

Predicting Needs, Financing Equality

An AI-Supported Framework for Gender-Responsive Budgeting
and Women's Economic Empowerment

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Research focus

Predictive analytics

Explainable AI

Decision support

Context / Challenge

From ex-post reporting to ex-ante decision support

GRB is still often analysed after budget decisions are made.

Women's economic needs are multidimensional and locally specific.

Relevant evidence is frequently fragmented across systems and actors.

Decision-makers need transparent prioritization — not a black-box score.

DESCRIBE What is happening?

PREDICT Where will needs intensify?

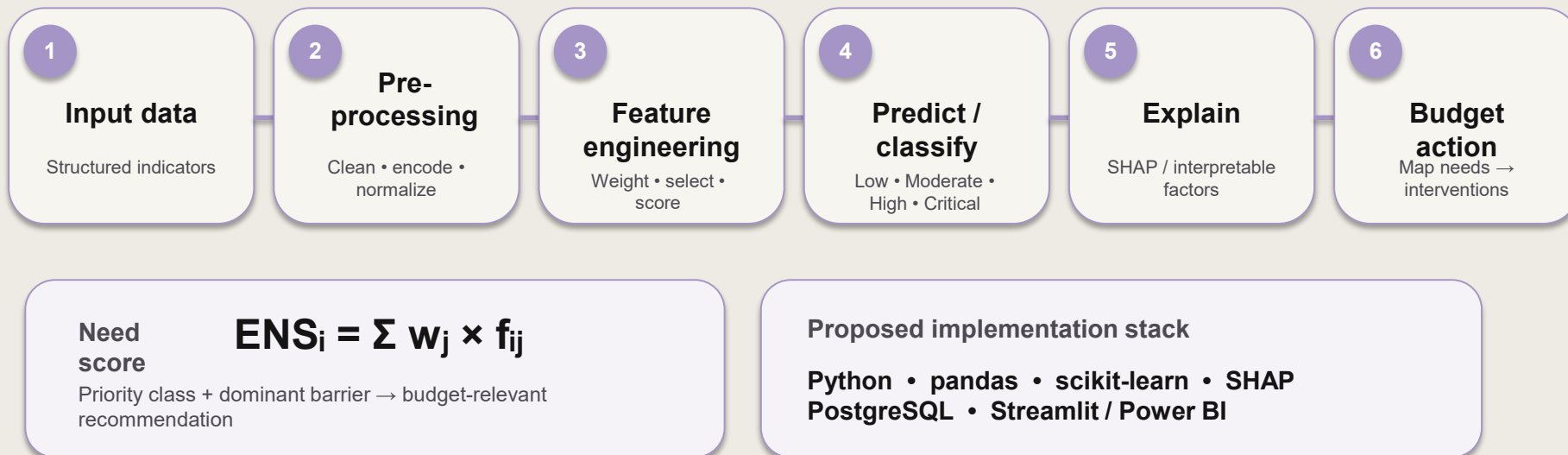
PRIORITIZE What matters most?

FINANCE Which intervention fits?

Research proposition: use AI to support planning before final allocations are locked.

AI-GRB Decision Support Model

Proposed algorithm



Human-in-the-loop: the model supports accountable decisions; it does not automate budget authority.

GRB in Bosnia and Herzegovina: From Practice to the Next Generation

Selected insights from UN Women-supported GRB work

INSTITUTIONALIZE

GRB embedded in policy & budgeting

Gender Equality Law • GAP 2023–2027 • Programme budgeting

CONNECT

Entrepreneurship needs an enabling economy

Finance • Care • Economic participation

FINANCE

Evidence translated into resources

9,000+ rural women • BAM 30M

Gender-responsive agricultural support

PARTNER

Broaden evidence & accountability

Institutions • Civil society • Academia

JP GEA Civil Society Advisory Group

What's next? [Joint Programme Gender Equality Accelerator](#)

Advancing GRB institutionalization through continued technical support and capacity development • 2nd GRB Forum in BiH

Further reading: [UN Women GRB Programme Evaluation](#)

GRB Community of Practice
25-26 August 2026, Ohrid

Recommendations

From prototype to an accountable GRB decision-support tool

- 1 Start with a small pilot**
One administrative level / limited set of indicators.
- 2 Define a machine-readable GRB indicator dictionary**
Clear metadata, ownership, update frequency and quality rules.
- 3 Use hybrid weighting + explainable AI**
Combine expert knowledge with data-driven feature importance.
- 4 Map predictions directly to budget measures**
A model output must be actionable, not only descriptive.
- 5 Validate predictions against real outcomes**
Institutions + UN Women + civil society + technical experts.

Implementation principle: small, transparent, validated and scalable.

Key Takeaways

Three messages

- 01 Move GRB upstream**
from ex-post reporting to ex-ante decision support.
- 02 Use AI to rank and explain needs**
not to replace accountable human decisions.
- 03 Connect technology with practice**
data + public finance + field knowledge = better targeting.

Thank you

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Predict needs. Explain priorities. Finance equality.