

**POST TRAINING EVALUATION REPORT OF
THE A.I.T. COURSE ON**

**ZOO
MANAGEMENT**

By

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1- EXECUTIVE SUMMARY

The Government of Punjab is working for the capacity building of its officials with a view to improving the overall performance and efficiency levels of service delivery. This has become doubly important in keeping with the many reforms being introduced by the Government, as well as the rapidly changing modern governance paradigm, which requires acquisition of new skill sets. The Punjab Resource Management Program entered into a partnership with the Asian Institute of Technology (A.I.T), for training selected officials from identified Departments in the modern techniques and required skills of certain disciplines. In this regard so far eight different training courses have been conducted. In keeping with best practices, it was decided to evaluate these trainings. Through this assessment process, A.I.T is being provided with feedback on the aspects which need improvement. As a result of this initiative, eight Evaluation reports have already been submitted for the first eight courses, namely, *Contract Administration and Alternative Dispute Resolution, Hospital Management, Irrigation System Management, Construction Management, Monitoring & Evaluation of Infrastructure Development Project, Hospital Management-2, Hospital Management-3, Advance Competencies for Trainers* and the ninth report on *Zoo Management* is being submitted now. The report is based on the findings elicited through Questionnaires. The Questionnaire (attached as Annex-A) aims to assess a broad range of data including overall satisfaction with training quality, course content, resource persons quality, logistical arrangements, etc.

The contents of the Zoo Management course (attached as Annex-D) include modules on *Zoo Management* and *Animal Care & Management* which cover a range of topics. In addition the study visits were also included to give participants ample exposure to actual applications, problems / challenges.

The total number of participants sent on this course was 20 and these were selected from the Forest, Wildlife & Fisheries Department. Out of these 20 participants, 13 have filled in the Questionnaire. The Report is based on the feedback of these 13 participants. The participants have expressed their complete satisfaction with the training course and the logistical arrangements. The participants looked particularly satisfied with the *Administration, Training facilities* and *The overall quality of training workshop*. They have also shown satisfaction with the Resource Persons and declared the study visits (zoos and safari parks) as very beneficial. Some of the participants have mentioned that the modules on animal shows / training of wild animals and their use in the circus have not much relevance with the Public Sector. Majority of the participants were of the opinion that Safari World and Night Safari Parks can be replicated in Pakistan and a few of participants have also suggested *Lal Sohanra* and *Changa Manga* as potential places for these parks. All participants have recommended this course and Institute for the future training of other officers as well.

A separate section has been provided alongwith charts, showing a comparison of the overall average ratings of participants for all of the nine courses conducted by A.I.T. so far and the satisfaction level of the participants with regard to the achievement of their objectives for going to the said training.

2- BACKGROUND

The ability of the officials to perform well their assigned tasks is crucial to the efficient working of the various government departments. It is particularly so in the fast changing modern world, where the skill sets required for job performance are subject to continuous change and improvement. It is in keeping with this that the Government of Punjab came up with a plan through the PRMP to build the capacity of the public servants working in the provincial government. This plan has been developed after a thorough and broad based stakeholder consultation process. It envisages a multi-pronged strategy that includes granting of scholarships for Masters Programs to world reputed universities, in areas of importance for the provincial government. In addition, it also includes sending selected government employees on short courses to various leading institutions, such as the Civil Service College, Singapore, and the Asian Institute of Technology (A.I.T.) Thailand, etc. The A.I.T. program was started in May, 2009 and the current batch was the ninth in this regard.

In order to ensure that the scarce government resources are being efficiently utilized, it was decided by PRMP to conduct an evaluation of these trainings, with a view to assess the courses, their contents and quality of the resource persons as well as the overall usefulness of the said courses, for the Government of Punjab. This exercise would help the Government determine whether to continue sending officials on this course in the future as well. It is also meant to identify any short comings and come up with positive suggestions for onward communication to A.I.T., so that they may improve the course for the future batches.

The Forestry, Wildlife and Fisheries Department, Government of Punjab has developed a master plan which aims at development and improvement of zoos and wildlife parks in Punjab. In particular, it addresses the need for the rehabilitation and up gradation of existing facilities of the Lahore Zoo. This would involve remodeling of houses of zoo animals, landscapes and public facilities of the zoo.

It is important that government functionaries engaged in planning, management, operation & maintenance of the Lahore Zoo should have up to date knowledge and understanding of modern management techniques. It is hoped that the direct exposure and comparative study of management practices of Thailand would help initiating new initiatives.

Course Objectives:

This training programme will aid GoPb in advancing management knowledge and managerial skills of zoo managers. After the completion of this course the participants will:

- ❖ Gain knowledge on up-to-date management concepts and approaches applied in management of modern zoos and wildlife parks

- ❖ Enrich relevant knowledge and understanding in zoo management and conservation of captive wildlife
- ❖ Have broader perspectives in organizational development strategy, strategic plan, and an appropriate techniques in materializing change strategies of the zoological parks
- ❖ Get imperative knowledge on zoo animals' welfare and ethics
- ❖ Awareness on possible strategies to promote eco-tourism and edutainment programmes in the zoo
- ❖ Awareness on the key management skills that the zoo managers need to develop staff to deliver better services
- ❖ Accumulate lessons from the exposure visits to zoos and wildlife parks in Thailand

3- METHODOLOGY

The same methodology was employed for the evaluation of this training program as the one used for the previous A.I.T. training courses and has been mentioned in earlier Reports already submitted for Contract Administration, Hospital Management (courses I, II and III), Irrigation System Management, Construction Management, M&E of Infrastructure Development Project and Advance Competencies of Trainers. Instead of reproducing the whole methodology here, it was thought convenient for the readers to add it with this report as Annex-B.

4- FINDINGS

The participants have expressed their complete satisfaction with the training course and the logistical arrangements. They were also very satisfied with the different aspects of the course and rated *Administration, Training facilities* and *The overall quality of training workshop* very highly. They have shown satisfaction with the Resource Persons and declared the study visits (zoos and safari parks) as very beneficial. Some of the participants have mentioned that the modules on animal shows / training of wild animals and their use in the circus have not much relevance with the Public Sector.

All the participants have recommended this course and institute for the future training of other officers as well. The participants' feedback in this regard have been organized and reported below in the form of charts, matrixes / tables, etc.

4.1 - Level of satisfaction expressed by participants on different aspects of training

This section shows the level of satisfaction expressed by the participants on the different aspects of the training course.

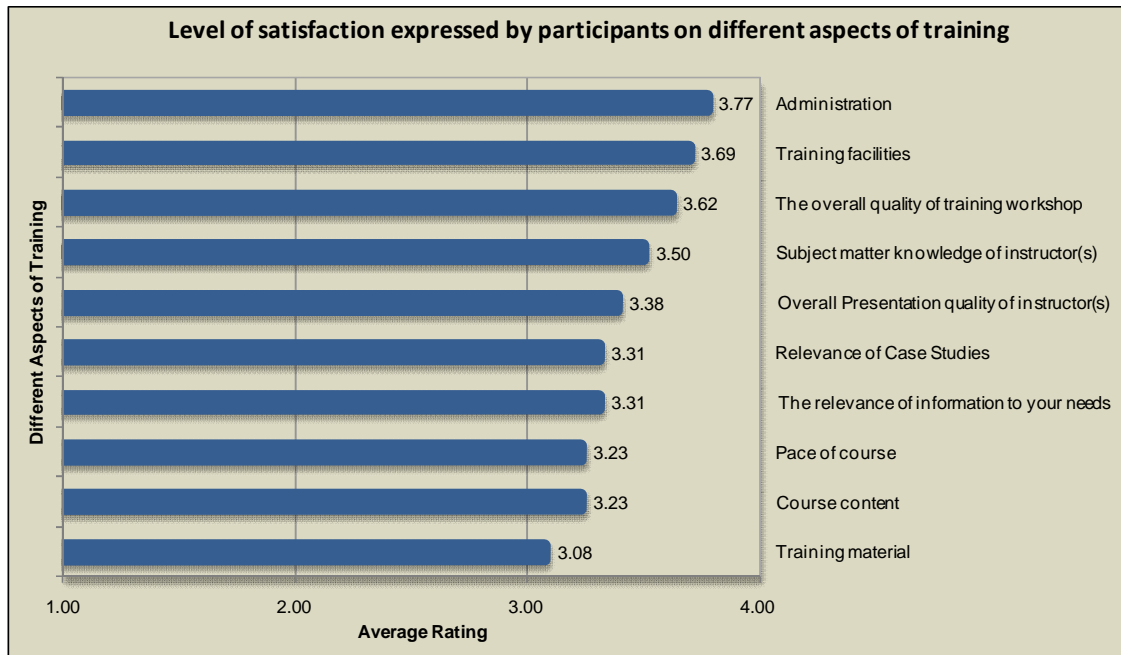


Figure 1

Participants were asked to rate each item on a four-point scale:

- 1 = Not satisfied
- 2 = Somewhat satisfied
- 3 = Satisfied
- 4 = Very satisfied

Figure 1 shows that, in head wise rating, *Administration* (3.77), *Training facilities* (3.69) and *The overall quality of training workshop* (3.62) were rated very highly. On the other hand *Pace of course* (3.23), *Course content* (3.23) and the *Training Material* (3.08) have got comparatively lower average ratings from the participants of the course. All of these ratings fall between 3.00 to 4.00 which represent *Satisfied* to *Very satisfied* on the Ratings Scale.

It may be mentioned here that one of the participants have assigned the rating of 1 (*Not satisfied*) to *Training Material*, however all other participants have shown satisfaction with this aspect.

