WOMEN IN TRADE EMPOWERMENT INDEX

GUIDING TOOL

Audience:
TradeMark Africa's programme teams, partners, public agencies, associations, researchers

VERSION: 2025.10

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1. Executive Summary

The Women in Trade Empowerment Index (WiTEI) is a practical measurement tool that tracks how women in trade are progressing and whether programmes are making a real difference. It converts many observations into four domain scores and two overall indices. You will publish two overall scores in every cycle. One is the legacy three domain index to protect the trend line. The other is WiTEI 2.0 that adds Sustainability and Resilience for better management decisions. This guide defines concepts, indicators, calculation, data quality, governance, and publication. It keeps rigorous methods and uses practical, human focused language.

Key Issues

- **Show the four domain scores** with confidence bands.
- **Tell the story in three short sentences:** what changed, why it changed, what it means.
- **List three actions.** Give each an owner, a deadline, a budget line, and a success check.
- **State the method in one line:** indicators, weights, normalization, missing data rule, version ID.
- **Share a small pack:** cleaned data, codebook, one script that rebuilds results end to end.
- **Confirm ethics:** consent taken, privacy protected, safe referral in place.
- **Set the next date** and who updates the dashboard and how results will be shared

2. Conceptual Framework

2.1 Objective

See where women face barriers, track change over time, and decide what to fix first.

2.2 Domains and definitions

Access measures women's ability to obtain and use the resources, information, finance, digital tools, and infrastructure necessary to participate effectively in trade.

Agency including Safety assesses women's confidence, decision-making power, leadership, and voice within households, associations, and trade institutions.

Achievement captures tangible outcomes such as income growth, asset ownership, improved livelihoods, and recognition in business and community spaces.

Sustainability and Resilience examines whether empowerment gains can be maintained during economic, social, or environmental shocks such as pandemics or market disruptions.

Domains at a glance

Access is what you can get. Agency is what you can decide and do. Achievement is what people can see. Resilience is whether it lasts when times are hard.

2.3 Theory of Change

Better Access supports stronger Agency. Together they create Achievement. Resilience protects those achievements when shocks occur. Programmes pull levers in each domain. WiTEI shows how those levers work.

3. Indicator Framework

3.1 Principles

- **Actionable.** A low score must point to a clear fix.
- **Comparable.** Keep indicator meaning and construction stable across rounds.
- **Balanced.** Cover several sub topics per domain. Aim for at least two indicators per sub topic.

3.2 Structure with examples

Access may include affordable credit, where finance is accessed, awareness of tax and licensing, training and BDS, physical trading spaces, membership in associations, legal and regulatory support, digital sales and digital payments.

Agency may include decision control over trade income, confidence to expand, ability to negotiate, leadership roles, voice in decision platforms, rights awareness, access to justice, experience or fear of harassment, knowledge of reporting, and visibility of protection measures.

Achievement may include record keeping, income rising, savings and reinvestment, asset growth, expansion to new markets, recognition in community or associations, mentoring others, and creating paid jobs.

Sustainability and Resilience may include the ability to operate during shocks, adaptation of products or routes, access to emergency support or insurance, climate smart practices, and market infrastructure that enables continuity.

3.3 Disaggregation

Always plan disaggregation by age group, by disability with consent, by trader segment including informal and micro and growing and formal SME, and by location and country.

Important

Do not overload the instrument. Start with a lean core that is stable. Add optional modules only when needed.

4. Study Design, Sampling and Ethics

4.1 Design

Use a standard survey to build the index. Add focus groups or key interviews to explain patterns and to capture lived experience, including safety.

4.2 Sampling

Use programme sites. The main goal is change over time inside your sample. If sites change between rounds, also show like for like results for the overlapping set.

4.3 Ethics and safety

Use informed consent and protect identities. Route sensitive questions with care. Provide referral information for safety incidents. Ask disability items only with consent. Train teams on these procedures and place a one page summary at the front of the field manual.

5. Data Standards and Quality Assurance

5.1 Before fieldwork

Freeze the questionnaire, codebook, and skip logic. Set validation rules in the form. Train enumerators and supervisors. Run a pilot and adjust wording without changing indicator meaning.

5.2 During fieldwork

Review data daily for completeness and logic. Run supervisor spot checks and a short debrief at the end of each day. Fix issues while teams are still in the field.

