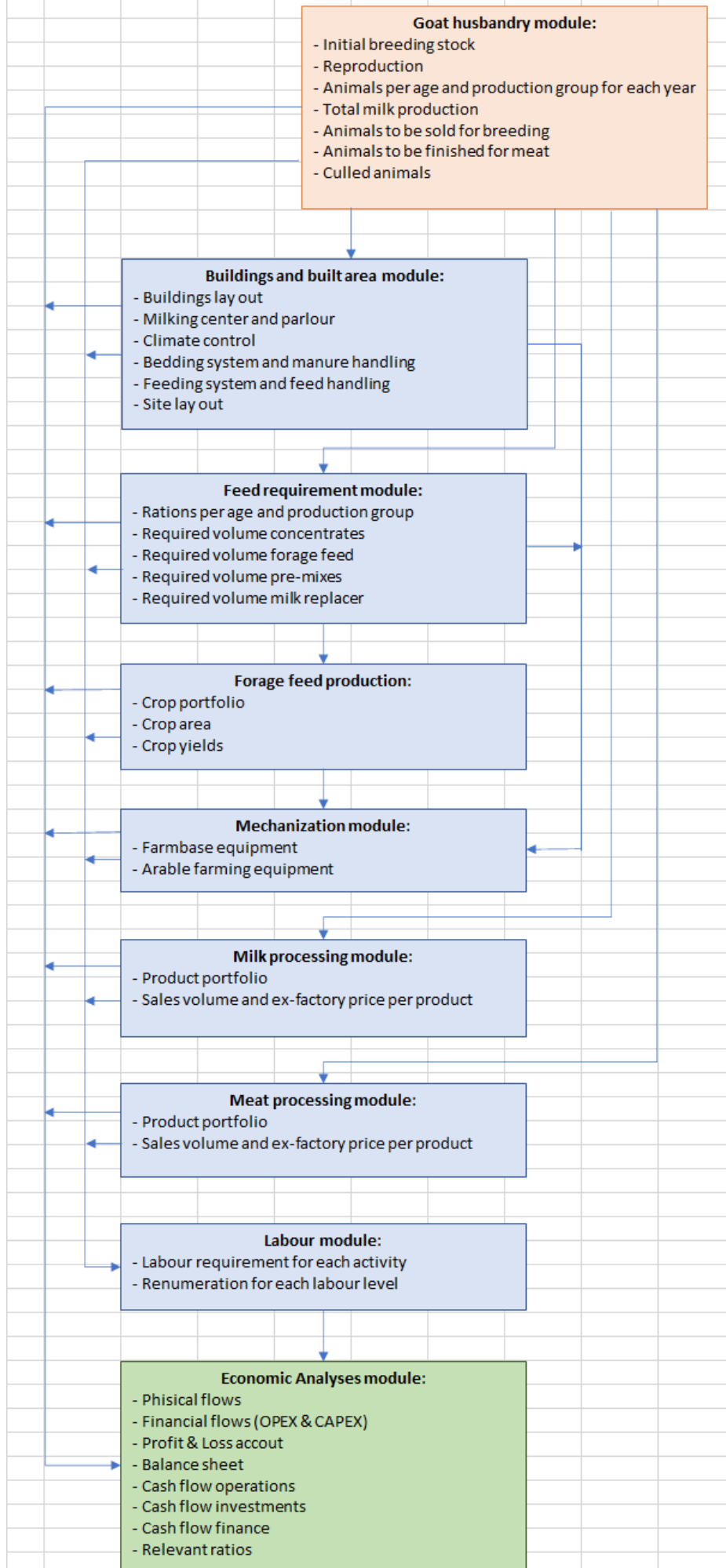


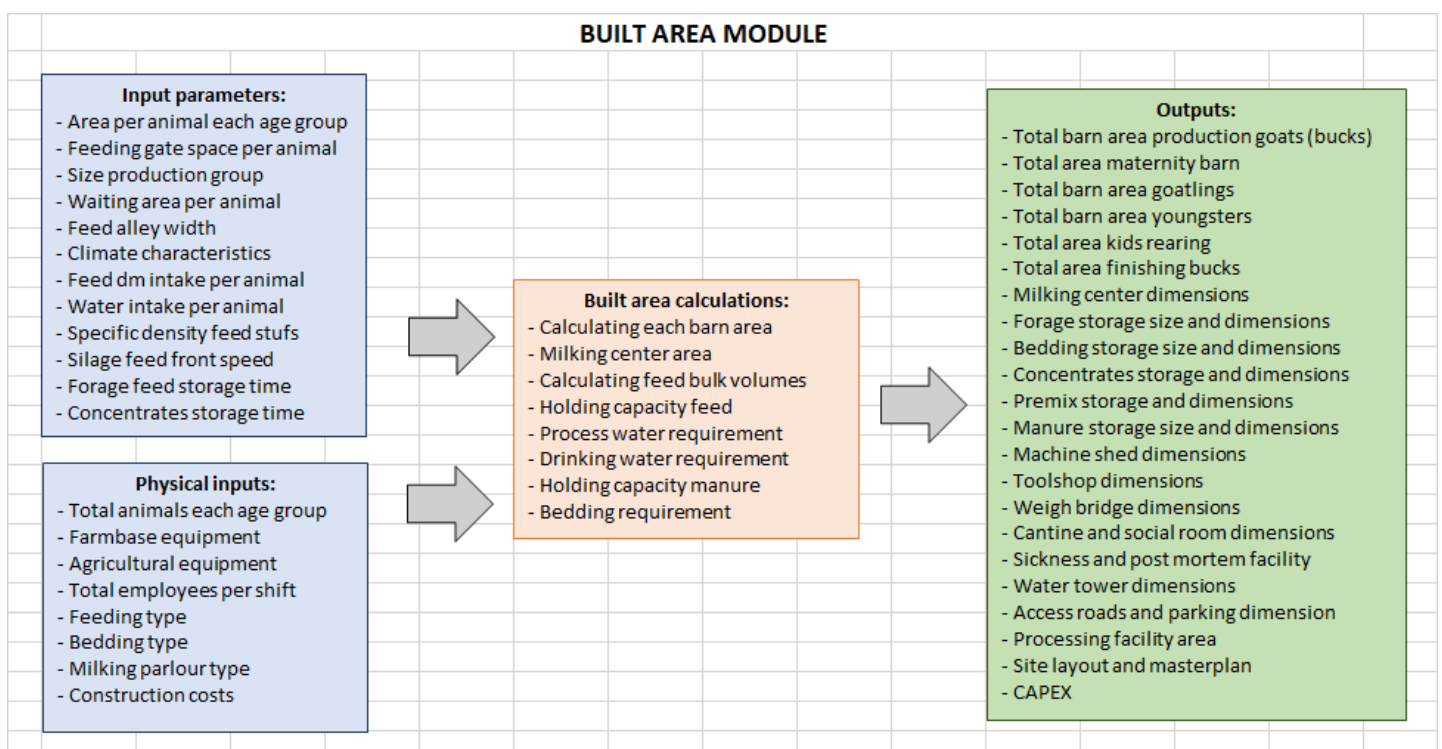