4.2 - Self-ratings of participants of their knowledge before and after attending the course

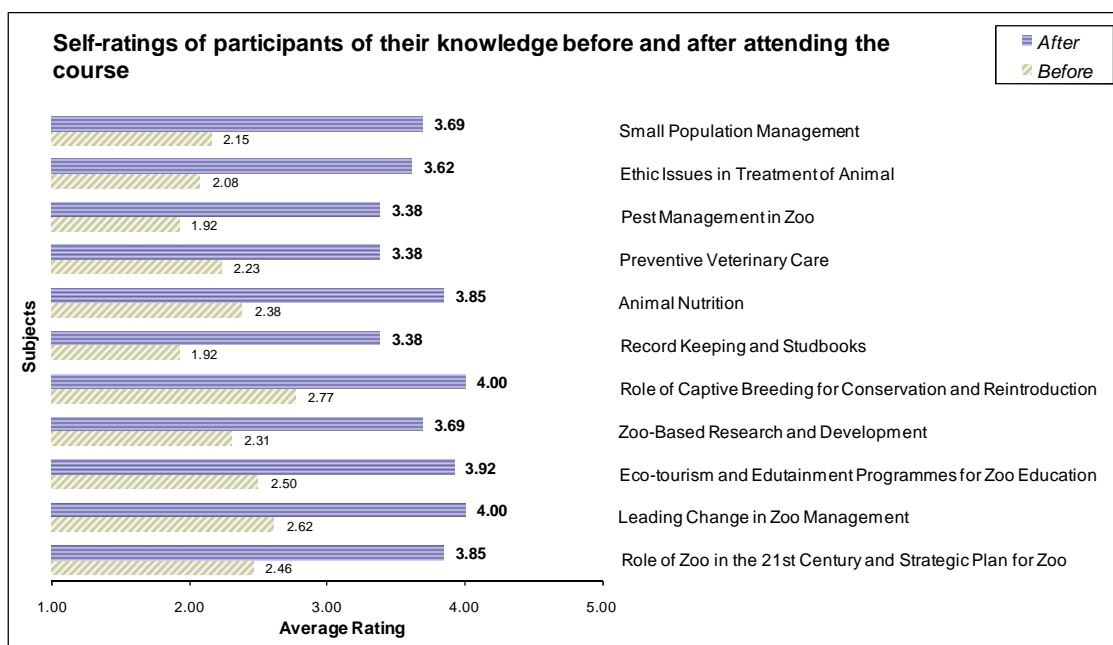


Figure 2

Participants were asked to rate their level of knowledge of each module taught with regard to before and after the training on a five-point scale as described below:

- 1. Very low = Know nothing about this topic
- 2. Low = Know very little about this topic
- 3. Moderate = Know about this topic but there is still a lot to learn
- 4. High = Have a good knowledge but there are still more things to learn
- 5. Very high = Know almost everything about this topic

Figure 2 illustrates that the most significant improvement in the knowledge of participants was noticed in *Pest Management in Zoo* and *Record Keeping and Studbooks* i.e. from an average of 1.92 of pre-training to an average of 3.38 of post-training for both. These were followed by *Ethic Issues in Treatment of Animal* from an average of 2.06 to 3.62, while the least gain in knowledge was observed in *Role of Captive Breeding for Conservation and Reintroduction* i.e. from an average of 2.77 of pre-training to 4.00 of post-training.

4.3 - Individual evaluation of resource persons

In any training perhaps the most important input, aside from the participant, is the resource persons / trainers. In view of this it was thought essential that the participants should evaluate the resource persons of the said training. The participants' responses indicate that there were 12 resource persons in all. It needs to be mentioned that our evaluation questionnaire in this regard has place for only six resource persons, therefore some of the resource persons are not mentioned by all the scholars.

The participants were asked to rate the resource persons with regard to a number of skills:

- Qualification & experience
- Training methodology
- Knowledge of the topics
- Communication style
- Time management
- Availability for after session consultations
- Management of the learning process

The five-point scale used for the rating is as follows:

- 1 = Below average
- 2 = Average
- 3 = Good
- 4 = Very good
- 5 = Excellent

Results for the same are shown below:

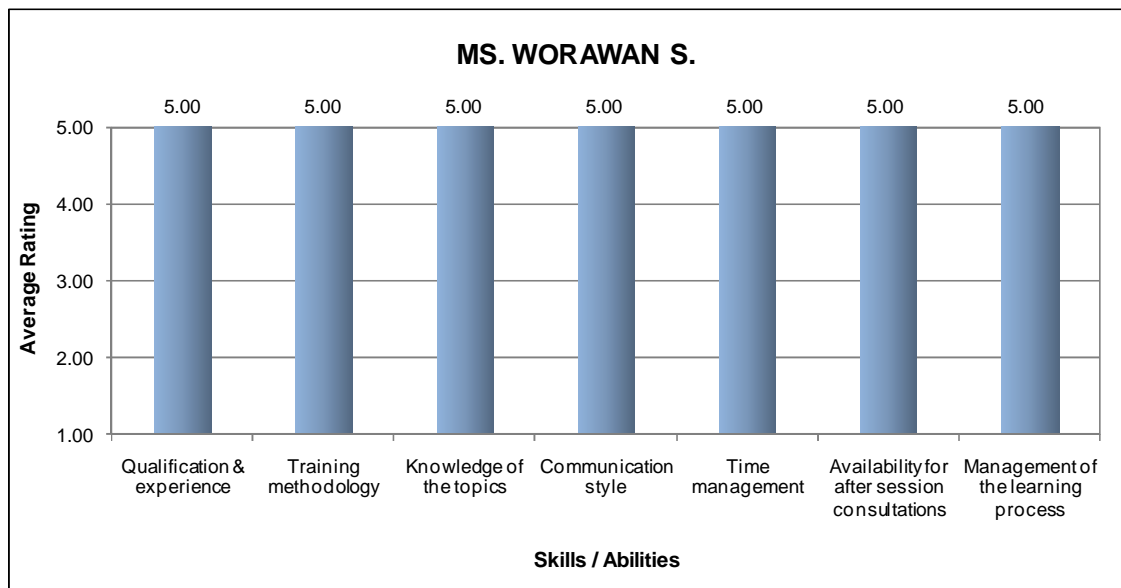


Figure 3

Figure 3 shows the ratings assigned to Ms. Worawan’s abilities and skills by one of the participants. She was assigned the ratings of 5.00 for all her attributes which represents *Excellent* on the Ratings Scale, however, it is to be noted here that these ratings were based on the feedback of just one participant.

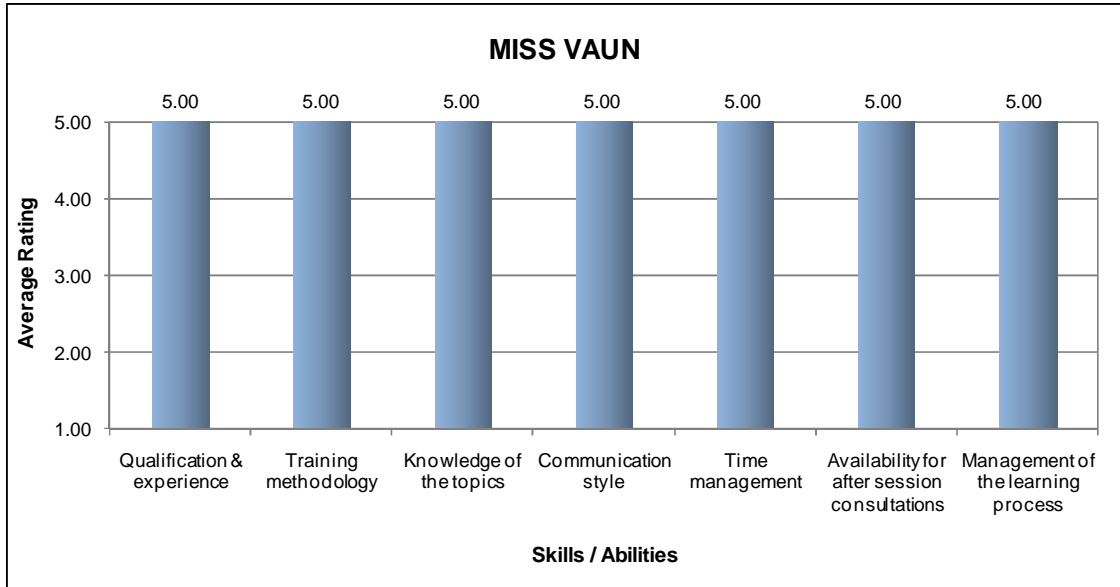


Figure 4

Like Ms. Worawan, Miss Vaun was also assigned the ratings of 5.00 (refer to figure 4) for all her attributes but ratings of her abilities and skills were also based on the feedback of one participant only.

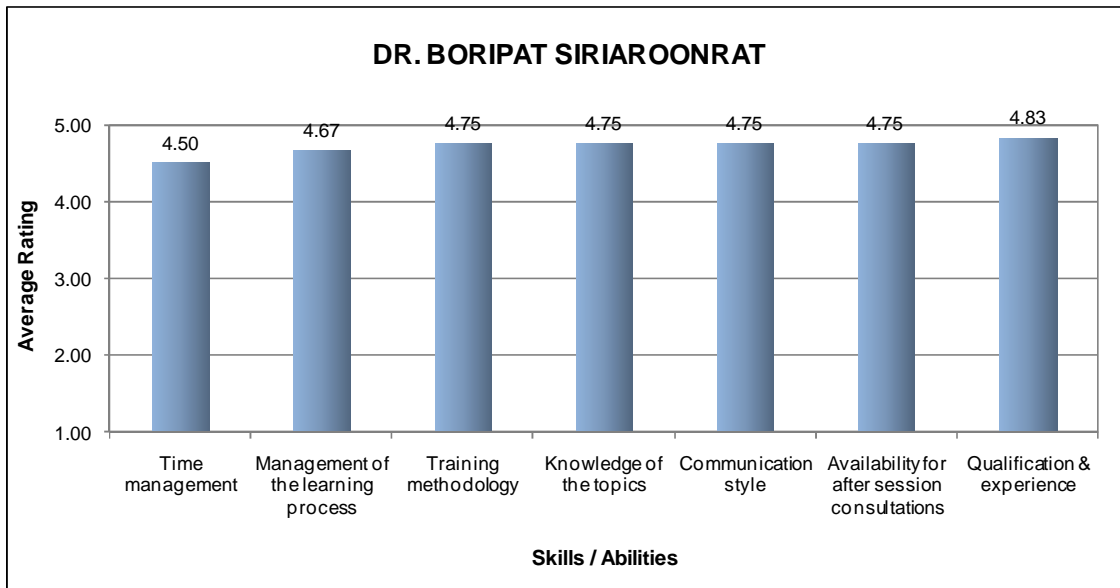


Figure 5

The averages for Dr. Boripat were calculated from the feedback of 12 participants. It is evident from the Figure 5 that all his skills and abilities were greatly admired by the participants and were given very high ratings. The participants rated all his attributes between *Very good* and *Excellent* on the ratings scale. He got the highest average rating (4.83) for his *Qualification and experience* and lowest (4.50) for the *Time management*.

