# Employee Performance Evaluation Systems: An Evaluative Study of Selected Public Quoted Manufacturing Firms in Sri Lanka

H.H.D.N.P. Opatha, Department of Business Administration, University of Sri Jayewardenepura, S. L.

#### **Abstract**

This paper provides a description of the Employee Performance Evaluation Systems (EPESs) in five selected manufacturing firms in Sri Lanka and an evaluation of those systems in the light of an evaluative framework developed from the current theoretical arguments, empirical findings and expert opinion. The evaluative framework has its focus on eight dimensions of Employee Performance Evaluation System (EPES) including Employee Performance Evaluation (EPE) purposes, EPE policies, EPE criteria and standards, EPE methods, feedback interviews, evaluator training, practices for ensuring accurate implementation and review and renewal. The results indicate that the degrees of systematic utilization/quality of EPESs in three firms (A, C, and D) are moderate and those of EPESs in two firms (B and E) are low as per 5-point scale suggesting significant revisions to be made to the EPESs so as to improve them.

#### Introduction

Socio-economic development of Sri Lanka depends heavily on the success of all the organizations operating in the country, particularly firms in manufacturing sector, which has potential for creation of employment opportunities and income opportunities on a sustained basis. Success of an organization largely depends on how effectively employees perform their jobs (Heneman 111 and Schwab, 1982). Employee Performance Evaluation (EPE) is concerned with how far and how well employees perform their jobs. EPE identifies, measures and develops job performance of employees in an organization. Employees in a firm are required to generate a total commitment to desired standards of performance to achieve a competitive advantage and improved performance for sustaining that competitive advantage at least for a prolonged period of time, if not forever. In view of Judge and Ferris (1993), perhaps there is no more important human resources system in organizations other than performance evaluation and ratings of employees' performance represent critical decisions that are key influences on a variety of subsequent human resources actions and outcomes. Effective EPE drives employees in a firm to produce excellent standards of performance and even beyond the excellent (exceptional) standards of performance.

There are a very few studies carried out in Sri Lanka in respect of EPE including an in-depth audit research carried out by the author (Opatha, 1992) focusing on employee performance appraisal practices of selected state corporations in Sri Lanka. It is noted that no prior empirical case studies carried out on EPE of public quoted manufacturing companies in Sri Lanka. Hence there is a gap in the empirical research knowledge in respect of the practices of Employee Performance Evaluation Systems (EPESs) of manufacturing firms in Sri Lanka.

It is hoped that this study will primarily be important for manufacturing firms and they will be in a position to identify the strengths and weaknesses of the current EPESs and to improve the systems. Also this study may be of assistance to all other organizations in Sri Lanka in general for the purpose of improving their EPESs. Also the paper may be useful for those who are interested in understanding the practice of EPE in Sri Lankan firms.

#### **Objectives of the Study**

This study attempted to achieve the following two objectives:

- To explore and describe the EPESs in the selected manufacturing firms in Sri Lanka.
- ii. To evaluate EPESs in the light of the evaluation framework developed from the current theoretical arguments, empirical research findings and expert opi: 1.

#### **Study Design**

As this study went beyond merely describing the current EPESs in the manufacturing firms selected to evaluation of the EPESs the nature of the study was evaluative. The study was conducted in the natural environment of the selected manufacturing firms the extent of the researcher interference is minimal with the normal flow of events. As the data for the study were collected over a point in time, the study was cross-sectional in time horizon.

In order to achieve the objectives of this study, qualitative case study investigation was used as the major research method. The reasons are that it was needed to investigate the phenomenon (i.e., EPES) within its actual natural context and there was no purpose of generalization of the findings of the study.

For the objectives of the study five public quoted manufacturing firms were selected and their names are not revealed for the reason of anonymity. Hence, the five firms are identified as cases A, B, C, D and E. These firms were quite similar in terms of size of the employee force.

Both primary and secondary sources were needed to collect the relevant data to achieve the objectives of the study. In case of primary sources of data collection, a comprehensive structured questionnaire/checklist was given to the human resource managers of the firms and direct interviews were held with them. The relevant EPE forms and documents were used as the secondary sources of data collection specially to collect data in respect of the dimensions of performance evaluation criteria and method and the element of content of training manual under the dimension of evaluator training.

#### The Evaluation Framework

Employee Performance Evaluation (EPE) is the human resource management activity by means of which the organization determines the extent to which the employee is performing the job effectively (Glueck, 1979 and Ivancevich, 1998). EPES was conceptualized as a system of interrelated dimensions that include EPE purposes, EPE policies, EPE criteria and standards, EPE methods, EPE

feedback interview, evaluator training, practices for ensuring accurate implementation and review and renewal. An evaluative framework was developed from the current theoretical arguments, empirical research findings and expert opinion in relation to the above eight dimensions, which were used to evaluate the degree of systematic utilization or quality of the EPES being applied by a manufacturing firm.

#### **Purposes of EPE**

Any proper EPES must have a formality and clear purposes for which it is used. EPE is used by the organization for administrative purposes, employee development and program assessment (Storn and Melt, 1983). According to Prasad (1993) EPE is expected to provide answers to many of the questions in respect of people management in the organization. In view of Prasad and Bennerjee (1994), the purposes of the periodical evaluation should be to evaluate results and plan for better performance, to understand the gaps in the knowledge, skills, and training needs and to identify employees with potential to fill higher positions in the future. There are several important purposes served by EPE and not served by any other human resource system or practice (Carrell, Elbert and Hatfield, 1995). Thus, ideally an EPES can be used to achieve at least administrative purposes that include: (1) To grant salary/wage increment; (2) To select employees to be promoted; (3) To determine the gravity of disciplinary actions; (4) To terminate/confirm employment; (5) To validate selection tools; and (6) To reward employees (other than salary/wage increments and promotions) and development purposes that include: (1) To ascertain potential performance and development needs of the employee so as to develop him/her; (2)To identify training needs of each employee so as to improve each employee's job performance; (3)To counsel employee; and (4)To assess results of training programs.

These purposes were taken as elements or indicators of the dimension of purposes of EPE and adequacy of purposes were rated on a 5-point scale of 'Always, Often, Sometimes, Rarely and Never'. Scores of 5,4,3,2,and 1 were given to the responses respectively.

#### Policies of EPE

There are generally four EPE policy issues for which an organization needs to answer or clarify in terms of well-defined policies (Glueck, 1979 and Ivancevich, 1998). These are:

- 1. On whom should EPE be done?
- 2. When should EPE be done?
- 3. Who should do EPE?
- 4. How often should EPE be done?

