

fraym

**Emerging Opportunities for Smallholder
Tobacco Farmers**

5 December 2018

Outline

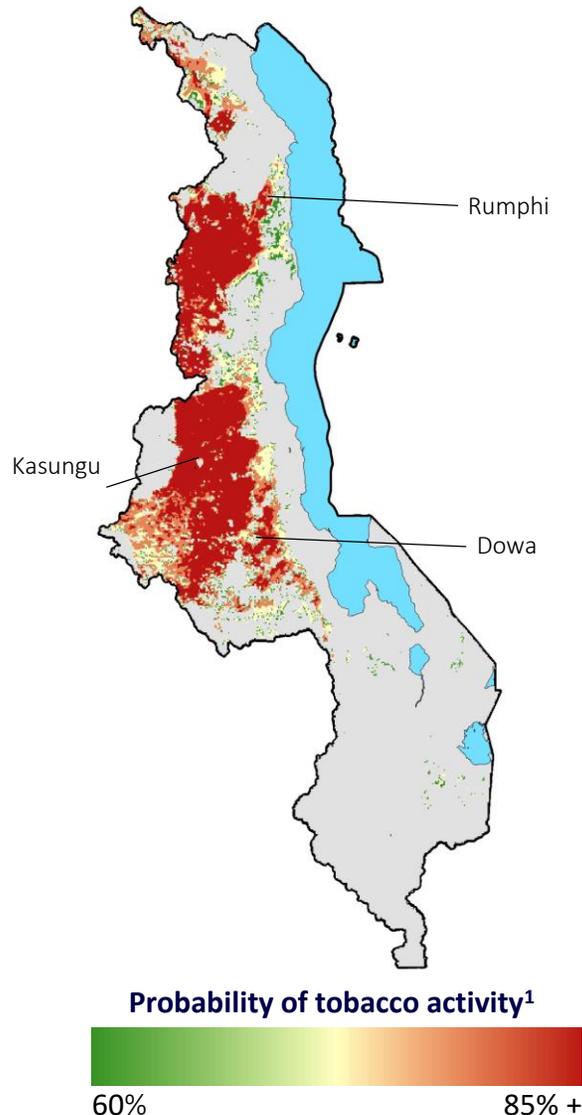
- I. **Understand current patterns**
- II. **Identify diversification opportunities**
- III. **Work toward inclusive business models**

**What do we
know about
tobacco
farmers
today?**



CURRENT PATTERNS || TOBACCO-FARMING HOUSEHOLDS

The 5 percent of households engaged in tobacco farming share many challenges with other agricultural households. They also tend to be more diversified, connected, and exposed.



Shared Challenges



Limited access to reliable markets

Few rural areas with tobacco activity have reliable access to agricultural markets.



Limited food security and diet diversity

Only 1 in 4 tobacco-farming households has a diverse diet, and 3 in 4 are food insecure.

Key Differences



Male decision-makers

Significantly more likely than other agricultural households to have a male household head and crop decision-maker.



More access to small assets and financial services

Higher mobile phone, bicycle, and bank account ownership.



Greater exposure to market shocks

40% affected by high input costs and 75% affected by low output prices, higher than other agricultural households.

