



RIAPA-AI

Democratizing Economic Models

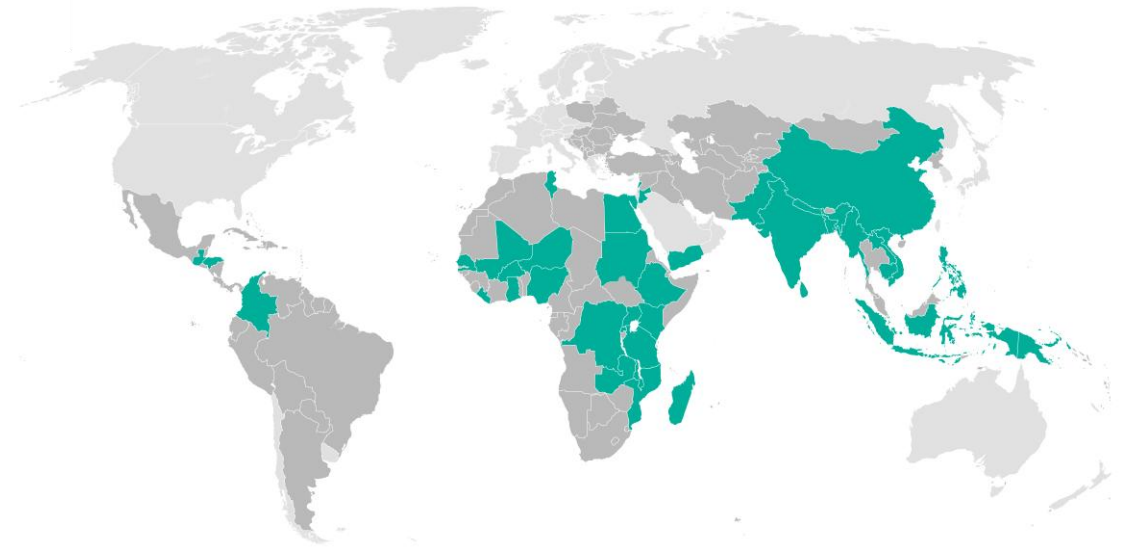
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RIAPA Modeling System

- **IFPRI maintains the largest repository of country economywide models**
 - Unique coverage of lower-income countries
- **RIAPA is designed to capture agrifood systems**
 - Linkages to the broader economy
 - Tracks jobs, poverty, diets, water, emissions, etc.
- **Used by our partners around the world**
 - Evaluate policies and investments
 - Analyze economic shocks

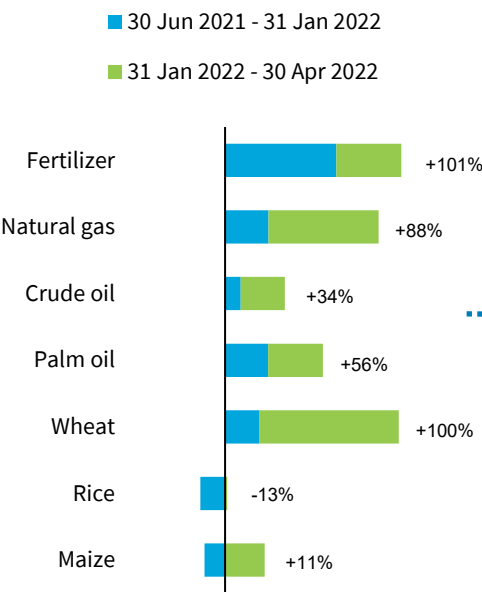
42 countries have RIAPA models



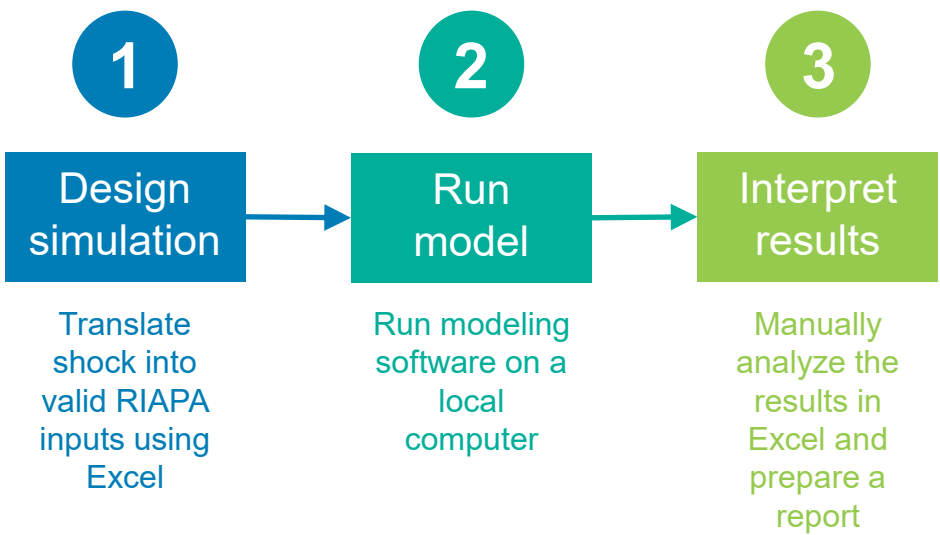
Rapid Analysis of the Ukraine Crisis

Change in real world prices

(June 2021 to April 2022 | %)

