



Repurposing agriculture's public budget to accelerate transformation in Ethiopia

Background

Agricultural transformation has been ongoing for decades in Ethiopia where the agenda to improve nutrition has gained momentum. As far as policy intention is concerned, agricultural transformation and nutrition are well aligned, and there has been progress in both fronts. However, agriculture is still predominantly cereal based and relies on household-based and subsistence-oriented systems; rural off-farm employment creation remains below expected targets; productivity growth is still below its potential, and millions of Ethiopians face hunger, food insecurity and malnutrition.

Not only will Ethiopia need to accelerate agricultural transformation, but it will also need to expand the supply of the nutritious (and safe) foods that constitute healthy diets. This will require significant investment. In the current context, however, where economic recovery is not as strong as expected, and the COVID-19 pandemic, the war in Ukraine and increasing climate adversities keep on disrupting agrifood systems, private investors may feel more risk averse than usual to invest in agriculture. For Ethiopia's government, it will not be easy to step up the public budget needed to support agriculture in such a context and create the kind of environment that enables private investment. Yet, Ethiopia's government could achieve better development outcomes if it were to allocate the existing budget optimally.

Repurposing public budget optimally: What does it entail?

It is possible to accelerate agricultural transformation and improve access to healthy diets coherently in Ethiopia if the public budget allocated for agriculture is repurposed optimally. Optimality – when given an objective function with policy objectives – refers to reaching a compromise in policymaking to reallocate the same budget in a unique way whereby it is not possible to improve in at least one policy objective without worsening any of the other policy objectives.

FAO has developed an innovative policy optimization tool to help policymakers address their most common problem:



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KEY MESSAGES

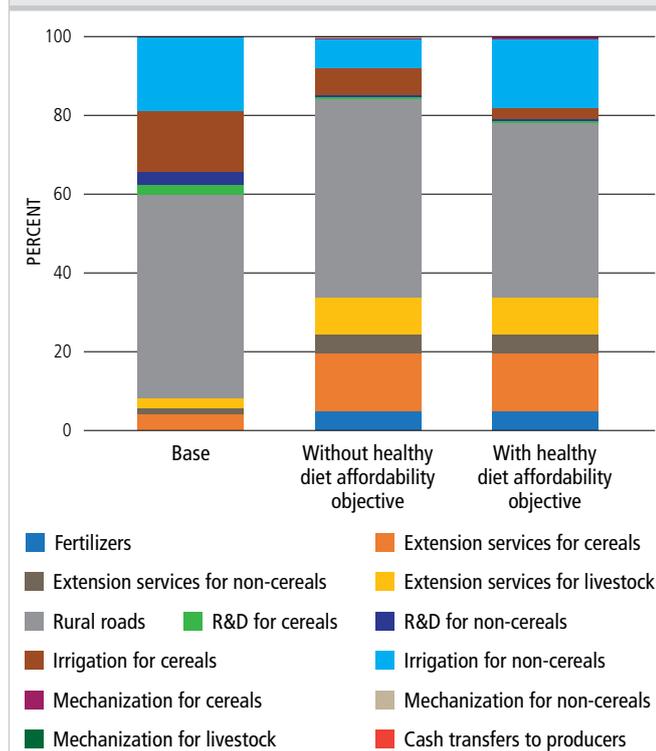
- ▶ Agricultural transformation and nutrition are well aligned in terms of policy intention.
- ▶ Implementing these agendas coherently and faster requires optimal budget allocations.
- ▶ Optimal budget support to agricultural transformation reduces the cost of healthy diets.

seeking multiple objectives that can be conflicting under a budget constraint. Applied in the context of Ethiopia, this tool shows how agricultural transformation objectives can be simultaneously pursued while minimizing trade-offs if a compromise is reached through optimal policies. The tool considers three agricultural transformation policy objectives: maximizing agrifood GDP, maximizing off-farm rural employment and minimizing rural poverty. It also includes a fourth policy objective: minimizing the cost of the nutritious foods that form the least-cost healthy diet.

Consider the following two repurposing scenarios whose results are expressed as deviations from a base scenario that starts in fiscal year 2015/2016 and runs through 2025. The base scenario represents business-as-usual as it just projects the current public budget composition for agriculture without policy changes. The two repurposing scenarios pursue the aforementioned three agricultural transformation objectives from 2022 to 2025. Only in one of these scenarios is the objective of minimizing the cost of the least-cost healthy diet (i.e. healthy diets' affordability objective) also pursued.

