Exploring Conjectural Perspectives Of Evaluation As An Integral Part Of The Project Management Cycle

Its not "what you see is what you get," but "what you don't see will get you"
(Martin and Heaulme, 1998)

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INTRODUCTION

Projects and programmes have since long been recognized as the most practical methodologies of achieving specific goals and objectives that may lead to progress and development (Cusworth and Franks,1993) and within the sphere of project management, the project cycle is recognized as an indispensable tool that guides the project systematically from its conception to the finish stage. In the sphere of project management, the word 'success' is used in the context of achieving something desirable i.e., the delivery of the project results on time, within budget and having an 'operational fit' with the organization's goals (Cleland and Ireland,2000). As such a stage of the project cycle -that can help arriving at judgments on a project's fate, its success or failures, merits or weaknesses, is the stage of *evaluation.*

Historically, evaluations are said to have been used as early as 2000 B.C. The Chinese, infact, had a large functional evaluation system in place for their civil servants as long ago as 2000 B.C.(Floraline,et.al,2002). In the modern times, evaluation ideas and methods were developed as a result of the need to understand how money was being spent in order to justify expenditure to the funders (Rubin, 1995). However, evaluation as a stage has often not been considered in traditional project cycles or was often 'aborted' primarily due to the lack of funds and other resources (Lewis, 2000). Evaluation as a final stage of the World Bank project cycle was established in 1970. And today, in contrast to the former decades where emphasis was only given to the planning and implementation stages and evaluations were not conducted often, the view is gaining ground that evaluation should be a tool that not only measures, but can also contribute to project or programme's success or establish that it could be a fit case of replication (Floraline, et.al, 2002).

EVALUATION: WHAT IT MEANS

Evaluation is a tool used to assess how far the project objectives have been achieved and whether the initial assumptions about what would happen were right. It also helps in arriving at judgments about the effectiveness, efficiency, impact and sustainability of the project and whether the project could be replicable in future (Rubin,1995). The Project Cycle by Rubins, 1995 (Fig.1) puts evaluation as the last stage of the project cycle. The cycle mentions assessment, appraisal and monitoring activities as being carried out periodically and these activities feed into the evaluation stage. The results of evaluation can be input into newer projects and policies. In terms of the inputs for the same project from the cycle, it seems that the project would be more dependent upon assessment, appraisal and monitoring activities to realign or improve itself.

Evaluation involves collecting baseline information, primarily quantitative data against which the progress and the intended and the achieved benefits can be measured (ibid).

Traditionally, evaluation has been seen as a, "means of control, focusing on predetermined aims" (Rubin, 1995, p.19) taking place serially once the former stages of the cycle have been gone through. However, the later definitions (such