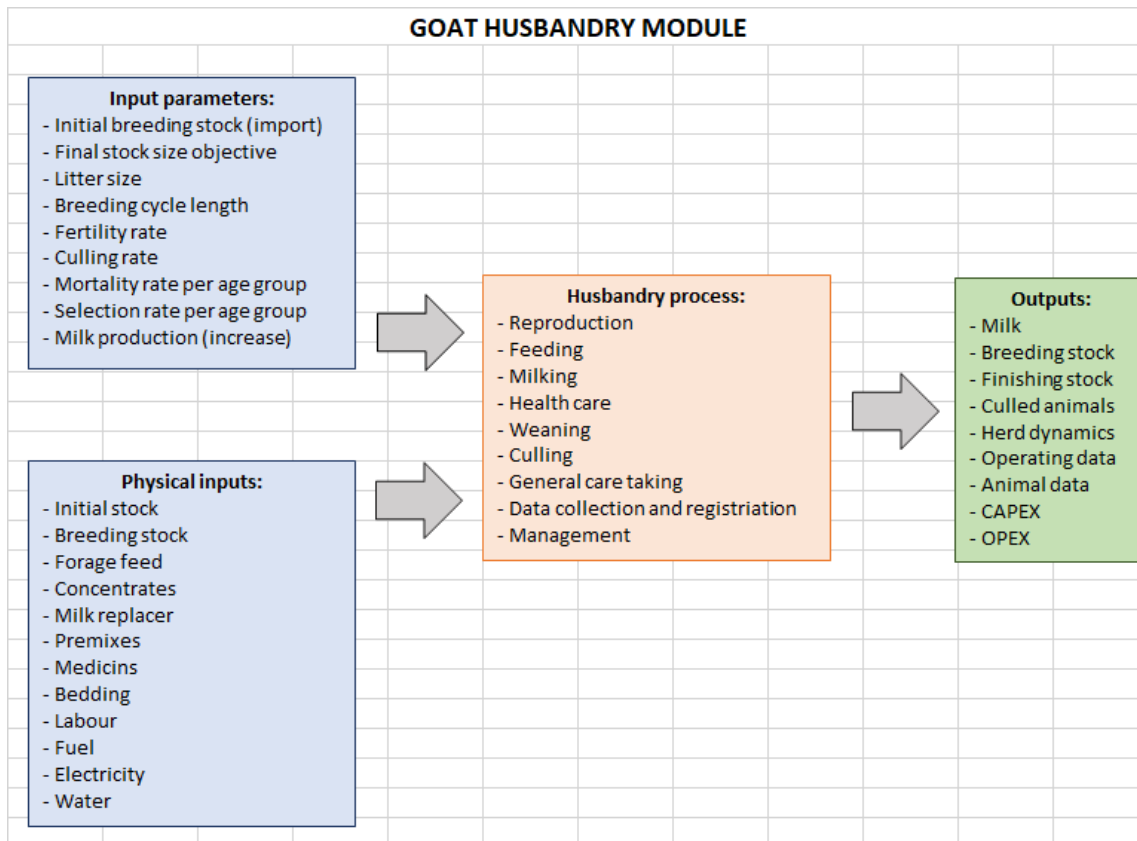


Description of FINMOD and its modules as used for (goat) dairy business planning