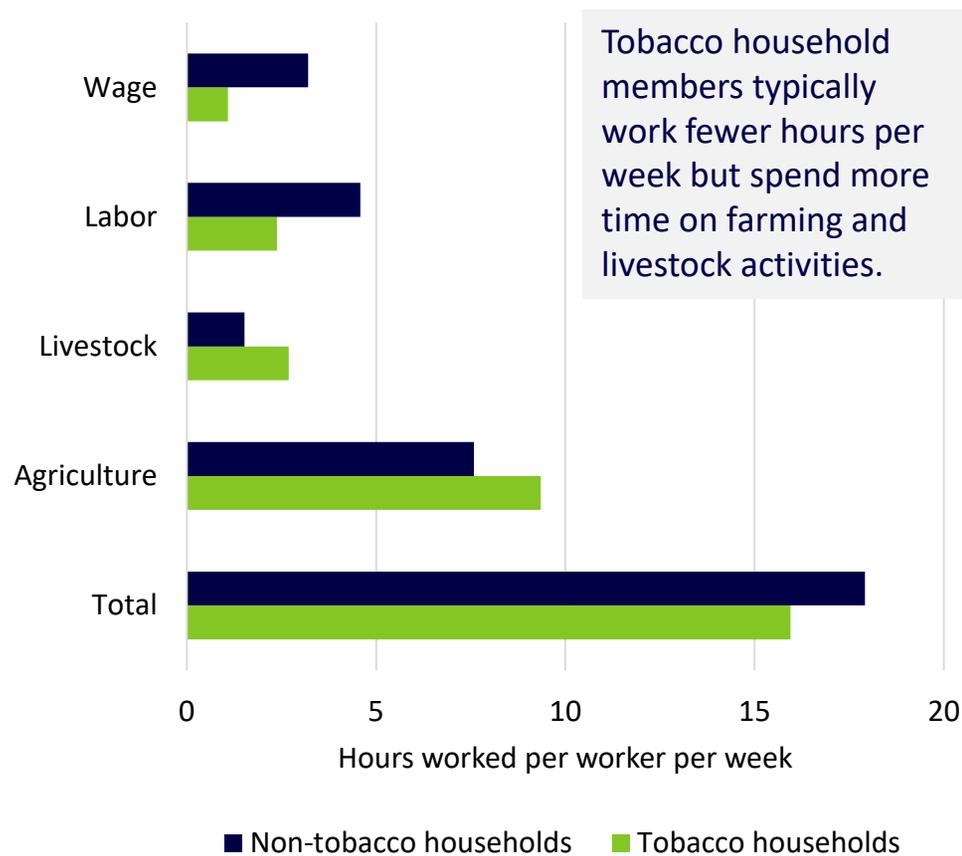
Note 1: 1 km x 1 km grids show the estimated probability of tobacco being farmed in the area. Areas with a probability of tobacco farming less than 60% are shown in gray. Water bodies are shown in blue.

Source: Fraym

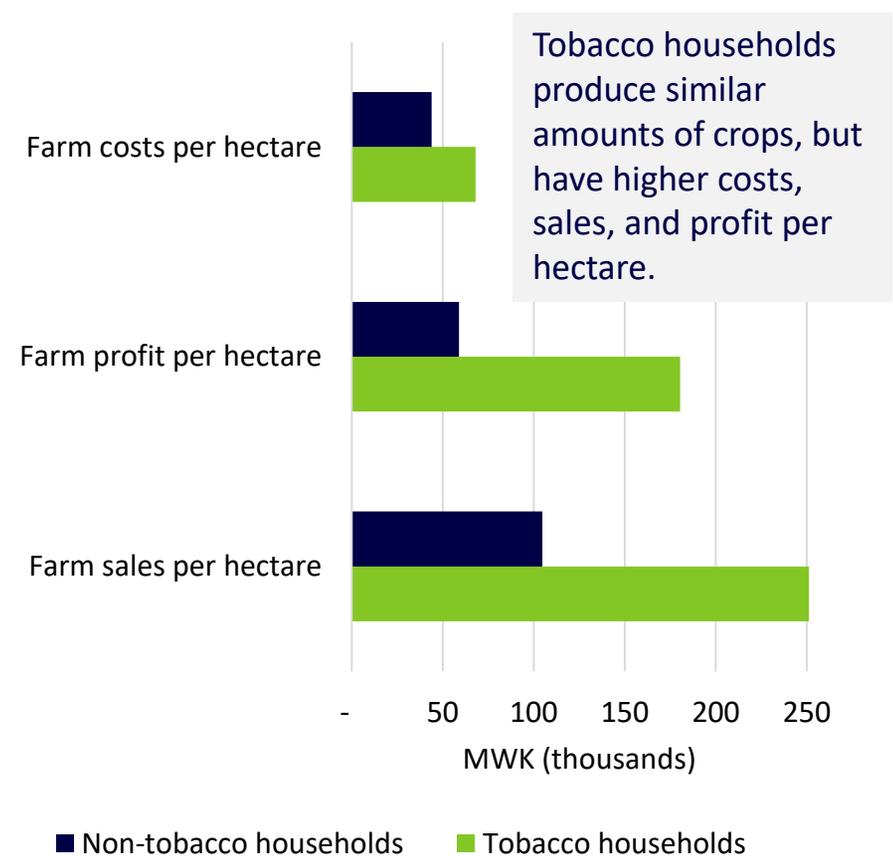
CURRENT PATTERNS || LABOR AND PRODUCTION