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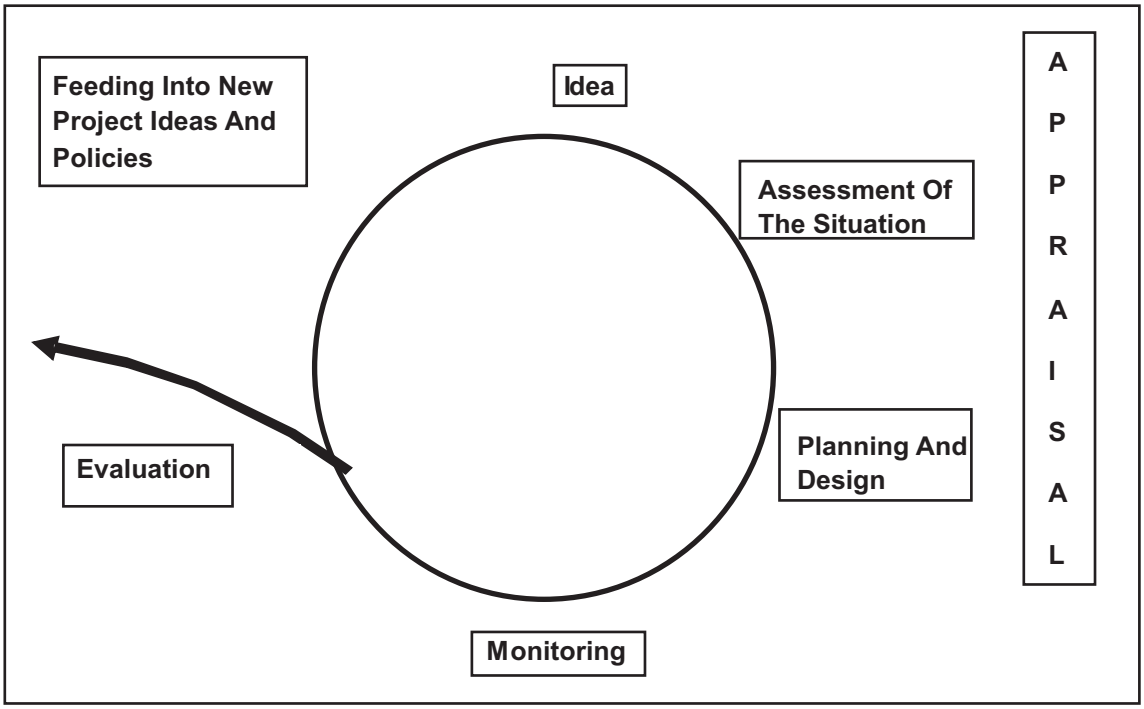
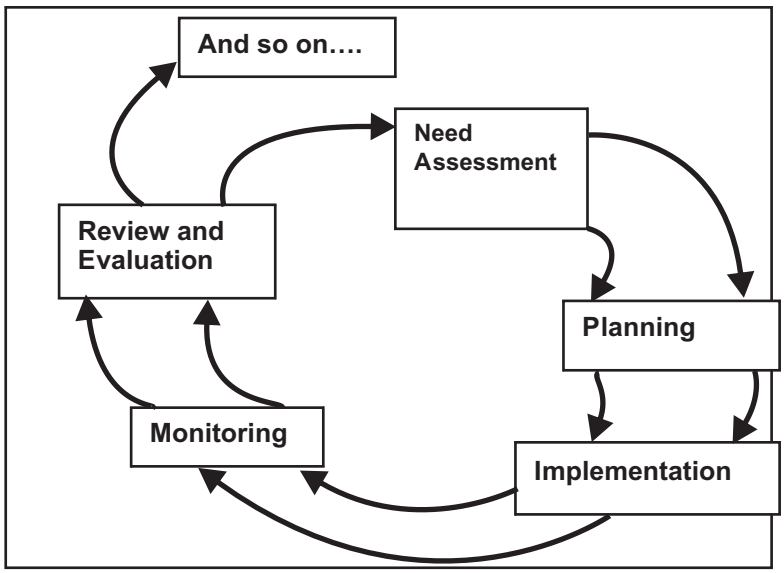
Figure-1: **The Project Cycle By Rubin, 1995**



as World Bank,1996) seem to give more value to the phase, conducted at various periods during the life of a project, not only to provide feedbacks to the newer projects or programmes to develop but also to improve the efficiency of the ongoing project. According to World Bank (1996p.1), "Evaluation is the periodic assessment of a project's relevance, performance, efficiency and impact (both expected and unexpected) in relation to stated objectives". As such, interim evaluations (formative) are conducted during implementation as a first review of progress and terminal evaluation (summative) at the end of the project. The contemporary ideas about evaluation also involve building upon all the processes involved in former stages of the project cycle, and going on to reflect upon what has happened, reviewing the effects and to judge the overall impact of what has been done. Although distinct in terms of the stage of involvement and scale, assessment, monitoring, review and evaluation are essentially parts of the same process of

Figure -2: The Project Cycle By Gosling And Edwards (1995)



analyzing and modifying work in order to improve effectiveness. (Gosling and Edward, 1995, fig.2).
According to Gosling and Edwards, 1995, since all development work comprises of learning and change at every stage of the cycle, it is more of a spiral rather than circular. Similar interrelations can also be observed from this illustration with the previous stages, providing inputs into evaluation stage and evaluation feeding both into the same project and well as the newer ones.