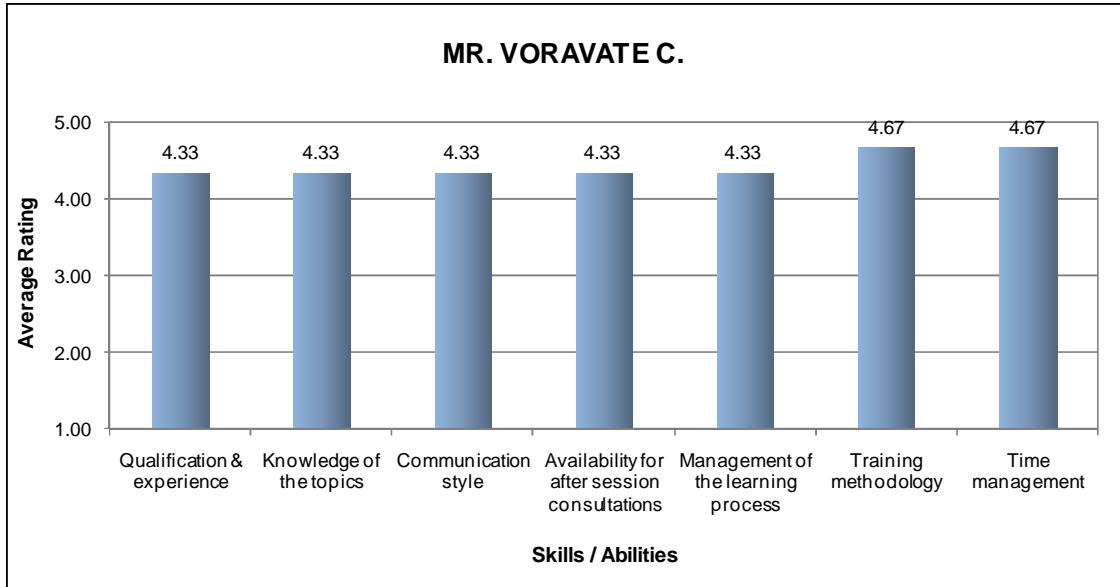


Figure 6

The average ratings for Mr. Vorvate were calculated from the feedback of 3 participants. All of his abilities and skills were given the ratings between *Very Good* to *Excellent* by the participants. Mr. Vorvate's *Time Management* and *Training methodology* were rated highest with average of 4.67 each. All of his other abilities and skills were also rated very highly (4.33 each). Figure 6 illustrates the feedback of the participants for Mr. Vorvates's abilities.

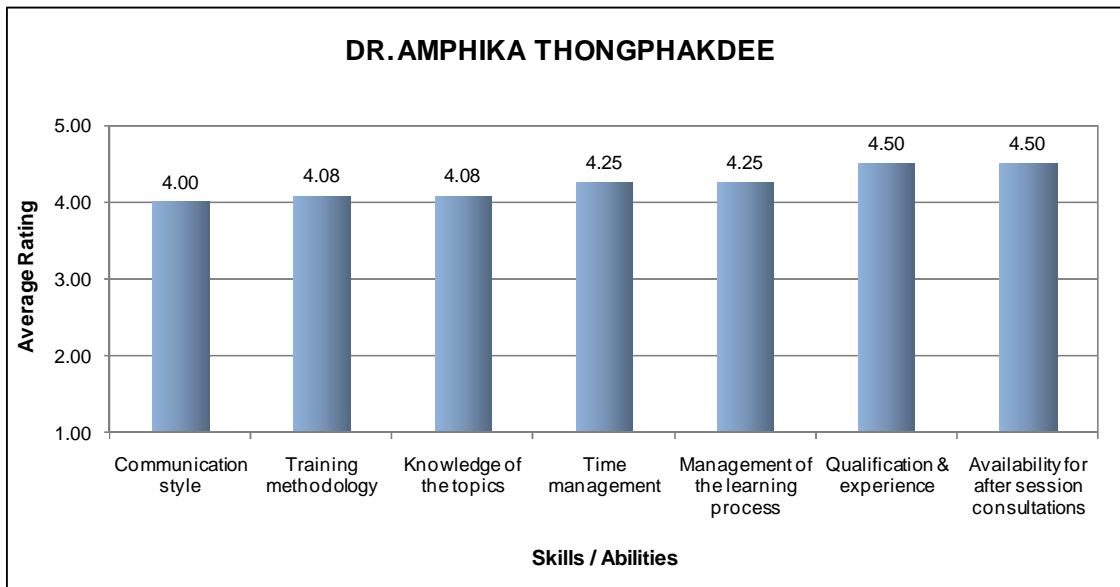


Figure 7

Figure 7 shows the average ratings that were assigned to the abilities of Dr. Amphika Thongphakdee by the participants of the course. *Availability for after session consultations* and *Qualification & experience* of Dr. Amphika were rated highest by the participants with average rating of 4.50 each whereas the average rating for her

Communication Style was lowest (4.00). The averages for Dr. Amphika were calculated from the feedbacks of 11 participants.

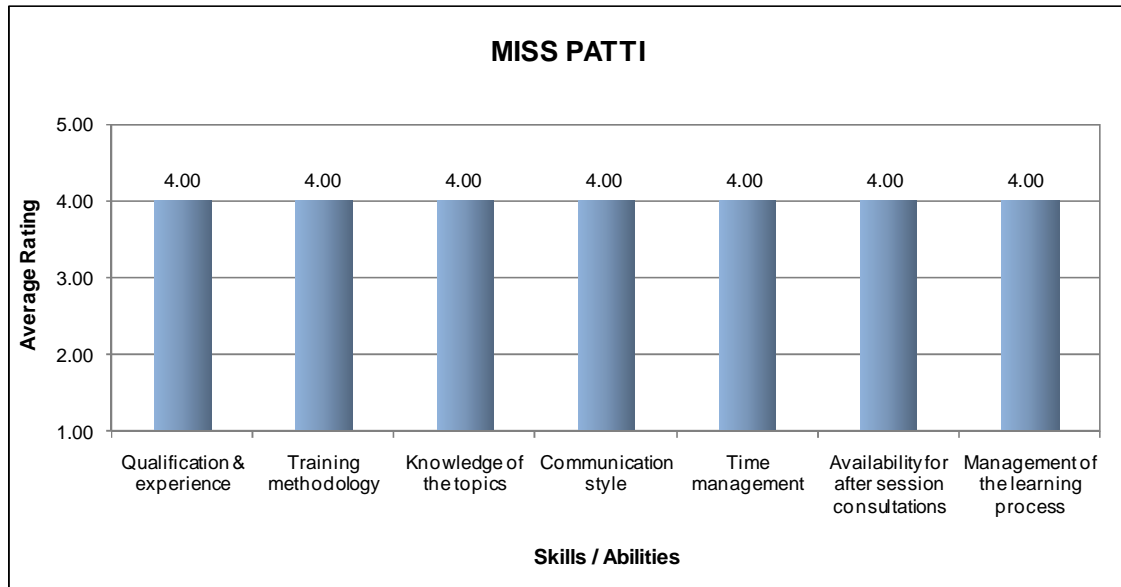


Figure 8

The ratings of Miss Patti's abilities and skills were based on the feedback of one participant only. The participant has assigned the ratings of 4.00 (refer to figure 8) to all the abilities and skills of Miss Patti.

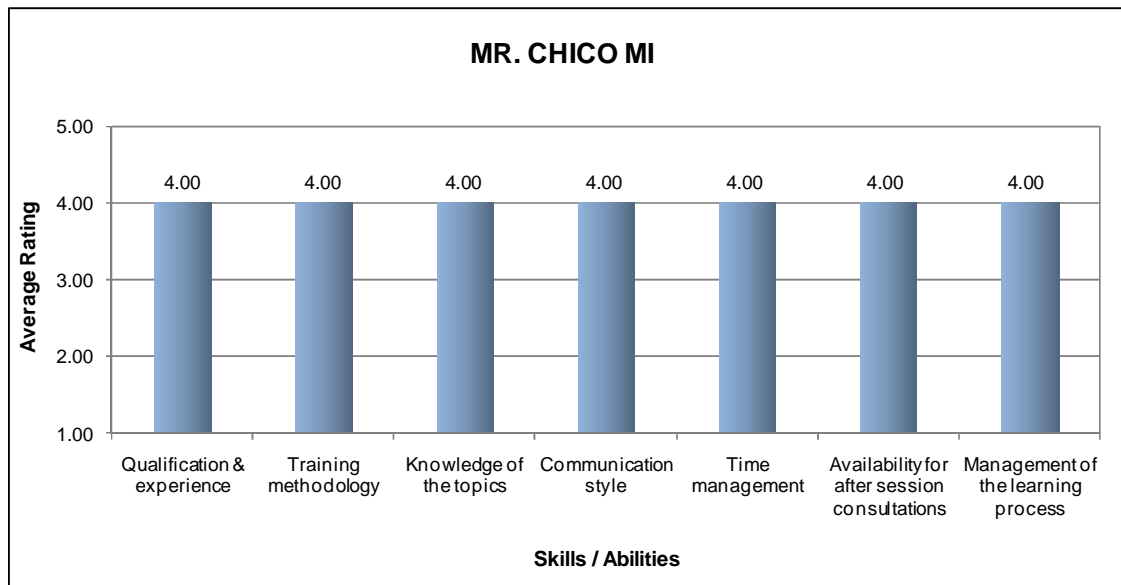


Figure 9

Mr. Chico Mi was also assigned the ratings of 4.00 (refer to figure 9) for all her attributes but ratings of his abilities and skills were also based on the feedback of one participant only.

