EVALUATION OF TRAINING PROGRAMS FOR RURAL DEVELOPMENT[1]

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Abstract: *An Evaluation of the "Impact Assessment of the Training Programs" of a National Level Training Institution in India was conducted using the Kirkpatrick Method (KP Method). The studied Institution takes up research, provides training, offers consultancy and initiates action in the rural sector of India. The evaluation study used a detailed questionnaire for conducting a survey on the entire population of participants who attended the training programs in the selected study period. Personal interviews and workshops were also conducted with respondents to understand the behavioural changes and results seen in the work environment. The study brought out the need to understand the training evaluation as a continuous process, requiring periodic review and analysis of the needs of the various sectors of rural development. It reiterated the need to develop a systematic evaluation process within the institution. It also showed that the rural development professionals undergoing training themselves were keen to participate in the evaluation process so as to help in the process of self-learning and bring about sustainable changes.*

Key words: *Kirkpatrick Model; Survey; Rural Development; Evaluation; Training*

1. Introduction

There is much ado about training as an important component of the overall capacity building of any employee in an organization. Training is a planned process to acquire knowledge, skill, to modify attitude and/or behaviour. Training is done using different kinds of techniques, which include Lecture-cum-Discussion, Case Discussions, Group Discussions, and Exercises/Hands on Sessions, and Field visits. It is seen that sharing of learning experiences during training helps achieve a more effective performance in an activity or range of activities among the trainees.

Efforts are made to evaluate training programs by both the training institution and the participating organizations, so that there can be an effective learning process. Where training is in-house the three most common reasons for evaluating the training program is: (1) to see how future programs can be improved; (2) to determine whether training should be continued and (3) to justify the existence of the training department itself. However most organizations continue to perceive training as a *'philanthropic'* activity whose results is intangible in nature, and hence do not consider evaluation as a necessary activity. But over

the years, evaluation has become an important component as training requires enormous amount of investment in terms of human, financial and other resources.

Donald Kirkpatrick in 1959 formulated the four Levels of Evaluation. The four levels represent a sequence of steps to evaluate training programs. Each level is important and has an impact on the next level. As one moves from one level to the next, the process becomes more difficult and time consuming, but it also provides more valuable information.

Level 1: Evaluation at this level measures how those who participate in the program react to it and is taken immediately after the completion of the training program. It can also be called a *'measure of customer satisfaction'*. It is observed that a positive and favourable reaction from a few key persons in the group influences the future of a program. Infact a less than favourable reaction affects the motivation to learn among the participants. A negative reaction could greatly reduce chances of continuity for further programs.

Level 2: A simple standardized paper and pencil test is administered (same test) before and after the programs as part of the evaluation process. This helps in understanding the extent to which participants change attitudes, improve knowledge and /or increase skill as a result of attending the program.

Level 3: At this stage, it would be possible to assess the extent to which the behaviour is changed because of training and ideally assessed between six to nine months after the training is completed.

Level 4: At this level the final impact results are taken into consideration. The final results can be in the form of increased production, improved quality, decreased costs, reduced frequency and/or severity of accidents, decreased costs, increased sales, reduced turnover and higher profits. It would help if the final objectives of the training program can be stated in these terms, for seeing improvement in the long-term. This assessment can be made between one to three years after completion of training, because otherwise there is a danger of 'lack of recall'. It is also that changes cannot always be singularly identified with the training received.

The Kirkpatrick (KP) model has been used in different situations but predominantly in industrial settings, because, the final results are more quantifiable in nature both for the trainers and the trainees. This helps the authorities to take decisions about the continuation of training in a very proactive manner. Some of the companies which have used this evaluation method very rigorously include Motorola Corporation, University of Wisconsin, USA which evaluated the training for developing supervisory skills in the staff, and Intel Corporation which used the method to evaluate a corporation wide performance improvement system (Kirkpatrick 1998).

Increasingly, the KP model is being used by training organizations to understand the impact of the training programs even where the results are not very tangible in nature (Marcotte, Bakker-Dhaliwal and Bell, 2002).