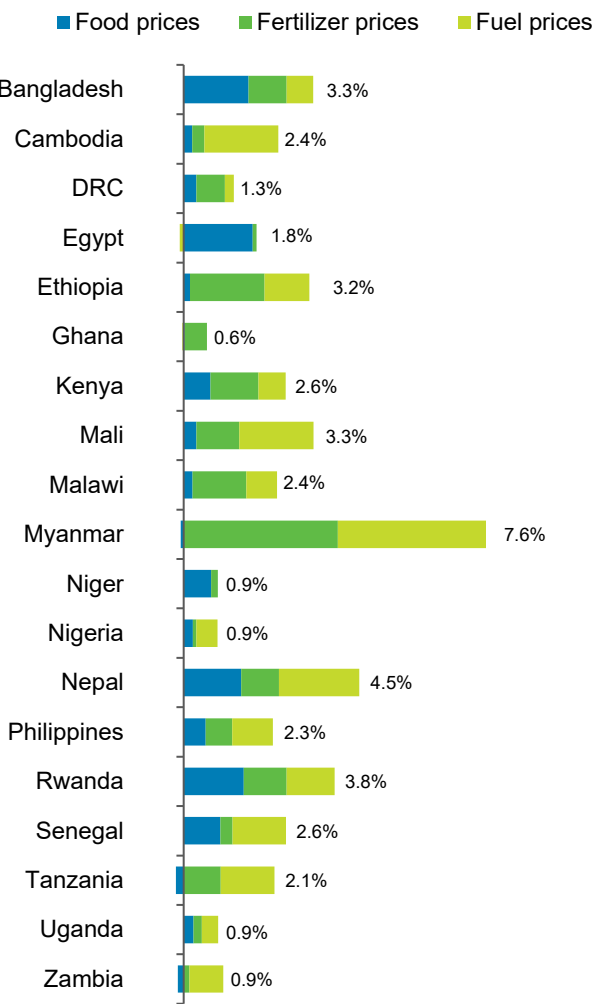


Standard approach to using RIAPA



Impact on national poverty rates

(%-point)



Standard Approach

Design
simulation

1

Run
model

Interpret
results

Three screenshots of the SAMs Studio software interface illustrating the standard approach:

- Top Screenshot:** Shows the "Production-Trade Elasticities and Functional Forms" window, which is used for defining the model's structure, including commodity flows, activity taxes, and factor prices.
- Middle Screenshot:** Displays the "SAMs Studio" main window, showing the project explorer on the left and the "Model log" on the right, indicating the execution of the model.
- Bottom Screenshot:** Shows the "Sectoral Gross Domestic Product (GDP)" window, which displays the results of the simulation, including a table of GDP values for various sectors and a summary of the model's performance.

