# Chapter 80 Human Capital Formation for the Fourth Industrial Revolution: The Role of Women

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## ABSTRACT

This chapter focuses on the drivers of human capital development in the fourth industrial revolution by examining the role of women. It discusses the role of women in economic development since 570BC. Women are ignored in most important areas in society whereas men are found at the frontline. However, available empirical analyses suggest that when women are empowered, they are able to turn the tables in their favour. The chapter outlines development role played by selected women across time and uses data from studies to show poor representation of women on international bodies and parliamentary seats. Selected women that have led and continue to lead various countries all over the world are presented. This chapter argues that women are important stakeholders in economic freedom. The chapter suggests encouraging society and men in particular to help women become front line participants in the human capital development for the fourth industrial revolution.

## INTRODUCTION

The world had witnessed production process going through changes over time. The changes are put into stages called industrial revolution. As Sentryo (2019) states, water and steam were used to automate production in the first industrial revolution, the second industrial revolution saw the use of electric energy to generate and manufacture in bulk, the third witnessed electronics and information technology to automate production. There is a fourth industrial revolution on going based on building upon the ideas of the third industrial revolution starting from the middle of the last century. However, the role of women in the earlier industrial revolutions is not well known.

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Throughout history, women have made great contribution to development in various ways, but the role tend to be unnoticed in the earlier revolutions. As noted by Foundations for Western Culture (FWC, 2018), the First Industrial Revolution had different impact on women, however; were mostly employed to work under difficult conditions. Women from less wealthy families worked to earn income to feed their families from 6.00 am and end at 7.00 pm with only a lunch break of 45 minutes; some started to work even as children. As the FWC (2018) narrations show, women worked under dangerous conditions even in some situations women worked with men who were half-naked (in the coalmines) at a lower wage rate. Unfortunately, during the First Industrial Revolution, salaries paid depended on gender at the expense of women. Thus, women earned about a third or half of male counterparts. Low salaries to women and children benefited the employers who made "good" use by exploiting them.

Again, available evidence indicates that some women worked in the mines under harsh conditions; they wore belts around their waste with chains in between their legs joined to the carts that transported the coal into the pits. Despite these poor conditions, women worked hard to contribute to development in their era. Some societies relegate women to the background and ignored, thus, women are restricted in doing certain things and must obtain permission from their husbands before they can do certain things; once they are able to go beyond that, they are considered to be empowered (see Rahman, 2007, and Garikipati, 2008 for some findings on women empowerment). It is important to note that though women have not been at the forefront and have been abandoned in terms of leadership position; their contributions have been tremendous to economic development. In the light of this, the chapter is of the view that women's contributions to the human capital development of the Fourth Industrial Revolution, is very crucial such that all and sundry have to ensure that the hindrances are removed to allow their participation for better society. In the next section, the role played by selected women in economic development is outlined. The rationale is to portray the importance of women in development despite low recognition, and this low recognition must not continue.

# ROLE OF SELECTED WOMEN IN HELPING SOCIETY IN ECONOMIC DEVELOPMENT OVERTIME

The role of selected women in their quest for helping society is outline in this section of the chapter. This intends to show that women play an important integral part of any society and must be included and recognized in the quest for development. Thus, the role of gender is portrayed here to be important from the beginning of creation. Here specific role played by selected women since 570BC are listed for readers to see the important role that women spearheaded years back and continue to play to date, and thus in the Fourth Industrial Revolution, women cannot be left out. Thus, highlights of various contributions by selected celebrated women whose efforts changed the world are portrayed, they have been grouped into: i) Women Right Activists and Humanitarians ii) Poets and Writers iii) Musicians and Actress iv) Politicians and Leaders – war leaders and queens v) Scientists and vi) Entrepreneurs. Unless otherwise stated, the study adopted the presentation below from Pettinger (2014). Though brief, what most of them did and to some extend how it affected humanity is provided. It ranges from 570 BC to date.

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