Tobacco households have more diversification through livestock and crop variety. Per hectare costs, sales, and profits are significantly higher than other households.

Hours Worked¹



Costs, Sales, and Spending²



Note 1: Data on labor comes from a seven day recall of the number of hours worked in the past week. Statistics above do not include individuals who reported working zero hours in the past seven days. Child labor is defined as any person, aged 5-17, who reported working some amount of time in the last seven days.

Note 2: Data on farm sales and profits only include households that are engaged in agricultural activities and made sales. Cost data is only for households that had costs. Farm costs are defined as any cost associated with farming, and includes seeds, inputs, labor, and transportation.

Source: Fraym



**Where are there
opportunities for
diversification?**



DIVERSIFICATION OPPORTUNITIES || MARKET-FACING CROPS

Geographic viability, revenue potential, and ease of transition are crucial factors for identifying promising alternative cash crops to tobacco.

1

Geographic viability: Groundnut, soyabean, beans, sweet potato, and sunflower are currently grown in tobacco areas.

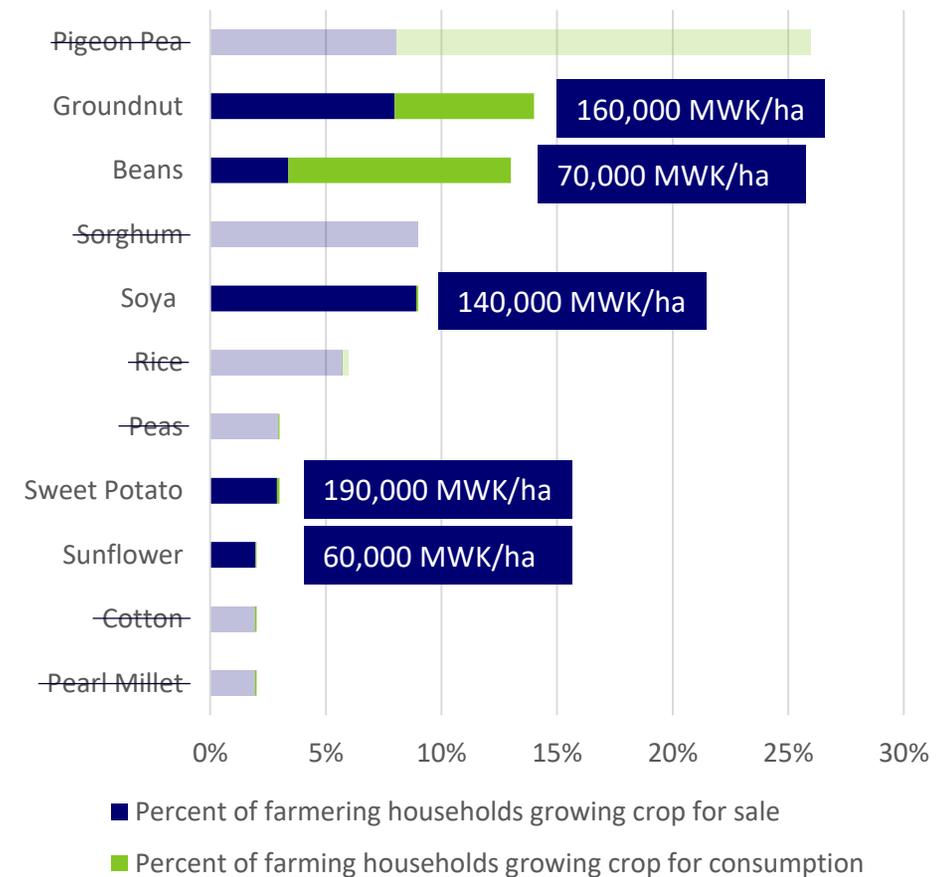
2

Revenue potential: Tobacco crops bring in an average of 600,000 MWK in sales per hectare planted. This is significantly higher than any other market-facing crop.