Effective policies in respect of the above policies, which are considered as indicators of the dimension of policies of EPE, are as follows:

1. The writing of Glueck(1979) and Schular and Youngblood(1986) suggests that job performance of all permanent and non-permanent employees should be evaluated in order to accomplish as many purposes of EPE as possible. Unnecessary negative attitudes that will create if a part of employees are

evaluated are avoided by evaluating all employees. Further this will further to ensure legal defense.

- 2. General approaches for timing of EPE include Fixed Time approach (evaluating job performance of all employees within a certain period of time-one day or several days), Arbitrary Time approach (evaluating job performance of different employees at different days/times) and Job Cycle approach (evaluating job performance of an employee when he/she finishes all the duties for one time). It is more appropriate to use fixed time approach plus job cycle approach (rather than arbitrary dates approach) in order to have more convenient administration of EPE, more concentration of evaluator on EPE, easier comparison of EPE of different employees and lesser possibility of unfair and inaccurate EPE owing to organizational and environmental causes (such as transfer or promotion of evaluator) and clear starting and ending of work (Glueck, 1979).
- 3. Arguments of Glueck(1979), Schular and Youngblood(1986), Bernardin and Russel(1993) and observation of Judge and Ferris(1993) suggest that immediate superior of an employee should be allowed to participate in evaluating his or her job performance and, however only the immediate superior is not sufficient. Immediate superior is relatively in a good position to observe the subordinate's job performance closely and he or she has a greater degree of interaction with the subordinate. Use of immediate superior only may encourage a situation where the evaluation is based on not on actual performance but on prejudices. Several sources including immediate superior, immediate superior and immediate superior's superior, several superiors, a committee, an outsider, peers, customers, and self and a combination can be used for job performance evaluation of an employee. As each source has its own advantages and disadvantages use of several sources will enhance the degree of accuracy of EPE by maximizing advantages and minimizing disadvantages (see, Ivancevich, 1998).
- 4. Companies that conduct multiple EPE had better results in terms of total shareholder return on equity, sales growth and cash flow (Martinez, 1997). In the current business climate, to consider monitoring performance often may be well for all firms (Mondy et al, 1999). Research has shown that many employees believe performance feedback should be given more frequently than once or twice a year (Bernarding and Christopher, 1997 as in Anthony and et al, 1999) and, thus, suggesting doing EPE frequently. To do EPE often or too frequent is not realistic due to time and other constraints. To conduct formal PE at least twice per year seems to be more appropriate owing to lesser probability of occurring recency effect and greater opportunity of giving feedback.

Degree of soundness of EPE policies being followed by the selected cases was rated on a 5-point scale based on the above effective policies. Scores of 5,4,3,2,and 1 were given depending on the varying degrees of soundness of EPE policies. Soundness of on whom was measured by giving 5 for 'on every employee'; 4 for 'on permanent employees only'; 3 for 'on managerial employees only'; 2 for 'on every employee except minor staff' and; 1 for 'on other specific category only'. Regarding second policy issue, 5 was given for fixed time and job cycle approaches, 4 was given for job cycle only, 3 for fixed time only, 2 for arbitrary time only and 1 for no clear policy. Third policy issue (soundness of who) was rated on a 5-point scale (5= combination of more than three sources; 4=

combination of three sources; 3= combination of two sources; 2= immediate supervisor only; and 1= any other source only). In respect of fourth policy issue, 5 was given for monthly/fourth-monthly (for every two months), 4 for quarterly, 3 for semi-annually, 2 for annually, and 1 for more than one year.

#### **EPE Criteria and Standards**

The dimensions/factors of performance on which an employee is appraised are referred to EPE criteria (Ivancevich, 1994 and Ivancevich, 1998). Criteria are measures of identifying success of job performance of employees. It is indispensable to have good PE criteria for fair and accurate EPE.

Three elements of EPE criteria such as adequacy, definition and objectivity are considered for this study. Use of one criterion is not appropriate at all to evaluate the success of an employee's job performance (Ivancevich, 1994). It is recommended that use of multiple criteria is appropriate (Ivancevich, 1998 and Mathis and Jakson, 2000). For instance, criteria such as quality of work, quantity of work, commitment to work, attendance and relationship with relevant people may be used to assess success of job performance of employees. successful EPE, criteria should be developed in respect of traits (qualities). behaviors (activities) and results (outcomes) as well because there are both pros and cons to focusing exclusively on one group of criteria and then use of the three groups enhances adequacy of evaluation (Beach, 1980 and Tripathi, 1991). Traits are special qualities possessed by the employee such as job knowledge, honesty and trust that do contribute to better behaviours and to identification of employees' training needs. Behaviours such as planning the work, organizing the work, attendance and punctuality are particular activities to be performed for success of the job and are generally free from contamination by external uncontrollable factors (such as economic conditions, power failures or inadequacy or defective tools). Results are the outcomes that are the primary goals of the job performance and are the most important at the final analysis. Relatively results are easier to evaluate more fairly and more accurately. Both objective and subjective measures of performance should be taken into consideration for formal EPE (Anthony, Perrewe & Kacmar, 1999). Traits and behaviours are more subjective measures rather than objective compared with results that are more objective measures.

Adequacy of criteria was rated on a 5-point scale. 5,4,3,2,and 1 were given for criteria clearly focused on traits, behaviours and results; focused on results and behaviours; focused on behaviours and traits; focused on results only and traits and behaviours only respectively.

All the criteria used EPE must be clearly defined (Chruden & Sherman, 1980 and Anthony, Perrewe & Kacmar, 1999). If criteria have been defined clearly the users can understand them properly for effective EPE. Nature of definition ( degree of clearness) was rated on a 5- point scale (5= all the criteria defined clearly; 4= majority of criteria defined clearly; 3= almost a half of the criteria defined clearly; 2= a few criteria defined clearly and 1= no criterion defined clearly).

Compared with subjective criteria, relative degree of accuracy is higher in case of objective criteria (Stone and Melt, 1983; Werther and Davis, 1985). It is more appropriate to use objective criteria for EPE as they can be quantified distinctly and verified by others. The degree of objectivity of the criteria becomes maximized if all the criteria being used for EPE can be quantified clearly. Even in case of

subjective criteria, they can be made objective through the use of objective standards/rating scales as much as possible in order to improve the degree of objectivity of the EPE.

