# The Implementation of the PESI Project using ESRI software in support of small-scale farmers during COVID-19

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Responsible:

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Geoinformation Science
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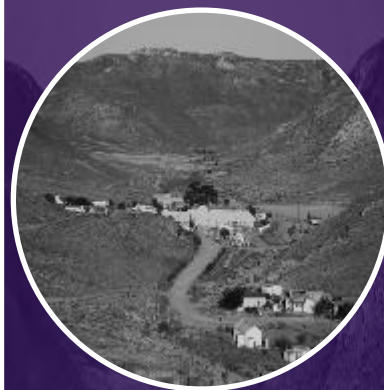
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agriculture, land reform & rural development
Department:
Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

**Accountable Digital Transformation**

Goat herder in rural Northern Cape Province

Drought relief in Eastern Cape Province

Lekkersing village in its desolate Richtersveld setting.

Landscape in the Eastern Free State Province

Steytlerville in the Eastern Cape Province
Nama Riel dance

Donkey cart near Cradock

# INTRODUCTION

## EARLY 2020

- Impact and pressure of Covid-19 pandemic on vulnerable households, farmers in remote areas.
- Restricted access to markets dealt a heavy blow to farmers and their livelihoods!
- Increased food insecurity.

## LAUNCH OF PESI

LOCK DOWN 2020

- Launch of the Presidential employment stimulus packages (PESI).
- To support subsistence producers to retain self-employment and support food value chains.

## ROLLOUT

- Subsistence producers in rural and peri-urban areas
- 50% women, 40% youth, 5% military veterans and 5% people with disabilities were be targeted.

# PROBLEM STATEMENT

**PESI PROGRAMME**

1. DALRRD undertook a programme to support small scale farmers!

2. The process was manual and there was no system help with the verification of applications!

3. The manual process presented a number of challenges, more especially during the lockdowns where the forms could not be distributed nor collected and applicants were left destitute.

4. The PESI Task team developed a systematic approach, which served two critical purposes; 1. application of farmers (using Vodacom USSD code) and 2. verification of applicant farmers (using Survey 123).

PESI System Workflow

Phase

**Vodacom USSD registration and eVoucher**

1 — Applicant register via USSD process

1a — Farmer info collected (Vodacom)
Name, Surname, ID number
Province, Municipality, Closest town
Person with a disability
Child headed household

ID verified via algorithm, reconfirmed if typed wrong

Vodacom issues a application reference number via SMS indication a successful application had been lodged

Application reference number generated here

1b — Farmer choose his type of applications
Vegetable and fruit growing | Maize/soya/cotton/sugar/other production | Poultry | Small stock | Large stock
USSD menu choose activity size per commodity type to enable system to determine estimated cost of all applications

1c

Live link to LTS to monitor process and store all Information
**Also LTS to calculate support amount**

2b — Unsuccessful or disqualified (disqualified after application period) and Successful will receive SMS via API

4a — Vodacom issue eVoucher with data from LTS of verified applicants (include ID nr and Cell nr to suppliers on voucher)

4b — Vodacom receive a list of registered suppliers from finance

From CFO

PSSC SCM to support the physical verification after scrutiny of Suppliers received

**Long Term Solution**

Import reviewed and assessed applicants and notify disqualified applicants (after application period) National Committee

Screening 2
OCIO/IT to check Persal/Home Affairs and screen all Government officials for exclusion or who received other support,
Compare PESI application ID numbers against the Phase 1 applications to determine duplicate applications. These need to be reported to determine if they are to be included or excluded

2c — Step 2c Disqualified applicants will receive SMS with reason

**National Committee**
Provide oversight on project expenditure and consider adjustments if required, hold or delay function to stop from handover to Vodacom eVoucher

Dashboards receive live information

Classify applications per Province/District/Municipality(Town) — 3a

Dashboards setup to monitor progress per Province/ District/ Municipality/Town **(Managed per District)**

List of registered suppliers communicated to districts (Location, Contact name and number, etc)

2b2 — **Provincial Committee**
Support District Committee decisions and performed oversight and do spot check on approvals per district. Perform oversight on at least 2% of approved applications and support the rest in bulk

Rejected application, reverted back to previous step

3b

Produce applications report/list for cell nr was duplicated

Produce applications report/list for child headed households report per town to verify

Produce applications report/list per town per verifier assigned by District manager

2b1 — **District Committee**
Check against advert criteria if all PoE and application details were verified and approve applications.