2

3



Barriers for Users

Design
simulation

Must be able to load a policy shock into the model

- Lengthy training courses and lots of Excel files

Run
model

Must be able to run the modeling software on a local computer

- GAMS is a complicated programming language with an expensive license

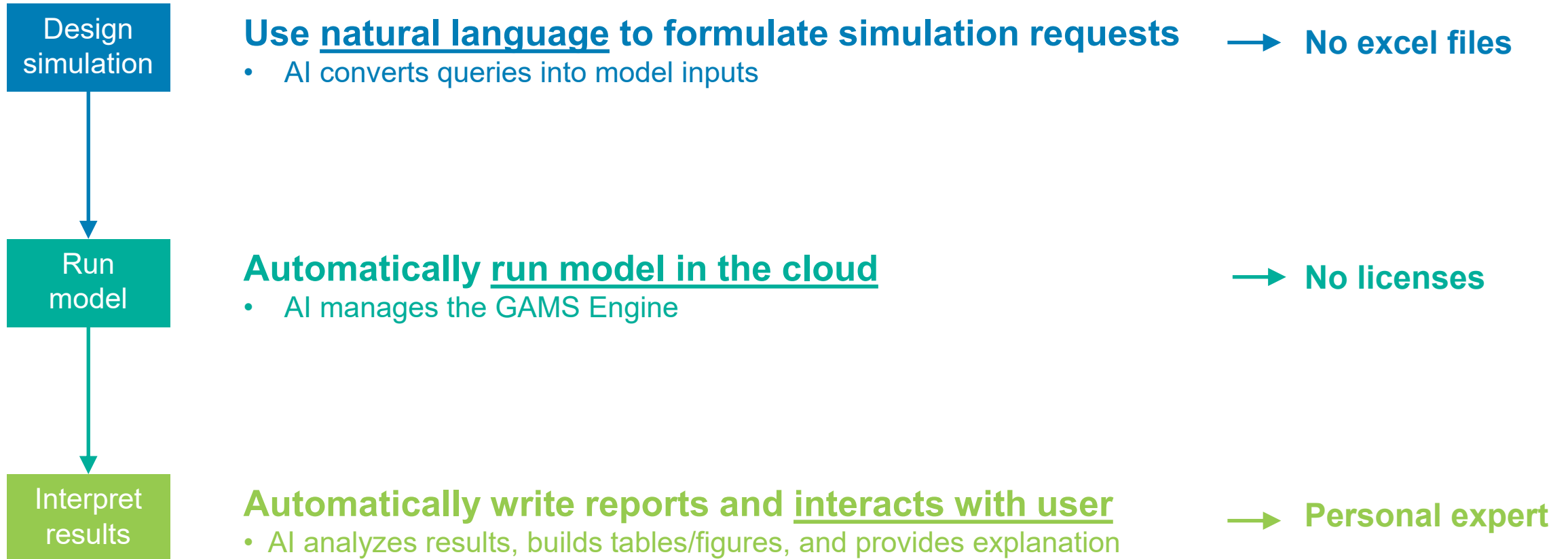
Interpret
results

Must be able to interpret results

- Without an expert in the room to explain the data and model



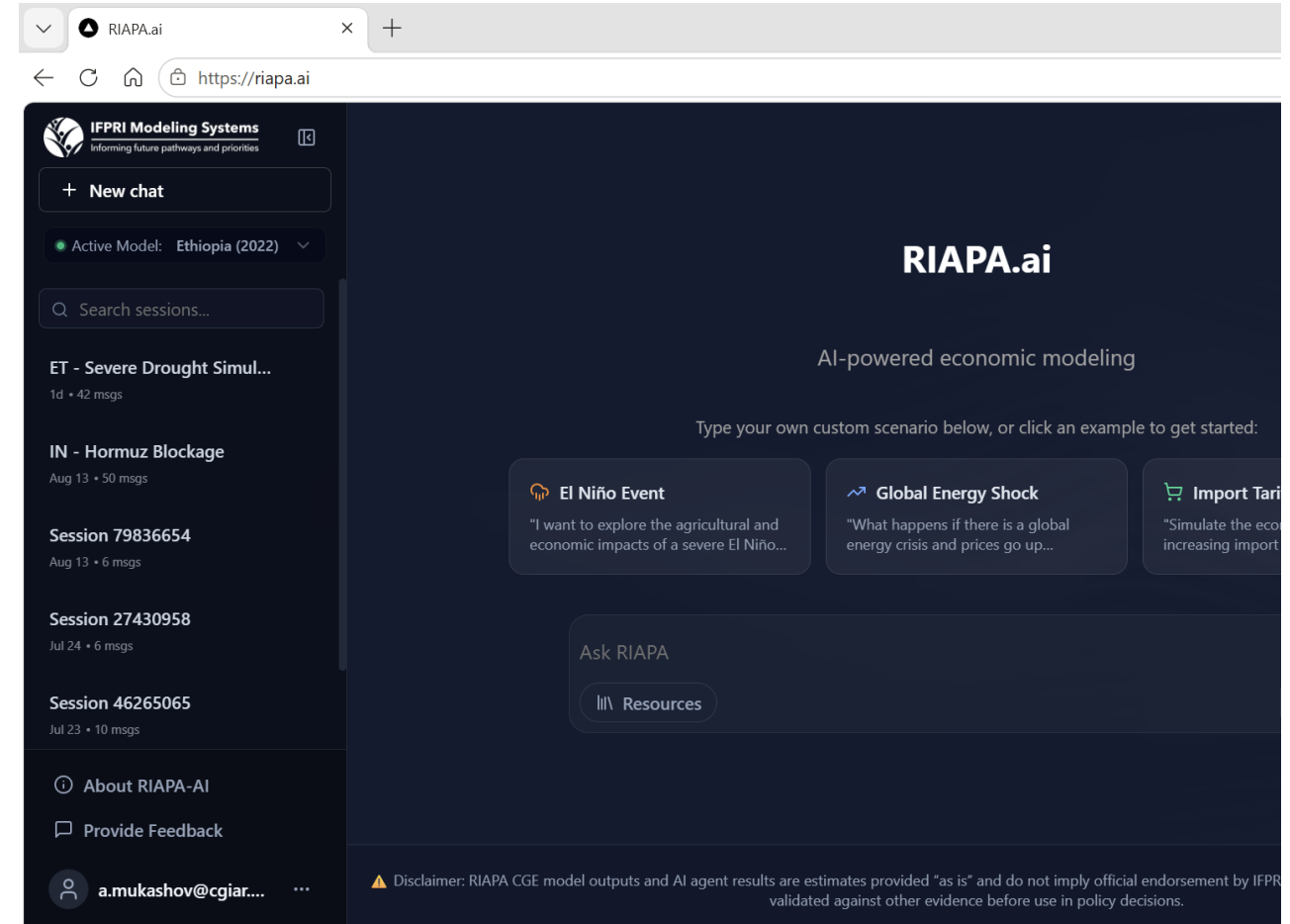
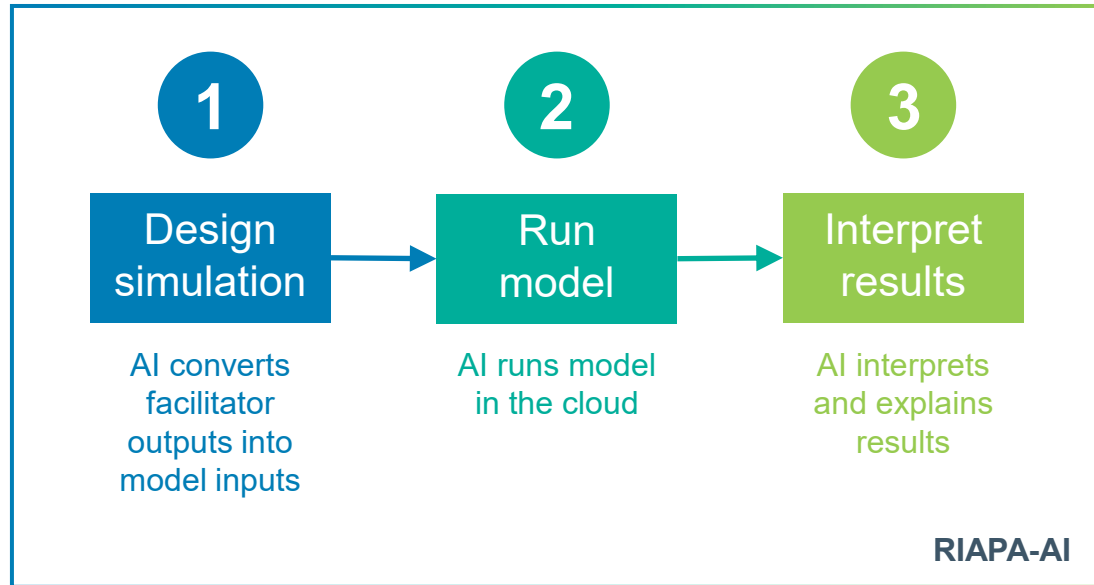
New Approach = RIAPA-AI



RIAPA-AI

User interacts with LLM

- Design economic scenarios (where and how much to shock the model?)
- Interpret results (what is happening in the model?)



Demo

The screenshot shows the RIAPA.ai web application. The browser address bar displays <https://riapa.ai>. The page header includes the IFPRI Modeling Systems logo and the tagline "Informing future pathways and priorities". A sidebar on the left contains a "New chat" button, a dropdown for "Active Model: Ethiopia (2022)", a search bar for sessions, and a list of recent sessions: "ET - Investment Project Si..." (4m • 40 msgs), "ET - Severe Drought Simul..." (1d • 42 msgs), "IN - Hormuz Blockage" (Aug 13 • 50 msgs), "Session 79836654" (Aug 13 • 6 msgs), and "Session 27430958" (Jul 24 • 6 msgs). At the bottom of the sidebar are links for "About RIAPA-AI" and "Provide Feedback". The main content area features the title "RIAPA.ai" and the subtitle "AI-powered economic modeling". Below this, a prompt says "Type your own custom scenario below, or click an example to get started:". Three example scenarios are presented in cards: "El Niño Event" (describing agricultural and economic impacts), "Global Energy Shock" (describing the effects of a global energy crisis), and "Import Tariff Policy" (describing the effects of increasing import tariffs). At the bottom of the main area is a large text input field with the placeholder "Ask RIAPA", a "Resources" link, and a "Send" button.

riapa.ai

Create account:
**email +
password**

access code:
riapa-trial