The present paper is based on an evaluation study conducted for a training institution in India. It brings forth the method in which the training programs were evaluated following the four levels of the KP model. The studied institution over the years has emerged as a premier training and research institute in the field of rural development in India. Training rural development professionals is complex as it encompasses many areas of knowledge and myriad skills which are sought to be transferred through various methods. The composition of the participants is heterogeneous in nature. The studied Institution imparts training mainly to lower and middle level government officials working in the

Departments relating to rural development and related sectors, which include Water Supply and Sanitation, Health, Local Self Governments, Public Works Departments, Roads and Buildings, among others.. The personnel are nominated by the respective departments for training every year based on the proposed internal requirements.

The training institution went in for the evaluation study to assess the impact of the training programs and get a macro picture across all the training programs and all participants across the country. It covered a three year period for the survey. The main objectives of the study were:

(i) to understand the impact of training on the participant's knowledge, skills and attitudes; (ii) to understand whether the training programs had affected participant's performance in the work environment back home and (iii) to understand the efficacy of institutionalizing an evaluation process using the KP model.

The paper is divided into three sections. The second section gives the methodology of the study based on the KP model, the third section discusses the survey results with respect to the four levels of the KP model and the last section gives the conclusions drawn from the study.

2. Methodology

A primary survey was done using a detailed questionnaire as a tool**.** The survey helped in establishing an understanding of all the four levels of evaluation – reaction, learning, changes and results. The survey used the entire population of participants who attended the training programs of the Institution over the selected three years. The institution on an average trained 3000 participants every year from across the country in its 100 training programs per year.

The questionnaire had three main parts –

I. Personal details - to build the profile of the participants;
II. 'Effectiveness of Program' was studied with key questions on whether the objectives of rural development were met within the program. The participants were asked to rate the program content and design on the basic inputs of knowledge, skills and attitudes.
III. 'Professional relevance of training' was evaluated with key questions asking how relevant the program content was for meeting the local needs and whether there was enough practical application which could be used for working or transferring the knowledge to functionaries further down the line. It also probed whether the learning could be shared with other colleagues in the organization and lastly whether the course had helped in the organizational performance.

Database:

In the first instance, the database of 9000 participants was cleaned for missing names and incomplete addresses. The questionnaire was then posted to all the participants together with a stamped self-addressed envelope. Three reminders were also posted over a period of three months to the trainees who had not replied. Questionnaires were also posted to e-mail ids wherever available. The replies received were tabulated in the SPSS format and analysed.

The exercise with the database highlighted the weakness in the system where the names of all the participants of the programs, names of the resource faculty and feedback received were not maintained properly. This seemed to have happened because of a lack of a central system to maintain records of the various programs. The institution, recognizing this lacuna, had recently developed a new digital format to capture the information correctly. With this, a good electronic database would be in place which while giving a clear picture of all training programs, could be used as a ready input for any future evaluation.

The survey received a 16% response rate from a total population of 9000 participants. In the second phase of the study, personal interviews were also conducted to understand the perceptible change in knowledge, skills and attitudes after the training, for Levels 3 and 4.

Further the survey findings were shared in four regional workshops held in the north, east, west and southern parts of India respectively. A background paper was prepared with a regional focus, and circulated among all participants of the workshop. The workshops helped the study team to understand the impact of training programs and the future changes and interventions that could potentially improve the reach and relevance of training programs for rural development. The workshops also helped validate the findings of the survey and obtain suggestions for improving the quality of the training programs. Suggestions were also received about new ways for evaluating training programs in future.

3. Survey Results

Profile of the participants:

The survey had a response of 87% from men when compared to 13% from women. This result was clearly in conformity to the pattern of the database. Fewer women were trained as compared to men. The respondents were mostly in the age group of 41-50 years. The educational profile however showed a very interesting insight across the country, that the majority of the trainees were post-graduates.

Majority of the responses came from those participants who were trained in the most recent year of the study period. This confirmed the Kirkpatrick model, which states that the evaluations conducted within a shorter span of time after the actual training has been given, is more relevant. The rate of recall reduced as time passed by.

