

Application of Project Formulation, Appraisal and EIA Courses: A Study on NAPD Stakeholders

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ABSTRACT

This study considered a specific training program namely “Project Formulation, Appraisal and EIA”, organized by NAPD from the year 2010 to 2015 where 139 trainees from 68 organizations attended. The study is based on the primary data. This training program contents teach the trainees about the procedure to prepare the Development Project Proposal (DPP). The researchers conducted pilot study where focus group discussion of 15 participants and two in-depth interviews were included. This study also covers some relevant literature. Three categories of respondents were focused which were nominating authority, trainees and trainers. Total 123 respondents were interviewed through semi-structured questionnaires. This research ranked complex training agendas from the curriculum and highlighted trainee's readiness on adopting the knowledge acquired from such training. This study found trainee's needs were usually determined by the nominating authority without much consideration of direct involvement of the DPP formulation. NAPD as an organizer of the training program provided training information well advance to nominating authority to select trainees. This study found lecture and feedback session as major method of training rather than group discussion. It is found that there is positive relation with experience on DPP in the past and training outcome. Objectives of the training were also delivered. Major challenges identified as selecting trainees, learning mode and involvement in training programs. This study recommended to select trainees and placement of trainees after training based on organizational necessity, to reorganize session duration as per complexity level of contents and, to incorporate group discussion for the betterment of the training program.

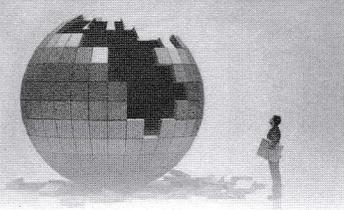
Keyword : Project, Environmental Impact Assessment, government offices, selection procedure, course design, DPP, Log-frame, NAPD.

1. Introduction

All types of organizations such as government, semi-government, autonomous and private organizations are bound to be concerned for their human resource capacity development for their overall development. Training plays a vital role to enhance the capacity of the human resources. This research concerns about the need of such

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initiative. All government institutions have clearly been involved in achieving an impressive progress in all sectors of the society. Therefore, it is extremely mandatory to train the human resource team so that the capacity, to develop the institutions of the government itself, can be improved. To develop human resource for implementing various projects, the government developed standardized instruments which help to develop, plan, implement and evaluate the project itself. One of such instruments is Development Project Proposal (DPP). It is a technical instrument which includes various parts. Majorly, project summary and the project details require crucial attention.

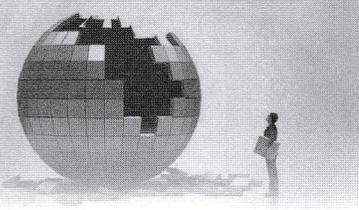
In the project summary this DPP is comprised with various sections such as, project title, sponsoring ministry, executing agency, objectives of the project, location of the project, estimated cost of the project, exchange rate with date, location wise cost break down, mode of financing with sources etc. Similarly, project details also include background, objectives, priority, rationale, linkages, targets and outputs, findings of feasibility study, findings and recommendations, net present value, benefit-cost ratio, internal rate of return, lessons learnt from similar nature of projects etc. (DPP Guidelines, Planning Commission, Government of Bangladesh). All these information are vital in ensuring that the trainees understand all the objectives, targets, methodology, dependencies, and outcome of the project. Thus, this study will focus on DPP formulation based training fragments which will eventually cover the issues of training effectiveness on a broader scale.

National Academy for Planning and Development (NAPD) is one of the pioneers in the arena of training in Bangladesh. It imparts training on Project Planning and Management, Economic Development, Public Administration and ICT. NAPD achieved a number of milestones in training management of Planning and Project Management Courses since started its journey as a development project in 1980. Apart from training, NAPD has been conducting research on various issues. NAPD organizes research and produce knowledge for practical application with high relevance, utility and economic impacts on post-training utilization and various development issues. This research provides the theoretical framework needed to understand the information reported by individual practitioners.