The degree of objectivity of the EPE was rated on a 5-point scale with scores of 5,4,3,2,and 1. The highest score (5) was given to 'all criteria are can be quantified clearly'. 4 was given for 'many criteria can be quantified clearly; 3 for '50% of the criteria can be quantified'; 2 for 'many criteria cannot be quantified clearly; and 1 for 'almost all the criteria can not be quantified clearly'.

By using standards, performance criteria take on a range of values (Schuler and Youngblood, 1986). EPE standards refer to rating scales that should be developed systematically and fairly.

"Based on job analysis information, the levels of performance deemed to be acceptable versus those that are unacceptable are developed. In essence, this determines a standard against which to compare employee performance. A good performance standard describes what an employee should have produced or accomplished upon completing a specific activity." Wrote Anthony, Perrewe and Kacmar, (1999: 379).

"Standards should be set with great care, for if they are too liberal little benefit will be gained by the control, and if they are too stringent, they will demoralize the staff and may even precipitate industrial action." Stressed Denyer (1993: 513).

Standards should not be static and they should be dynamic. In view of Anthony et al, (1999) performance standards should meet several important requirements. First the standards should be written. When they are in writing, anyone who reads them will be able to recognize the difference between acceptable and unacceptable levels of performance. Second, the standard should challenge the employee. However it should be attainable by the relevant employee. To set an extremely high standard to motivate employees to perform at their maximum level may backfire. Also the standards should have the quality of measurability and a specified time frame.

Regarding the number of rating scales in respect of a particular criterion there is no certain number. Rice (1996: 244) observes:

"In an attempt to improve the reliability of ratings, several researchers have experimented with varying the number of rating categories. The results indicate that consistency among raters drops significantly when there are less than 4 or more than 10 categories. Five to nine categories seem to produce the most consistent ratings."

Thus, it is better to have rating categories between five and nine. This will improve consistency among raters and then reliability of EPE.

The degree of quality of standards was rated on a 5-point scale according to the number of requirements being met out of the five requirements. The five requirements are clearness of showing acceptable and unacceptable levels of performance, realistic but challenging standards, measurability, specified time frame and five to nine categories. 5 scores were given to 'all the five requirements are met'; 4 for 'four requirements only met'; 3 for 'three requirements only met'; 2 for 'two requirements only met' and 1 for 'one requirement only met'.

#### **EPE Methods**

Generally EPE methods refer to techniques that can be used in evaluating job performance of employees. Three elements i.e., appropriateness of the technique, quality of the content of the evaluating form and quality of the EPE procedure were considered under this dimension.

Traits, behaviours and results of the employee should be assessed for a better EPE. The Management by Objectives (MBO) technique focuses on results only (Werther and Davis, 1993, Mathis and Jackson, 2000). Behavioral Anchored Rating Scales (BARS)/Behavioral Observation Scales (BOS) technique focuses on activities or behaviours (Schuler and Youngblood, 1986 and Mamoria, 1991). Graphic Rating Scales (GRS) technique has generally the focus on traits of employees needed to perform the jobs. A 5-point scale was used to rate the degree of appropriateness of the technique. 5, 4, 3, 2, and 1 were given for 'use of MBO + BARS/BOS + GRS', 'use of MBO + BARS/BOS, 'use of MBO or BARS/BOS', 'use of any other technique except Essay Technique' and 'use of Essay Technique' respectively. As the Essay Technique has relatively more disadvantages such as difficulty of comparing evaluations among employees, high subjectivity in evaluation and unequal skills in writing possessed by different evaluators, less consistency and less accuracy in evaluating, the lowest score (01) was given.

EPE form is a specific form used for the purpose of performance evaluation of an employee and it is the heart of EPE. The quality of the content of the form was assessed by taking into consideration of the following indicators (these are based on recommendations of Cumming, 1998): (1) Identification information such as name of the evaluee, job title, department, unit, date of evaluation etc.; (2) Instructions (appropriate); (3) Evaluation on criteria; (4) Comments of evaluator (for notes on present deficiencies, strengths/potential and actions to be taken to fulfill potential shown or correct deficiencies and other remarks); (5) Comments of evaluee about evaluation given; and (6) Comments of reviewing official(s).

The ratings relating to the above indicators were done on a 2-point scale of 'Provided' and 'Not provided'. Score weightages of 5 and 1 were given to this scaling.

A procedure outlines specific steps to follow in particular recurring situations (Bovee, et al., 1993). EPE procedure gives, broadly writing, the relevant specific guidelines for completing the EPE form. The quality of the EPE procedure being used by the cases was evaluated by taking into consideration of the following indicators (these are based on recommendations of Bernardin and Russell, 1993): (1) Steps to be followed are clearly indicated; (2) Weighting according to the significance of each criterion (as all the criteria being used do not equally contribute to success of the employee job performance.); and (3) Overall score computation.

The rating for the above indicators was done on a 2-point scale of 'Included' and 'Not included'. Score weightages of 5 and \*\*were given to the scaling.

#### **EPE Feedback Interview**

EPE feedback interview refers a performance review session giving evaluee information regarding his/her past performance assessed and improvement of future performance. The objective of the feedback interview is to get employees to do more talking and thinking about their job performance in order to improve individual performance (Jone, 1998). Due to several important reasons such as providing the superior an opportunity to discuss the quality of performance with the subordinate, exploring areas of possible improvement and growth, providing an opportunity to identify the subordinate's attitudes and feelings more thoroughly, and thus, improving communication between the parties that may lead to feelings of harmony and cooperation (Chruden and Sherman, 1980) EPE feedback interview is an integral part of an EPES. In observation of Kave (1984), motivation of an employee to improve his/her current performance increases when received feedback specifying goals, which in turn enhances future career moves. The Job Characteristics theory developed by Hackman and Oldham (1980) as in Fried, Cummings and Oldham(1998) shows that knowledge of the results of work is one critical psychological state that controlls satisfaction and motivation and this knowledge of the results of work is delivered through feedback interview.

The elements such as availability of the feedback interview, appropriateness of the method and adequacy of the expected behaviours are considered for this study under this dimension. Tell-and-sell, tell-and listen and problem solving are the three basic methods of feedback interview (Schuler and Youngblood, 1986; Mathis and Jackson, 1988). Advantages and disadvantages can be seen relating to each method and therefore a combination seems to be better. Advantages such as stimulating growth and development in employee, increasing freedom, enhancing responsibility and facilitating change will maximize while disadvantages such as suppressed defensive behaviour, loss of loyalty and inhibition of independent judgment will minimize as a result of the use of a combination (Chruden and Sherman, 1980 and Mamoria, 1991).