EVALUATION: WHAT IT INVOLVES

Whether an evaluation is formative or summative, the purpose is primarily to judge upon the project achieving its targets. The idea is also to identify risks and deviations and accordingly realign the present or future course of action. In order to be able to do this, evaluation involves a set of activities. At the outset, the objectives of evaluation have to be specified followed by formulation of potential evaluation questions such as - the information is for whom, who will use the findings, what kind of information is required, etc. (Floraline,et.al,2002). Also, important is the identification of either stakeholders in the project as different stakeholders might have different information needs, for example, the type of information needed by those who are concerned about the day to day operations of a project will differ greatly from those needed by policy makers who may be dealing with more long term issues or those who have to make funding decisions (ibid). According to William (2001), the evaluation hypothesis and indicators to measure performance shall also be fixed in the first phase of evaluation (fig.3).William, 2001 also states that the distinctions between planning and evaluation are not always clear as a lot of planning is going on in the evaluation stage to arrive at a desired alternative. The cycle shows the stages involved in both planning and evaluation phases and the cyclical shape and arrow show that both feed into each other.
The selection of indicators may vary depending upon the nature and the context in which the project is set, but in the broader context, the performance indicators generally pertain to time, cost, scope, organization and beneficiary satisfaction besides other indicators specific to the project. Data so gathered should be able to indicate if there have been changes in the scope. This is important as it may have further impact on project time and cost. Similarly, indicators are also required to assess whether the project organization is performing as desired (Turner, 1999). The next stage is the determination of appropriate information gathering techniques and this may further include selection of an evaluation model[1], determining the data sources, selection of appropriate data collection methods and formulation of a design format (fig.4).

Figure -3: The Planning Evaluation Cycle By William, 2001

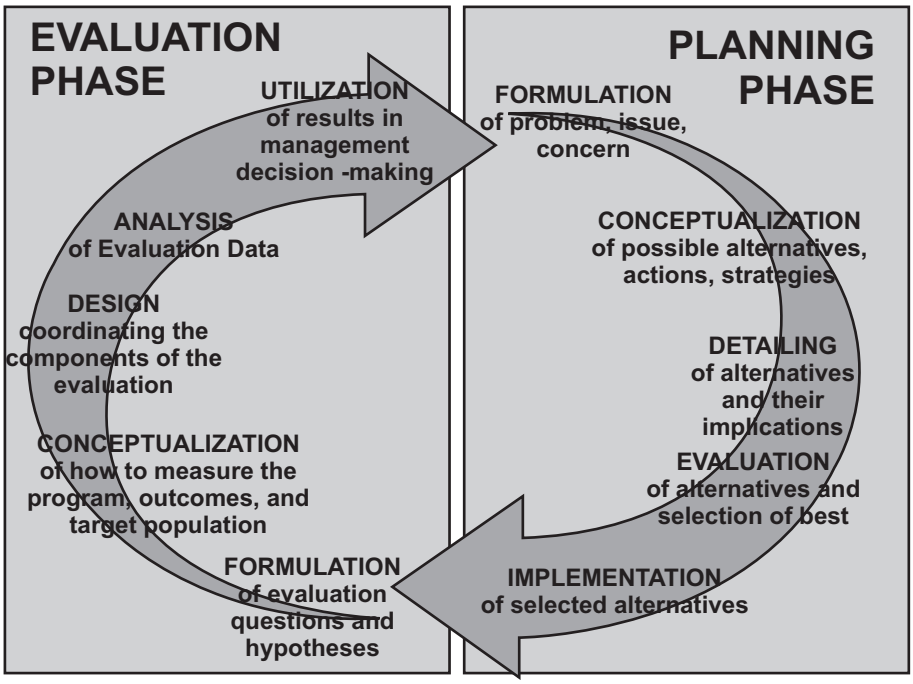
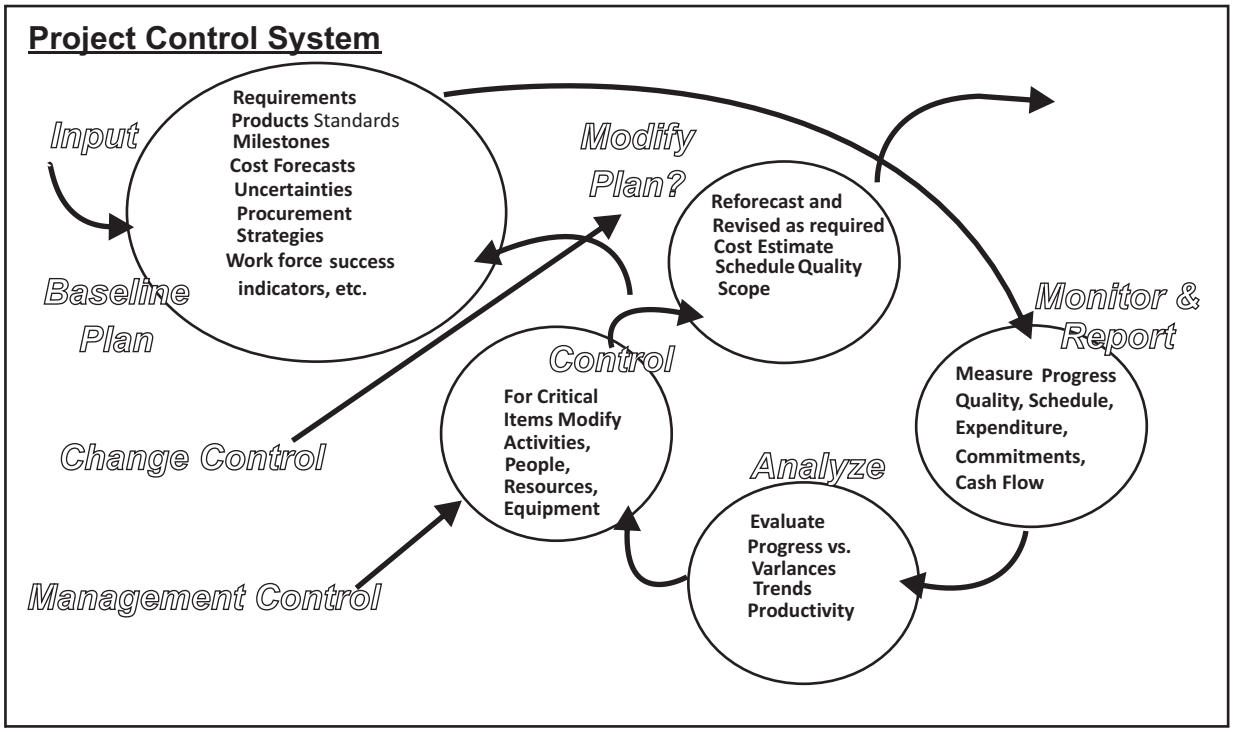