The survey showed that the majority of the participants trained were those having experience for about 10 years or more in the rural sector. Another very interesting fact emerged from the study that nearly 70% of those trained remained in the same position after receiving the training.

Level 1

In the studied institution, feedback was taken at the end of every program on important heads such as realization of program objectives, program content, and training methods on a 5-point scale. This is the Level 1 process of the KP model. The institution over the years had continually received a rating of over 84% at this level, which reflects the quality of performance of training activities carried out by the Institute.

The survey also sought to understand the rating of the programs. The participants were asked to rate the program content and design, teaching methodology and style, material used and distributed on a 3-point scale - (a) innovative and effective, (b) repetitive but effective, and (c) ineffective.

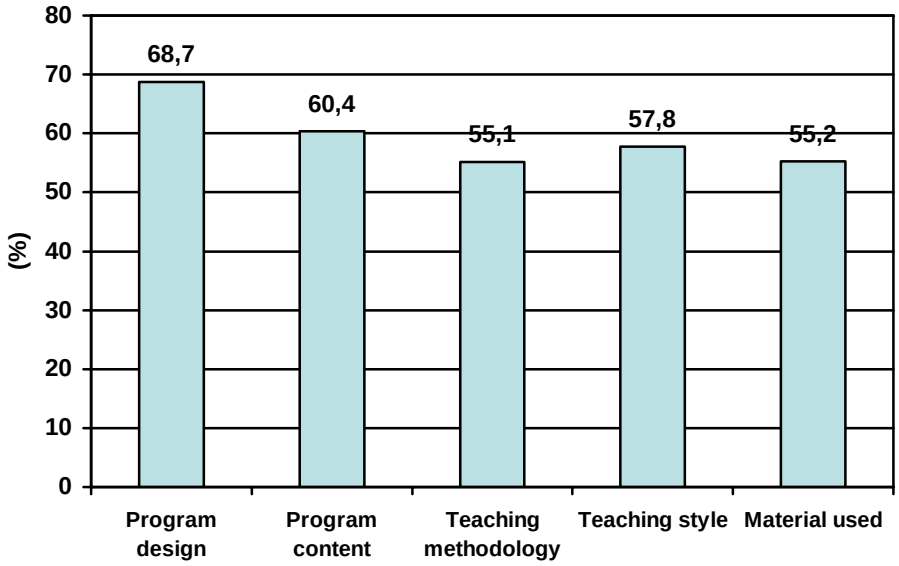

Figure 1. Rating of Programs – Innovative and Effective

The survey showed that nearly 55% of the respondents observed that overall the training components were innovative and effective. But when seen closely, program design stood first followed by program content, as shown in Figure 1. All the other three attributes, namely, teaching style and delivery, teaching methodology and the material used and distributed were ranked lower showing that there was much scope for improvement in these areas. 37% of the total respondents said that the programs were repetitive but effective and the rest said that they were ineffective.

The survey reaffirmed the initial reaction of the participants even after a time gap of three years. However the respondents mentioned that more could be learnt through interactions with the trainers. Clearly there was a need for "hands-on" knowledge of resolving issues on ground through local case studies. It was also important for the respondents that the lead coordinators or trainers were available throughout the period of the program.

Another important question under the "effectiveness of the program", was the "extent to which objectives of rural development" were achieved in the various training programs. The respondents on a scale of 1 to 5 measured the objectives given below, with 5 standing for 'completely' to 1 standing for 'minimally'.

- Understanding of concepts, definition, planning, and implementation of rural development programs;
- Awareness of personal and institutional role in Rural Development;
- Bringing about attitudinal change towards Rural Development;
- Develop new skills for a sustainable approach to Rural Development;
- Appraisal of rural development projects;
- Understanding institutional mechanisms;
- Analysis of strengths/ weaknesses of various anti poverty programmes;
- Role of Information Technology in Rural Development.