Before a manager/evaluator performs a feedback interview he/she is supposed to prepare well for it and then appropriately conduct it. There are several expected behaviours from evaluators in relation to feedback interview, which are considered as indicators of the element of expected feedback interview behaviours that are based on the recommendations of Donnelly, et al. 1987 and Kleiman, 2000). These are: (1) scheduling so that evaluator and evaluee agree upon an appropriate date and time for the interview; (2) selecting a neutral private location (neither the evaluator nor evaluee's work place); (3) informing the evaluee of the interview sufficiently in advance; (4) reviewing the ratings given and being prepared to state the reasons of each rating; (5) making criticisms specific, not general and vague; (6) focusing criticism on performance and not personality characteristics as much as possible; (7) identifying specific actions that can be taken by the evaluee to improve performance (emphasize on a plan of action). Thus, seven expected feedback interview behaviours were considered for the element of adequacy of expected behaviours.

The degree of systematic utilization/quality of the EPE feedback interview was judged according to the three elements, i.e., availability of feedback interview, appropriateness of the method of feedback interview and adequacy of expected behaviours. Responses to the availability were elicited on a 2-point scale of 'Yes' and 'No' for which scores of 5 and 1 were given respectively. The responses to the appropriateness of the method of feedback interview were elicited on a 5- point

scale (5= Problem Solving + Tell and Listen; 4= Problem Solving + Tell and Sell; 3= Problem Solving only; 2 = Tell and Listen only and 1= Tell and Sell). A 5-point scale of 'Always', 'Often', 'Sometimes', 'Rarely', and 'Never' was used to rate the degree of use of the expected feedback interview behaviours. Scores of 5,4,3,2, and 1 were given respectively.

#### **Evaluator Training**

Training of all the relevant evaluators is important for successful implementation of the EPES (Mathis and Jackson, 2000). It refers to a systematic attempt to improve knowledge, skills and attitudes within the relevant evaluators in respect of EPE, particularly the scheme or the program developed for EPE in the organization. In view of Lopez (1968) few people are born with evaluation skills. Smith (1986) observes that proper training of evaluators will help avoid or alleviate evaluator errors such as leniency, strictness, central tendency, and especially halo effects. In view of Kirkpatrick (1986) the relevant knowledge should be provided, the skills in evaluation should be developed, and the relevant positive attitudes should be created for an effective EPE system through evaluator training. The training is recommended for raters and all decision-makers and analysts (Bernardin, Kane, Ross, Spina and Johnson, 1995).

For this study, the dimension of evaluator training is considered to have three elements i.e., availability of evaluator training, availability of evaluator manual, and content of evaluator training program.

A good EPE evaluator-training program should focus on: (1) giving an understanding of the significance and objectives of EPES; (2) an understanding of the EPES designed/ used in the organization; (3) an understanding of the existence and avoidance of common errors associated with evaluators such as halo effect, bias, central tendency, harshness and leniency, recency effect and so on; (4) practice in completing EPE forms; (5) understanding and practice in feedback interviewing; (6) and, an understanding on other important issues associated with EPE such as documentation for proper evaluation, ethics, legal defensibility, and responsibility of implementation of the EPES (Lopez, 1968; Schuler and Youndblood, 1986 and Carrell, et.al.,1995). These were considered as elements of the content of evaluator training program.

Responses to the availability of evaluator training and availability of evaluator manual were elicited on a 2-point scale of 'Yes' and 'No' for which scores of 5 and 1 were given respectively. The responses to the content of the evaluator training were elicited on a 2-ponit scale of 'Included' and 'Not included'. The score weightage of 5 was given to 'Included' and 1 was given to 'Not included'.

#### **Practices for Ensuring Accurate Implementation**

Having designed an EPES it is essential to implement it as planned in order to realize the intended purposes. The following practices, most of which are based on Lopez (1968), were considered as elements for this dimension: (1) Personnel/Human Resource Department makes sure that reports are completed and processed punctually; (2) Top management communicates the significance of EPE at all level; (3) EPE is a direct responsibility of every manager; (4) Personnel/Human Resource Department does periodic attempts to discover methods for

improving EPES; (5) The top management introduces EPE to all the levels of the organization as a general management program, not a personnel management program; (6) To complete EPE form at least in duplicate; (7) EPE reports/forms remain confidential; (8) There is an opportunity available for appealing against evaluations; (9) To recognize and reward evaluators for accurate evaluation; and (10) To review the EPE form by at least one higher management level before it becomes official.

This dimension was divided into two elements such as responsibility practices for ensuring (above practices numbered 1, 2, 3, 4, and 5) and other practices (5, 6, 7, 8, 9, and 10). Degree of use of the above practices was rated on a 5-point scale of 'Always', 'Often', 'Sometimes', 'Rarely', and 'Never'. Scores of 5,4,3,2, and 1 were given sequentially.

#### **Review and Renewal**

Final dimension of EPES of this study is review and renewal. Adapting from Lopez (1968), 'Review' refers to a systematic attempt to find out whether the EPE program is being carried out in the manner it was planned and to determine whether improvements can be made for more successful system while 'Renewal' refers to redeveloping of the EPES so as to incorporate all the improvements determined through the review.

Systematically evaluating the validity of the EPES should be a key feature and an unmonitored system can create havoc within an organization if problems go undetected (Anthony et al., 1999). By gauging the users' satisfaction with the EPESs most firms evaluate it and its users (employees) are displeased with the system, there is probably something wrong with it (Kleiman, et al., 1987). Observation of organizational records (grievances, appeals and legal cases etc.) and attitude surveys are two methods from which user satisfaction can be gleaned (Kleiman, 2000).

Use of systematic review and renewal and its continuity were rated on a 5- point scale of 'Strongly agree', 'Agree', 'Undecided', 'Disagree', and 'Strongly Disagree'. Scores from 5 to 1 were given respectively.