To conduct the research this study reviewed literature from two perspectives. Firstly, different training relevance models used to understand training effectiveness. Secondly, various factors affecting training cited from different sources.

There are different models available for training evaluation. Notable ones include Kirkpatrick model, Phillip's ROI model, Hodges's components for HRD evaluation,





Holton: HRD evaluation and research model, Kraiger: decision-based evaluation model etc. This study considered Kirkpatrick model for the purpose of analysis due to relevancy of the training aspects. Kirkpatrick is without doubt the most frequently used technique. It suggests measurement of training at four levels (Kirkpatrick & Kirkpatrick, 1975):

Reaction: Measures the learner's reaction to the training immediately after the session. Seeks to gain information on their perception of the quality of the training content, and the trainer (Information often gained through reaction sheets).

Learning: Measures actual learning achieved in the training.

Behavior: Measures transfer of learning, including any changes in behavior back on the job.

Results: Measures the business impact of the training program.

Phillip's Rio model adds a fifth level to Kirkpatrick's four levels (Phillips, 1997):

Return on Investment (ROI). This level is purely concerned with the measure of financial benefit (or lack thereof) to an organization after training.

Hodges sees training evaluation as a selection of the following components (Hodges, Toni 2012):

Needs Assessment = what do they need? Formative Evaluation = will it work?

In addition, there are four components to Summative Evaluation as follows:

Reaction Evaluation = were they satisfied?

Learning Evaluation = did they learn?

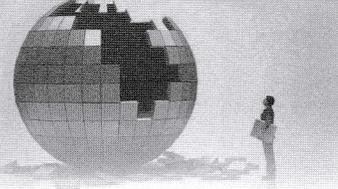
Performance Evaluation = were they able to use it, and were they successful in using it?

Impact Evaluation = what impact has it had and was there a financial return?

Holton in his model includes three evaluation targets and these are - learning, transfer, and results (Swanson, Richard & Holton 2001). He excludes reaction sheets collected at the end of a training course (also known as "Happy Sheets" or "Smiley Sheets"), which he doesn't consider valid as a primary outcome of training. He argues for an integration of effectiveness and evaluation, determining that certain effectiveness criteria is included in evaluation.

Fischer & Ronald (2011) stated that open-mindedness is also a significant moderator of training effectiveness. Driskell (2011) concluded in his study that type of training implemented, training content and trainee expertise also affect the training outcomes. Success of a training program always depends on how the training was given, what the content was and who the trainer was.





Beigi, Mina and Shirmohammadi (2011) found that emotional training has significant impact on service quality. It means there is a relationship between behavior and learning, and service industry can be benefitted by emotional training because service industry is basically related to marketing and verbal communication.

Identifying whether or not a training initiative is effective depends on how well learners are able to apply what they learned to improve job performance. However, whether or not a learner is able to successfully transfer his or her knowledge to the workplace isn't wholly dependent upon the learner. Instead there are many different types of influential factors that affect job training, and, in fact, most of them do not depend on the learner. These factors are needed to be known while measuring the effectiveness of any training program. So, this study has identified some significant factors that can be used for evaluating the respective training program. The influential factors for evaluating training effectiveness are management support, training needs, emotional investment, in-class practice, out-class practice and learning environment.

2. Objectives of the study

This study aims to achieve the following major objectives:

1. To find out the skill gap of trainees in DPP preparation who attended the training program called "Project Formulation, Appraisal and EIA"
2. To identify the factors affecting effectiveness of the training program.
3. To explore the challenges from major stakeholders of the training program.
4. To identify the potential solutions of the existing problems.

3. Methodology

Quantitative approach has been used in this study where primary data were collected and analyzed to address the study objectives. Primary information has been obtained through a sample survey conducted from different organizations like government, semi-government, autonomous, private organizations, NGO's etc. Structured and semi-structured interviews were conducted with the samples of the research. The respondents were former trainees, their nominating authorities and the resource persons of the training course of Project Formulation Appraisal and EIA at NAPD. Sample size of the trainees was 71 and that of the nominating authorities and resource persons was 37 and 15 respectively. The secondary sources of information were various publications of NAPD, journals, newspapers and website. In the selection of the sample, the researcher followed the non-probability purposive sampling technique.



