

# Micronutrient Action Policy Support

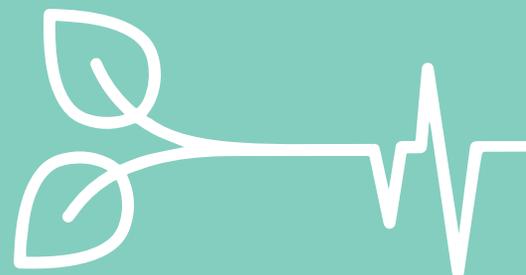
Developed by the University of Nottingham, London School of Hygiene & Tropical Medicine, University of California, Davis, British Geological Survey, International Food Policy Research Institute, Addis Ababa University and Lilongwe University of Agriculture and Natural Resources

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<https://micronutrient.support/>

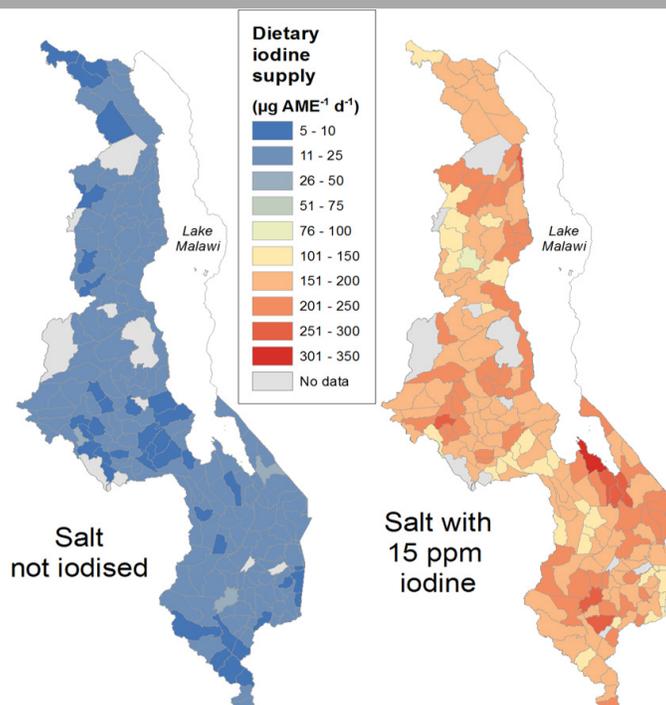


## Summary

The MAPS tool is in the early co-design phase with ongoing, iterative stakeholder and user engagement to inform tool design and ensure the tool will meet user needs. When complete, MAPS will be a web-hosted tool, communicating estimates of dietary micronutrient (MN) supplies and deficiency risks at national and sub-national scales in Africa. Through novel functionality, this tool will allow users to view and explore dietary MN supplies and deficiency risks at various spatial and temporal scales, in both data-rich and data-poor nations. The tool will draw on MN biomarker survey data where these are available, and dietary MN supply estimates derived from national-scale (Food Balance Sheets) or sub-national (Household Consumption and Expenditure Survey) data, presenting

the user with multiple perspectives on MN deficiency risks and highlighting where there are major data gaps. Baseline estimates of dietary MN supplies and deficiency risks in the user's country or region of interest can be taken forward in the tool to allow, for example, foresights of food system changes or estimates of cost-effectiveness of food system interventions, including food fortification and biofortification.

**Figure 1: Example visualization of dietary iodine supplies in Malawi with and without iodization of salt. AME=Adult Male Equivalent**





## Key Questions Addressed

The MAPS tool will provide information at national and (where data support) sub-national level to answer questions such as:

- What are current dietary MN supplies and risks of deficiency?
- How do MN deficiency risks vary by demographic group?
- What is the uncertainty associated with current predictions of micronutrient status?
- Is the prevalence of MN deficiencies likely to increase or decrease over the coming decades, under a business-as-usual scenario?
- What is the relative cost-effectiveness of existing and potential food system interventions for addressing MN deficiency risks?



## How does this help nutrition decision making?

Decision making in programmes and policies to alleviate MN deficiencies could be improved through better use of existing data. The MAPS tool will make existing data readily available to users in the Agriculture-Nutrition community. The projections and cost-effectiveness components will help the user ask various ‘what if’ questions, helping them explore future scenarios and intervention options. Through appropriate communication of uncertainty, users will see where data are sufficient to inform a decision and where investment is required to improve the availability or quality of data.



## What are the data needs?

The MAPS tool will be pre-loaded with existing national micronutrient survey data and estimates of dietary micronutrient supplies, derived from national-level Food Balance Sheets and Household Consumption and Expenditure Surveys combined with Food Composition Tables (at various levels of disaggregation depending on the country/region). Thus, entry-level users will require minimal input data for any geographical setting. Advanced users can bring their own data and load these into the tool. R scripts and guidance for processing and integrating these data will be available.



## What technical resources are needed to implement this tool?

The MAPS tool will be web-hosted and users will need a PC or mobile device with an internet connection. Advanced users may need a working knowledge of R, depending on their use of MAPS.



## How long does it take?

The MAPS tool aims to make existing data easily accessible to users within minutes. Users will need to familiarise themselves with the MAPS tool website and enter some basic information, e.g. on their geographical domain and micronutrient(s) of interest. Data will be presented in map and table format, ready for interpretation and use. Maps and data tables will be accompanied by information text boxes and links to more information that help the user to interpret the data and understand potential limitations.

Advanced users who bring their own data and/or adapt R scripts may need weeks or months to complete their tasks, depending on their complexity.



## Strengths and limitations?

### Strengths:

- Low barrier to access for entry-level users
- Combined biomarker and dietary supply estimates providing rounded perspectives on population micronutrient status
- Ability to provide sub-national and spatially disaggregated estimates of micronutrient supplies and deficiencies
- Appropriate communication of uncertainties in supply/deficiency predictions, highlighting where investment in data collection and surveillance is required
- Integration of comparative estimates of effectiveness and cost-effectiveness of interventions aimed at decreasing the risk of MN deficiencies

### Limitations:

- Subnational estimates of micronutrient status will not be possible in many countries due to data limitations

Learn more at:

<https://www.nyas.org/NMC>