3

Ease of transition: 20% of tobacco farming households are currently growing groundnut, beans, and/or soya. Of these crops, groundnut and soya have the highest per hectare sales.

Non-tobacco market-facing crops¹

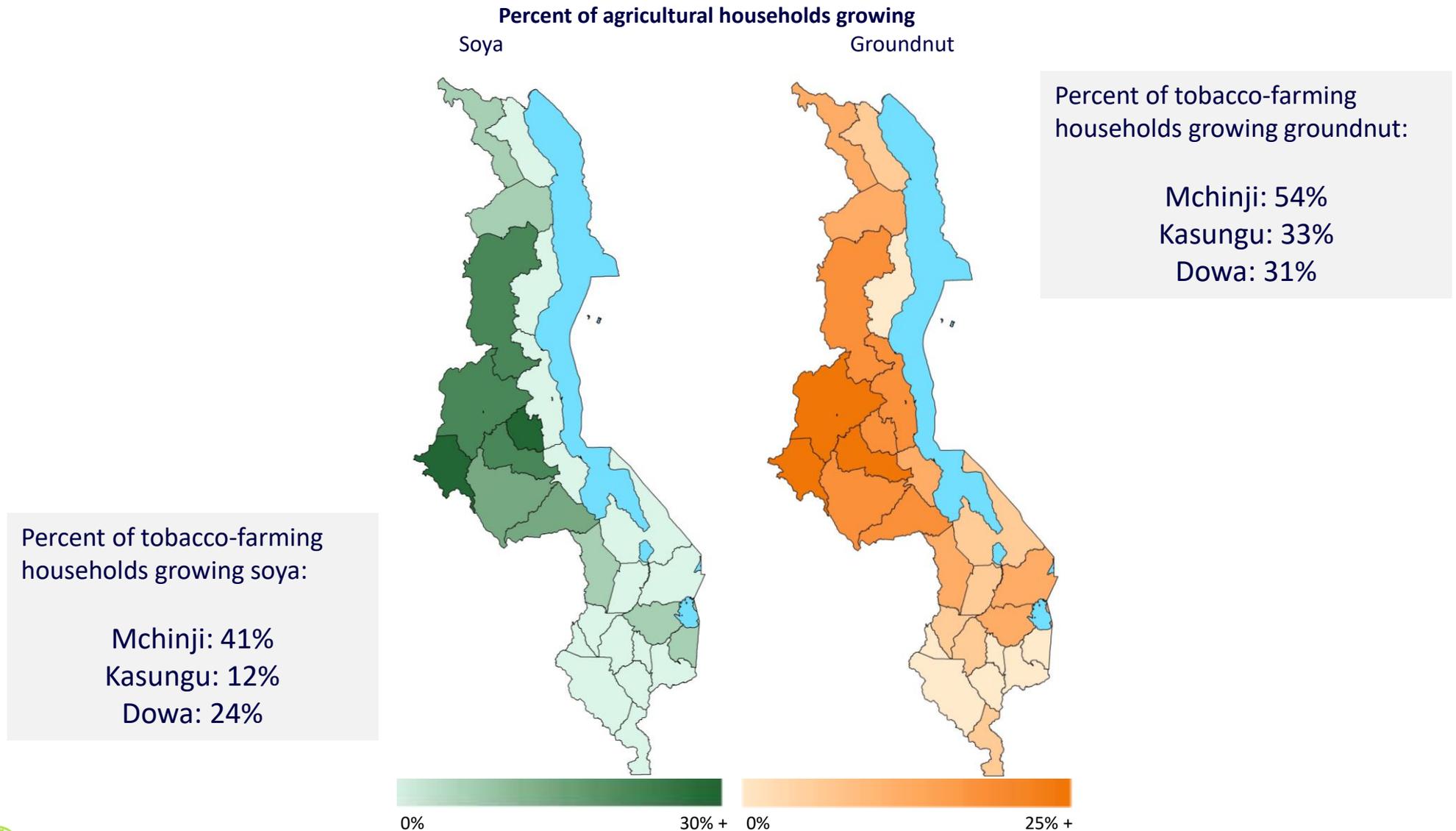


Note 1: Crop categories are not mutually exclusive. A household can grow multiple crops. Several crops were removed due to small sample size, such as sugarcane, paprika, onion, and tomato. A household is considered as growing and selling a crop if they responded yes to selling at least some of their harvested crop.

Source: Fraym

DIVERSIFICATION OPPORTUNITIES || CURRENT STATUS

Soya and groundnut appear particularly well-suited for the central tobacco-growing area.



**How can we work
toward inclusive
business models?**

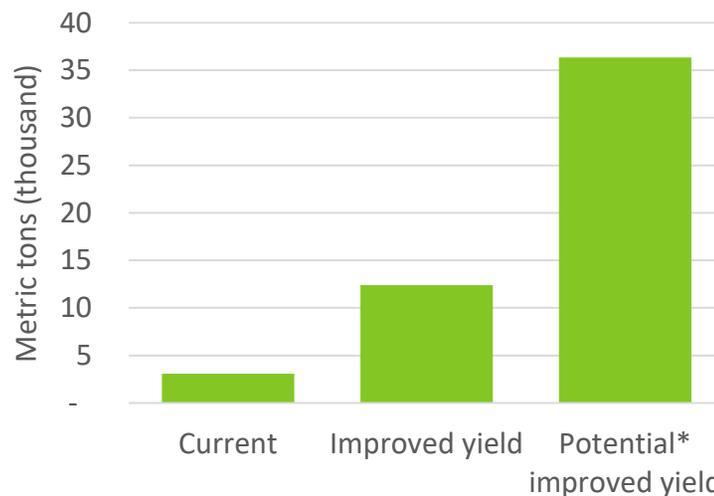


INCLUSIVE BUSINESS MODELS || SOYA CASE STUDY

With improved yield, soya production by smallholder tobacco farmers in three central districts could grow to over 12,000 metric tons under current land use.



Estimated soya production by smallholder tobacco farmers in Mchinji, Dowa, and Kasungu



*Potential assuming a 50% reallocation of tobacco land to soyabean

Farmers earn 550,000 MWK per ha of tobacco and 125,000 MWK per ha of soya in these districts.

With new seed varieties, extension services, and market facilitation to ensure a stable price, farmer earnings could reach 375,000 MWK per ha of soya. With lower per hectare costs than tobacco, this may be a competitive income opportunity.

Note 1: Production is estimated using population data in combination with estimations of average yield and plot size from survey data in the three districts. MT refers to metric tons.

Note 2: Improved yield potentials for Kasungu district from the Feed the Future Soyabean Innovation Lab trials.

Source: Fraym.

In Mchinji, Dowa and Kasungu districts,

- Smallholder tobacco farmers currently produce around **3,000 MT¹** of soya, with an average yield of **0.6-0.8 ton/ha**.

With support for agricultural transformation that helps to improve yields² to around **2 tons/ha**,