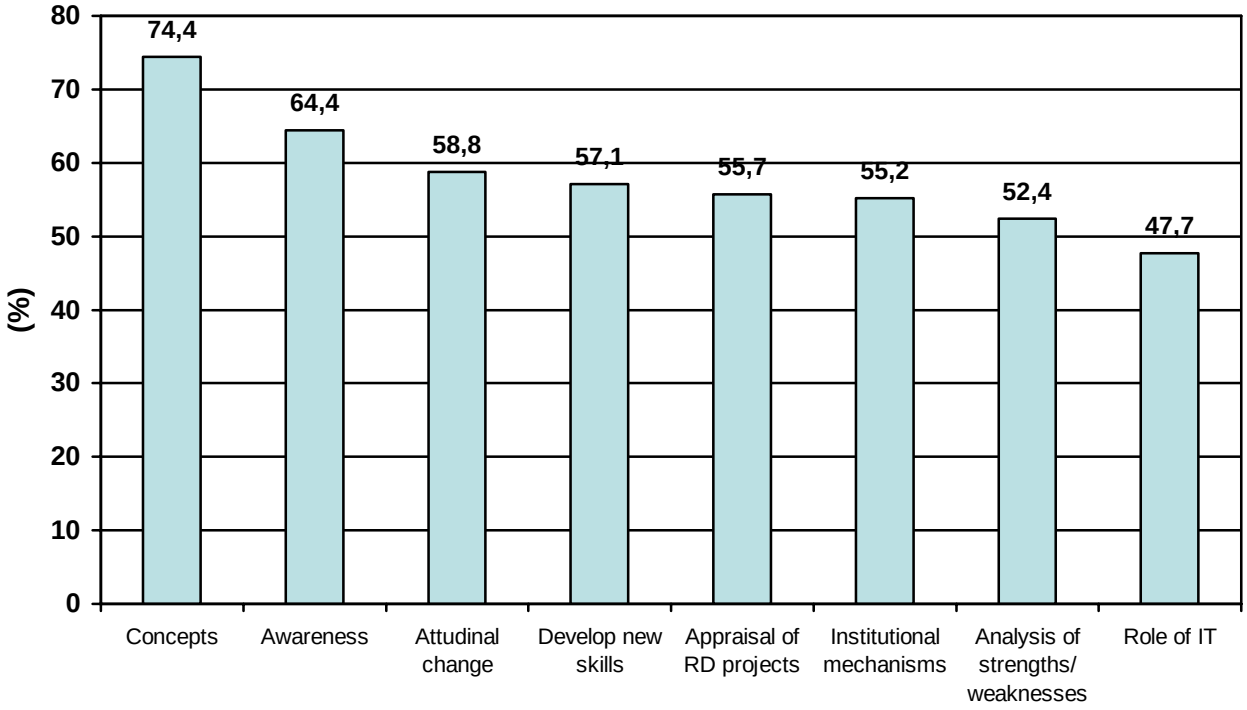

Figure 2. Objectives of Rural Development Achieved

For simpler analysis, the scales of 4 and 5 marked by the respondents against each of the objectives were taken together, and similarly 1 and 2 were clubbed to understand minimal achievement. The scores in Figure 2 shows the percentage of respondents who felt the respective objective was achieved on the five point scale.

The survey showed that the training programs were able to achieve a near sense of completeness of objectives (Figure 2) in terms of 'understanding of concepts'- as shared by 74% of the respondents across the various categories of trainees, followed by 'awareness of role in Rural Development' and 'attitudinal change towards Rural Development', clearly shown by the percentage scores. 'Development of new skills' clearly received a lower ranking.

Level 2:

Measurement of 'learning' at Level 2 requires administration of tests at the beginning and the end of training programs. This was not taken up in the study because: (1) the institution had not conducted such tests for the training programs being evaluated and (2) the tests could not be conducted as part of the survey as the training programs being evaluated were spread over a period of three years in the past. Level 2 measurement is useful where the training programs predominantly target conceptual understanding or transfer of skills. As one of the objectives of the study was to look at the need for a regular evaluative process, the need for a Level 2 assessment was discussed with the participants in the workshops.