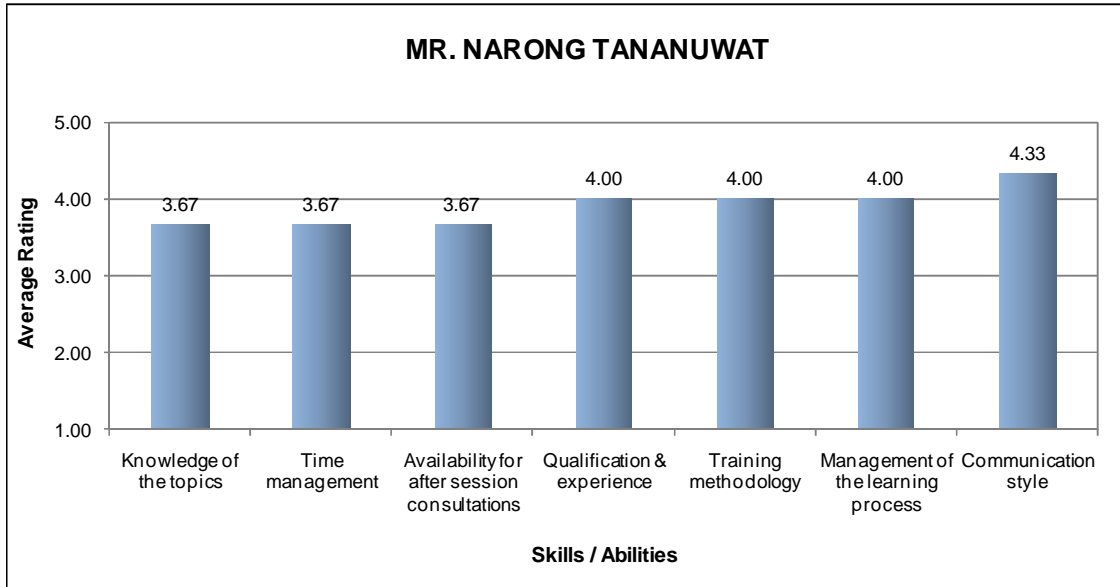


Figure 10

The averages ratings for Mr. Narong Tananuwat were calculated from 3 participants' feedback. Mr. Narong's *Communication Style* was given the highest rating by the participants i.e. 4.33 whereas his *Knowledge of the topics, Time management and Availability for after session consultations* were his lowest rated abilities with an average of 3.67 each. Figure 10 illustrates the all averages of ratings assigned by the participants to Mr. Narong's abilities.

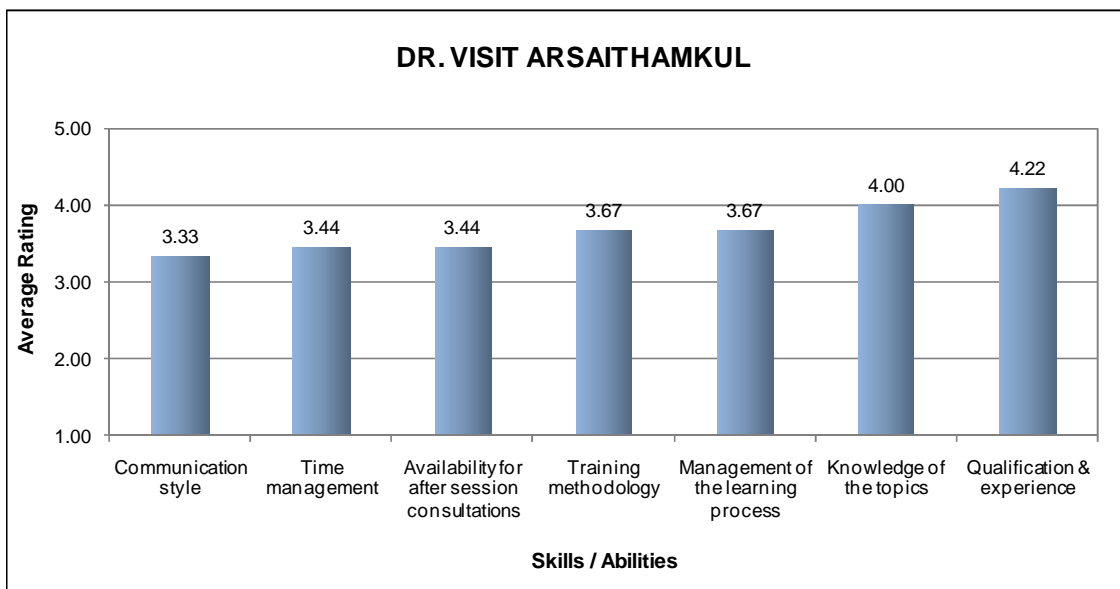


Figure 11

Figure 11 illustrates the averages of ratings that were assigned by the participants to Dr. Visit's abilities. It can be seen from the chart that the *Qualification and experience* and *Knowledge of the topics* of Dr. Visit were rated very highly by the participants with

averages of 4.00 and 4.22 which is *Very Good* to *Excellent* on the Ratings scale. The participants have rated all other Dr. Visit's abilities from 3.00 to 4.00 which represents *Good* to *Very good* rating on the Ratings Scale. The averages for Dr. Visit were calculated from the feedback of 9 participants.

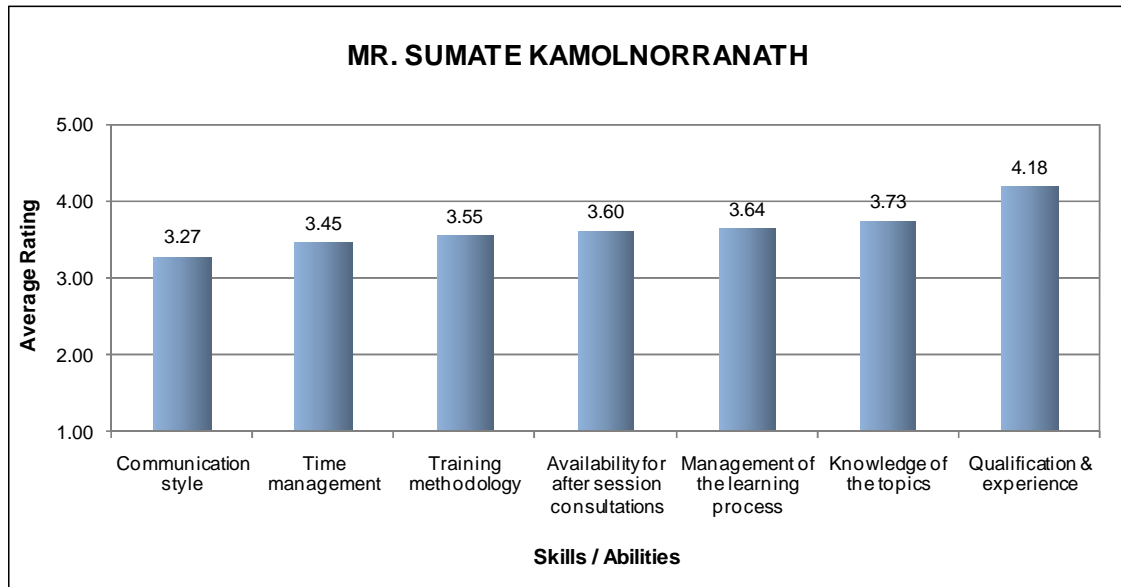


Figure 12

Figure 12 shows the feedback of participants regarding the abilities and skills of Mr. Sumate Kamolnorrnanath. Mr. Sumate's *Qualification and experience* was rated *Very Good* to *Excellent* by the participants. The average ratings for all his other abilities and skills fall between 3.00 to 4.00 which represent *Good* to *Very Good* on the Ratings Scale. These average ratings are based on the feedback of 11 participants.

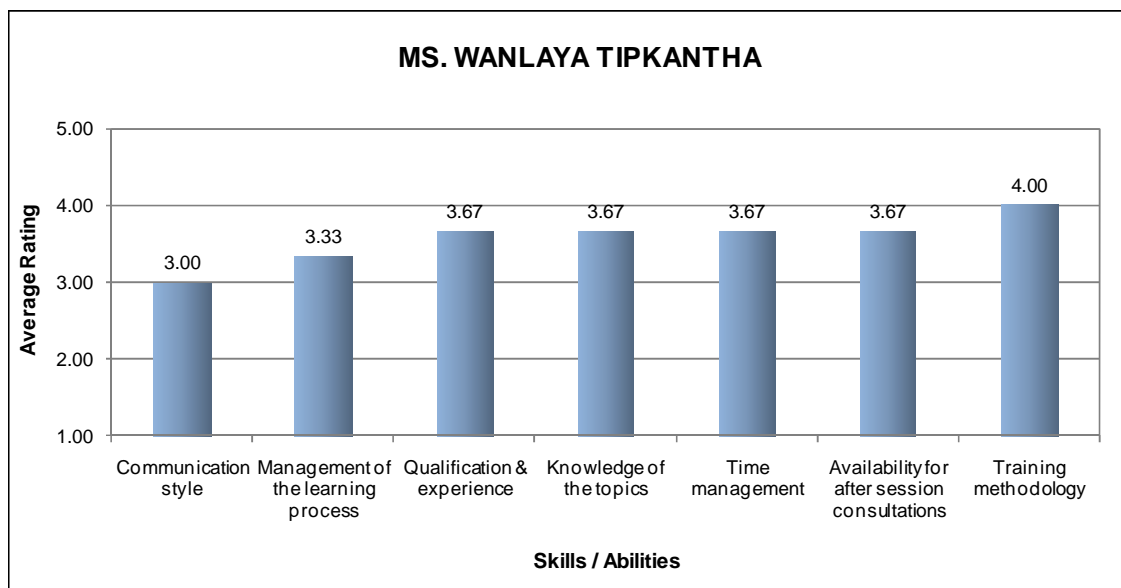


Figure 13

Figure 13 illustrates the average ratings that were assigned by the participants to abilities and skills of Ms. Wanlaya and these were calculated from the feedback of 3 participants. It can be seen from the chart that her *Training methodology* was admired most by the participants. The participants have rated her all other abilities from 3.00 to 4.00 which represents a *Good* to *Very good* rating on the Ratings Scale.

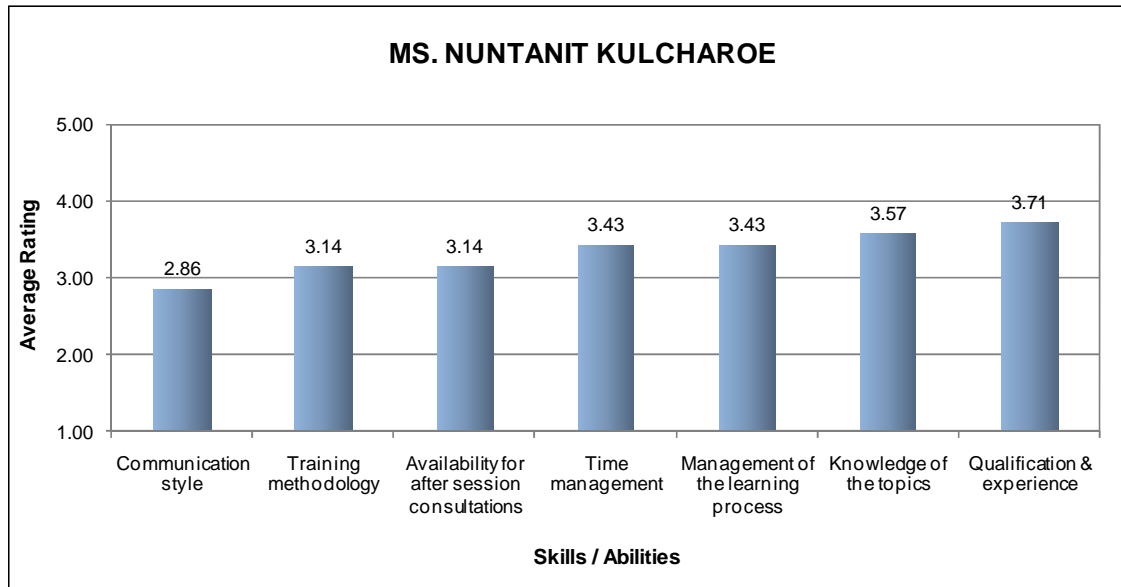


Figure 14

Ms. Nuntanit Kulcharoe's average ratings are based on the feedback of 7 participants. The participants have rated all her abilities between 3.00 (*Good*) to 4.00 (*Very Good*) on the Ratings Scale except her *Communication style*. Her *Qualification & experience* and *Knowledge of the topics* were rated highest with 3.71 and 3.57 respectively by the participants whereas her *Communication style* got the lowest rating 2.86. Figure 14 shows the average ratings for all her attributes.