Figure- 4: Evaluation Design Format (Boulmetis and Dutwin, 2000)

Evaluation Question	Activities To Observe	Data Source	Population Sample	Data Collection Design	Responsibility	Data Analysis	Audience

Figure- 5 : Elements of a Project Control System by Wideman, 2001



According to Boulmetis and Dutwin, 2000, the design format is essential in collecting and maintaining data right from project initiation to conclusion stage and should be thought of during the project design phase. Audience refers to the body for which evaluation will be carried out -such as a funding agency, project management team or any other body. Different evaluation questions may be framed to suit different audiences. For e.g., funders may be more interested in knowing about program efficiency and impact, whereas, project management team may be concerned about both efficiency of the project as well as its own performance.

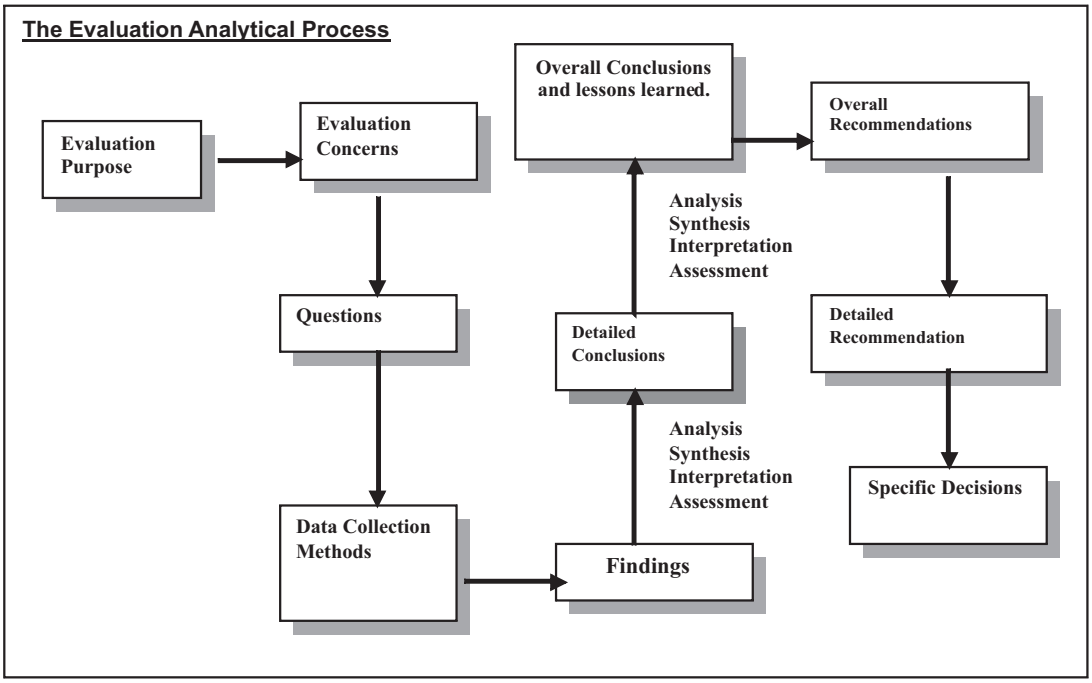
Wideman, 2001 has used the term Project Control System for detailed Project Evaluations. Devised mainly for use in the corporate sector, the Project Control System (fig.5) shows the ways control is exercised through use of monitoring and evaluation. Again, it shows how evaluatory processes can feed into the same cycle as well as provide output for new projects.In terms of selecting the data collection techniques, quantitative or qualitative or a combination of both methods can be followed. Traditional evaluations were known to depend heavily upon quantitative methods [2] such as

[1]Some examples of models are described by Boulmetis and Dutwin (2000) such as the discrepancy evaluation model, transaction model, decision making model and goal based model.

[2]Which draws upon numeric values to measure performance(Gosling and Edwards 1995).

tests and records (Rubin, 1995) drawn from survey data from statistically represented samples (World Bank, 1996). Qualitative methods such as interviews and observations and the more participatory methods are increasingly being used to supplement quantitative methods as these can provide critical insights into beneficiaries' perspectives or reasons behind certain results observed in the quantitative analysis. Participatory methods seek information from focus groups, maps and diagrams, etc. So a variety of PRA (participatory rapid appraisal) tools may be used (Gosling and Edwards, 1995). In the next step, data is analyzed and interpreted in relation to the performance indicators as fixed earlier [3] and to integrate separate analysis into the overall picture and develop conclusions. The final activity is reporting the results and this is usually done through a written document.

Figure - 6 : The Evaluation Analytical Process (Danida,1999)



The flowchart above show how the process works, the starting point being the identification of the evaluation purpose and the steps thereafter gradually leading to the last stage of formulation of specific decisions which may be related to the ongoing or the next project.

EVALUATION: INDEPENDENT OR INTERDEPENDENT?

In the traditional methodologies, evaluation (as also other phases) has been regarded as a neat division occurring independently once the previous stage has been fully completed. However, the later project/ programme cycles demonstrates that the phases are not complete self contained units but are in fact interdependent in terms of their components and activities and evaluation is no exception to this. In this context, it is stated that evaluation is an integral part of the project/programme cycle. The standpoint is based upon the analysis of interrelationships between the phases. According to Valendez and Bamberger (1994), evaluation should be considered as a complementary part of an integrated system, from the time the project is formulated right through implementation and operational part. This also implies the fact that although evaluations may be conducted periodically or at the end of a project, it needs to be thought about as a part of the overall project design right in the beginning. Evaluation depends upon information as such baseline data requirements that inform the planning and design phase and the same is invaluable during the evaluation phase to assess progress or impacts. At the same time, evaluation processes may feed the results into the planning and design stage (Lewis, 2000), Boulmetis and Dutwin, 2000). Incase of formative evaluation, results can be

[3]For the analysis of both quantative and qualitative data, there are statistical programmes available on easily accessible software that makes data analysis easier then what it was about 2 decades ago(Floraline,et.al,2002).

fed back into the same project planning and design phase, in case of summative evaluation, it would usually be a successive project of similar nature. The relation is further analyzed using project cycles (fig1, 2, 5). If evaluation has already been incorporated into the project design, then implementation questions [4] would be specific to the evaluation to be conducted (Floraline, et.al,2002). Within the implementation stage, data is primarily collected through monitoring activity and this is used as further input for evaluation processes to begin (Rubin, 1995). In this context, monitoring functions provide a vital support system to the evaluation, highlighting that these processes are interdependent (Dutwin, 2000).