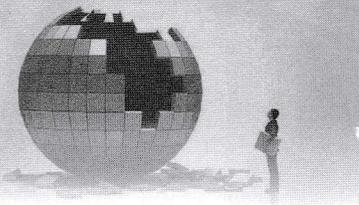


Table-1: Summary of population and sample statistics

Description	Population	Sample	% of total Population
Number of Organizations	68	37	54.41%
Number of participants (Trainees)	139	71	51.07%
Number of Trainers	28	15	53.57%

Source: NAPD Research on DPP Training Evaluation

This research followed the flowchart given in figure 1.

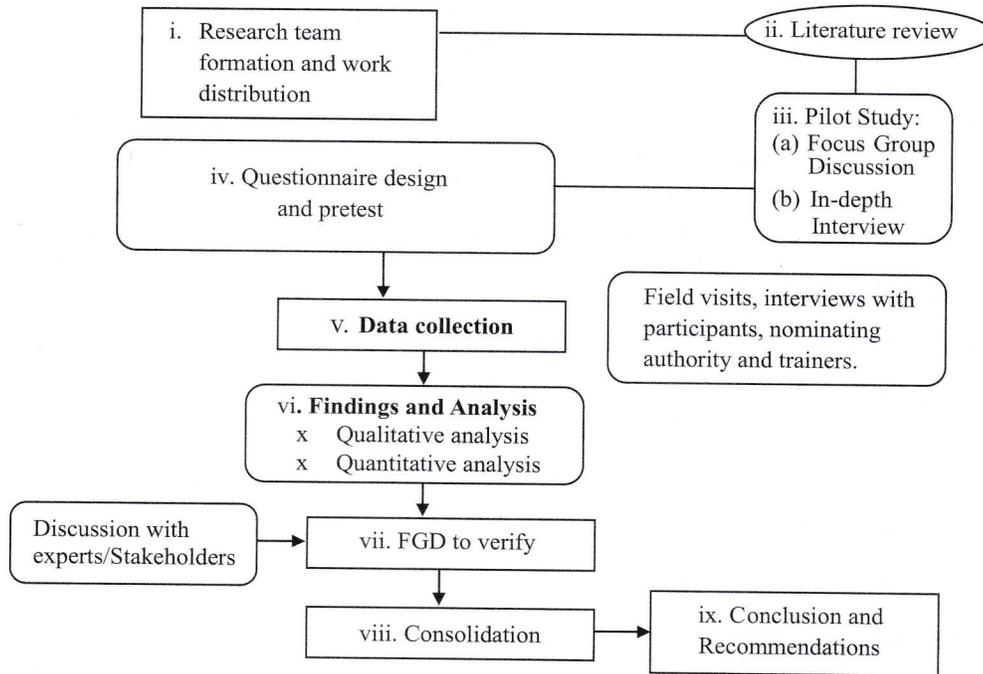


Figure-1: Flowchart of research design

Source: NAPD Research on DPP Training Evaluation

4. Findings of the study

4.1 Background Information

The study was based on responses of various parties involved in the training system. The numbers of the respondents were 71 (over 50% of the total population) and it was of three (3) types such as trainees, nominating authority and trainers while male and female respondents comprised (83%) and (17%) respectively from the organizations like government, semi-government and autonomous (64.9%), (24.3%) and (10.8%). Sample trainees mostly (about three-quarters) have job experience over 15 years, while the experience of others range from 3-12 years.



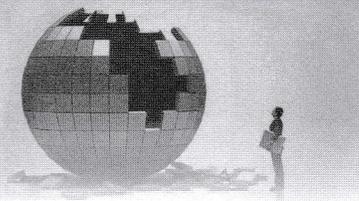


Table-2: Socio-demographic characteristics of the respondents.