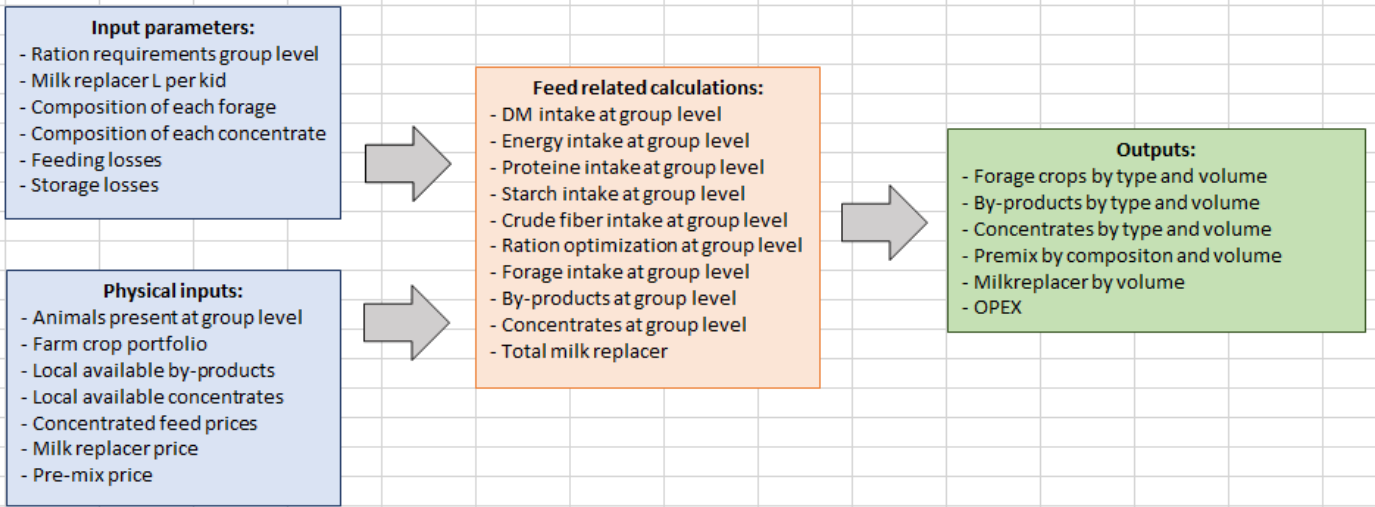
Agrix F&A Project Development, Deventer, The