#### **Description of Current EPESs**

In this section, it is intended to present EPESs being followed by the five firms selected for this study. Each of the five firms has been following an EPES. The history of the systems goes back to the commencement of the firms. Terminology used by the firms with respect to EPE is as follows:

Firm	Terminology
Α	Performance Evaluation
В	Annual Evaluation Report
С	Performance Appraisal
Ď	Annual Performance Appraisal
F	Annual Salary Increment Report

#### **Objectives**

All the five firms used EPE information to achieve many purposes. All the firms were using none of the administrative objectives and development objectives always. Cases B, C, D, and E always used EPE information to grant salary increments while case A used EPE information to grant salary increments sometimes. None of the cases used EPE information for selecting employees to be promoted. Case B never used EPE to select employees for promotions. Also none of the firms used always EPE information to determine the gravity of disciplinary actions, to validate selection tools, to reward employees (other than salary increments and promotions). Regarding development objectives case A always used EPE information almost all objectives considered. Case C used it always to identify potential performance for employee development and to counsel employees, and often used to identify training needs and, assess results of training programs.

#### **EPE Policies**

The staff of all the cases comprised of permanent, temporary and casual employees and EPE was done by cases A, C, and E on all permanent and temporary employees. However cases B and D did EPE on permanent employees only. In performing EPE fixed time approach was used by all the cases. All the cases did EPE annually except case C that did semi-annually. In case B two persons: the immediate superior and immediate superior's superior were involved in the evaluation. Immediate superior only did the evaluation in cases A, C and E. Case D used a mixed approach that involved immediate superior, immediate superior's superior and Personnel Manager/General Manager.

#### **EPE Criteria**

The case A considered four objective criteria such as attendance, productivity, English knowledge and other Language proficiency and seven subjective criteria such as responsibility, conduct, attitudes, ability to get on with others, neatness, ability to train others and leadership style. In the case B, four objective criteria such as attendance, warning, penalties and output contribution and four subjective criteria such as personality, reliability, discipline and co-operation were used to measure job performance of executives. Attendance, quantity and quality of work and late arrivals are the objective criteria and discipline, co-operation, job knowledge and effort are the subjective criteria used to measure the job performance of supervisors. Clerical and allied employees' performance was measured by the use of three objective criteria such as attendance, quantity and quality of work and late arrivals and five subjective criteria such as reliability, behaviour. co-operation, knowledge and effort. Job performance watchers/security personnel was measured by the use of attendance and late arrivals as objective criteria and discipline, co-operation, expectations and efforts as subjective criteria. Two objective criteria (attendance and late arrivals) and four subjective criteria (reliability, behaviour, co-operation and effort) were used to measure the job performance of labourers. The case C used attendance and defects as objective criteria and ability, attitudes, reliability, co-operation, behaviour, discipline and knowledge as subjective criteria to evaluate job performance of trainees/probationary employees. One objective criterion i.e., attendance and eleven subjective criteria i.e., knowledge, initiative, quality of work, effort, cooperation, communication, leadership, learning ability, dependability, commitment and personal impression were for evaluating all other employees. Case D used warnings issued, leave utilized, achievement and number of no-pay days as objective criteria and man management, co-operation, technical ability, organizing ability, effort, oral communication, and written communication as subjective criteria to measure managerial performance, and warnings issued, leave utilized and no-pay days as objective criteria and application, motivation, initiative and conduct as subjective criteria to measure non-managerial performance. The case E used two objective criteria, i.e., attendance and work and one subjective criterion, i.e., conduct to evaluate all employees' performance.

Case C had almost half of criteria clearly defined while case D had no criteria clearly defined. Other cases had a few criteria clearly defined. In relation to objectivity of the EPE criteria used by all cases, many had not been quantified clearly. Only one of " > five requirements of the quality of standards i.e., five to nine categories of rating had not been met in all the cases except case D that had met only two requirements such as clearness of showing acceptable and unacceptable levels of performance and five to nine categories.

#### **EPE Methods**

Some form of MBO and Graphic rating scales were used in cases A and D. The general method used to evaluate job performance of employees in case C was Graphic Rating Scales. Case B and case E used Essay method to do EPE. The forms used for EPE by the selected cases for the study are not given in this paper for the reason of anonymity as well as the reason of space.

#### **EPE Feedback Interview**

All the cases held feedback interviews. Case A and case E had the type of tell-and-sell while case B had tell-and-listen. The feedback type used by case C was problem solving plus tell-and-listen. Case D used problem solving only. First and second expected feedback interview behaviours were missing from all the five cases. The third expected behaviour could be seen sometimes in case C only. The fourth, fifth and sixth behaviours could be seen often in cases A and B and while they were seen sometimes in cases B, D and E. The eighth behaviour, i.e., identifying specific actions that can be taken by the evaluee to improve performance (emphasize on a plan of action) was sometimes in cases A, B and D while it was often in case C and never in case E.

#### **Evaluator Training**

In all the cases irrespective of case A, there was no specific training given to evaluators to train them in EPE. The cases B, C, D and E had no a manual to be used for the evaluator to do EPE while case A had such thing. Two elements such as understanding and practice in feedback interviewing and an understanding on other important issues associated with EPE such as documentation for proper evaluation, ethics, legal defensibility, and responsibility of implementation of the EPES had not been included in the content of evaluator training program in case A.

#### Practice for Ensuring Accurate Implementation

It revealed that practices i.e., top management communicates the importance of EPE at all levels, EPE has been made a direct responsibility of every manager and review the EPE form by at least one higher management level before it becomes official were being followed always in all the cases. The practice-Personnel Department does periodic attempts to discover methods for improving EPES- was never in case A; always in case B; rarely in cases C and E; and sometimes in case D. The practice- introducing EPES as a general management program instead of a personnel management program was never followed by any case studied for the study. All the cases did completion of EPE form at least in duplicate sometimes. EPE reports remained confidential always in cases B and D; sometimes in case A; and never in cases C and E. While there is always an opportunity available for appealing against evaluations in cases A and C, there is never such opportunity in cases B, D and E. Case A always recognized and rewarded evaluators for accurate evaluation while other cases did sometimes.

#### **Review and Renewal**

Other than C and D, all the other three cases had done no review and renewal in respect of their EPESs. Case C and case D did a review once its commencement and consequently changed the system in order to improve. However there was no continuity of EPE review and renewal in the case C and the case D.

#### Results and Discussion of the Evaluation

This section presents the results of the evaluation of the eight dimensions of the EPESs being applied by the cases selected for the study basing on the framework given earlier. The overall ratings in relation to each element of the each dimension are indicated in the table -1.