Socio-demographic characteristics		Number	Percentage
Sex	Male	59	83
	Female	12	17
Experience (Trainees)	3-6 Years	26	38
	6-9 Years	13	18.3
	9-12 Years	9	12.27
	Above 12 Years	22	30.99
Experience (Trainers)	5-10 Years	2	13.3
	10-15 Years	2	13.3
	Above 15 Years	11	73.3
Level of Education	PhD	4	5.6
	Masters	37	52.2
	Bachelors	30	42.2
Organization type (Nominating authority)	Government office	24	64.9
	Autonomous	9	24.3
	Semi-Autonomous	4	10.8

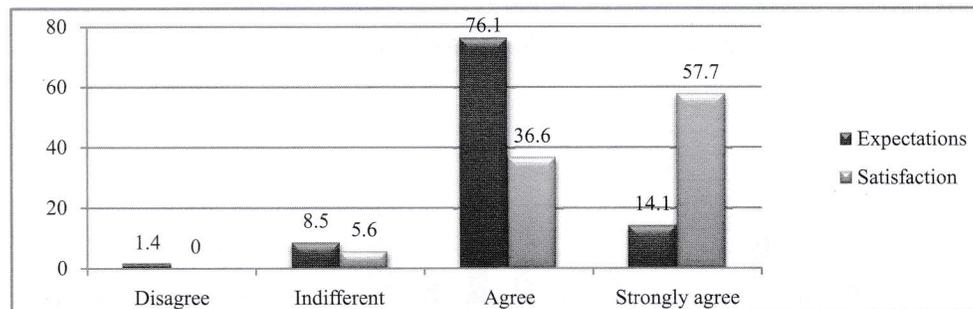
Source: Field survey

4.2 Discussion

4.2.1 Expectations and satisfactions on training programs

Majority of the respondents agreed that they learnt from the training course about DPP formulation as intended and over half of them strongly agreed that they were quite satisfied. The aim of the training was to make the trainees aware of information and data requirement of the prescribed project performance and give them the technical competence to furnish such data where required in the DPP format.

Figure 2: Respondents learning about DPP formulation



4.2.2 Relevancy and duration of trainee's participation in the training

As evident from Table 3 most of the trainees found their training on DPP formulation very relevant to their jobs. Over 50% of them viewed the duration of training as sufficient and content as adequate.



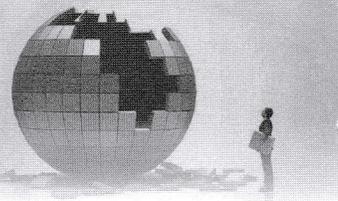


Table-3: Training relevancy, duration and participation

	Relevancy of the Training		Duration		Trainees' Participation	
	Number	Percent	Number	Percent	Number	Percent
Not good	1	1.4	11	15.5	1	1.4
Indifferent	3	4.2	12	16.9	4	5.5
Good	34	47.9	38	53.5	41	57.7
Very good	33	46.5	10	14.1	25	35.2
Total	71	100	71	100	71	100

4.2.3 Training facilities

Almost all of the participants considered the training facilities as adequate. All the participants were satisfied regarding the training. National Academy for Planning and Development has sufficient training facilities for the trainees such as well decorated spacious class room, multimedia and audiovisual equipment, computer lab, language lab, cyber cafe, indoor sports zone, cafeteria, dormitory, breathing space. Participants can enjoy these facilities during their training. So the respondents viewed positively about adequate training facilities provided by NAPD.