In context of the modern project management, LogFrame (logical framework analysis), PERT (project evaluation and reviewing techniques) and CPM (critical path method) are widely used to prepare project planning and implementation schedules. Used both in planning and implementation stages, Turner(1999) argues that besides helping to identify and eliminate risk in former stages, they provide valuable information and analysis for evaluation in terms of checking some of the performance indicators (such as time). Taylor (2000) is of the opinion that identifying the indicators of progress and means of verification by use of LogFrame can give a 'flying start' to the management's ability to build up a sound evaluation. Related to project scheduling , these techniques help in making estimates of activity durations based on previous datas and are assumed to be the mean or average time that the activity has taken to perform in the past (Lewis,2000).

Information is the key to evaluation (Gosling and Edwards,1995). From the above write up, it can be derived that evaluation is dependent both upon the activities and tools used in former stages to arrive at a rational judgment which may impact the present or the future projects. So while it draws inputs from other phases of the project cycle, it also provides feedback to the phases and in this context, it can be counted upon as an interdependent and integral part of the project cycle.

As far as policy making is concerned, the same argument can be carried further to state that evaluation is a critical and integral component in addressing policy matters that would further impact projects and programmes. However, traditionally, it does not seem to have been given much value as can be observed from the linear model [5] which does not include the element of evaluation, highlighting the dichotomy that would have existed between policy making and evaluation. Evaluation as Sanderson (2002) puts it can inform the development and implementation of a policy in a number of ways. It provides evidence of the likely effectiveness of policy options to inform decisions on what action to initiate, develop a sound basis on whether to continue, terminate, adjust or improve policies as also to contribute to the evidence base to inform future considerations for policy options (ibid).

Dunshire(1986) as quoted in Sanderson(2002) argues that under conditions of uncertainty about the correctness of policy decisions and about the capacity to implement policies as intended, there is a need to strengthen and in build the role of evaluation in providing information on actual performance. There is also a need to build the capacity to take action to modify policy design and implementation in light of such evidences. Recognizing the role of evaluation in policy making, countries as well as institutions such as the IMF and the World Bank have put systems in place to conduct evaluations. For instance, the Implementation, Monitoring and Evaluation division (MED) was set up in Bangladesh in 1984 and is responsible for monitoring and evaluation of development projects. In India, the Programme Evaluation Organization of the Planning Commission performs evaluation functions. The operations Evaluation Department of the World Bank conducts detailed evaluation of its funded projects/ programmes and the lessons of experience are then fed into the preparation and design of future policies and projects (Baum, 1982).

The interactive model (Grindle and Thomas, 1991 as in Sutton, 1999) stresses that the process of policy making is 'interactive and not linear' and that pressure for change can be exerted at many points in the policy cycle. As such, the dynamics of change can be informed through sound evaluation practices. Thereby, “if evaluation is to fulfill its potential for driving policy learning, it must be fully integrated into the ongoing discourse, able to sustain advocacy of the 'evidential voice' and help policy makers to think more intelligently about the domain in which they worked”(Weiss,1995,p.141 as quoted by Sanderson,2002).

[4] Such as 'do the activities and strategies match those described in the plan? If not, what changes have occurred'? (Floraline,et.al,2002)

[5] By Grindle and Thomas(1990) as given in Sutton(1999).

THE EVALUATION OF KAMPUNG IMPROVEMENT PROGRAMME JAKARTA - SOME INSIGHTS

Taking the case of the housing sector, it can be said that evaluation is vital to arrive at making rational decisions about project/programme continuity, improvement or replicability as also with a broader view of providing feedback to the strategic policies upon which future housing projects shall be based. Though the format described above is likely to be similar in terms of its components, the nature and type of evaluation may vary depending upon the context and the type of hypothesis framed with respect to expectations from the housing project/programme. Here in, the example of the Kampung Improvement Programme is cited to demonstrate the application of evaluation in the low income housing segment.