Table-1 Results of the Evaluation of EPESs

Dimensions and Elements	Ratings				
	Case A	Case B	Case C	Case D	Case E
1. Purposes					
(a) Adequacy of administrative purposes	3.2	1.6	4.3	4	3.1
(b) Adequacy of development purposes	4.8	1.6	4.4	3	1.8
Mean	4	1.6	4.35	3.5	2.48
2. Policies					
(a) Soundness of on whom	4	3	4	3	4
(b) Soundness of when	4	4	4	4	4
(c) Soundness of who	3	4	3	5	3 .
(d) Soundness of how often	3	3	4	3	3
Mean	3.5	3.5	3.75	3.75	3.5
3. Criteria and Standards					
(a) Adequacy of criteria	4	4	3	3	1
(b) Definition of criteria	2	2	3	2	1
(c) Objectivity	2	2	2	2	2
(d) Quality of standards	1	1	1	2	1
Mean	2.25	2.25	2.25	2.25	1
4. Methods					
(a) Appropriateness	4	2	2	4	2

(b) Quality of the content of the form	2.3	3	3	3.6	2.3
(c)Quality of the evaluation procedure	3.6	5	5	5	2.3
Mean	3.3	3.3	3.3	4.2	2.2
5. Feedback Interview		1			
(a) Availability of feedback interview	3	5	5	5	3
(b) Appropriateness of the method	1	2	5	3	1
(c) Adequacy of the expected behaviours	2.2	2.1	3	2.1	1.8
Mean	2.06	3.03	4.3	3.36	1.9
6. Evaluator Training					
(a) Availability of training	5	1	1	1	1
(b) Availability of training manual	5	1	1	1	1
(c) Quality of training program content	3	1	1	1	1
Mean	4.3	1	1	1	1
7. Practices for implementation					
(a) Use of responsibility practices for ensuring	4	3.5	4	4	4
(b) Use of other practices	3.6	4	3	3.3	2.3
Mean	3.8	3.6	3.5	3.6	3.1
8. Review and Renewa					
(a) Use of system review and renewal	1	1	5	5	1
(b) Continuity of review and renewal	1	1	1	1	1
Mean	1.	1	3	3	1
Overall Mean Value	3.02	2.41	3.18	3.08	2.02

Key: 5 Very High; 4: High; 3: Moderate; 2: Low; 1: very Low

As can be seen in the table-1, degree of systematic utilization/quality of EPES of case A, case C and case D is moderate and that of case B and case E is low. None of the cases is rated as having the very high or high degree of systematic utilization/quality of EPES as far as the evaluative framework of this study is concerned. The implication of this finding is that there is a need for each case to improve its EPES to reach the standard expected by the evaluative framework of this study. This need of improving is more severe in case of cases B and E whose systematic utilization/quality of EPES is low. In relation to any dimension of the EPES none of the cases can be rated as very high in systematic utilization/quality (see mean values relating to dimensions in the table). Only case A has a high degree of adequacy of EPE purposes, only case D has a high degree of EPE methods and, only case C has a high utilization/quality of EPE feedback. None of the dimensions of EPES of case B and case E has got a high rating. This implies that there is a room for each dimension to improve in order to reach the standard suggested by the evaluative framework of this study (see table-2 for the results of the degrees of systematic utilization/quality of each dimension of EPESs when all the cases' ratings are summed up).

Table-2 Results of the Dimensions of EPESs of All the Five Cases

Dimension	Scores	Standard
1. Purposes	3.18	Moderate
2. Policies	3.6	Moderate
3. Criteria and Standards	2.05	Low
4. Methods	3.26	Moderate
5. Feedback Interview	2.93	Almost Moderate
6. Evaluator Training	1.6	Very Low
7. Ensuring Practices	3.57	Moderate
8. Review and Renewal	1.8	Very Low
Overall	2.74	Above Low but less than Moderate

With respect to the dimension of evaluator training all the cases except case A are rated as very low. It is rated in case A as high, not very high. Also three cases i.e., A, B, and E are rated as very low with respect to the dimension of EPE review and renewal. These results imply that there is a strong need of improving for evaluator training in all the cases except case A and a strong need of improving for renew and renewal in almost all the cases.

Another notable finding is that each case has at least two dimensions rated as very low or low. This finding implies that each case strongly needs to improve totally at least two dimensions/aspects of its EPES. As far as the dimension of criteria and standards is concerned, the degree of systematic utilization/quality is low for all the cases suggesting a strong need to improve criteria and standards. We strongly recommend for all the cases that EPE criteria and standards, which are relevant and more objective, should be developed. As a whole, there is a very strong need for case E to improve its EPES. It is recommended for case E to discontinue the existing system and introduce a new EPES that incorporates all the dimensions rightfully. As case B has a low degree of systematic utilization/quality of its EPES, it is better for it also to introduce a new EPES. As other cases' EPESs are moderate in their systematic utilization/quality, the existing systems can be revised so as to avoid all the weaknesses.

As far as terminology is concerned cases A and C are OK. But cases B, D and E used the word 'annual' indicating frequency of EPE is annual, which is not appropriate because frequency should be higher (at least two times per year) for better feedback to improve the performance. The terms 'Annual Salary Increment Report' used by case E indicates that EPE is done only for the purpose of determining salary increments underestimating the value of EPE that can serve many purposes. Therefore, these terms need to be changed.

There should be some reasons for moderate or low degree of systematic utilization/quality of EPESs in the five cases studied. It might be the reason that each firm has no right expertise to understand all intricacies and aspects involved in EPE and, develop and implement a more systematic/high quality EPES. Otherwise, there is an adequate expertise available within the firm but top management or the relevant authority has no serious motivation to develop and implement a more systematic/high quality EPES owing to lack of understanding the overwhelming significance of EPE or mere ignorance. The Personnel manager, having understood the very importance of EPE that has a variety of utilities, gets no support from top management and/or line management. This might be another reason for moderate or unsatisfactory level of quality of EPES. It might be that all the important employee-related decisions such as promotions, rewards and training etc. are being made by managers based on organizational politics or personal influences or haphazard judgement rather than EPE information. In fact, it was revealed that none of the cases studied used EPE information for selecting employees to be promoted. Promotions should ideally be given to employees on the basis of both seniority and competence.

#### Conclusion

An attempt was made to explore, describe and evaluate EPESs of five selected public quoted manufacturing firms. The investigation covered eight major aspects of EPE such as purposes, policies, criteria and standards, methods, feedback interview, training, practices for ensuring accurate implementation and review and

renewal Summary of the evaluation indicates that the degrees of systematic utilization/quality of EPESs in cases A, C and D are moderate while cases B and E being low. General implication of the findings suggests that the current EPESs of all the cases need to be revised largely or at least significantly and further improved for realizing the important purposes of performance evaluation and then for better employee performance towards better human productivity.