Improving on the four objectives will require prioritizing the budget differently (Figure 1). When only the three agricultural transformation objectives are pursued, for example, extension services in both cereals and livestock farming, as well as fertilizers – though to a lower extent – would receive a relatively larger budget allocation at the cost of other budget lines. When the healthy diets' affordability objective is added

FIGURE 1. Ethiopia's domestic budget allocation to agriculture by type of expenditure in 2025: projection of current budget vs scenarios of optimal budget reallocations

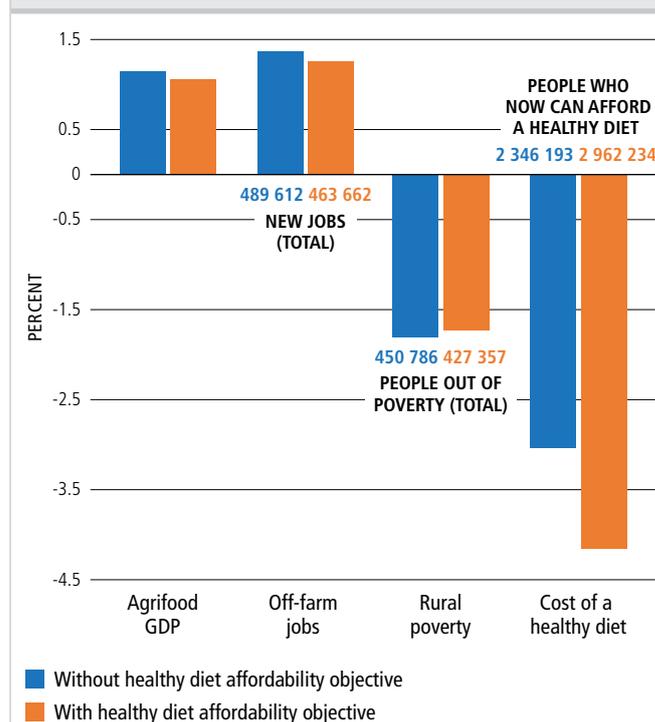


Source: Sánchez, M.V. & Cicowiez, M. 2022. *Repurposing agriculture's public budget to align healthy diets affordability and agricultural transformation objectives in Ethiopia*. Background paper for *The State of Food Security and Nutrition in the World 2022*. FAO Agricultural Development Economics Working Paper 22-04. Rome, FAO.

to the policymaking problem, it becomes optimal to step up expenditures in irrigation, for example, notably because there will be more production and consumption of nutritious foods, such as fruits and vegetables, which are relatively more water intensive. In this case, irrigation expenditure targets specific commodities (i.e. nutritious ones), whereas investing in rural roads has a positive impact on all commodities.

Because the budget reallocation is optimal, there is improvement on all four objectives (relative to the base), indicating that the current budget allocation is inefficient; however, there are some potential trade-offs to consider (Figure 2). When the affordability of healthy diets' objective is added to the policymaking problem, the cost of the least-cost healthy diet falls the most, and 2 962 234 more people (vs 2 346 193 when the fourth objective is not added) can now afford the least-cost healthy diet. This is the result of optimizing the budget differently to support the production of the nutritious

FIGURE 2. Indicators reflecting improvement in development objectives as a result of an optimal budget allocation to agriculture in Ethiopia, 2025 (percent and absolute deviation from base scenario)



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foods making up the least-cost healthy diet. However, this is at the cost of not accelerating agricultural transformation as much as possible, because the budget is now biased towards supporting the production of the selected nutritious foods that make up the least-cost healthy diet. As a result, the opportunity to additionally create 25 950 jobs and get 23 429 people out of poverty is foregone.

Policy implications

Supporting agricultural transformation through an optimal public budget is found to be quite favourable to reducing the cost of healthy diets in Ethiopia. Policymakers in low-income countries should rethink how their budgets are allocated and find optimal ways to accelerate agricultural transformation while also supporting healthy diets along the lines suggested here. Of course, the optimal budget mix will keep on changing over time as these countries develop.