Business transformation through technology adoption: Special reference to rice millers in Eastern Province, Sri Lanka

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The objective of this study is to examine the transformation of business organizations in the agricultural sector in the conflict-affected provinces in the post-conflict period facilitated through the adoption of new technologies. While the opportunities for transformation and growth have increased manifold, the agri-based industries, especially the rice producing sector in the province has not shown many signs of exploiting these opportunities to their potential. Therefore, this study focuses on the rice production business in the Eastern Province. Technologies can play a major role on transforming any businesses, but that entails technology adoption at the right time in the right manner. Through literature factors that contribute to the adoption of technologies leading to business transformation were identified. In order to systematically investigate the existing technology adoption gaps in the region, a comprehensive questionnaire survey was carried out among a large sample of rice millers in the Eastern Province (EP). Then a similar study was carried out with selected millers in the North Central Province (NCP) which possesses a well-developed rice production industry in order to benchmark the performance of the Eastern Province. To select a sample, categorical variables “output capacity” was used for stratification. The sample for the study was selected from each stratum using a simple random sampling technique. Analysis of the data revealed that all factors had positive relationships with technology adoption in the way of transformation. However, the results in the EP indicate that existing set up is inadequately arranged for rapid transformation. The results of a bench marked study showed rice millers in NCP are in a better position when compared to EP in relation to business transformation through technology adoption. Majorities of the Eastern millers have adopted with a moderate level of technology component and capability adoption. In contrast, the benchmarked millers were at high levels of adoption in all components of technology adoption factors. These higher adoption levels led to higher transformation of the benchmarked millers. So, the researcher concludes that the North Central province millers proved that they have more concern on influencing factors, adopted accordingly for the transformation. Further, it was observed that transformation can be achieved through redesigning organizational structure, process, human resources management practices, technology, and changing the organization’s culture. Further, a strong emphasis is to be placed upon a network-based approach with the close cooperation between, owner/managers, government support programmes, and policies.

Keywords: Business transformation, Technology adoption, Technology components and capabilities, Agribusiness sector