#### References

Anthony, W.P., Perrewe, P.L. and Kacmar, K.M. 1999. Human Resource Management: A Strategic Approach, 3 ed, Fort Worth: Brace College Publishers.

Beach. D.S. 1985. The Management of People at Work, New York: Macmillan Publishing Company.

Bernardin, H. J. and Russell, J.E.A. 1993. Human Resource Management An Experiential Approach, New York:McGraw-Hill, Inc.

Bernardin, H.J., Kane, J.S., Ross, S., Spina, J.D. and Johnson, D.L. 1995. In Ferris, G.R., Rosen, S.D. and Barnum, D.T., (eds.), Handbook of Human Resource Management, Cambridge: Blackwell Publisher: 462-493.

Bovee, C. L., Thill, J.V., Wood, M.B. & Dovel, G.P. 1993. Management, New York: McGraw-Hill, Inc.

Carrel, M.R., Elbert, N.F. and Hatfield, R.D. 1995. Human resource Management: Global Strategies for Managing A Diverse Workforce, New Jersey: Prentice Hall.

Chruden, H.J. and Sherman, A.W. 1980, Personnel Management, Ohio: South-Western Publishing Co.

Cumming, M.W. 1989. The Theory and Practice of Personnel Management, 6<sup>th</sup> ed, Oxford: Heinemaun Professional Publishing.

Denyer, J.C. 1993. Office Management, London: Pitman Publishing.

Donnelly, J. H. Gibson, J. and Ivancevich, J. 1987. Fundamentals Of Management, Homewood IRWIN.

Fried, Y., Cummings, A. and Oldham, G.R. 1998. Job Design, In Poole, M. and Warner, M., The IEBM Handbook of Human Resource Management, London: International Thomson Publishing: 532-541.

Glueck, W.F. 1979. Foundations of Personnel, Texas: Business Publications Inc.

Heneman III, H.G. and Schwab, D.P. 1982. Perspectives on Personnel/Human Resource Management, Homewood: Richard D. IYWIN.

Ivancevich, J. M. 1994. Human Resource Management, Homewood: IRWIN.

Ivancevich, J.M. 1998. Human Resource Management, Boston: Irwin MaGraw-Hill.

John, F. 1998. Beat the Performance Review Blues, Restaurant Hospitality, 83:9: 38.

Judge, T.A. and Ferris, G.R. 1993. Social Context of Performance Evaluation Decisions, Academy of Management, 36:1: 80-105.

Kaye, B.L. 1984. "Performance and Career Development: A Shotgun Marriage", Personnel, 61:2:57-66.

Kirkpatrick, D. 1986. Performance Appraisal: Your Questions Answered, Training and Development Journal, 40: 68-72.

Kleiman, L.S. 2000. Human Resource Management: A Managerial Tool for Competitive Advantage, Cincinnati: SouthWestern College Publishing.

Kleiman, L.S., Biderman, M.D., and Faley, R.H. 1987. An examination of employee perceptions of a subjective performance appraisal system, Journal of Business and Psychology, 2: 112-121.

Lopez, F.M. 1968. Evaluating Employee Performance, Chicago: Public Personnel Association.

Mamoria, C. B. 1991. Personnel Management: Bombay: Himalaya Publishing House. Martinez, M.N. 1997. Rewards Given the Right Way, HRMagazine, 42: 116.

Mathis, R. L. and Jackson, J. H. 1988. Personnel / Human Resources Management, 4<sup>th</sup> ed, New York: West Publishing Company.

Mathis, R. L. and Jackson, J. H. 2000. Human Resources Management, 9<sup>th</sup> ed, cincinnati, Ohio: South-Western College Publishing.

Mondy, R.W., Noe, R.M. and Premeaux, S.R. 1999, Human Resource Management, New Jersey: Prentice Hall International, Inc.

Opatha, H.H.D.N.P. 1992. An Assessment of Employee Performance Appraisal Practices of Selected State Corporations in Sri Lanka, Vidyodaya Journal of Social Science, 6:1&2: 113-128.

Prasad, M. 1993. Principles and Practice of Management, New Delhi: Sultan Chand and Sons.

Prasad, M. and Baunerjee, A.M. 1994. Management of Human Resources, New Delhi: Sterling Publishers Private Limited.

Rice B. 1996. Performance Review: The Job Nobody Likes, In Ferris, GR and Buckley, M.R. (eds.), Human Resources Management, 3 ed, New Jersey: Prentice-Hall.

Schuler, R. S. and Young blood, S. A. 1986. Effective Personnel Management, New York: West Publishing Company.

Smith, D.E. 1986. Training Programs for Performance Appraisal: A Review, Academy of Management Review 11: 1: 22-40.

Stone, T. H. and Melt, N. M. 1983. Personnel Management in Canada, Toronto: Hott of Canada Ltd.

Tripathi P C 1991. Personnel Management & Industrial Relations, Sultan Chand and Sons, New Delhi.

Werther, B. W. and Davis, K 1985. Human Resources and Personnel Management, 4ed, New York: McGraw- Hill Book Company.

Werther, B. W. and Davis, K 1993. Human Resources and Personnel Management, 4ed, New York: McGraw- Hill Book Company.

#### SUBSCRIPTION FORM

#### **Regular Subscription Service**

The fee for local subscribers in Sri Lanka is Rs 300 per year (per issue). Overseas subscriptions receive the Journal for US\$ 15.00 per year. These prices include shipping cost and applicable taxes.

#### **Journal Exchange Agreement**

Institutions which publish their own academic journals which a continual basis can regularly receive the Sabaragamuwa University Journal absolutely free of charge, if they agree to send their Journals regularly free of charge to the Sabaragamuwa University, which is a rural university in a developing country. This exchange programme is an opportunity to gain access to academic scholarship from around the globe.

