

TECHNOLOGICAL FACTORS INFLUENCING THE SUSTAINABILITY OF THE ZIMBABWEAN TEXTILE INDUSTRY

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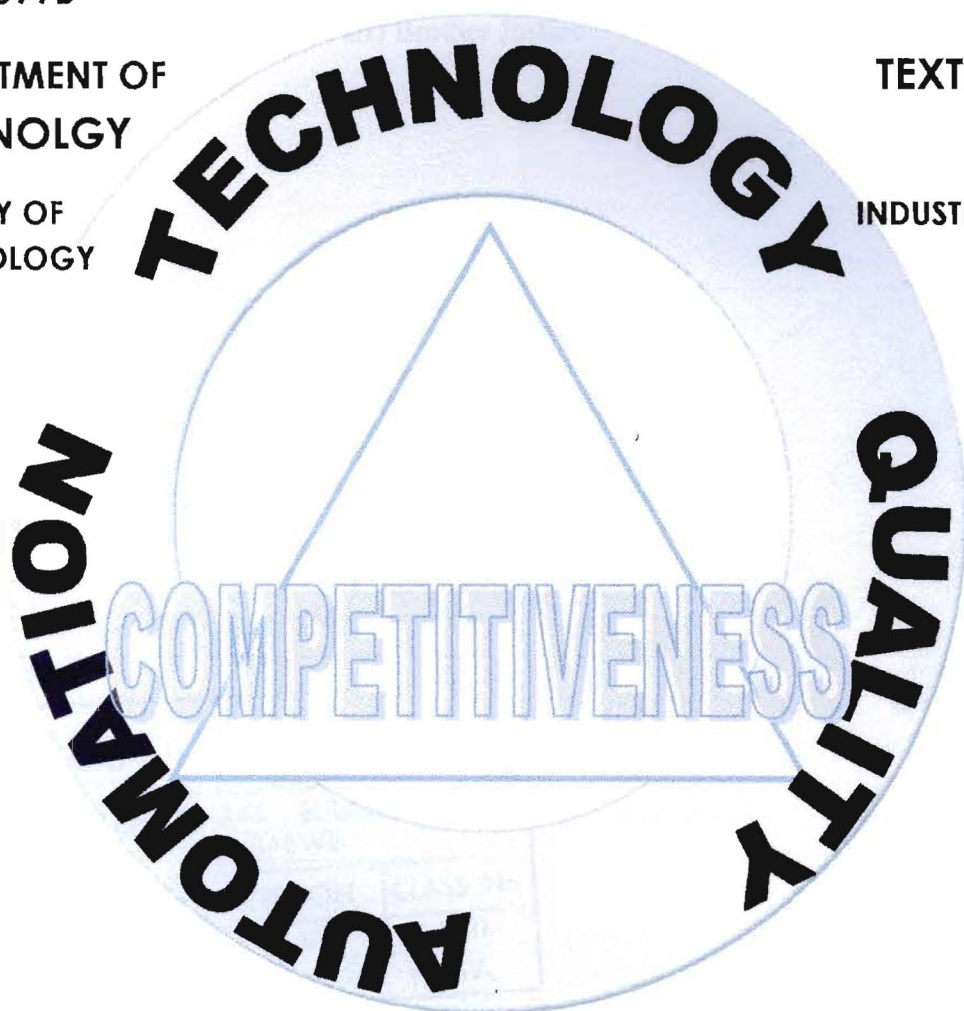
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Abstract

This project is intended to provide a comprehensive technical survey of the important aspects in the Zimbabwean textile industry. It examines technology use in production processes, products, machinery, automation technology, technology in materials and information systems. The project presents the social and environmental arguments on the use of technology. Technological factors have vastly affected the Zimbabwean textile manufacturing industry. The Zimbabwean textile industry experienced a boom during the seventies that significantly contributed to economic growth. It achieved a stable constant growth rate during the mid 80s to the early 90s and a sharp decline during the mid 90s to the current period. This decline is mainly attributed to manufacturing technologies getting outdated and obsolete.

It can be drawn that the government slowly shifted attention from the manufacturing sector as the main source of economic strength, during the turn of the millennium as it were during the period from 1980s to mid nineties, to focus on agriculture.

Despite all this, today the industry is comprised of a mixture of modern and old manufacturing technologies with a greater proportion (over 90%) still using old production technologies. Essential research information was obtained through experimental work and from secondary publications. Results reveal that the index of volume of production of the textile industry dropped by over 70% between 1990 and 2005, taking 1990 as the base year. The spinning industry has the capacity to absorb less than 10% of the locally ginned cotton and continues to shrink. Comparisons on productivity of different machinery reveal that production rate of newer machines can be more than 100% higher than that of older machines and the quality of products produced showing improvement by an average of 10%. External trade reflects a negatively increasing balance of payments in all textiles and articles. The balance shifted negatively by 792 % from 1990 to 1997 and by 4492% from 2000 to 2005. It has been concluded that the lag in technology has resulted in low capacity utilization and incompetence of the local textile industry; and that technological use and advancement in manufacturing systems is the key to existence, sustained growth, competitiveness and future development as it will continue to push the cost of production down. It however seems that the current downward trend in textile manufacturing is likely to continue, as no feasible solution appears to be hand.