



Draft Programme

National Capacity Building Training on Statistical, Methodological and Computational aspects of the Productive Capacities Index (PCI)

(Harare, Zimbabwe, 6-7 May 2024)

The main objectives of the statistical training are:

- I. To build statistical capacities of Zimbabwe through training of national statistical experts to compute and interpret country-specific PCI.
- II. To share statistical and methodological as well as computational aspects of the PCI and to expose national statisticians to UNCTAD's Productive Capacities Index (PCI).
- III. To enhance the capacity of Zimbabwe's statistical experts to initiate processes to enhance the validity of the results for Zimbabwe.
- IV. To explore how the PCI can be used in national statistics and policy-making processes.
- V. To foster a network of national statisticians who work and exchange on PCI.
- VI. To collect feedback for the Statistical and Technical Advisory Group (STAG) of the PCI.



To participate in the training sessions, all trainees must have access to a computer with R and RStudio installed.

- ✓ The R software (which is the engine that performs the calculations) and R Studio Desktop (which is integrated development environment for R and makes working with R much more manageable) can be both easily downloaded from <https://www.rstudio.com/products/rstudio/download/> (Steps 1 & 2 respectively)

Monday, 06 May 2024

- 09:00-09:30 Registration and introduction of participants
- 09:30-10:00 Opening, overall objectives of the training, economic concepts around productive capacities and articulation with official statistics. **Rachid Bouhia, Economic Affairs Officer, Productive Capacities and Sustainable Development Branch, UNCTAD**
- 10:00-11:00 **Session 0: Setting the stage**
Introduction to the UNCTADStat PCI database: Access and use; **Mr. Benny Salo, Statistician, UNCTAD Statistics**
- 11:00-11:30 Tea/Coffee break
- 11:30-12:00 Overall presentation and visualization of the PCI package: pipelines, inputs, outputs, options and objects; **Mr. Rachid Bouhia, Economic Affairs Officer, Productive Capacities and Sustainable Development Branch, UNCTAD**
- 12:00-13:00 Introduction to R and hands-on exercises; **Mr. Benny Salo, Statistician, UNCTAD**
- 13:00-14:00 Lunch Break
- 14:00- 15:00 **Session 1: Reading data (Step 1)**
Indicators for productive capacities as input for PCI: Sources and data availability; **Mr. Benny Salo, Statistician, UNCTAD Statistics**
- 15:00-15:30 Drills on input datasets and NA diagnostics; **Mr. Rachid Bouhia, Economic Affairs Officer & Mr. Benny Salo, Statistician, UNCTAD**
- 15:30-16:00 Tea/coffee break
- 16:00-17:00 **Session 2: Interpolating, extrapolating and accounting for COVID-19 (Steps 2 & 3)**

Overview of methods used and drills; **Mr. Rachid Bouhia, Economic Affairs Officer & Mr. Benny Salo, Statistician, UNCTAD**

Tuesday, 07 May 2024

- 09:30-11:00 **Session 3: Computing the PCI (Step 6)**
Presentation of Principal Component Analysis, applications to the PCI and drills; **Mr. Rachid Bouhia, Economic Affairs Officer, UNCTAD**
- 11:00-11:30 Tea/Coffee break
- 11:30-12:00 **Session 4: Transforming input indicators (Step 5)**
Overview of options and exercises; **Mr. Benny Salo, Statistician, UNCTAD**
- 12:00-13:00 **Session 5: Imputing missing values (Step 4)**
Presentation of techniques used (random forests, PCA and gravity models) and drills; **Mr. Benny Salo, Statistician, UNCTAD**
- 13:00-14:00 Lunch
- 14:00-14:30 Why Productive Capacities Matter for Zimbabwe and what do we learn from Zimbabwe's PCI score? **Mr. Andrzej Bolesta, Economic Affairs Officer, UNCTAD**
- 14:30-15:30 Group exercises and presentations on PCI analysis; **Mr. Rachid Bouhia, Economic Affairs Officer & Mr. Benny Salo, Statistician, UNCTAD**
- 15:30-16:00 Tea/coffee break
- 16:00-17:00 (Continued) Group exercises and presentations on PCI analysis; **Mr. Rachid Bouhia, Economic Affairs Officer & Mr. Benny Salo, Statistician, UNCTAD**

17:00-17:10

The way forward and closing; Mr. Rachid Bouhia, Economic Affairs Officer & Mr. Mussie Delelegn Arega, A/Head, Productive Capacities and Sustainable Development Branch, UNCTAD