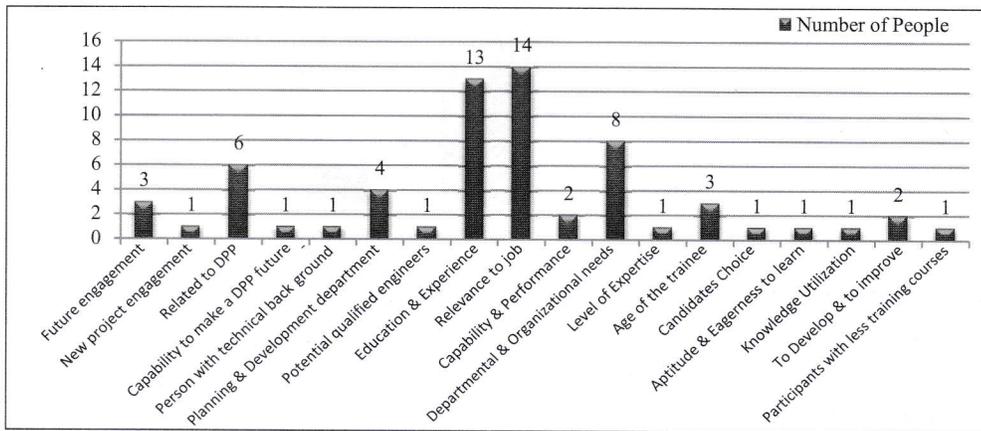
Table-4: Adequacy of training facilities

	For trainees		For trainers	
	Frequency	Percent	Frequency	Percent
Disagree	1	1.4	0	0
Indifferent	6	8.5	0	0
Agree	37	52.1	4	26.7
Strongly Agree	27	38	11	73.3
Total	71	100	15	100

4.2.4 Selection procedure of participants by the Nominating Authority

Nominating authorities pointed out various factors they consider while selecting participants.

Figure 3: Factors Suggested by Respondents



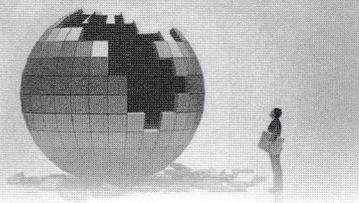


Figure 3 indicates that participants were selected mostly based on their relevancy to the job. Some other important factors for selecting the participants were education & experience, departmental & organizational needs, job related to DPP, posting in planning and development department, age of the trainee and future engagement. As a technical issue, nominating authority emphasized participant's education and experience. But sometimes due to lack of availability of proper personnel engaged in the projects, authorities considered other factors for selecting the participant's for the training.

4.2.5 Understanding of financing, Log-frame, procurement plan and capital budgeting

Major portion of the participants agreed to the point that they acquire knowledge about the mode of financing, Log-frame, procurement plan and capital budgeting very perfectly. Respectively 66.2%, 69%, 64.8% and 53.5% of them viewed that their learning was good. A good number of the participants' replied that their learning was very good and also some of them replied indifferent and not good but the percentage about negative is not up to the mark.

Table 5: Mode of financing, Lag-frame, procurement plan and capital budgeting

	Mode of financing		Lag-frame		Procurement plan		Capital budgeting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Not good	1	1.4	2	2.8	1	1.4	4	5.6
Indifferent	4	5.6	11	15.5	7	9.9	11	15.5
Good	47	66.2	49	69	46	64.8	38	53.5
Very good	19	26.7	9	12.7	17	23.9	18	25.4
Total	71	100	71	100	71	100	71	100

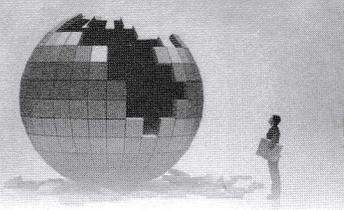
4.2.6 Training Methods

In this training program the trainers followed different methods in conducting the training sessions. Usually they followed the lecture and question/answer methods mostly and majority of them followed group exercise. Lab sessions and group discussion methods were not that much followed.

Table-6: Methods are followed in the training session

i.	Lecture	100%
i.	Question and answer (Q/A)	100%
ii.	Group discussion	13.3%
iii.	Lab session	7%
iv.	Group exercise	73.3%





4.2.7 Improvement and engagement in DPP formulation after the training

As evident from table 7 most of the respondents (97.3%) opined that considerable improvement of the trainees in DPP Formulation is found after the training and 91.9% of them were engaged in DPP formulation after the training.