Netherlands, August 2019

**FINMOD MODULES
(DETERMINISTIC MODEL)**

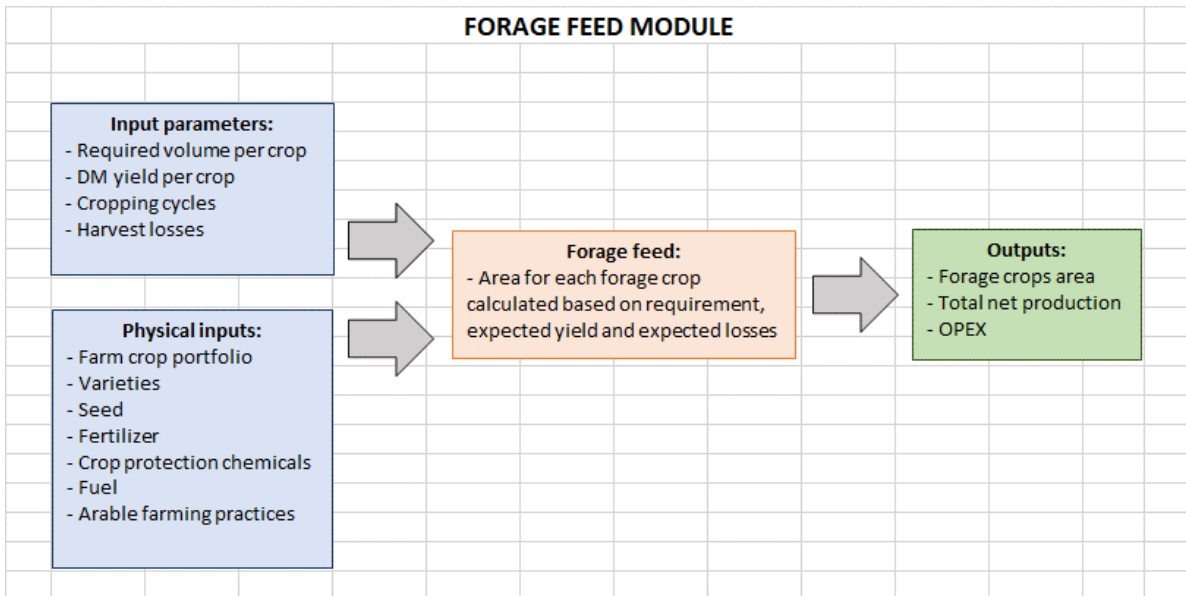