I / We w	ish to subscribe to the			
Sabaragamuwa University Journal				
Please check where applicable:				
Flease				
	Sri Lanka: Rs 300.00 (per year/ per issue)			
	Overseas: US\$ 15.00 (per year/ per issue)			
	Exchange Agreement: We agree to regularly send Our journal:			
	The state of the second of the			
In excha	inge for the regular receipt of the Sabaragamuwa University Journal			
Pleases	send the Sabaragamuv a University Journal to:			
Name:				
Position	• :			
Institutio	n:			
Address	:			
Country	:			
Tel:	Fax:			
Email:				
Signatu	re:			
i				

Please send exact payment in the form of cheque or bank draft made out to:

Sabaragamuwa University Journal

Send your completed subscription form and payment to:

Sabaragamuwa University Journal Sabaragamuwa University of Sri Lanka PO Box 02 Belihuloya Sri Lanka

For further inquiries please contact the Co-ordinating Editor.

#### Information for Contributors

The Sabaragamuwa University Journal is a refereed journal and accepts articles from all academic disciplines.

Articles should be up to 20 pages include a brief Abstract of less than 200 words. Abstracts first state the central research problems(s), then the methods(s) employed, and finally the central conclusion(s).

Articles must be typed, preferably using Microsoft Word 6 or 7, Arial 11 Font, double-spaced, on one side only of white A4 paper or US equivalent.

Titles and headings should be brief and clear, in bold type.

Longer quotations should be indented, single-spaced and without quotation marks.

Non-English terms should be in italics e.g. chena or sine qua non

Date format used in text: 7 February 2002.

In text use either 'percent' or % consistently. Use letters for numbers from one to ten and numerals from 11 onwards; but use numerals or letters consistently in range or series of numbers, e. g 5 to 10

Use either British ('labour') or spelling consistently.

Titles of figures or tables should be in bold type and placed above, and notes and sources for the same under each figure or table. They should be numbered consecutively, separately for tables and figures. Column headings should clearly defined the date presented. Table borders should be in % Point and simple.

Figures, which cannot be reproduced in MS Word, should be submitted on a separate A4 sheet accompanied by concise information about titles, notes and sources, a well as their location in the text.

Use either footers or endnotes; these should be standard MS Word 6 or 7 format.

First drafts should be submitted as hard copy (on paper) only. Final drafts should be submitted as hard copy and on 3 ½ HD floppy disk, preferably MS Word 6 or 7.

All quoted and paraphrased intellectual property of other authors, as well as other works of the contributing author(s) must be properly referenced.

Works cited in the text should be indicated as follows: (Weber, 1978: 234) or (Gombrich & Obyesekara, 1990: 22-250); i.e author(s), year of publication: page number(s). Use 'et al'. When citing a work by more by more than two authors, but list all the authors under References.

To distinguish citations of different works of the same author published in the same year, use letters, i.e (Perera, 1998a, 1988b)

All works cited in the text, including sources for tables and figures, must be listed alphabetically under References, beining on a separate sheet of paper. Use the following style:

Books: Weber, Max 1978. Economy and Society. Barkeley:

University of California Press

Contribution to book: Kovacs, G. F. Zuidema & J. Marsalek. 1989. Human

interventions in the terrestrial water cycle. In Comparative Hydrology, Falkenmark, M & T. champman (eds.) Paris:

**UNESCO** 

Journal articles: Berugoda, S. 1991: Present Pattern of Land Use and Policy

Planning. Longos 29: 3 & 4: 37-47

Conference papers: Everett, Yvonne 1989. The forest gardens of highland

Sri Lanka: An indigenous agroforestry system for reclaiming deforested marginal land. Paper presented at the American Association for the Advancement of Science Meeting, San

Francisco, CA, USA

Unpublished work: Gunasekera, Tamara. 1974, Deity Propitiation in Urban Sri

Lanka, Unpublished M A. thesis, University of Edinburgh.

## Sabaragamuwa University Journal

### Volume 3 Number 1 March 2003

Editorial Note - Coordinating Editor	
I. K. Perera	. 1
Review Paper: Development of Health in Sri Lanka Carlo Fonseka	3
German in Switzerland: A Socio · Linguistic Approach	
Nirosha Paranavitana	19
Resource Degradation in High Agro-Ecosystems: An Overview of the Ecological Capital Management in Tea Plantations in the Highlands of Uva in Sri Lanka	
I. M. P. M. P. Illukpitiya	33
Opportunities for Capitalizing on the Software Development Industry Growth through Appropriate Manpower Training	
L. Munasinghe, P. L. S. Peter, T. D. S. Perera	45
The Impact of the Behavioural Patterns of Vegetable Consumers on Marketing Activities	
Rohana P. Mahaliyanaarachchi	63
Effect of N, K and Inter- row Spacing on the Growth and Yield of Intercropped Maize and Groundnut	
S. Subasignhe, R. Senaratne	75
Growth Prospects for the Software Industry in Sri Lanka and an Appropriate Policy Framework	
L. Munasinghe, P. L. S. Peter, T. D. S. Perera	81
Impact of Marketing Strategy on Market Share of Ornamental Horticultural Exports: The Sri Lankan Case	
H. S. Rohitha Rosairo	99
Motivation - A Way to Weaken Humans: Some Thoughts for New Millenium Managers	
Sunanda Degamboda	111
Distribution of Subject Grades and Relationships among Subjects of the G.C.E. A/L Examination	
A. W. Wijeratne	119
Employee Performance Evaluation Systems: An Evaluative Study of Selected Public Quoted Manufacturing Firms in Sri Lanka	137
H H D N B Opatha	

### **National Digitization Project**

#### National Science Foundation

Institute	: Sabaragamuwa Univer	sity of Sri Lanka		
1. Place of Scanning	: Sabaragamuwa Univer	sity of Sri Lanka,	, Belihuloya	
2. Date Scanned			·	
3. Name of Digitizing	g Company : Sanje (Privat	e) Ltd, No 435/16	, Kottawa Rd,	
•	Hokandara N	lorth, Arangala, Ho	okandara	·
4. Scanning Officer			·	
Name	6.A.C. 50d	<i>ን</i> ዶና ለጎር-ዶ		······································
Signature	:			
Certification of Sca	nning	,		• •
I hereby certify that	the scanning of this docum	ent was carried o	ut under my supervi	sion, according to
	ards of digital scanning acc			
• •	oted in a court of law.			
Certifying Officer				
Designation	: LIBRARIAN			
Name	: T.N. NEIGHSOOREI		•••••	•••••••
Signature		Mr <sub>2</sub> .		
Date: .2017	1.00.2	Sabar 1	: 1) - Sri L <b>anka</b> - Jun <b>ka</b>	
			: -5 : 75	•

"This document/publication was digitized under National Digitization Project of the National Science Foundation, Sri Lanka"