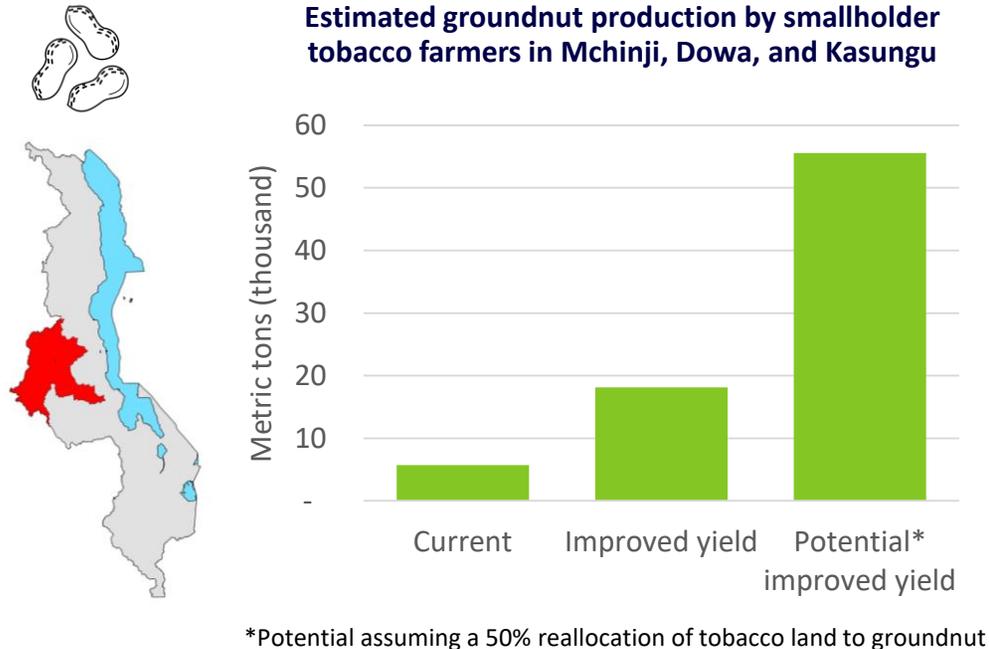
- An **additional 9,000 - 12,000 MT** of soya could be produced in these districts, assuming the same land use for smallholder tobacco farmers.

If demonstrated viability under improved yield facilitates a transition of **50%** of smallholder tobacco land in these districts to soya,

- Around **35,000 MT** of additional soya could be produced.

INCLUSIVE BUSINESS MODELS || GROUNDNUT CASE STUDY

With improved groundnut yield, smallholder tobacco farmers in these districts could produce over 18,000 metric tons under current land use.



Farmers earn 550,000 MWK per ha of tobacco and 115,000 MWK per ha of groundnut in these districts.

With new seed varieties, extension services, and market facilitation to ensure a stable price, farmer earnings could reach 265,000 MWK per ha of groundnut. With lower per hectare costs than tobacco, this may be a competitive income opportunity.

In Mchinji, Dowa and Kasungu districts,

- Smallholder tobacco farmers currently produce around **6,000 MT¹** of groundnut, with an average yield of **1.2-1.4 ton/ha**.

With support for agricultural transformation that helps to improve yields to around **3 tons/ha**,

- An estimated **12,000 – 14,000 MT** of additional groundnut could be produced in these districts, assuming land use remains the same.

After demonstrating viability, if tobacco farmers decide to use 50% of tobacco land for groundnut,

