuss the course or risk analysis of food safety?

? Not at all ? A little bit ? Mostly ? A lot

22. If you have had contact, who initiated this contact?

? I Did ? Trainer/Organiser Did

Comments:

23. Have you had any contact with participants from your own economy about risk analysis of food safety matters?

? Not at all ? A little bit ? A lot

Comments:

24a. Have you had any contact with course participants from other economies about risk analysis of food safety matters?

? Not at all ? A little bit ? A lot

Comments:

24b. If yes, in what way has this been useful to you in your role?

25. Please rank each of the topics presented at the course according to whether they have been of benefit to you in your work?

Hazard identification (Les Davies)	? Not at all	? A little bit	? Mostly	? A lot
Bureau Resource Science (Dr Rusty Branford)	? Not at all	? A little bit	? Mostly	? A lot
Overview of Risk Analysis (Janice Baines)	? Not at all	? A little bit	? Mostly	? A lot
Food Hygiene Regs – Case Study (Tania Martin)	? Not at all	? A little bit	? Mostly	? A lot
Import/Export Control (Slava Zeman)	? Not at all	? A little bit	? Mostly	? A lot
Microbiological Risk Analysis (Scott Crerar)	? Not at all	? A little bit	? Mostly	? A lot
Import/Export Control (Peter Maple)	? Not at all	? A little bit	? Mostly	? A lot
Interpretation of Hazard Evaluations (Jack Dempsey)	? Not at all	? A little bit	? Mostly	? A lot

26. Since completing the course, have you identified any other topics that should have been included in the course?

27. How beneficial have you found working on your project to be?

? Not helpful ? A bit helpful ? Mostly helpful ? Very helpful

Comments:

28. Have you trained more people in the area of risk analysis of food safety since completing the course than before you undertook the course?

? Trained less people ? Trained same number ? Trained more people

Comments:

29. To how many other people have you provided risk analysis of food safety training using information and skills you gained during the course?

? 0 to 9 people ? 10 to 19 people ? 20 to 29 people ? 30 or more people

Comments:

30. In what ways did the course help you to train others? (e.g. more confidence in topic knowledge; better presentation skills).

31. Were training materials provided in your own language for you to take home?
? No ? Yes

32. What additional materials/support would be useful to you in your training role?

33. What additional training in this area would be helpful to you in the future?

34. If APEC were to run the course again, do you have any other suggestions about how it could be improved?

Thank you for taking the time to complete this questionnaire. We appreciate it!



Health Outcomes International
Pty Ltd

APPENDIX F - EMPLOYERS' SURVEY (DEVELOPED BY HEALTH OUTCOMES INTERNATIONAL)

**APEC - FOOD RISK ANALYSIS TRAINING
EMPLOYER QUESTIONNAIRE**

Were you involved in the selection of [Participant] to attend the course? YES NO
? ?

Comments:

How was it decided to select [Participant] to attend the course?

Were you provided with enough information about the course to help you decide who should attend? YES NO
? ?

Comments:

If not, what other information would you have liked to have been provided with?

Have you had feedback from [Participant] about the course? YES NO

? ?

Comments:

Do you think [Participant] has benefited from attending the course?

YES NO
? ?

How?

Has your organisation benefited from [Participant] attending the course?

YES NO
? ?

How?

If the course was run again, would you consider sending someone?

YES NO
? ?

Comments:

What changes, if any, would you like to see made to the course?

Any other comments:

Thank you. Please return to Ms Kate Campbell on 61+8+8363 9011.