

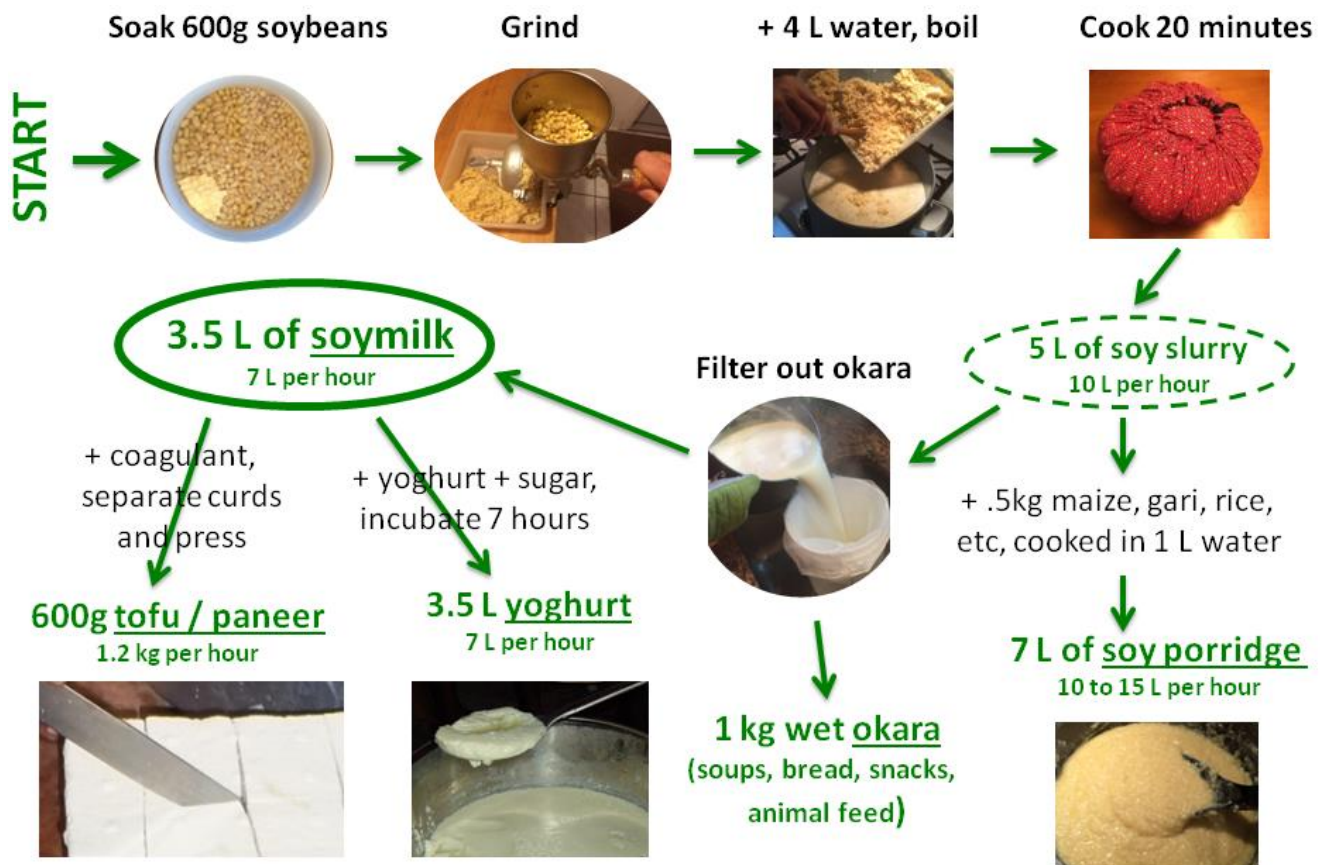
# SoyaKit: Home Business in a Box

## *Home Soyfoods Production: Soymilk, Yogurt, Porridge, Tofu/Paneer + Improved nutrition in rural and urban settings, including schools etc.*

This highly scalable business and nutrition approach is compelling for end-users due to its low capital cost, ease and economy of operation, profitability and positive health impact. Un-subsidized cost of the SoyaKit to the end-user is \$250 or less (landed cost in Africa / Asia).

The practice of artisanal home production of soymilk, yoghurt and related foods has been applied and studied in various forms in Uganda and South Africa. However, these artisanal initiatives are limited to very small output (under 2 L/hr), primarily for in-home consumption. They also involve laborious manual stone grinding and other production and quality challenges.

The recently developed SoyaKit enables production of 7 L / hr of soymilk or yoghurt, 1 kg / hr of tofu and more than 10 L / hr of soy porridge (the latter using 100% of the soybean plus a local starch component such as maize or sorghum flour or meal). It does not require electricity, and uses heat-retention cooking to reduce fuel cost, smoke etc. by more than 50%. Profit potential of \$2.00 per hour of production is based on typical input costs and highly competitive pricing of the home-made products - far below the cost of animal protein products. With only several hours of daily production, this level of income substantially improves the living standard of a typical household, as well as improving the health of the (working poor) soyfood consumers. This output capacity is also ideal for small schools, clinics and other institutions. Three hours of work, by one or two people, can provide a serving for more than 100 people. A group of three kits could produce 20+ L / hr.



**The cost of the soyfoods products, including labour, is less than 1 cent per gram of whole protein. For example, a 200 ml serving of soymilk or yoghurt, with 6 g of protein would cost 4 cents to make.** This is less than half the cost of eggs (10 cents or more for 5g protein) or dairy milk. Beyond the value for soymilk and yogurt production, all the kit contents have extended utility in a home or home business. Most importantly, the heat retention cooking bag can be used for most other cooking, thereby saving at least 50% in fuel costs and environmental impact, and the corona mill/grinder can be used for nuts, cereals and grains, etc. to make butters, pastes or coarse flours. Further reductions in fuel usage are possible with options to be considered on a local supply basis, such as energy-efficient stoves (a.k.a. smokeless chulas) and solar cookers, to eliminate fuel requirement entirely.



The SoyaKit contains:

- Heat retention cooking bag
- Food-grade plastic pail
- Mixing spoon & Tofu ladle
- Weigh scale
- Good quality 8 liter SS cook pot
- Standard corona mill / grinder
- Large plastic bin
- Lined rubber gloves
- 3 Nylon filter bags and cheese cloth
- Graphic manual
- Measuring cup & kitchen brush
- Thermometer
- Colander
- Wooden dowel

All packed in a large plastic bin - useful also for bean storage or as wash tub etc.

**Malnutrition  
Matters**

FOOD TECHNOLOGY SOLUTIONS

Partners are currently being sought to scale up the SoyaKit program.

[www.malnutrition.org](http://www.malnutrition.org)

[matters@malnutrition.org](mailto:matters@malnutrition.org)