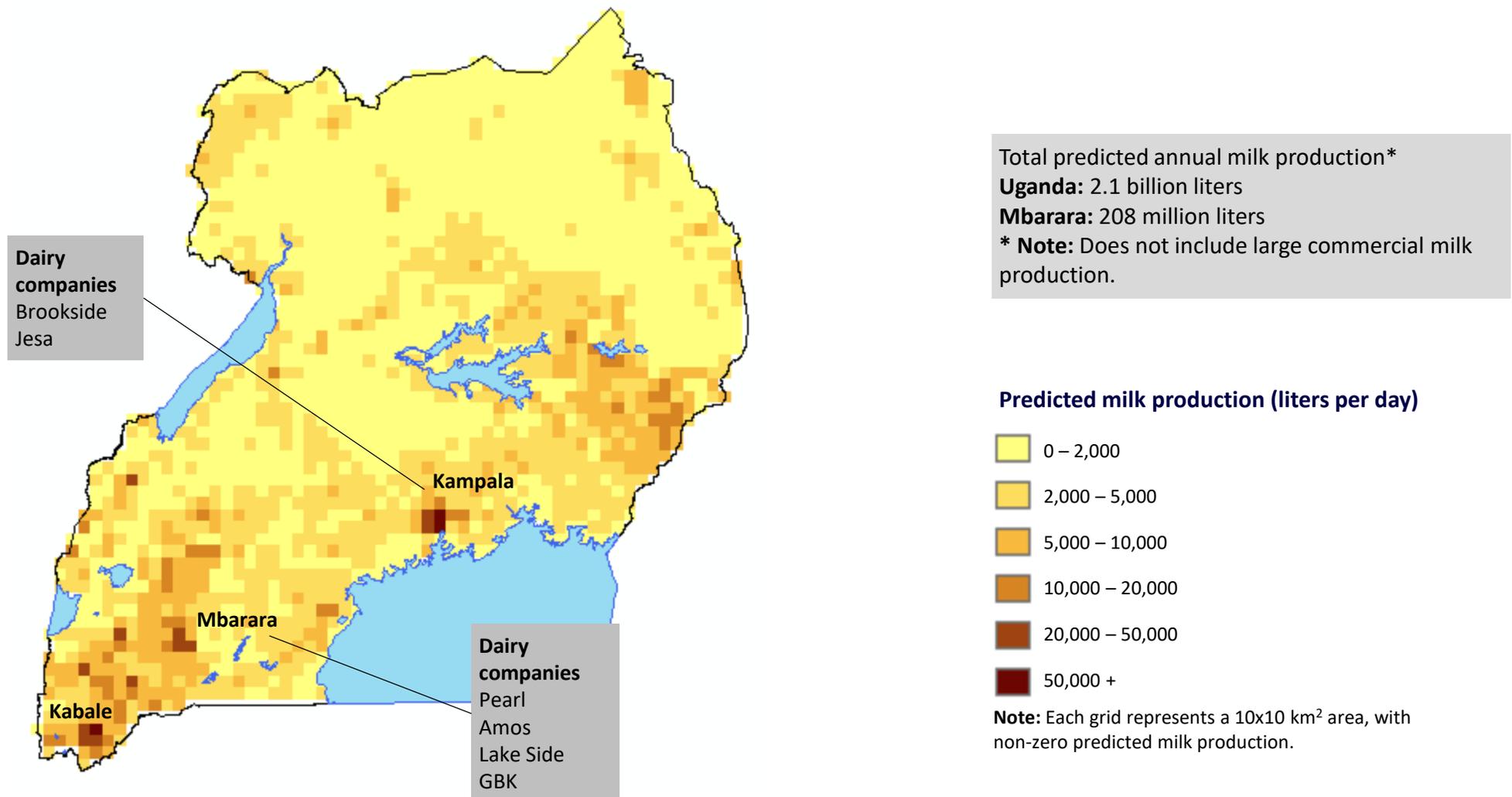
- Over **50,000 MT** of additional groundnut could be produced in these districts.

Note 1: Production is estimated using population data in combination with estimations of average yield and plot size from survey data in the three districts.

Source: Fraym.

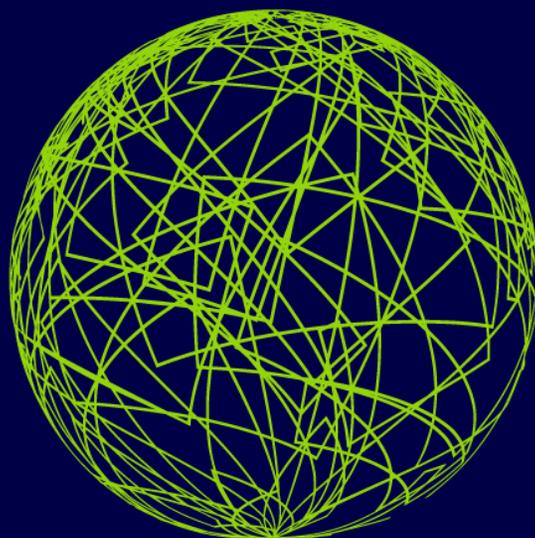
INCLUSIVE BUSINESS MODELS || MILK PRODUCTION IN UGANDA

To drive impact by identifying opportunities for innovative supply chains, Fraym predicted milk production across Uganda. Similar analysis of crop concentrations can provide key insight for alternative crop production in Malawi.



Note: The greater Kampala region shows a high level of milk production as the methodology to estimate milk production is a function of population.

Source: Fraym



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