Launched by the Government of Indonesia in 1969, the main objective of the Kampung [6] Improvement programme (KIP) was to make a marked difference in the lives of the urban poor by upgrading low income settlements in Jakarta and subsequently in other cities of Indonesia. The KIP is widely cited as the world's first urban slum upgrading programme and an innovative programme that served to transform urban slums from illegal settlements into an integral part of the urban fabric. It was supported by the World Bank from 1974 onwards. By the time the World Bank assistance closed in 1982, the KIP had improved living conditions for nearly five million urban poor across cities of Indonesia. An inbuilt monitoring and assessment system based upon the trial and error approaches as well as significant input from the beneficiary communities was also regarded as a key factor that contributed to the success of an up gradation project of this vast scale. The evaluation study mentioned here was conducted by John Taylor[7] between 1979-82.

In case of the KIP, the objective of the evaluation undertaken by Taylor was to judge the impact of the Jakarta KIP on people, economy and the physical environment of the Kampungs. The evaluation questions such as the impact of KIP on household incomes and expenditure patterns, etc., were formulated keeping the hypothesis and the main objectives of the programme in view. Nine set of hypothesis were formulated such as, 'KIP inputs will raise land and house values within the Kampung, thus benefitting households with clear ownership rights to land and or house'. The methodology used in this evaluation was the test control approach which compares one group of improved Kampungs with a similar group of unimproved Kampungs before and after the improvements (fig.7). The 'test' also known as experimental group consists of households in Kampungs improved between before and after time points. Control groups implies group of households in unimproved Kampungs. The test control strategy was applied to the Jakarta KIP by using the 1976 DKI (Jakarta Administration) baseline surveys and the resurvey was held in 1981.The analysis of findings compared changes experienced by the test and the control groups between the two survey points, wherein, each hypothesis was tested by assigning numeric values to the indicators [8]. Another salient feature of the evaluation was the use of qualitative data and analysis by employing measures such as participant and non- participant observation. These means were used for verification of quantitative data and also helped in providing other forms of more subjective information. The findings of the evaluation including the achievements and shortcomings were compiled and compared with similar impact evaluation studies of KIP in 5 other cities and were regarded as significant in addressing the policy options of the DKI (Taylor, 1987). For instance, the evaluation revealed that the investments in the KIP Kampungs were significantly greater and the houses in KIP Kampungs were in better conditions than those in the non-KIP Kampungs. Based upon the results of the evaluation, the DKI planned to 'scale up' further and take larger improvements towards urban betterment by initiating the Integrated Urban Infrastructure Development Program (IUIDP).

Figure-7 illustrates the changes experienced by the test group at the periods before and after the KIP implementation.The control group comprising of households in unimproved kampungs is compared with the test groups and quantitative analysis (multiple regression) so undertaken as a part of evaluation of the programme proves the hypothesis that the test group households would have experienced several changes in dwelling quality as a result of KIP inputs.

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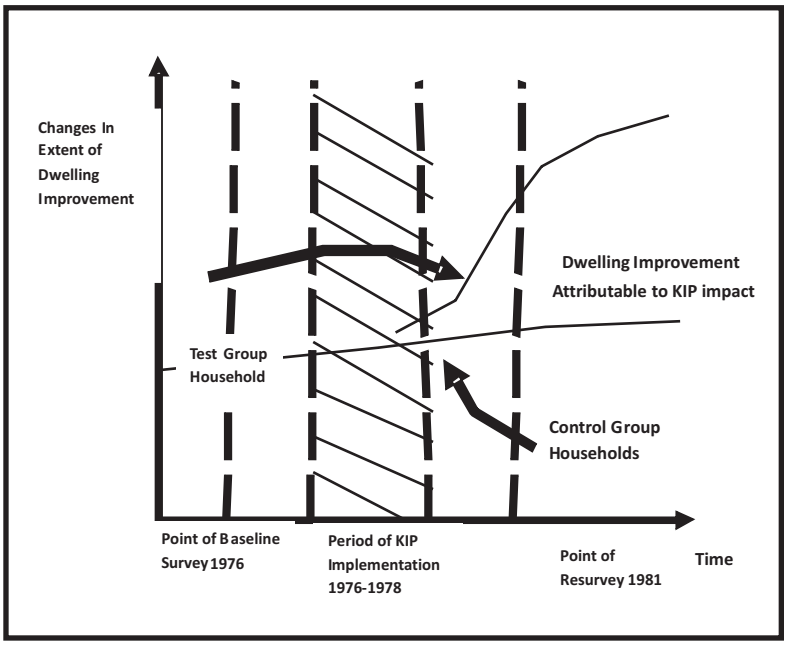
[6] Kampungs refer to the residential areas of the urban poor in cities of Indonesia.

