**Going micro:**

**Analysing SAM multipliers for the dairy chain on Reunion Island**

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**BACKGROUND**
- Analysis of the importance of dairy chain on Reunion Island
- Highly organised supply chain for dairy products
- Aims of the study are to
  - Estimate multiplier effects of increased production
  - Study the importance of subsidies for sustainability of milk production

**PROBLEM STATEMENT**
- High dependency on imports
- Expected rise in transportation costs, inflating input costs
- High unemployment rates
- Volcanic island & high population pressure: access of farm land
- Highly subsidized agricultural sector
  - future perspectives?

**STUDY AREA**
- Island in the Indian Ocean
- One of the French overseas departments
- Outermost region for the EU
- Population: almost 800,000

**MILK CHAIN**
- Dairy production started in the early 60s
- Highly organised around cooperatives
  - Sicalait for collection
  - Cilam main processor of local milk
- Subsidies from EU and French government:
  - Direct support of the milk price
  - Clearing pastures on hilly terrains
  - Investment in infrastructure
  - Production increase over the last years
  - Need for productivity increase
- Demand for local dairy due to increased transport costs

**METHODOLOGY**
- Social Accounting Matrix
- With disaggregated accounts for actors in the dairy chain
- Data from the Statistical Institute INSEE and key informants of the dairy chain
- Calculation of the multipliers by inverting the SAM
- Simulating effects of exogenous shocks

**RESULTS OF SIMULATION WITH SAM MULTIPLIERS**
- Increased demand (through increasing export) by 21 million euro
  - Increased value of production activities by 87 million euro
  - Increased value of production in local dairy chain by 35 million euro
  - Small benefits for milk farms
- Direct support of milk price by 0.085 euro per litre + extra subsidies to the farm and the cooperative
- Removal of farmer subsidies
  - Production value decreases by 11 million euro
- Removal of subsidies in the dairy chain
  - Production value decreases by 16.5 million euro

**CONCLUSIONS**
- SAM is appropriate to model a small economy such as Reunion Island
- Possible to disaggregate a sector to analyse importance and multiplier effect
- Drives on large amounts of data
- Does not account for limits in production factors, price effects, and changes in technology
  - CGE model?
- Dairy sector on Reunion Island is important for the economy and employment
- Increased demand will increase economic activity and employment significantly
- Removal of support will have a strong effect on the sector and its future

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