

Concept Paper for the National Workshop

“Quantitative Analysis in Support of Evidence-Based Policy Making in Social Protection”

25 – 29 July 2021

9.00 – 15.00

National Aid Fund,
the Hashemite Kingdom of Jordan

1. BACKGROUND

A social assistance programme is a complex system with multiple components, linkages and variables that evolve over time and transform in line with the changing environment. To make sure this programme is delivered in the most effective and efficient way, a systematic ongoing analysis of the programme as a whole, as well as its major elements is needed. The present workshop will introduce participants to the analytical framework custom-made for policy makers to deliver assessment of social assistance programmes and identify ways to improve them. The framework integrates high volumes of administrative data produced by social assistance programmes into a decision-making process that allows continuous update and improvement of these programmes in terms of their effectiveness, targeting and coverage.

The analytical framework is comprised of 4 distinctive tools enabling the following analysis:

- **Profiling of beneficiaries:** the tool allows identifying socio-demographic characteristics of the programme beneficiaries, clustering individuals with similar profiles in groups and visualizing structural factors that make them vulnerable. Once the common characteristics and groups are identified it is



possible to devise targeted services meeting the needs of specific beneficiary groups and allowing to reduce their vulnerability in the longer run.

- **Targeting characteristics:** the tool assesses the relevance of targeting variables or criteria in the selection of beneficiaries. It allows ranking selection variables according to their impact on the poverty score and eligibility/non-eligibility of applicants and thereby enables the targeting methodology to be continuously updated and improved.
- **Coverage evaluation:** this tool allows identify individuals with potential inclusion and exclusion errors. While a complete inspection will require the personalized evaluation of the individuals, this technique helps the policy maker to do a rapid screening and focus the resources on the individuals more likely to be misplaced in the system. This is achieved by analyzing current beneficiaries to identify those individuals whose situation might have changed (and who could thus potentially graduate from the programme) and those who might meet the criteria to participate in the programme but who are not currently enrolled.
- **Beneficiary evaluation:** the tool aims to measure the impact of a social assistance programme on its beneficiaries and unveil the characteristics that allow individuals to overcome their vulnerabilities and successfully graduate from the programme.

The workshop will build the capacity of key NAF staff to carry out systematic analysis of data stored in the programme registry and make data-driven policy decisions that improve efficiency and effectiveness of the social assistance programme.

2. EXPECTED ACCOMPLISHMENTS AND OBJECTIVES OF THE WORKSHOP

This workshop has two training components:

- (i) the first component is devised for **high-level policy makers** overseeing implementation of the social assistance programmes. This component has the objective of strengthening the capacity of policy-maker to obtain evidence to inform policy decisions that improve efficiency and effectiveness of social assistance programmes;
- (ii) the second in-depth component is designed for **technical experts** in charge of beneficiary databases, targeting and programme evaluation. These experts will build their capacity to deliver systematic ongoing quantitative analysis of the programme's database and make data-driven policy recommendations that improve efficiency and effectiveness of social assistance programmes.



3. DRAFT AGENDA

Training Workshop for **Technical-Level Experts**

Introduction to Data Analysis in Support of Evidence-Based Decision Making

25 - 28 July 2021

Trainers: Mr. Gustavo Paez and Ms. Balsam Halawi, ESCWA

Technical requirements:

- the classroom should be equipped with internet (or the participants should have individual internet hotspots);
- each participant should have a laptop with Windows operating system and 8 or more GB of Random Access Memory (RAM);
- each participant should download and install R and R studio on his/her laptop prior to the workshop.¹

Participation requirements: participants should preferably have educational background or working experience in data management or data analysis and basic knowledge of descriptive statistics.

Day 1: 25 July

09:00 – 9:30	Opening remarks Introduction to Data Analysis in Support of Evidence-Based Decision Making
09:30 – 11:30	Session 1. Module 1: Introduction to the software. Coding principles: variables
11:30 – 11:45	<i>Coffee break</i>
11:45 – 13:00	Session 2. Module 1: Coding principles: conditionals, loops, and functions
13:00 – 14:00	<i>Lunch break</i>
14.00 – 14:45	Session 3. Module 2: Table creation

¹ Here you can find detailed guidelines on how to install R and R studio:
<https://courses.edx.org/courses/UTAustinX/UT.7.01x/3T2014/56c5437b88fa43cf828bff5371c6a924/>



Day 2: 26 July

09:00 – 11:00	Session 4. Module 3: Graph creation: Basic graphs
11:00 – 11:15	<i>Coffee break</i>
11:15 – 12:30	Session 5. Module 3: Graph creation: Standardization and advance graphs
12:30 – 13:30	Lunch break
13:30 – 14:30	Session 6. Module 4: Connections between R and Excel

Day 3: 27 July

09:00 – 11:00	Session 7. Module 4: Practical project
11:00 – 11:15	<i>Coffee break</i>
11:15 – 12:30	Session 8. Module 5: Clustering techniques and their evaluation
12:30 – 13:30	<i>Lunch break</i>
13:30 – 14:30	Module 9: Module 5: Decision trees

Day 4: 28 July

09:00 – 11:00	Session 10. Module 6: Identification of significant variables Module 7: Estimation of missing registry values
11:00 – 11:15	<i>Coffee break</i>
11:15 – 12:30	Session 11. Module 7: Identification of outliers
12:30 – 13:30	<i>Lunch break</i>
13:30 – 14:30	Session 12. Module 8: Practical project
14:30 – 14:45	Closing remarks



Training Workshop for **Policy Makers**

Introduction to Data Analysis for Evidence-Based Decision Making

29 July 2021

Presenters: Mr. Gustavo Paez and Ms. Balsam Halawi, ESCWA

10:00 – 10:15	<ul style="list-style-type: none">• Opening and welcoming remarks by NAF and ESCWA• Introduction of the participants
10:15 – 11:00	Session 1. Module 1: Clustering techniques and their evaluation Module 1: Decision trees
11:00 – 11:15	Coffee break
11:15 – 12:15	Session 2. Module 2: Identification of significant variables Module 3: Estimation of missing registry values and identification of outliers
12:15 – 13:15	Lunch break
13:15 – 14:15	<ul style="list-style-type: none">• Presentation: Results of the NAF Data Analysis: this presentation will summarize major results of the analysis of the NAF database and outline suggested policy recommendations.• Questions and answers
14:15 – 14:30	Closing remarks by ESCWA and NAF

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