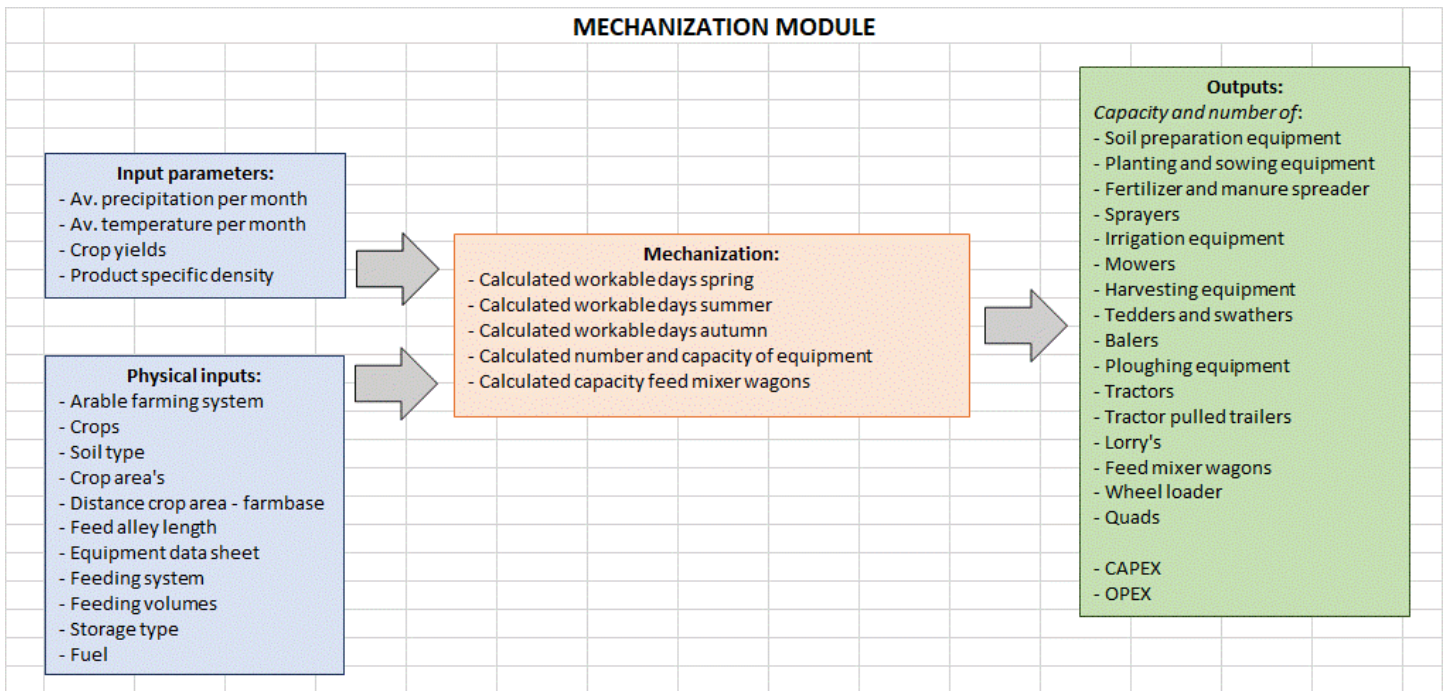
FEED REQUIREMENT MODULE



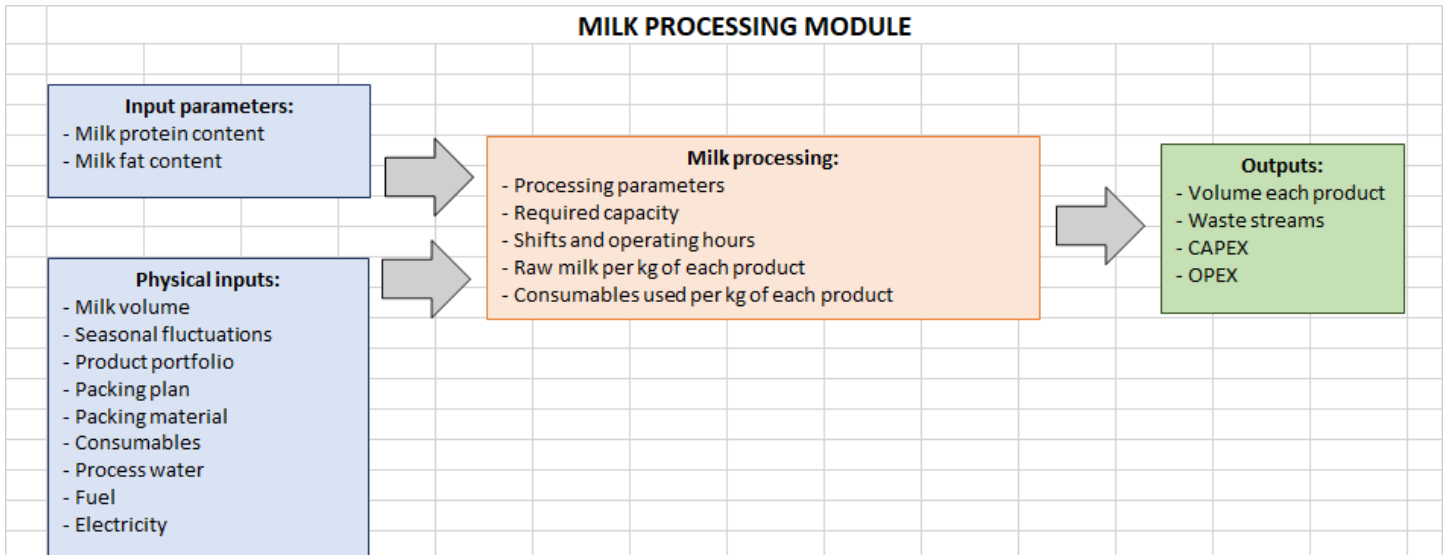