[7] John Taylor's Research article is titled "Evaluation of the Jakarta Kampung Improvement Program",in Rienhard. J.Skinner,et.al, *Shelter Upgrading for the urban poor, evaluation of Third World Experience.*

[8] However, the study does not mention the details of indicators so selected to judge the performance but it is assumed that besides the common indicators as mentioned earlier, a large number of social, economic and other indicators to which results could be compared, would have been selected.

Figure -7: Illustration of Test- Control Group Comparison In Case of KIP Jakarta (Taylor,1987)



The assessment of the evaluation approach undertaken reveals that it was built into the programme design which emphasizes the importance attached to the evaluation in the programme. However, the author does mention that despite this, there were a series of problems related to the test control approach and the fact that several questions that were actually framed in retrospect to test the hypothesis were not in the original evaluation design. As a result, baseline information had its limitations, thus affecting the accuracy of the evaluation results.

Another evaluation of the KIP was carried out by the Operations Evaluation Department of the World Bank in 1993, primarily to evaluate the medium to long term impacts of Banks lending for Urban Development in Indonesia. Three out of the four components of the urban projects namely KIP, Sites and Services Programmes and City wide improvement programmes were taken up for conducting impact evaluations.

According to World Bank, 1995, Impact Evaluations are an important tool for an institution to learn and make adjustments and reorient its policies and projects and hence impact evaluations are a true measure of project sustainability. Besides increasing the knowledge base about sustainability of the project, impact evaluations are valued as they contribute to establishing conditions under which urban improvement initiatives such as the KIP actually meet their goals. In order to carry out the impact evaluation, three Indonesian cities i.e, Jakarta, Surabaya and Denpasar were selected. The criteria for selecting the three cities were that they represented an extensive coverage of the KIP. Evaluation hypothesis and detailed indicators were prepared and information was collected through questionnaires administered to beneficiaries by local interviewers, beneficiary group interviews, case studies, expert observations and key informant interviews. The secondary data was obtained from reports and maps provided by national and provincial sources and from World Bank archives. To analyze the data generated, a methodology that combined rigorous quantitative analysis using statistical methods as the Chi Square Test along with qualitative information was applied. The analysis was able to effectively demonstrate the findings of the impact evaluation. However, some limitations also emerged in the process such as the absence of systematic baseline data on the conditions of the Kampungs prior to the implementation of the KIP. Consequently, the impact evaluation had to rely upon memories of some of the beneficiary individuals to undertake the investigations and test the formulated hypothesis. In addition, it became quite difficult to compare the situation of the KIP Kampungs with the pre-project situation in order to assess the impacts.

CONCLUSIONS

If "a project is a problem scheduled for a solution" (Lewis, 2000), then it can be safely said that evaluation serves as a

vehicle to arrive at a rational solution, which may prove critical to a project/ programme success and replicability. If evaluation procedures and activities are inbuilt in the project design, it is likely to be more effective and sound compared to an adhoc endeavor thought and incorporated later, which might not be able to generate the actual responses. Baseline information as has been mentioned is vital to conduct an effective evaluation. Traditionally, evaluations have been relying heavily on quantitative methods. However, over the last two decades, qualitative and participatory methods are also being incorporated to remove the element of objectivity in evaluation. Evaluation is as has been argued, an integral part of the project/ programme cycle that provides feedbacks to the other phases of the cycle, while also drawing from them. According to Rubins (1995p.14), "each stage of the project cycle should be the occasion of learning and change" and evaluation can provide inputs to achieve this, within the same as well as future projects/programmes.

Besides project/programmes, much more significant is the incorporation of evaluation in policy formulation and implementation processes, primarily because of the wider scale of policy impacts[9]. However, it may also be stated that policy making is also a matter of politics and power play. Evaluation can only inform decision-making and not make decisions. As such, it will work best where it is understood by all stakeholders as an, "integral part of development work" and foster in an "environment which encourages critical reflection" (Rubin, 1995,p.24).

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[9] Policy decisions channelised through projects and programmes may therefore cover a wide geographical area and effect larger populations.