5.3 After fieldwork

Clean the data and document each change in a changelog. Reverse code any negative items. Check internal consistency within domains. Apply the domain completeness rule before scoring.

Good practice

A small folder with four files. Raw data. Cleaned data. Metadata that lists variables and codes. One script that runs end to end.

6. Longitudinal Data Collection and Panel Management

This section explains how to follow the same traders across time. The goal is to measure change inside the same sample while keeping the overall series stable and credible.

6.1 Panel purpose

- Track progress for the same respondents so you can see real change, not just different people each time.
- Learn what predicts gains and losses and which programme levers move domain scores.
- Support equity checks by age, disability with consent, segment, and location.

6.2 Panel design

Cohort. Select respondents at baseline and assign a unique, stable ID.

Waves. Revisit them on a fixed calendar. Use the same core indicators so results remain comparable.

Refresh sample. If the population changes a lot, add a small refresh sample that uses the same core instrument. Keep the panel and the refresh marked in the data.

Field tip

Pick a wave schedule you can actually meet. For example every 12 months. Publish the date in advance so partners can plan fieldwork and review meetings.

6.3 Tracking and attrition control

Contact protocol. Collect two phone numbers, one alternative contact, a market or border landmark, and the name of an association contact.

Reminders. Send a simple message one week before and one day before the visit.

Flexible modes. Allow phone follow up where an in person visit is not possible.

Attrition rules. Set a target recontact rate, for example 80 percent. Record a reason code when a case is missed.

Important

High attrition can bias change estimates. If attrition is above your threshold, run a bias check and document how you corrected it.

6.4 Measurement consistency

Core stays the same. Keep the core question wording, response options, and scoring logic the same.

Modules may evolve. You may add optional modules, but keep them flagged so they do not affect the core index.

Version control. Tag every release of the instrument and publish a short change note.

6.5 Identifiers and data linkage

Unique ID. Generate once at baseline and never reuse.

Secure storage. Keep the ID map with names and phones in a protected file. Keep the analytical dataset de identified.

Linkage. Join waves by ID, not by name or phone. Check for duplicates and collisions before analysis.

6.6 Weighting and representativeness

Panel weights. If you used weights at baseline, carry them forward.

Non response adjustment. Consider simple post stratification or raking to correct for known patterns in attrition.

Document. Publish the exact steps used to adjust weights or to leave them unchanged.

6.7 When sites change between rounds

Publish two views.

Full sample. Everyone interviewed this round.

Like for like. Only the sites that appear in both rounds. Explain both views in plain language so readers do not confuse a site change with a real change in scores.

6.8 Analysis of change

Use methods that are standard and easy to explain.

- Simple change in means and medians for domain scores within the same respondents.
- Fixed effects or difference in differences when you have a clear treatment and timing.
- Quantile views to see if gains or losses are concentrated among lower or higher scoring traders.

6.9 Missing data in panels

Apply the same domain completeness rule in every wave. Do not score a domain for a respondent who answers less than sixty percent of items in that domain. Never impute safety incidents. If you impute other items, flag them.

6.10 Uncertainty and sensitivity for panel results

Uncertainty. Use a bootstrap at the respondent level within each wave and for change scores.

Sensitivity. Check if conclusions hold when you drop cases with imputed values, when you change weights, or when you switch from a linear mean to a geometric mean for aggregation.

6.11 Re baselining policy

Avoid re baselining. Only re base if the indicator scale or the population changed in a way that breaks comparability. If you must re base, publish the reason, the new parameters, and a bridge table that shows the effect on the series.

6.12 Ethics in a panel

Renew consent each wave. Remind respondents how their data are used and how to request deletion. Use a safe script for any sensitive topics. Provide referral information when needed.

6.13 Panel timeline and tasks

Phase	When	Tasks
Panel setup	Month 0	Assign IDs, record contacts, train teams, pilot
Wave 1 collection	Month 1	Field survey and qualitative work, daily QC, secure storage
Tracking window	Months 2 to 10	Maintain registry, update contacts, light touch phone checks
Wave 2 collection	Month 12	Revisit sample, record attrition reasons, field QC
Analysis and use	Months 13 to 14	Compute change, CIs, sensitivity, action workshops
Repeat cycle	Month 24	Next wave with the same core instrument and calendar

Good practice

- A panel tracker that lists every ID, last contact date, contact status, and next action.
- A short attrition dashboard that shows recontact rate by site, by age group, and by
- A wave playbook that fits on two pages. Who does what, by when, with one owner per

7. Computation

This section keeps the formal method and explains choices in simple terms.

