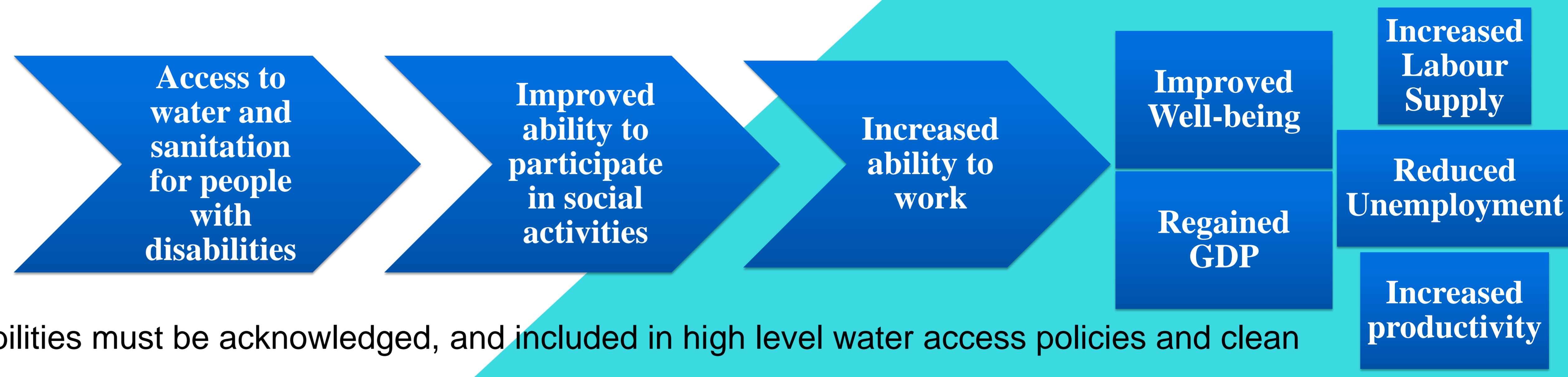


# CLEAN WATER AND SANITATION ARE UNIVERSAL HUMAN RIGHTS: ECONOMIC BENEFITS OF INCLUSIVE WATER AND SANITATION ACCESS POLICIES

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## Introduction

- In 2010, the United Nations General Assembly declared access to clean drinking water and sanitation a human right
- Currently, in both developing and developed nations, people with disabilities encounter inaccessible water sources
- People with disabilities comprise 15.6 % of the global population [1]
- In order to address this current violation of human rights, people with disabilities must be acknowledged, and included in high level water access policies and clean water initiatives
- Each of the following relationships have been well-explored: 1) access to clean water and health; 2) health and the ability to work; and 3) the labour force and the micro and macroeconomic markets. However, these issues and their impact on people with disabilities have not been well explored.
- By developing an economic argument for including people with disabilities in water and sanitation access policies, greater attention from high level policy makers may be achieved