Reject or send for resurvey

Screening 1 — 2a
ID harvested to provide gender, youth classification. Use selection criteria
(1) Gender M=3 F=5;
(2) Youth=5 Other 3;
(3) Disabled=5 Other=3
(4) Military Veteran = 2
Then only those with 11 or more allowed through to next step
**Naturalised citizen disqualified**

2

4 — Applications to be forwarded via LTS to ensure tracking

2 - 4

3

LTS track verified applications per verifier. Create a report per person to support stipend for NARYSEC/Graduates and Private verifiers. Report calculate stipend per person with PoE

**District Staff**
(**District Director** manage workflow, Group applicants to source per location and assign to be verified and to be resurveyed)
Role: District Manager

**LTS**
Long Term Solution receive final list of applicants, with support type chosen

send for resurvey

Timesheet Survey123 to geolocate and log times of paid verifiers

**Survey123**

4b — Suppliers verify delivery of goods with PoE of goods, ID and registration cell nr, delivery note and applicant satisfaction feedback using Survey123
Verifier and farmer sign acknowledgement and disclaimers
**(Managed per District)**

4c

1d — All verifiers register on Survey123 to enable to geolocate resources and their allocation **(Managed by PSSC)**

3c — Verify qualifying applicants using Survey123
Capture farmer details, GPS location, ID photo and farming activity photo as PoE as well as size or animal number range. Verify disability PoE;
Verifier sign and complete acknowledgement and disclaimers on behalf of farmer due to COVID-19 Level 3
**(Managed per District)**

