**SCHOOL OF ECONOMICS**

**VIVA VOCE 19th JANUARY, 2024 - TIME 14:00HRS**

**Venue: Room 210, Second Floor, CoSS Tower.**

**ERICK MAIKO AKAMA (REG NO: 2017-07-00032)**



**Title: Environmental Regulations, Manufacturing Export Performance and Employment Outcomes in Kenya**

**PANEL**

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| **NAME** | **POSITION** |
| Prof. Jehovaness Aikaeli | Chairperson |
| Dr. Innocent Pantaleo | External Examiner/Representative |
| Dr. Remedius Ruhinduka | Internal Examiner |
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# ABSTRACT

This PhD thesis sought to investigate the impact of environmental regulations on various industrial activities in low technological capacity economies. Three broad objectives are achieved: Firstly, we tested the validity of the Porter Hypothesis in low technological capacity economies by investigating the impact of stringent environmental regulation on the export intensity of firms in Export Processing Zone (EPZ) in Kenya; secondly, we estimated the impact of stringent environmental regulations on total factor productivity among manufacturing firms in EPZ in Kenya and lastly, we examined the association between environmental performance and employment outcomes among manufacturing firms in Kenya, with a specific focus on achieving three specific objectives: explore the impact of eco-efficiency on different types of employment outcomes; investigate the impact of the Environmental Management System (EMS) adopted by firms on employment outcomes; and lastly compare the impact of the commitment-based approach (proactive firms) and compliance-based approach (reactive firms) on different types of employment outcomes. In the first two broad objectives, we utilized a ten-year panel data of 137 firms from the EPZ’s annual reports (2008-2017) and quasi experimental approach with agricultural food industry as the control group while in the third objective, we utilized a two-year panel data on Kenyan manufacturing firms from the Regional Programme on Enterprise Development (RPED) dataset and a pooled panel regression model with employment outcome as the dependent variable and eco-efficiency scores as explanatory variables is utilized. The study findings provide evidence to support Porter Hypothesis among firms in a low technological capacity. On average, stringent environmental regulations improve the export intensity of small firms (by 11.97%) and large firms (by 9.18%) with a year-by-year basis revealing that the regulation’s marginal effect on export intensity is positive but lower in initial years of implementation and progressively increase over time. Further, stringent environmental regulations on emission control are found to have a negative effect on TFP of small firms (by 13.23%) and large firms (by 16.20%). However, the negative effect of the regulations’ marginal effects is higher in the early stages of policy implementation but fades away with an additional year of policy implementation. Additionally, the results suggest a potential gain in the employment outcomes by improving eco-efficiency in resource use, a magnitude of which depends on the type of employment outcome. We found out that proactive firms perform better than reactive firms, providing proof that there are benefits of adopting commitment-based approaches rather than compliance-based approaches to environmental management in order to boost employment outcomes among manufacturing firms. Thus, we recommend continuity of these stringent environmental regulations as a way of achieving inclusive and sustainable growth, a gradual implementation of these stringent environmental regulations especially in the early implementation phase to cushion policy shocks, and implementing agencies and manufacturing stakeholders adopting a commitment-based approach towards environmental management initiatives.