

# Microsimulation Tool - Disability-inclusive social protection system

## Introduction

In the years leading up to the COVID-19 crisis, Cambodia had seen impressive economic growth. In 2015, Cambodia reached lower-middle-income status and aimed to become an upper-middle-income country by 2030.

As the country moves towards this target, it is important that persons with disabilities are not left behind and can enjoy the fruits of economic growth.



Disability-inclusive social protection schemes are one important way that promote and enable equitable and fair participation and benefits for persons with disabilities. Building a modern social protection system for persons with disabilities in Cambodia aligns to the constitutional right of all citizens to access social security, and is particularly important as the country begins its economic recovery from the COVID-19 crisis.

## Overview

**The microsimulation tool was commissioned by ACCESS (Australia-Cambodia Cooperation for Equitable Sustainable Services),** and it was developed by Development Pathways using opensource computer programming language called R and RShiny – a free web app and dashboard development package.

**The tool allows social protection supporters and practitioners** to practically explore and visualise the potential impacts of disability-inclusive social protection systems for Cambodia.

**The objective of the tool is to enrich the debate** around building a modern social security system in Cambodia. The results from the tool are for illustrative purposes and should not be taken as exact predictions of changes in wellbeing.

**The microsimulation tool is designed** to model and provide an estimate on the coverage, adequacy and impact of disability-sensitive social protection schemes.

**The tool provides a costing model** to estimate the level of investment that would be required for the proposed disability-inclusive social protection programs.

**The microsimulations are based on the latest 2019-20 CSES data**, which identified persons with disabilities by asking questions on functional domains similar to the Washington Group Short Set of Questions. The tool also uses economic and population micro data from the IMF and UN DESA to produce costs estimates.

## **Description of the tool – content and functionality**

**The tool provides options on a comprehensive disability-inclusive social protection system for Cambodia.**

**It is composed of three programs: a Child Disability Benefit, an Adult Disability Benefit, and an Old Age Benefit.**

**The tool allows users to propose different setups of these programs**, by selecting three sets of programme parameters: transfer value, coverage level, and administrative costs.

**Once programme parameters have been inputted, users are then able to visualise the:**

- **Levels of investments** required to implement the programs;
- **Effectiveness of the programs** in reaching different groups of the population and;
- **Impacts the schemes** may have on purchasing power, poverty and inequality

**The results from the tools do not reflect the official views of ACCESS**, any errors in the tools remain that of the authors.

**The tool is designed to be user-friendly**, and users require basic computer and internet skills to use it.

**A step-by-step guide for using the tool is provided.** This guide also presents the simulation methodology as well as key data and assumptions used. Finally, at the end of this guide, a glossary of key terms is presented.

**Users are encouraged to access the Microsimulation Tool and the User Guide through**

→ this link [https://devpathways.shinyapps.io/access\\_disability\\_sptool/](https://devpathways.shinyapps.io/access_disability_sptool/) or

→ this QR code