7.1 Notation

Domains include Access, Agency, and Achievement for the legacy index. Sustainability and Resilience is added for WiTEI 2.0. Let $I_{d,i}$ be indicator i in domain d. Let $I^*_{d,i}$ be the standardized value. Let $W_{d,i}$ be indicator weights inside domain d that sum to one. Let W_d be domain weights across domains that sum to one.

7.2 Normalization

Pick one method and keep it stable for the whole series.

Min to Max to a 0 to 1 scale

$$I_{d,i} = \frac{I_{d,i} - min\,(I_{d,i})}{max\,(I_{d,i}) - min\,(I_{d,i})}$$

Z score then convert to 0 to 1

$$Z_{d,i} = \frac{I_{d,i} - \mu_{d,i}}{\sigma_{d,i}}, \quad I^*_{d,i} = \Phi\,(Z_{d,i})$$

Lock the baseline parameters. If you must re base, publish a short note that explains why and the effect.

7.3 Domain scores

Use a weighted mean and start with equal weights unless you have strong evidence to do otherwise.

$$\text{Domain Score}_d = \sum_i W_{d,i}\, I_{d,i}$$

7.4 Overall indices

Legacy with three domains

$$\text{WiTEI Legacy} = \sum_{dE\{\text{Access, Agency, Achievement}\}} W_d \times \text{Domain Score}_d$$

WiTEI 2.0 with the resilience domain

$$\text{WiTEI}_{2.0} = \sum_{dE\{\text{Access, Agency, Achievement, Sustainability and Resilience}\}} W'_d \times \text{Domain Score}_d$$

Note for computation

Equal domain weights are fine when you start. If you adjust weights later, publish the full scheme and a short sensitivity table that shows how much results move.

7.5 Missing data

If less than sixty percent of items in a domain are answered for a respondent, do not compute that domain for that respondent. For a small number of missing items inside a domain, use a simple bounded mean within that domain and flag the cell. Never impute safety incidents.

7.6 Uncertainty and sensitivity

Use a bootstrap at the person level to build ninety five percent confidence intervals. One thousand resamples is a good default. Sensitivity checks build trust. Try equal versus data driven weights. Try linear versus geometric mean. Try alternative normalization. Report large changes.

8. Analysis and Interpretation

Pair the index with short quotes or stories that explain why the number moved. One or two stories per site are sufficient. Always look at results for youth and for women with disabilities when consent allows. Compare informal and micro traders with growing and formal SMEs. When sites change, publish both the full sample view and the like for like view. Write findings in plain language so busy officials can act.

9. Programme Use and Decision Rules

Pair the index with short quotes or stories that explain why the number moved. One or two stories per site are sufficient. Always look at results for youth and for women with disabilities when consent allows. Compare informal and micro traders with growing and formal SMEs. When sites change, publish both the full sample view and the like for like view. Write findings in plain language so busy officials can act.

9.1 If Access is low

Improve credit links and reduce barriers such as collateral. Expand training and BDS. Improve information flows and digital use. Secure trading spaces. Strengthen associations. Offer help desks for licensing, tax, and rules.

9.2 If Agency is low and safety is a concern

Support decision power and negotiation. Create leadership pathways inside associations. Put safety in the open. Set up grievance and help desks. Provide reporting channels. Improve lighting where it helps. Use clear codes of conduct.

9.3 If Achievement is low

Help traders turn capabilities into results. Build market linkages. Support formalization where it unlocks growth. Expand capital and reinvestment coaching. Lift up role models and mentors.

9.4 If Resilience is weak

Plan for continuity during shocks. Connect traders to emergency support and insurance. Encourage climate smart practices. Diversify suppliers and routes. Improve infrastructure that keeps trading possible.

Field tip

Find the binding constraint. It is the lowest domain where your programme can move a practical lever this year. Move it first. Measure again next round.

10. Dissemination and Communications

10.1 Products

A four page executive brief per country. A dashboard with domain dials and confidence intervals. Border or market snapshots that fit on one page. Short audio or visual stories that protect identity.

10.2 Audiences

Policymakers want a clear ask and two or three actions. Field teams want a map, a checklist, and a timeline. Associations want stories, examples, and a route to services.

10.3 Transparency

Publish formulas, weights, missing data rules, and sensitivity results. Add a data access statement.