3d
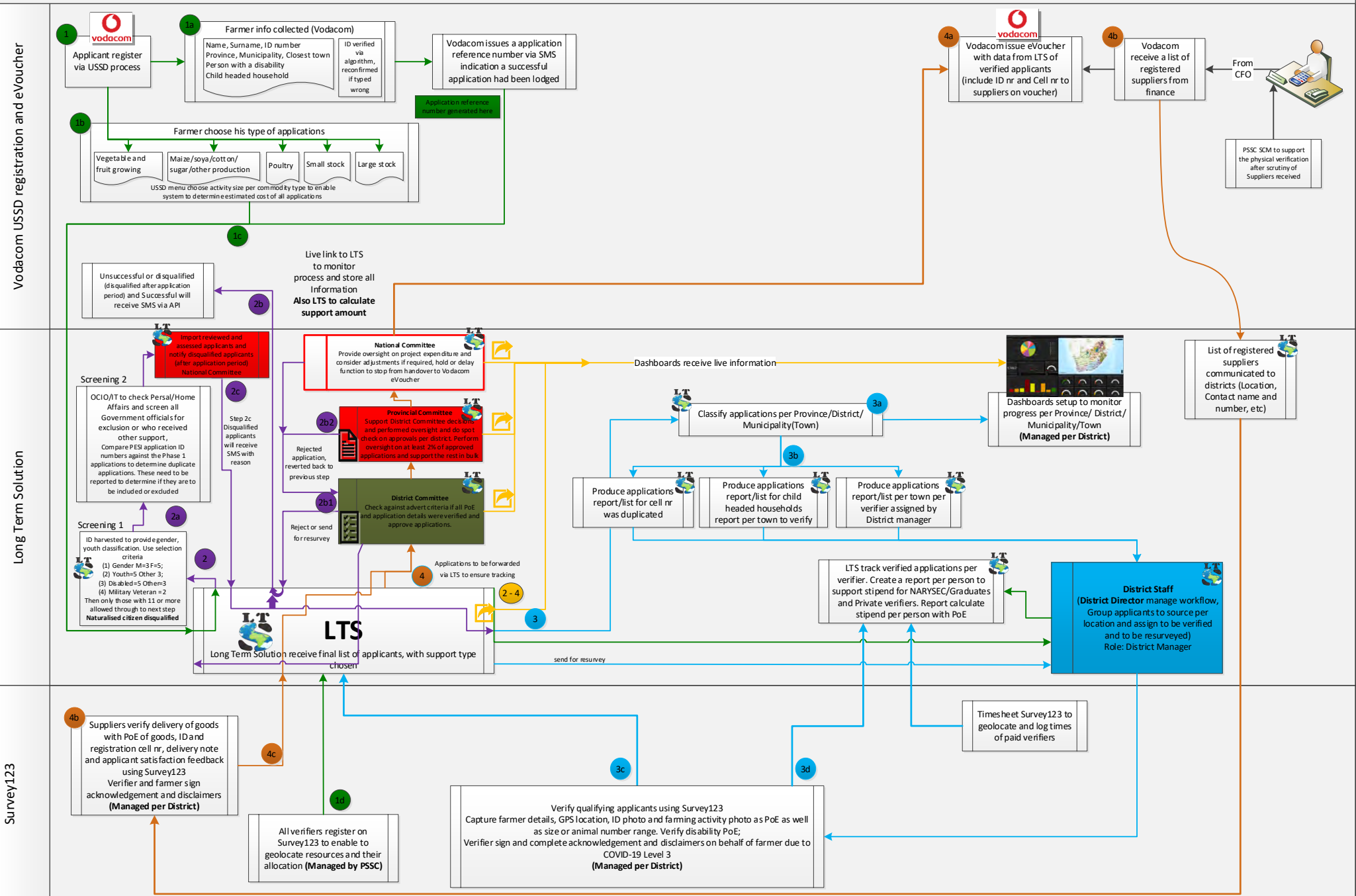
**Verifier Registration Survey**

**Open registration USSD App to interested citizens and Government Officials, enabling geolocating them to deploy resources for verification and support management optimally**

Time... Survey... NARYS... Grad... enab... paym... their s...