## Discussion

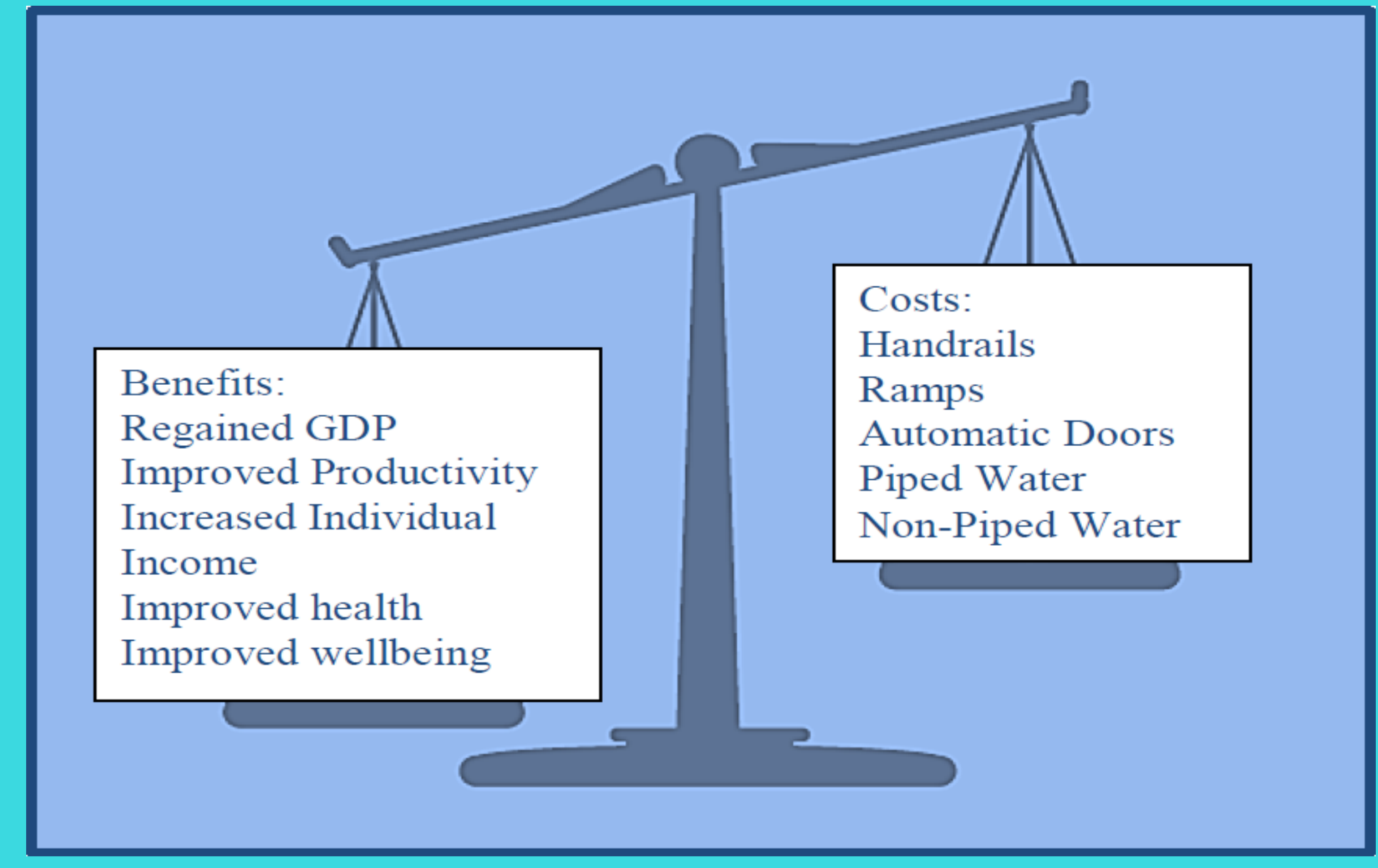
- Amending drinking water and sanitation access policies to be more inclusive of people with disabilities will likely result in an improvement in the economic markets
- Government policies are effective in creating and improving economic growth and stability [6], thus, including people with disabilities will be an effective way of improving the economy
- Beyond the simple issue of acknowledging the human right of people with disabilities to have access to clean water and sanitation, this research shows the benefits for countries, for society, and for people with disabilities alike of providing clean water and sanitation

## Cost-Benefit Analysis

Further research on this subject has generated a comprehensive cost-benefit analysis:

Gross Domestic Product (GDP) is lost due to:

- Inaccessible water sources [7]
- Unemployment [8]
- Poverty [9]



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## Costs

Costs of Providing Clean Water and Sanitation:

- Piped sources for clean water= US\$ 9.6-14.6 per capita [10]
- Piped sources for sanitation= US\$ 8.2 to US\$ 11.0 per capita [10]
- Non-piped sources for clean water= US\$ 42 billion [10]
- Non-piped sources for sanitation= Non-piped water = US\$ 142 billion [10]

Costs of Accessible Infrastructure:

- Handrails=CAD\$ 33.09/four feet [11]
- Metal ramps= CAD\$ 109.00 [11]
- Automatic door= CAD\$ 2000-8000 [12]

## Economic Benefits

GDP Regained: Theoretically, GDP lost due to exclusion from the labour force and from poor sanitation will be regained

Improved Productivity:

- One additional year of life-expectancy= +4 % in GDP [13]
- One percentage point in adult survival rates= 2.8 % increase in labour productivity [14]

Increased Individual Income:

- Salary with Doctoral degree= US \$89,400
- Salary with Master's degree= US \$62,300
- Salary with high school degree= US \$30,400 [15]
- In developing nations, gains in income averaged 11.2 % per year of education [16]



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**“the right to live in the world is something more than the right to remain in it” -Jacobus tenBroek [17]**