It came out clearly through the interviews that the respondents were open to having a test on concepts both before and after the training program. The respondents even suggested that the participant's performance should be assessed during the course of the program for both knowledge and skill inputs using a simple questionnaire. It was strongly recommended that the results of the test should be communicated directly to the head of the department where the participant worked. In cases where the results could not be shared on a one to one basis with the participants, it was suggested that the institution could think of having a collective group grading system both pre and post training.

Level 3

The questionnaire had a separate part on "Professional relevance of training" which tried to understand the Level 3 and Level 4 attributes of change and results of training. The components included the relevance of Program content, extent of practical application of the program, benefits of training, ability to share the information received and change in organisational performance.

The survey results were rechecked through personal interviews conducted with 16% of the total respondents spread across the four regions of the country. The focused interviews helped in understanding whether the participant observed any perceptible change in his/her knowledge, skill, and attitudes after the training program. The trainee was also asked to identify how the learning could be utilized in the work situation.

The survey clearly showed that the program content had high relevance. But in comparison to the extent of practical application of the program, content showed medium relevance. As the participants were heterogenous in nature, hailing from different parts of the country and sometimes working in different departments, they could not implement what they had been trained in. The most common reasons for this shortcoming was that: (i) the training was not always relevant to the specific areas of work, (ii) tools and techniques (information technology and GIS) shown during the training did not exist in the work environment, and /or (iii) the training program did not cover issues of 'how to resolve the problem' which arose in the field and (iv) after training, the trainee was shifted to another area of work, even if working in the same department.

With regards to the benefit of training, it is interesting to note that the respondents had an increased awareness through the program. The respondents were asked to rank the benefits of training, on a scale of 1 to 5, with 5 standing for 'extremely useful' to 1 for 'not at all useful'. The benefits being:

1. Developing concern for rural development
2. Improvement in inter personal relations
3. New concepts / ideas introduced
4. Networking
5. Increased efficiency in delivery of service
6. Improved service levels and
7. Efficient utilization of financial resources