# PESI - SURVEY 123 PROCESS:



**Design and published survey in Survey 123 Connect**

**PESI SURVEY 123 PROCESS:**

**Survey 123 Cloud/Web**

**Survey 123 Mobile/field application used by field verifiers**

**Data Interpretation, monitoring and evaluation**
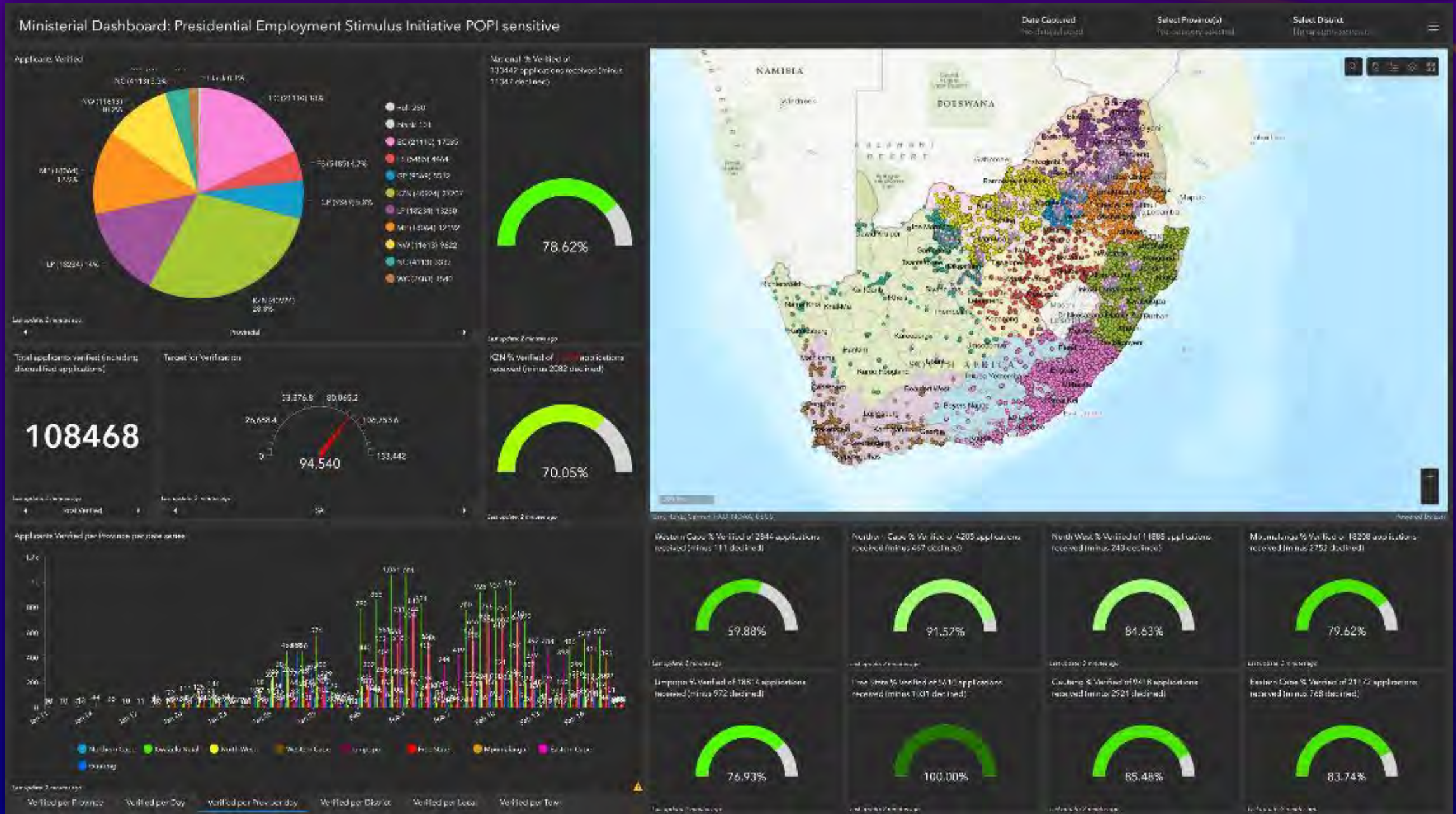
PESI Verification of Applicants App

**Real-time data and stats through dashboards!**
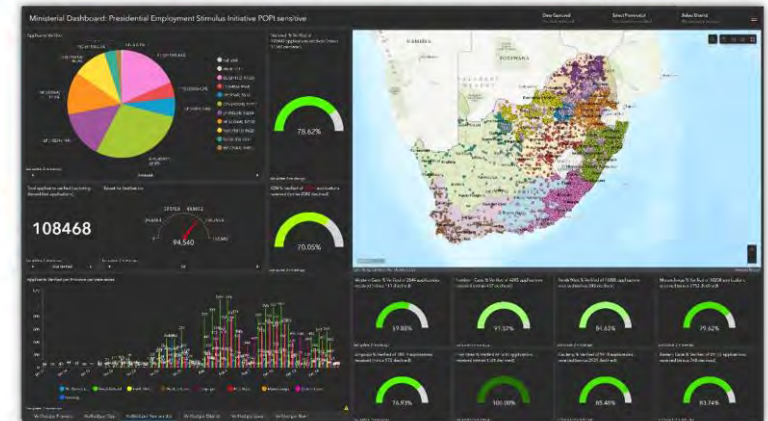
**Dashboards made available to Heads of the Department (decision makers)**

Staff from National and Provincial Governments were deployed to verify the applications. This created a challenge to integrate the various systems. The Survey 123 Cloud approach therefor was the ideal approach.

# PESI DASHBOARD:

# THANK YOU