DEVELOPMENT OF A COMPUTERISED PRODUCTION PLANNING AND CONTROL SYSTEM WITH THE AID OF WORK STUDY AND STATISTICAL METHODS

 $\mathbf{B}\mathbf{Y}$

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ABSTRACT

Kent Display (Pvt) Ltd is an organization, which was involved in manufacturing value added wooden packages mainly in the form of value added wooden boxes. Since the factory had commenced it operations recently, it had no proper database and developed methods in the areas of production planning and control, which caused problems in the areas of production related matters, mainly due to, unavailability of management information system and methodologies related to it. Due to the peculiarity of this industry, standard data for this type of operations was hardly obtainable for the purpose of adoption in the organization and also for benchmarking purposes. This research project aimed at introducing standardization to the possible areas of production and to develop standard times for standardized operations, with the aid of work-study and statistical methods. And with the developed standard data, it moves further to develop a computerized production planning and control system with the aid of MS-EXCEL and MS-PROJECT computer packages. The developed system was used for production planning and control, cost estimating and material requirement estimations. Developed package had the flexibility to be updated according to the improved methods during continuous improvement processes, and it provides a faster and accurate management information system in the area of production planning and control. The system developed is being tested currently at the manufacturing facility and it was found by the management that the cost estimation part proven to be satisfactory, while it is still early to make conclusions regarding the other areas of functionality of the package.

INVESTIGATION INTO THE PROPERTIES OF SRI LANKAN VEGETABLE FIBRES

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ABSTRACT

Four fibre types Pineapple, Sansevaria, Roselle and Akund were extracted and properties such as fibre dimensions, morphological characteristics, physical properties including tensile properties and behaviour towards some selected chemical reagents were studied.

The strength characteristics of fibres range from 33-42 g/tex indicating fibre types were strong enough to be considered as textile fibres. The extensibilities observed were in the region of 2.7 - 4.9% which seems quite adequate to withstand the forces encountered during processing. It was apparent that all fibres except Akund showed very good elastic recovery properties. The recovery of Akund was only 40% at 1.5% elongation.

The effect of storage conditions on fibre properties were also studied. The extent of reduction of strength and elongation when fibres were stored in standard atmospheric conditions is much less compared to the effect of variable atmospheric conditions with a temperature range of 27 - 32°C and a humidity range of 65 - 85 %.

Based on fibre properties studied, possible use of fibre types for different end uses were suggested. The economical viability of using the fibre types considering factors such as availability, fibre extraction, cost and yield per year per hectare were also discussed.

A STUDY OF THE FACTORS AFFECTING THE CONTINUATION OF STUDIES OF MUSLIM GIRLS, AFTER YEAR 9

IN

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ABSTRACT

It is evident that the Muslim women in the Kalmunai district (Sri Lanka) are deprived in educational attainment. Discontinuation by dropping-out from studies is a more serious problem than the deprivation of education. This study is an attempt to find-out the actual causes for the discontinuation of studies of Muslim girls in the Kalmunai district after Year 9.

The necessary data for this research was collected through a field survey conducted by administering questionnaires, through interviews and observation. The assessment and evaluation of the assumed factors which cause drop-out, such as socio-economic status and attitudes of parents towards the girl's education, facilities available in schools, developmental status of the area and the attitudes of society, were made through quantitative and qualitative analysis of the data.

The findings of the study revealed that,

- 1. Poverty is the most influential factor in the drop-out phenomenon and that it operates at all levels of education of Muslim girls in the Kalmunai district.
- 2. Attitudes of parents is not favourable to the continuation of the education of Muslim girls after Year 9.



- 3. Socio-culturally constructed views regarding the role and status of women, and marriage have a negative impact on girls' education.
- 4. The level of school facilities does not have any direct bearing on the drop-out phenomenon of Muslim girls in the Kalmunai district.
- 5. The combined effects of poor economic levels, and parents' and society's negative attitudes towards the education of girls have aggravated the drop-out problem.

The poverty and attitudes of parents, and the socio-economic-cultural aspects related to marriage, have had a separate and a collectively negative impact on the education of Muslim girls in the Kalmunai district.

Short and long-term measures to encourage the continuation of studies of girls were identified as remedial and preventive measures. The main remedial measures were midday meals, a flexible time table, and a second chance to drop-out students. The main preventive measures suggested are awareness programmes for parents and interested groups of society.

Urgent intervention is suggested to overcome this problem.