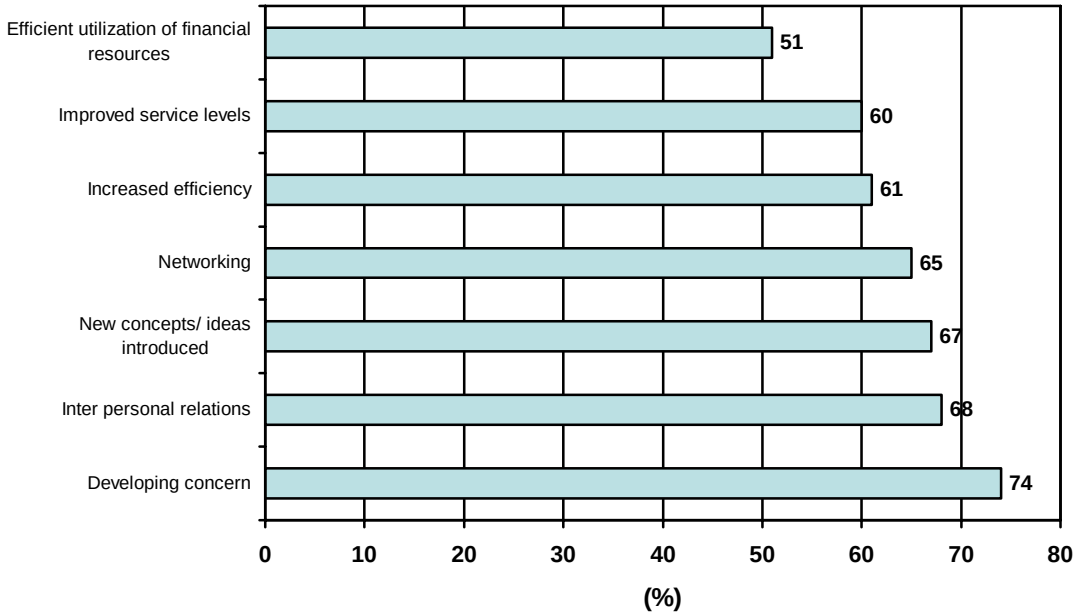

Figure 3. Benefits of Training

Here again the scales of 4 and 5 and scales of 1 and 2 were put together for simpler understanding. The Figure 3 shows that 74% of the respondents said that the greatest benefit that they had derived from the training program was in 'developing concern' for rural development. The other two main benefits were seen in improvement of inter-personal relations and learning of new concepts/ ideas introduced in the field of rural development.

It was observed that the changes and the ensuing results in the organizational context were the more difficult steps of evaluation. No final results could be expected unless a positive change in behaviour occurred. It was also seen that at times, the change was not fully under the control of the participant. Participants could not change their behaviour unless they had a chance to do so. Also, it was impossible to predict when change occurred, and sometimes, the participant may have decided against the change after contemplation because (s)he felt the earlier style was better or that the environment was not conducive for change. Infact it was seen that in many cases, changes could not be singly attributed to the training received.

At such times it became imperative to see how the participants came to be nominated for the training program. From the survey it came out that the most common reasons were: (i) the participants considered themselves to be the most 'Suitable person' for training. But most could not elaborate further on this. Under the circumstances, it could not be inferred further whether any specific mode of selection was identified or was in place within the departments when identifying the suitable person; (ii) Nominated – This in most cases meant that the participant had not really thought about his/her nomination. The trainees had attended because they had been sent for training. From the trainer's point of view, it seemed that many times the most *'dispensable'* person was sent for training. This was true in cases where the nominations were received in the last minute; (iii) As per procedure – this was also a reason similar to that of the suitable person, where the trainees could not clearly define what the procedure was for being selected to the training program;

and (iv) Don't know – the trainees did not simply know why they had been sent for training, even after a lapse of nearly 1 to 3 years.

This seemed to give a clear picture of how training was not considered serious business by the sponsoring authorities. The point was reiterated during interviews with the Heads of the Departments. The Departmental heads many times were trying to use the budget allotted under capacity building. No clear guideline had been followed before the nominations were made for the training program.

It was seen that the impact of the training was best seen where the needs of the training was clear right from the beginning. But under the circumstances, one could venture to say that the impact of the training was limited by the participant who was nominated. Because of this the studied institution was compelled to design a more common, base level program catering to a heterogenous group rather than a specific issue based training program.

All the same, once selected for training, the respondents (77%) came with some expectations before the training, though they were not able to clearly express what their expectations had been. The respondents (75%) also went on to say that their expectations had been met. 23% of the respondents however said that the question of expectations being met was not applicable to them, as they had not really understood what they wanted initially from the program nor realized the objectives of the program even by the end of the training.

59% of the participants had become aware of new needs and the personal handicaps in terms of skills required for meeting the needs after attending the training. Such participants wanted to attend repeat programs at an advanced level. In some cases they even wanted to attend a few basic courses for better understanding of the concepts. Research Methodology and Communication Skills were two such popular programs.

When asked about the 'perceptible changes' in knowledge, skills and attitudes after the training, 99.5% said they had observed that there was some learning, though unable to pinpointedly mark it in their work.

Overall it came out that the training programs had created awareness, and helped them in 'being more concerned' about rural development. It was found that the middle level functionaries working in the field, who were working very grudgingly earlier, realized that they could contribute positively in the work environment. Training had helped them become aware of the problems and needs of rural development. And the already 'aware' participants became more articulate in their expression. The training helped them in thinking in a more sequential manner to help find solutions locally.

These findings directly related to the training programs which had good program content, and design, but was not sufficiently performance oriented in terms of practical application. This perhaps could be one of the main reasons for the participants inability in realizing a perceptible change, or in they having a continued niggling feeling that something was missing, which restrained them from completing the 'last mile' successfully.