Table-7: Trainees improvement and engagement in DPP formulation

	Improvement (%)	Engagement (%)
Yes	97.9	91.9
No	2.7	8.1

5. Conclusion and policy recommendations

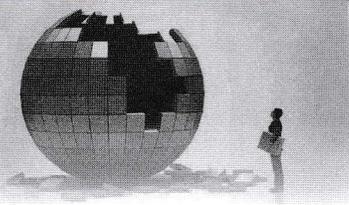
5.1 Conclusion

The study explored that the critical issues like knowledge acquisition, mode of training, utilization of skill concerning training effectiveness of the Project formulation, appraisal and EIA course. It is evident from the study that post training utilization of the gained knowledge depends on the job relevancy of the trainees and organizational arrangements for proper placement of the trainees. It is also evident that demand for higher skill and desire for higher skill should be matched. The training on Project Formulation, Appraisal and EIA could provide a certain level of knowledge for the skill development for the training and training facilities were adequate. Selection of trainers were up to the mark. The nominating organizations should accommodate the trained officers to utilize their knowledge and skill in DPP preparation. The nominating authority also should nominate the appropriate persons considering job relevancy, education, position and age. Review of training should be regular in nature and that affects to the success of the training. More practical sessions are required for the DPP preparation. Attachment with planning commission and other development organizations of the government who deal with DPP formulation can be a good practice for the participating offices Participatory methods like group exercise, DPP review and group presentation can be applied frequently for the hands on knowledge on DPP preparation.

5.2 Recommendations

From this study it was found that the nominating authority consider education, background & job relevancy in selecting the participants but practically proper person is not nominated for the training program due to unavailability or engagement in the organizational responsibility. Diversity of the trainees creates complexity while conducting the session. Therefore, success of the training program proper participants should be nominated considering educational level, job relevancy & experience.





The participants found some topics as complex in various sessions of the training program. These are financial and economic appraisal, derivation of cash flow, discounting technique, NPV, B/C ratio & IRR, sensitivity analysis, project formulation, logical framework & critical path method. It is due to diversity of the educational background & job relevancy of the participants. Therefore, it is suggested that additional time should be allotted for each session for clarification of complex topics.

It appears that the trainers followed lecture and question/answer method in conducting the sessions. But from the FGD, case study and participants' observations it is found that the trainees desired more interactive practical sessions for the effectiveness of the training program. Therefore, the methodology of training should include group work, group presentation, case study and project visit.

From FGD and other expert opinions, it was found that recognition or rewarding system in the organization level for successful preparation of DPP can provide a positive reinforcement to enhance trainees' performance. Also some mechanism can be applied for the trainees recognition who achieved considerable improvement in DPP formulation.

It was suggested by the trainees for creating a portal or web-based communication platform. They can inquire about their problems in formulating DPP through this web-based portal & get suggestions from NAPD or expert trainers. This portal or web-based communication can be a media of communication among the trainees, NAPD & the expert trainers. There can also be an e-learning platform of this program. Therefore, the trainees can participate in this training program from anywhere of the country.

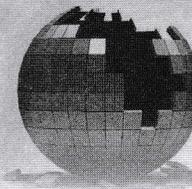
6. Direction for future research

Organizational arrangements or provisions are important to accommodate the trained officers for utilization of their gained knowledge. However this study could not cover every aspect related to the assessment of the utilization of knowledge. This is indeed a highly complicated, hard and massive task. Without having any baseline data on the level of knowledge of the target population it is not possible to determine the exact extent of application of knowledge by the respondents on their completion of the project formulation appraisal and EIA course. Therefore, it is suggested that future study can be conducted for the measurement of the utilization of the gained knowledge and benefit of the organization in the aspect of return of investment (ROI).

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Glossary

NAPD	National Academy for Planning and Development	GDP	Gross Domestic Product
DPP	Development Project Proposal	FGD	Focused Group Discussion
EIA	Environmental Impact Assessment	ADP	Annual Development Program
NPV	Net Present Value	IRR	Internal Rate of Return
BCR	Benefit Cost Ratio	NGO	Non-government Organization