4.4 - A comparison of resource persons

The following chart is based on the performance comparison of all the resource persons. It is based on the range of questions asked from participants to rate the different individual abilities of the resource persons and has been presented to compare the overall performances of all resource persons.

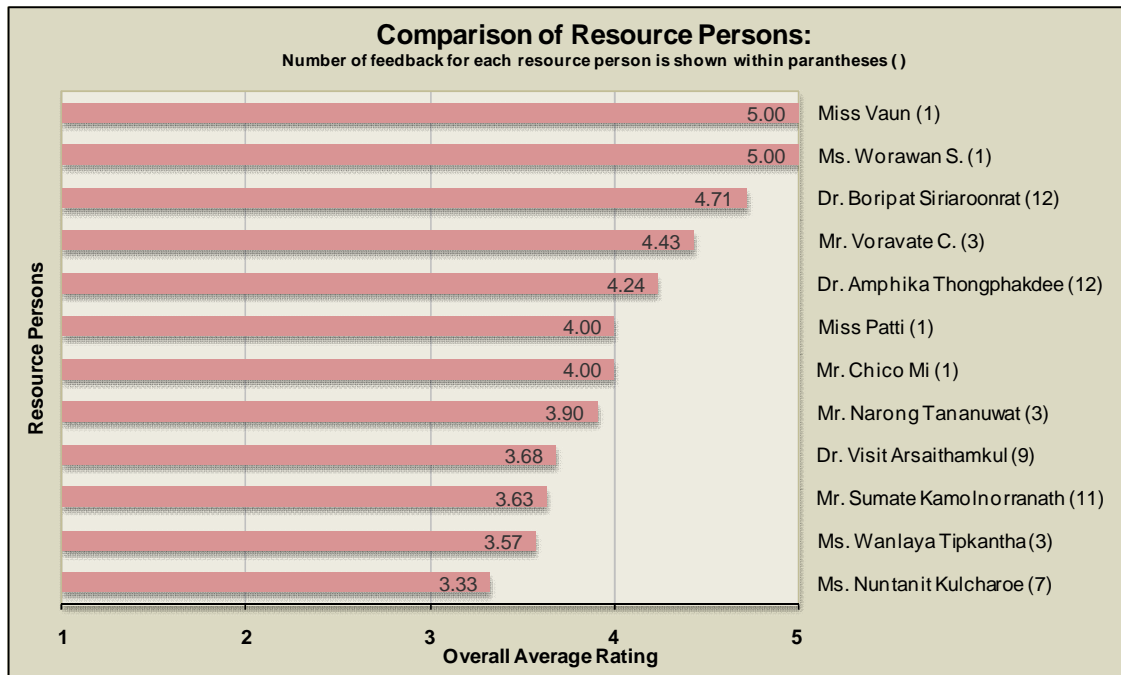


Figure 15

For the purpose of constructing this comparison, an average for the aggregate scores gained by resource persons from participants for each of their individual skill and ability was taken. The number of participants' feedbacks for each resource person is shown in the parentheses against their names in the chart (Figure 15). The number of feedbacks varies for each participant largely because each participant was provided with a questionnaire for acquiring feedbacks for 6 Resource Persons but the participants' selection of Resource Persons varied significantly.

The skills of Miss Vaun and Ms. Worawan S. were assigned the maximum ratings of 5.00 (that represents *Excellent* on the Ratings Scale) by the participants. It is to be noted here that the ratings for both of these resource persons were assigned by only one participant each. Dr. Boripat Siriaroonat's rating of 4.71, however, was calculated from feedback of 12 participants. Mr. Vorvate and Dr. Amphika also got very high ratings from the participants of the course with 4.43 (3 feedbacks) and 4.24 (12 feedbacks) respectively.

The average ratings for the abilities and skills of Ms. Nuntanit and Ms. Wanlaya were calculated as 3.33 and 3.57 respectively and were lowest among the resource persons of this course. However both of these ratings represent *Good* to *Very Good* ratings on the Ratings Scale as well. The average for Ms. Nuntanit was based on the feedback of 7 participants and that for Ms. Wanlaya was based on the feedback of 3 participants.

4.5 - Evaluation of the training in achieving the objectives at the department level

The participants' responses (verbatim) are as under:

- ◆ *In Punjab, areas provided to zoo exhibits are much larger but habitat enrichment & complexity of enclosures / cages is on lower side. There is a dire need for improvement of veterinary care, quarantine facilities & record keeping of captive wild animals in our zoos and wildlife parks.*
- ◆ *I want to apply gained knowledge about Animal Health and Care, Night Safari.*
- ◆ *That, one should be very much sincere and dedicated to his job.*
- ◆ *Very beneficial*
- ◆ *Very useful and beneficial*
- ◆ *Very good course according to the needs of Department to improve zoos and wildlife parks*
- ◆ *Through better management of wildlife parks*
- ◆ *The trained officers should be very much sincere & dedicated to their jobs*
- ◆ *We can develop our Zoos like Dusit Zoo.
We can develop our Parks like Safari World*
- ◆ *This training is beneficial by visiting the zoo, getting the knowledge through lecture. Will implement good aspects which were seen in zoos in Thailand.*
- ◆ *Very much satisfactory.*
- ◆ *Practical application of wildlife Safaris & Public Private Partnership concept has been conceived.*

4.6 - How beneficial and relevant were the study visits with the rest of training and was there any model, which can be replicated in Pakistan

All of the participants were of the view that the study tours were relevant with the rest of training and were beneficial. They have also mentioned the models, which in their views can be replicated in Pakistan. Following are the participants' views (verbatim) in this regard:

- ◆ *Study visits were much beneficial in the training. It was learnt during visits of Zoos and safaris regarding management of these facilities. Several ideas are replicable i.e. habitat enrichment, nutrition enrichment, record keeping, establishment of zoos, safaris and aquaria in private sector.*
- ◆ *We learn many new concepts of Zoo, like Open Zoo, Night Safari, Educational Auditorium in Zoo and Animal Hospitals in each Zoo.*
- ◆ *Study visits were very much beneficial except Cowboy show and Spy show. Safari World and Night Safari in Lal Sohanra, Bahawalpur.*
- ◆ *Study visits were very beneficial and much related with our training. World safari and open safari parks may be replicated in Pakistan at Lal Sohanra and Lahore Safari Park.*
- ◆ *Study visits were almost related to training course. Visit of World Safari can be replicated into Punjab and the best place is Manga Forest or Lal Sohanra.*
- ◆ *Study visits in training course were up to the mark and Ecotourism development program can be replicated in zoos of Pakistan.*
- ◆ *Study visits were highly related to trainings because training was on Zoo Management and study visits were conducted at 2 zoos, One Night Safari, One Safari Park, Elephant Institute.*
- ◆ *Visit was very much beneficial towards better management of Zoos and wildlife parks. There must be a Safari like World Safari near Bangkok, in Pakistan.*
- ◆ *Very much related tours. Dusit Zoo, Safari World and Siam Ocean World can be replicated in Pakistan.*
- ◆ *Study tours were beneficial and practicable. Open Zoo & Night Safari can be replicated in Pakistan.*
- ◆ *Study visit is very beneficial as what we learn in lecture can see in practical, Ocean world, Proper Diagnostic Center, ARKS system.*
- ◆ *Study visits were very beneficial, we can modernize our zoos and wildlife parks by adding animal behaviour shows and establishment of Deer Safari in Changa Manga and introduction of tram. Beautification of bird cages through flowering pots.*

4.7 - To what extent the objectives for going to this training were fulfilled

The pie chart below shows the percentage of objectives achieved, unachieved and those, which are mentioned by participants as partially achieved.

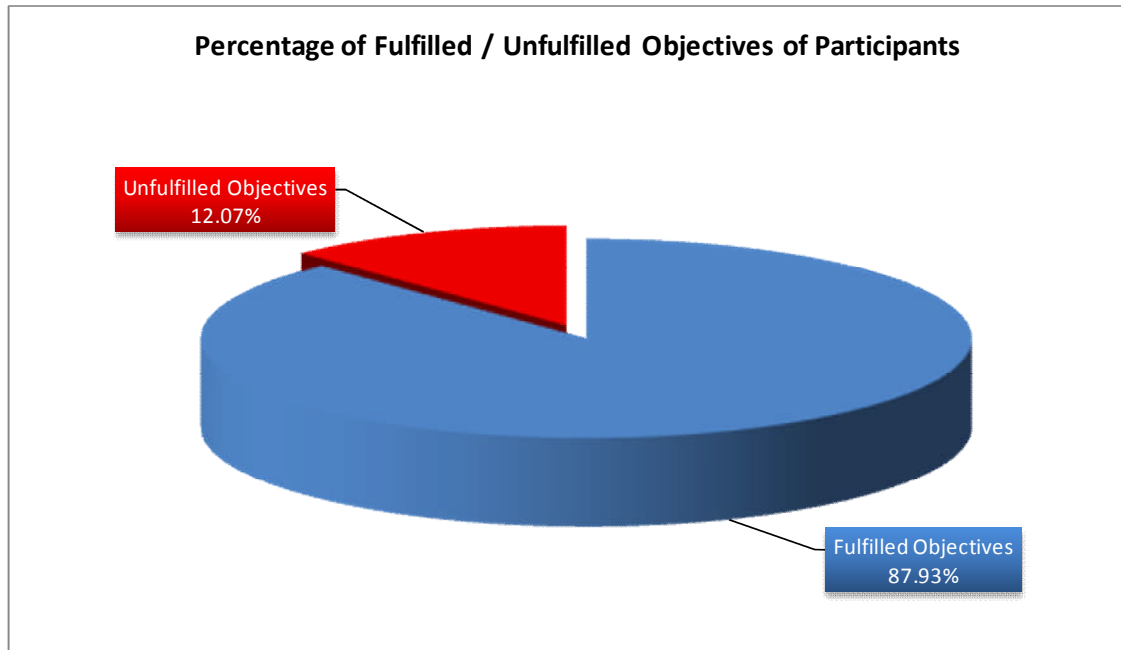


Figure 16

The participants stated 59 objectives in total. Out of which, 51 objectives were marked as fulfilled and 7 of the objectives were marked as unfulfilled by the participants. One of the stated objectives was neither marked as fulfilled nor as unfulfilled by the participant and therefore was not taken into account while calculating the percentages. All the stated objectives of the participants are attached at Annex-C, of this report.