This only confirmed that in the training institution, the trainer would have to take note of the work situation that the participant returned to while designing the course. And for a more effective result, an enabling atmosphere would need to be created in the Departments where change was expected.

Level 4

For Level 4, the study tried to get the respondent to quantify through figures, the sharing of learning in terms of meetings held, number of beneficiaries influenced and such others. The Heads of Departments were contacted to get their views on what was needed for rural development.

When asked about how the knowledge had benefited the organization, respondents found it difficult to quantify the benefits derived. 96% of the respondents were emphatic that they had utilized the learning from the training in their work situation. But a large number, were unable to explain how it had been translated into work. It was seen that only 68% said that they had actually attempted knowledge sharing while the rest had made no attempts in this direction.

The common ways in which the participants utilized the learning were (i) to implement day-to-day work and prepare reports, planning and evaluation, (ii) design and implement new schemes effectively and (iii) Learned skills to train the field staff.

One of the main reasons why no quantification could be made, because there were no attempts prior to the training or later to document the work done to help fill in the gaps where needed. Hence no comparative analysis could be done.

However the survey results under the section 'Professional relevance' of the program helped gain insight into this aspect. The question was administered on a 5-point likert scale. The results showed a definite change among the trainees in (a) new concepts / ideas were introduced, (b) increased productivity, (c) networking with different people, (d) increased efficiency in delivery of services, (e) improvement in interpersonal relations, (f) improved service levels and (g) career advancement. However reduction of execution time of projects and improvement in revenue/project viability got relatively low scores, meaning perceptible changes could not be seen in these two parameters. It can be seen that these heads are such which need a systemic organizational change with more awareness among all concerned. Infact it was interesting to note that many respondents shared the view that their 'bosses' and Heads of Departments needed to be trained for a more systemic change and overall better performance in the organization.

In the current scenario, the departments in Government had no regular process whereby the learning could be transferred to the work environment. Most times the back home work environment remained neutral with no expectations from the Departments.

The respondents also suggested ways to improve the training programs so that more changes could be seen at Level 3 and Level 4 in the long run, which were as follows -

1) Most participants were unaware of the gamut of training programs offered by the Institution. It was suggested that if the calendar of the training programs were communicated to the concerned Department a year in advance then the participants could choose those training programs which would be most relevant to them.
2) Selection of participants had to be done in an objective manner by the sponsoring department, which was sending the participants; based on the relevance of the training program. Younger personnel with more years in service would have to be sent for training.
3) The training Institution would have to scrutinize the nominations sent, through its own rigorous protocol for selection of the participants. This way the right participant who was well experienced in a relevant field would get enough inputs for betterment.

4) Every group of participants needed a program guide from the parent Department to help them through the training program.
5) Impact of training programs to be evaluated within 3-6 months after training program to help reiterate the learning.

4. Conclusions

Overall, the studied institution had delivered through its numerous training programs. The participants were happy about the training they had received, and looked forward to learning more from the Institute. There were however shortcomings in trainings in terms of the nominations of the participants, and the problems faced by the participants in utilizing the learning in their home environment.

It was interesting to note that through the study, the respondents came up with the same kind of suggestions for evaluation as suggested under the KP model, even when the study team had never mentioned that the study was using such a model for analysis.

From the study it came out quite clearly that:

a) Level 1 is the best evaluation method of the four levels with respect to cost and efficiency. Level 1 evaluation was being done at the institution and needed to be continued.
b) Level 2 was presently not done at the institution. The various respondents were keen on being evaluated during training as also at the start and the end.
c) The Level 3 evaluation clearly brought out that there were perceptible behavioural changes in the respondents after training, though not measurable in all cases. The study clearly showed that nearly 70% of those trained remained in the same position after training, which offered great hope for active policy interventions and changes that could be brought through the training programs.
d) For Level 4, sponsoring departments had to clearly put down the expected results. The study showed that there was need for cooperation between sponsoring authorities and the trainers to design programs which could become more functional and useful for changes to happen at the ground level. The respondents were clearly keen to cooperate and take the efforts forward.

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