11. Governance and Roles

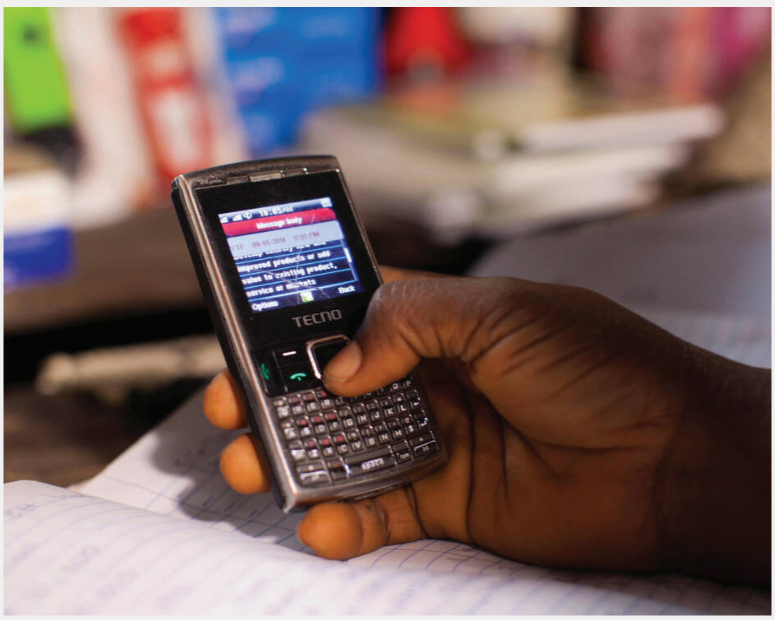
Index stewardship, Corporate MEL keeps the standard, the calendar, and the scripts. **Gender and Inclusion** protects the meaning of Agency and Safety and the disability lens. **Country teams and associations** maintain the trader registry, run local interpretation sessions, and write actions into workplans.
Public agencies and statistics offices support alignment and data exchange.
Change board approves any change in indicators, weights, or normalization and publishes a short version note.

Good practice

A quarterly coordination call. A shared tracker. One clear owner for each action. This keeps motion visible and reduces drift.

12. Publication Protocol

Each release includes the scorecard with both overall indices, the four domain dials, and confidence intervals. Include a short methods note with formulas, weights, missing data rules, and sensitivity highlights. Include the instrument and codebook, the analysis scripts, and a data access statement. Use a stable version name such as WiTEI 2025.10 and archive with a persistent link.



13. Technical Annexes

13.1 Annex A. Calculation pseudocode

```
# Inputs: cleaned dataset , indicator - > domain map , weights , normalization params

# 1. Normalize indicators
for each indicator i in domain d:
I_star[d, i] = normalize( I[d, i], params_locked )

# 2. Domain scores
Domain Score [ d] = sum_i( w[d, i] * I_star[d, i] )

# 3. Overall indices
WiTEI_Legacy = sum_ { d in [ Access , Agency , Achievement ]}( W[ d] * Domain Score [ d] )
WiTEI_ 2 _ 0 = sum_ { d in [ Access , Agency , Achievement , Sustainability and Resilience ]}( W2 [ d] * Domain Score [ d] )

# 4. Uncertainty with bootstrap for b in 1..1000:
resample respondents with replacement recompute scores take percentile intervals for 95% CIs
```

13.2 Annex B. Missing data and outliers

Domain completeness threshold is sixty percent. Impute inside a domain only when logic allows and flag every imputation. For extreme numeric outliers, consider winsorizing at the first and ninety ninth percentile and document the rule.

13.3 Annex C. Sensitivity menu

Weights: equal versus empirical. Aggregation: linear mean versus geometric mean. Normalization: min to max versus z score. Site set: full sample versus like for like.

13.4 Annex D. Field team checklists

Before include maps and site lists, a consent script and referral list, device checks and spare power.

During include daily review and quick fixes, supervisor spot checks, and a short evening debrief.

After include a debrief with associations and local officials, a first fixes memo with owners and dates, and an upload to the dashboard and archive.

13.5 Annex E. Glossary

Domain is a theme like Access. Indicator is a measured item that feeds a domain. Normalization puts indicators on the same scale. Weights define how much each indicator or domain counts. Bootstrap confidence interval is a resampling method. Like for like is comparing the same sites between two rounds. Dual reporting is publishing both the legacy index and the 2.0 index.