The participants mentioned the following objective(s) as 'not fulfilled':

- 1) *Wildlife Management in Natural Habitats*
- 2) *Crocodile Farming*
- 3) *Knowledge about Species Diversity*
- 4) *Captive breeding of Reptiles*
- 5) *Advanced Techniques for Wildlife Breeding*
- 6) *Disease control in wildlife*
- 7) *Wildlife Management in Natural Habitats*

4.8 - Participants' feedback of most beneficial modules for the public sector

	PARTICIPANTS' RESPONSES
<p>Out of the whole course, which, modules did you find most beneficial for the Public Sector?</p>	<ul style="list-style-type: none"> ◆ <i>World Safari (5)</i> ◆ <i>Eco-Tourism and EDUTAINMENT (3)</i> ◆ <i>Programs for Zoo Education</i> ◆ <i>Preventive Veterinary Care</i> ◆ <i>Leading Change in Zoo</i> ◆ <i>Ethical Issues in Treatment of Animals</i> ◆ <i>Animal Care and Management</i> ◆ <i>Khao Kheow Open Zoo</i> ◆ <i>Animal Hospital</i> ◆ <i>Establishment of Night Safari</i> ◆ <i>Chiang Mai Zoo</i> ◆ <i>Ocean World</i> ◆ <i>Role of Zoo in the 21st century and strategic plan for Zoo</i> ◆ <i>Role of Captive Breeding for Conservation and Reintroduction</i> ◆ <i>Zoo Based Research and Development</i> ◆ <i>Visit of zoos was excellent. Modules were beneficial for the public sector</i>

There were few modules which were repeated, that is why the number of times a module was mentioned has been written afterwards within brackets.

4.9 - Modules that should have been added to the current course to make it more useful in view of participants

The participants were requested to identify those modules, which should have been added to the course they attended to make it more useful. The responses of the participants who have mentioned modules are given in the below table:

	PARTICIPANTS' RESPONSES
<p>What modules you think should have been added to the current course, to make it more useful?</p>	<ul style="list-style-type: none"> ◆ <i>Conservation of wildlife in wild habitats (3)</i> ◆ <i>Habitat Improvement (2)</i> ◆ <i>Re-introduction of wildlife in nature (2)</i> ◆ <i>Taxidermy / Establishment of wildlife museum (2)</i> ◆ <i>Low Cost, Best Management Programme</i> ◆ <i>Animals Behaviour, Animal Keeping</i> ◆ <i>Only knowledge about species diversity and zoo geography of animal is required to be added to the course.</i> ◆ <i>Species Management</i> ◆ <i>Visit to Songkhla Zoo</i> ◆ <i>Research & learning about the scientific instrument in laboratory may be added.</i> ◆ <i>Legislation regarding wildlife</i> ◆ <i>As the training was ex-site but it would be better if in future in-site topic may please be added because both are compulsory for each other.</i> ◆ <i>Visit to see the animals/birds in wild/natural habitat</i>

Many modules were repeated, which is why the number of times a module was mentioned has been written afterwards within brackets.

4.10 - Modules identified by participants that were not so relevant for the Public Sector.

The participants were asked to mention the modules which were not so relevant for the Public Sector in their opinion. A few of the participants declared all the modules as relevant. The comments of those who have mentioned the modules as having not much relevance to the Public Sector are as follows:

	PARTICIPANTS' RESPONSES
<p>What were the modules that were not so relevant for the Public Sector?</p>	<ul style="list-style-type: none"> ◆ <i>Tiger Show / Tiger Training (4)</i> ◆ <i>Elephant show / Elephant Training (3)</i> ◆ <i>Crocodile / ELEGATOR show (2)</i> ◆ <i>Use of wild animals in the circus (3)</i> ◆ <i>Ethical Issues in Treatment of Animals (2)</i> ◆ <i>Eco-tourism</i> ◆ <i>Record Keeping and Stud Books</i> ◆ <i>Small Population Management</i> ◆ <i>Spyshow</i> ◆ <i>Cowboy show</i> ◆ <i>Siam Ocean visit</i> ◆ <i>Small Population Management</i>

It is evident from the feedback of the participants that the majority of the participants were of the opinion that animal shows / training of wild animals and their use in the circus were not much relevant for the Public Sector.

4.11 Are you satisfied with the training attended

This question was included in the questionnaire to find out the number of participants who were satisfied with the training in general.

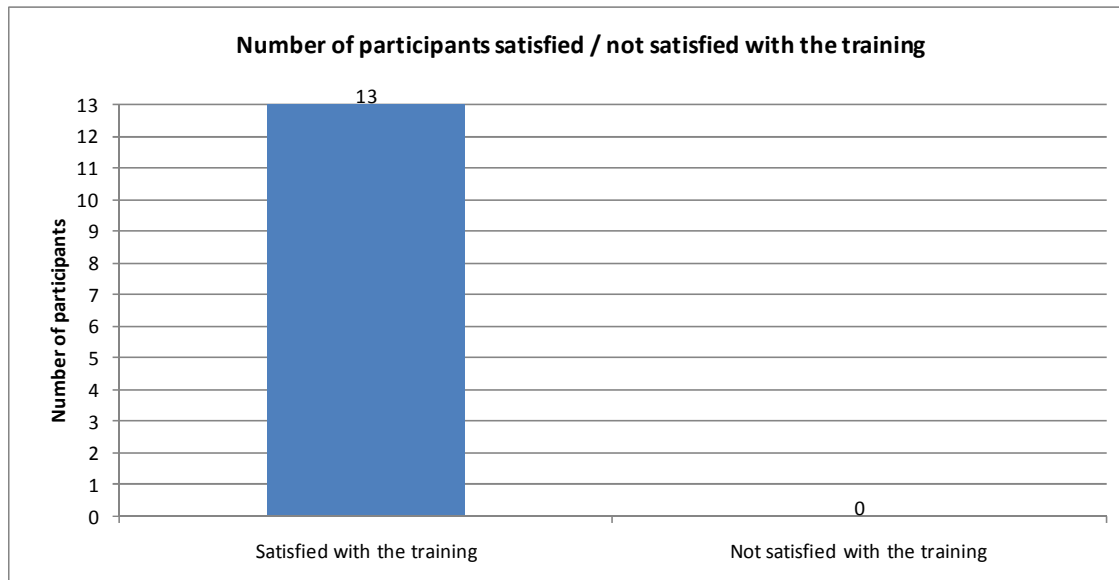


Figure 17

All thirteen participants have expressed their satisfaction with the training and have recommended this Course and Institute for future training to other officers.

5- A COMPARISON BETWEEN ALL THE NINE COURSES CONDUCTED BY A.I.T.

In order to enhance the quality of training an effort has been made to compare all following nine trainings conducted by A.I.T. so far.

1. Hospital Management
2. Contract Administration & Alternative Dispute Resolution
3. Irrigation System Management
4. Construction Management
5. M&E of Infrastructure Development Project
6. Hospital Management-2
7. Hospital Management-3
8. Advance Competencies for Trainers
9. Zoo Management

5.1 - OVERALL RATING OF TRAINING PROGRAM AND INSTITUTE

The participants were asked to assign an overall rating to their training programs and the institute using the following five-point rating scale:

- 1 = Poor
- 2 = Fair
- 3 = Good
- 4 = Very good
- 5 = Excellent

Results for the same are shown below:

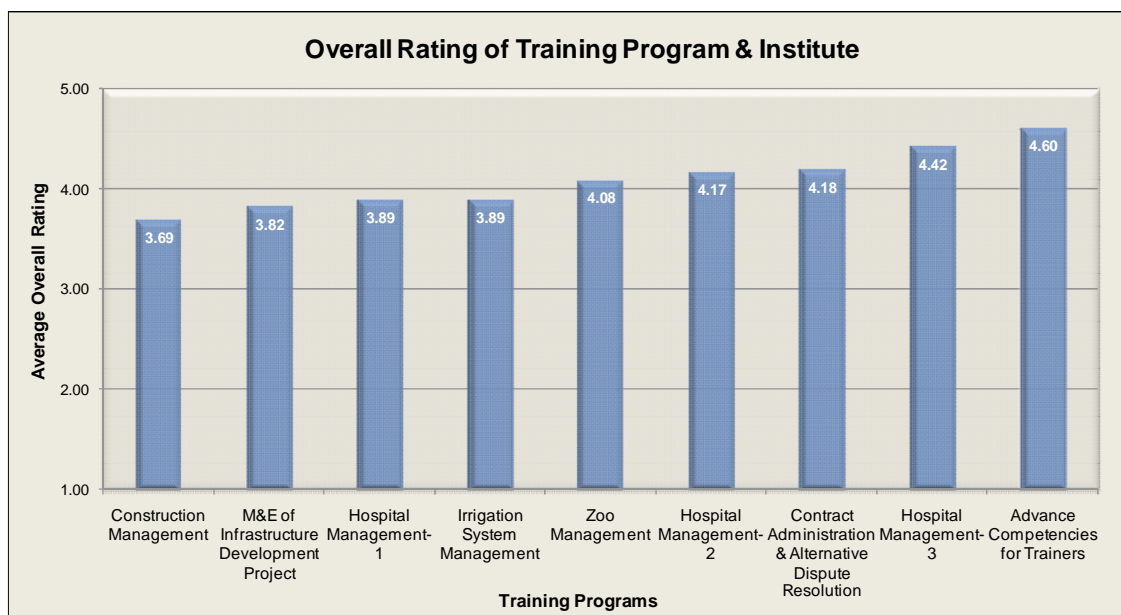


Figure 18

It is evident from the figure 14 that amongst all the training programs conducted by A.I.T. so far, the participants of *Advance Competencies for Trainers* have rated their Program and the Institute (A.I.T.) highest with an average rating of 4.60, which is *Very Good to Excellent* on the Ratings Scale, followed by *Hospital Management-3* course with average rating of 4.42. The participants of *Zoo Management* course have given the average rating of 4.08 to the course and the institute which is also *Very Good to Excellent* on the Ratings Scale.

The program *Construction Management* has been the lowest rated one so far with an average rating of 3.69 which is a *Good to Very Good* rating on the Ratings Scale. All other courses as can be seen in the chart above were also rated between *Good to Very Good* by the participants.

5.2 - COMPARISON BETWEEN THE ACHIEVED STATED OBJECTIVES OF PARTICIPANTS OF ALL NINE COURSES

The following chart demonstrates the results in percentage for the stated objectives of participants of the courses.

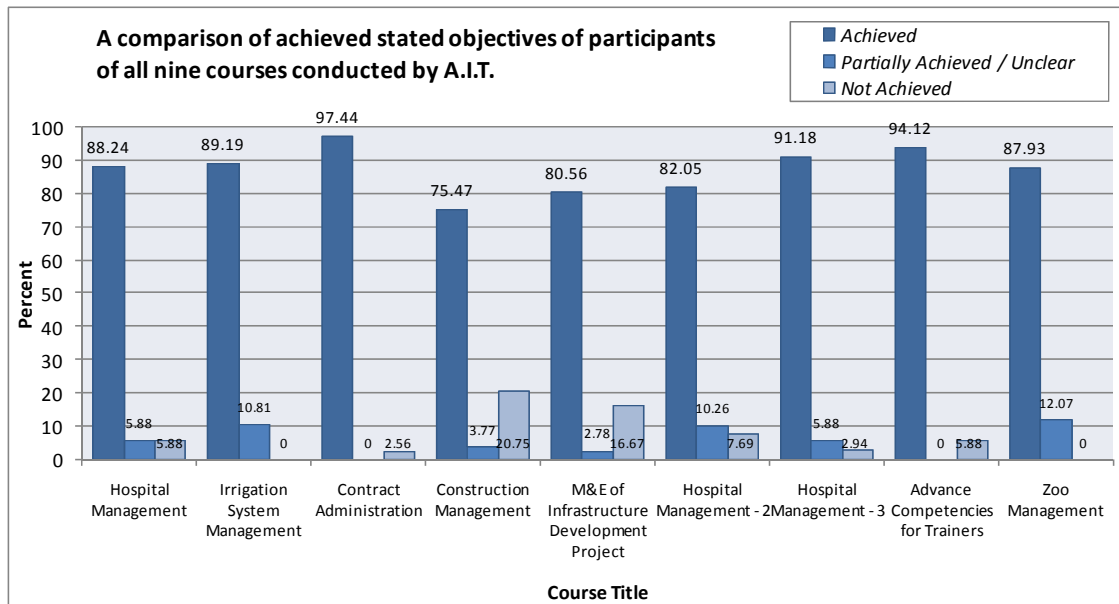


Figure 19

It can be seen from the Figure 15 which shows the comparisons of achieved objectives of participants for all nine courses that the course on *Contract Administration and Alternative Dispute Resolution* has been the most successful one in terms of participants' achieved objectives. The course *Construction Management* was behind others in terms of percentage of achieved objectives of participants followed by *M&E of Infrastructure Development Project*.

6- RECOMMENDATIONS

Recommendations of the participants are given below in their own words:

- ◆ *Proposal for establishment of ungulate Safari at wildlife Park Chang Manga is under consideration. High up in Department has agreed to this proposal and PC-1 is under preparation. Similar other projects are under are also being initiated and work is being carried out on habitat enrichment and complexity of cages.*
- ◆ *This is a good effort and it should be carried on in future for short courses on Modern Zoo Mission and Conservation.*
- ◆ *Programmes like such type of short courses should be scheduled regularly in this department for capacity building in the relevant field of areas.*

- ◆ *The training programme was very beneficial and informatory. It should be arranged once in a year at least to share the advance knowledge and technology on Zoo Management and Development of Habitat. Practical exhibition of medical treatment and animal handling should be arranged. Duration of the course should be also extended to four weeks.*
- ◆ *Such trainings are very useful for employees of wildlife department and such programmes must be appreciated in future also.*
- ◆ *These trainings are the source of sharing information between different communities by which many solutions to the problems are effectively sorted out. This process is much appreciable and this training programme must be extended to the European countries and especially Australia (Because Australia has a very unique wildlife species).*
- ◆ *Such types of training programmes must be scheduled regularly to improve the ability of wildlife officials towards wildlife – management and conservation.*
- ◆ *Time for course should be at least 2 months so as to cover Zoo-based research and developments.*
- ◆ *Lectures regarding Zoo Management course were beneficial. AIT administration & Resource persons did very well to accommodate, deliver knowledge to us. Arranged study visits in excellent way. They provided us friendly environment. Experts from Thailand are invited to visit Punjab for the betterment of zoos in Pakistan. Research facilities / animal species exchange with Thailand.*
- ◆ *Training course was lacking in management aspects regarding housing of wild animals i.e. sanitation, feeding protocol, reporting lines of subordinate staff. An important aspect i.e. nutrition, habitat enrichment, complexity of the enclosures / cages was only limited to the observations, any practical demonstration in this regard was not arranged. It was observed that zoos both in public & private sector are much focused on animal and bird shows. This is much deviated from the natural behavior of animals in wilderness.*
- ◆ *An interaction between both countries to exchange knowledge. Priority to in-site training because which is quite necessary as the habitat destruction & declining population of wildlife will ultimate result into disturbance in natural cycle.*
- ◆ *I gained knowledge on up-to-date management concepts & awareness about modern zoos & wildlife parks. It should be continued. This is really very informative and useful training program. Training regarding wildlife protection should be initiated in different habitats of countries like Africa, India, Malaysia, Kenya, etc.*

ANNEXES

ANNEX A: QUESTIONNAIRE

SHORT COURSE-POST TRAINING EVALUATION FORM
ASIAN INSTITUTE OF TECHNOLOGY
Zoo Management
(November, 2009)

PERSONAL INFORMATION		
1. Name:	2. Gender:	Male Female
3. Designation & Department:		
4. Occupational Group/Service:	5. Pay Scale:	
6. Date of Birth:	7. Year of Joining Service:	

1) Education:

Degree	Subject	Institution	Year
M.A. / M.Sc.			
Professional Degree			
Others			

Evaluation OF Short Executive Courses Please provide your candid evaluation of the Short Course that you have just undertaken. Your evaluation will help to improve the future delivery of trainings by Punjab Resource Management Program.

2) Were you satisfied with the logistical arrangements for training before your departure and during the program?
Yes No

If no, why [please use extra sheet, if required]:

3) Training Program:

a. Title of the Training:

b. Name of the Institute / Department:

c. Are you satisfied with the Training attended?

Yes No

If no, than kindly elaborate [Please feel free to use extra sheet, if required]:

d. Out of the whole course, which, modules did you find most beneficial for the Public Sector?

e. What were the modules, which were not so relevant (identify 2-3 only) for the Public Sector?

f. What modules you think should have been added to the current course, to make it more useful?

g. **Would you like to recommend your Course and Institute for future training to other officers?**

Yes No

		Poor	Fair	Good	Very good	Excellent
h.	Your overall rating of Training Program and Institute.	1	2	3	4	5

4) Learning Objectives

4.a) What were your objectives for going to this Training?

4.b) Please mention which of your objectives for the training were fulfilled and those that remained unfulfilled?

	Objectives	Fulfilled	Not Fulfilled
1.			
2.			
3.			
4.			
5.			

4.c) How would you evaluate the training in achieving your objectives at the departmental level?

5) Training Evaluation

5.a) Overall Evaluation of Training

How satisfied are you with:	Not Satisfied	Somewhat Satisfied	Satisfied	Very Satisfied
The relevance of information to your needs	1	2	3	4
Course content	1	2	3	4
Pace of course	1	2	3	4
Training Material	1	2	3	4
Relevance of Case Studies	1	2	3	4
Overall Presentation quality of instructor(s)	1	2	3	4
Subject matter knowledge of instructor(s)	1	2	3	4
Training facilities	1	2	3	4
Administration	1	2	3	4
The overall quality of the training workshop	1	2	3	4

5.b) Resource Person Evaluation:

a. *Resource Person 1.* _____

		Below average	Average	Good	Very good	Excellent
A	Qualification & experience	1	2	3	4	5
B	Training Methodology	1	2	3	4	5
C	Knowledge of the topics	1	2	3	4	5
D	Communication style	1	2	3	4	5

E	Time management	1	2	3	4	5
F	Availability for after session consultations	1	2	3	4	5
G	Management of the learning process	1	2	3	4	5

b. Resource Person 2. _____

		Below average	Average	Good	Very good	Excellent
A	Qualification & experience	1	2	3	4	5
B	Training Methodology	1	2	3	4	5
C	Knowledge of the topics	1	2	3	4	5
D	Communication style	1	2	3	4	5
E	Time management	1	2	3	4	5
F	Availability for after session consultations	1	2	3	4	5
G	Management of the learning process	1	2	3	4	5

c. Resource Person 3. _____

		Below average	Average	Good	Very good	Excellent
A	Qualification & experience	1	2	3	4	5
B	Training Methodology	1	2	3	4	5
C	Knowledge of the topics	1	2	3	4	5
D	Communication style	1	2	3	4	5
E	Time management	1	2	3	4	5
F	Availability for after session consultations	1	2	3	4	5
G	Management of the learning process	1	2	3	4	5

d. Resource Person 4. _____

		Below average	Average	Good	Very good	Excellent
A	Qualification & experience	1	2	3	4	5
B	Training Methodology	1	2	3	4	5
C	Knowledge of the topics	1	2	3	4	5
D	Communication style	1	2	3	4	5
E	Time management	1	2	3	4	5
F	Availability for after session consultations	1	2	3	4	5
G	Management of the learning process	1	2	3	4	5

e. Resource Person 5. _____

		Below average	Average	Good	Very good	Excellent
A	Qualification & experience	1	2	3	4	5
B	Training Methodology	1	2	3	4	5
C	Knowledge of the topics	1	2	3	4	5
D	Communication style	1	2	3	4	5
E	Time management	1	2	3	4	5
F	Availability for after session consultations	1	2	3	4	5
G	Management of the learning process	1	2	3	4	5

f. Resource Person 6. _____

		Below average	Average	Good	Very good	Excellent
A	Qualification & experience	1	2	3	4	5
B	Training Methodology	1	2	3	4	5

C	Knowledge of the topics	1	2	3	4	5
D	Communication style	1	2	3	4	5
E	Time management	1	2	3	4	5
F	Availability for after session consultations	1	2	3	4	5
G	Management of the learning process	1	2	3	4	5

5. c) Please explain how beneficial and related were the study visits with the rest of your training, and was there any model which can be replicated in Pakistan:

6) Level of Knowledge: (Zoo Management)

Please circle the appropriate number to indicate your level of knowledge about the following topics **before** and **after** completing the program. Please use the following key for rating:

1. Very Low = Know nothing about this topic
2. Low = Know very little about this topic
3. Moderate = Know about this topic but there is still a lot to learn
4. High = Have a good knowledge but there are still more things to learn
5. Very High = Know almost everything about this topic

How do you rate your knowledge about:	BEFORE THIS WORKSHOP					AFTER THIS WORKSHOP				
	Very Low	Low	Mode-rate	High	Very High	Very Low	Low	Mode-rate	High	Very High
Role of Zoo in the 21 st Century and Strategic Plan for Zoo	1	2	3	4	5	1	2	3	4	5
Leading Change in Zoo Management	1	2	3	4	5	1	2	3	4	5
Eco-tourism and Edutainment Programmes for Zoo Education	1	2	3	4	5	1	2	3	4	5
Zoo-Based Research and Development	1	2	3	4	5	1	2	3	4	5
Role of Captive Breeding for Conservation and Reintroduction	1	2	3	4	5	1	2	3	4	5

Record Keeping and Studbooks	1	2	3	4	5	1	2	3	4	5
Animal Nutrition	1	2	3	4	5	1	2	3	4	5
Preventive Veterinary Care	1	2	3	4	5	1	2	3	4	5
Pest Management in Zoo	1	2	3	4	5	1	2	3	4	5
Ethic Issues in Treatment of Animal	1	2	3	4	5	1	2	3	4	5
Small Population Management	1	2	3	4	5	1	2	3	4	5

7) Any Other Suggestion / Comment.

Name: _____

Signature: _____

Date: _____

Contact Telephone No: _____

Note:

The information contained in this Pro forma will be used for evaluation and analysis. We may also use your comments in certain publications/ reports.

ANNEX B: METHODOLOGY

Evaluation is the comparison of actual project impacts against the agreed strategic plans. It looks at what you set out to do, at what you have accomplished, and how you accomplished it. It can be **formative** (taking place during the life of a project or organization, with the intention of improving the strategy or way of functioning of the project or organization). It can also be **summative** (drawing lessons from a completed project or an organization that is no longer functioning). In addition, experts usually distinguish among four levels of training evaluation, which were first developed by Donald L. Kirkpatrick in 1959:

Level 1 : Reaction - *Measures participant's opinions about the course. This is the most common way to evaluate a course and provides a measure of customer satisfaction. It is low cost; easy to administer, provides insights into participants' opinions. This method provides quick feedback regarding successes and failures.*

Level 2: Learning - *Can include tests of performance before and after the course*

Level 3: Transfer to the job - *Measures how the knowledge, skills and values from a course are used on the job. Typically measures 3 to 6 months after training*

Level 4: Organizational impact - *Measures performance improvements, quality improvements and cost savings to an organization*

This evaluation report is based on the first level technique, that is the reaction of the participants. The other three advanced levels of evaluation require much more time and resources than level 1.

Methods used:

The total number of participants was 20, out of which only 13 have filled in the Questionnaire. This means that we were handicapped by the small number of participants, which obviously resulted in the availability of limited data. It is because of this that the sampling technique was not used, as the total amount of data available was itself small enough to be easily manageable. It is because of this that all the available data has been carefully and systematically incorporated in the evaluation process.

In the development of this report Methodological triangulation was employed. Two separate sources of data collection were used, one of the questionnaire, and the other of the select interview. However, within the first method of questionnaire, two within-method techniques were used, that is *the Rankings* and the *Rating Scales*. The objective is that to see if there is room for improvement and to communicate that information to AIT.

Structure of Post-Training Evaluation Form / Questionnaires:

Questionnaires were carefully designed in such a way so as to acquire the relevant data from participants, which could subsequently be used to review and assess the quality of training provided by AIT. Evaluation process requires a combination of quantitative and qualitative

information in order to be comprehensive and hence the questionnaires were custom designed to yield quantitative as well as qualitative data. The questions used in the questionnaire were both open-ended questions and the closed-ended ones. The objective was to obtain explanatory responses from participants, their observations and their candid views on different aspects of training.

The questionnaire was further developed in a way that involved both the ranking and ratings scale. Ranking was incorporated to judge what participants found most/ least useful during the course. The Rankings method involves getting participants to state what they consider most important, most useful, least important, least useful, etc. It can be used with individuals and groups, as part of an interview schedule or questionnaire, or as a separate session. The Rating Scale method was included to let the participants express their level of liking and disliking about various fields of training. This technique makes use of a continuum, along which participants are expected to place their own feelings, observations etc. People are usually asked to say whether they agree strongly, agree, don't know, disagree, disagree strongly with a statement.

Process:

All the participants of the course were provided with the questionnaires and were requested to fill in the required fields as per their experiences and observations during training.

In addition, the method of select semi-structured one on one interview was employed to complement the process of information acquisition and these outcomes were considered while preparing recommendations.

The data from questionnaires was meticulously extracted and compiled. Statistical techniques were used to convert responses into means (averages), frequencies and percentages for further clearer analysis. After a thorough analysis, the analyzed data was organized in the form of lists, graphs, summaries and charts and has been included in the succeeding section.

At the end of the report recommendations and suggestions for improvement of training courses has been provided as per the recommendations provided by the participants themselves.

ANNEX C: ALL THE STATED OBJECTIVES OF PARTICIPANTS FOR THE TRAINING

(√ represents fulfilled objectives while X represents those that were not fulfilled)

OBJECTIVES	Fulfilled / Not Fulfilled
❖ Knowledge of Zoo Management	√
❖ To study Housing of Zoo Exhibits	√
❖ Provision of Veterinary Care	√
❖ Record Keeping	√
❖ Wildlife Management in Natural Habitats	X
❖ To gain Management knowledge regarding Zoo	√
❖ Promote Eco-tourism and Edutainment	√
❖ Exposure visit zoos and wildlife parks	√
❖ Crocodile Farming	X
❖ Management of wildlife in Captivity and Synology for Education	√
❖ Improvement of Habitat	√
❖ Conservation of Wildlife	√
❖ Animal Health & Medicinal Care	√
❖ Balanced diet	√
❖ Zoo Management	√
❖ Animal Keeping	√
❖ Animal Hospital	√
❖ Open Safari	√
❖ Animal Shows, Fish Aquarium	√
❖ Knowledge about Zoo Management	√
❖ Knowledge about Animal Health	√
❖ Awareness about A.I.	√
❖ Recreation Facility in World Safari	√
❖ Knowledge about Species Diversity	X
❖ To learn how to improve zoos to the international standard	√
❖ Diet of Zoo animals	√
❖ Medical facilities at international zoos	√
❖ Preservation of wildlife species	√
❖ To make zoos more recreational	√
❖ Knowledge on up-to-date management concepts of modern zoo & wildlife parks	√
❖ Knowledge about management of captive wildlife	√
❖ Knowledge on zoo animals' welfare & ethics	√
❖ Awareness to promote ecotourism	√
❖ Captive breeding of Reptiles	X
❖ Management	√
❖ Habitat Improvement	√

❖ <i>Conservation</i>	√
❖ <i>Animal Care</i>	√
❖ <i>Provision of Balanced Diet</i>	√
❖ <i>Zoo Management / Safari</i>	√
❖ <i>Wildlife Management</i>	√
❖ <i>Advanced Techniques for Wildlife Breeding</i>	X
❖ <i>Safari Park / Eco-tourism</i>	√
❖ <i>Captive Breeding for Conservation / Reintroduction</i>	√
❖ <i>Knowledge for zoo betterness</i>	√
❖ <i>Technique for captive breeding</i>	√
❖ <i>To make zoo more attractive for visitors</i>	√
❖ <i>Disease control in wildlife</i>	X
❖ <i>Knowledge of Zoo Management</i>	√
❖ <i>To study Housing of Zoo Exhibits</i>	√
❖ <i>Provision of Veterinary Care</i>	√
❖ <i>Modern concepts in zoo management</i>	√
❖ <i>Wildlife Management in Natural Habitats</i>	X
❖ <i>Capacity building in advancing management knowledge to be a better manager</i>	Unmarked
❖ <i>Recreational facilities</i>	√
❖ <i>Captive breeding in captivity</i>	√
❖ <i>Wildlife Management / Conservation</i>	√
❖ <i>Animal health care</i>	√
❖ <i>Zoo Management / Deer Safari</i>	√

ANNEX D: COURSE CONTENT

MODULE-1: Zoo Management

- ◆ Roles of Zoo in 21st Century
- ◆ Strategic Planning for Zoo and Wildlife Parks
- ◆ Leading Change in Zoo Management
- ◆ Zoo-based Research and Conservation
- ◆ Integrated Conservation: Roles of Captive Breeding for Conservation and Reintroduction
- ◆ Record Keeping and Studbooks
- ◆ ARKS system
- ◆ Eco-Tourism and Edutainment Program for Zoo Education

MODULE-2: Animal Care and Management

- ◆ Small Population Management
- ◆ Preventive Medicine and Veterinary Care
- ◆ Animal Nutrition
- ◆ Disease Diagnosis
- ◆ Ethical issues in the Treatment of Animals
- ◆ Pest Management in Zoo

MODULE-3: Study Visit Programs

- ◆ Safari Park (Key focus: learn from private-run Safari parks, customer services and park management)
- ◆ Dusit Zoo (Key Focus: Zoo management, animal care, Edutainment Programs)
- ◆ Khao Kheow Open Zoo, Regional Center for Research and Conservation
- ◆ Siam Ocean World(Key focus: Organization setup, visitor tour programs, eco-tourism and Edutainment program)
- ◆ Chiang Mai Zoo (Key focus: Organization setup, visitor tour programs, eco-tourism)
- ◆ Chiang Mai Night Safari (Key focus: Organization setup, visitor tour programs, eco-tourism and Edutainment program)
- ◆ Elephant Training center and Elephant hospital (Key focus: elephant conservation undertaken by non- government organization, pest and disease control, veterinary hospital and treatment)