FORAGE FEED MODULE



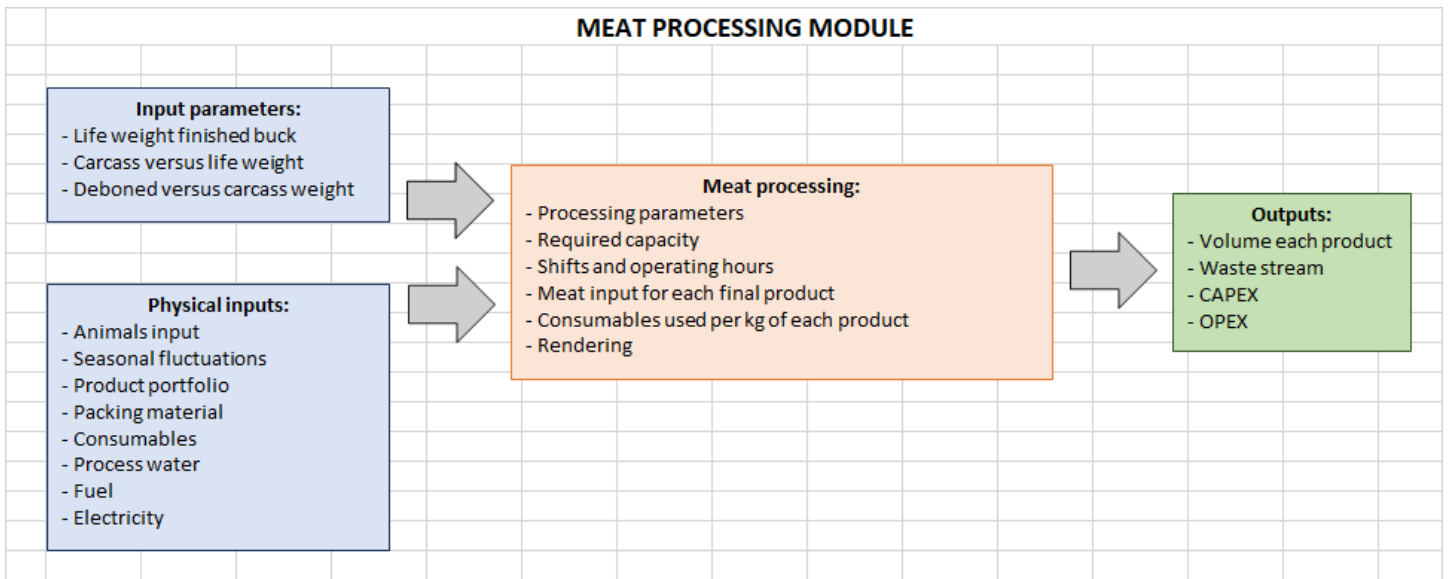
MECHANIZATION MODULE



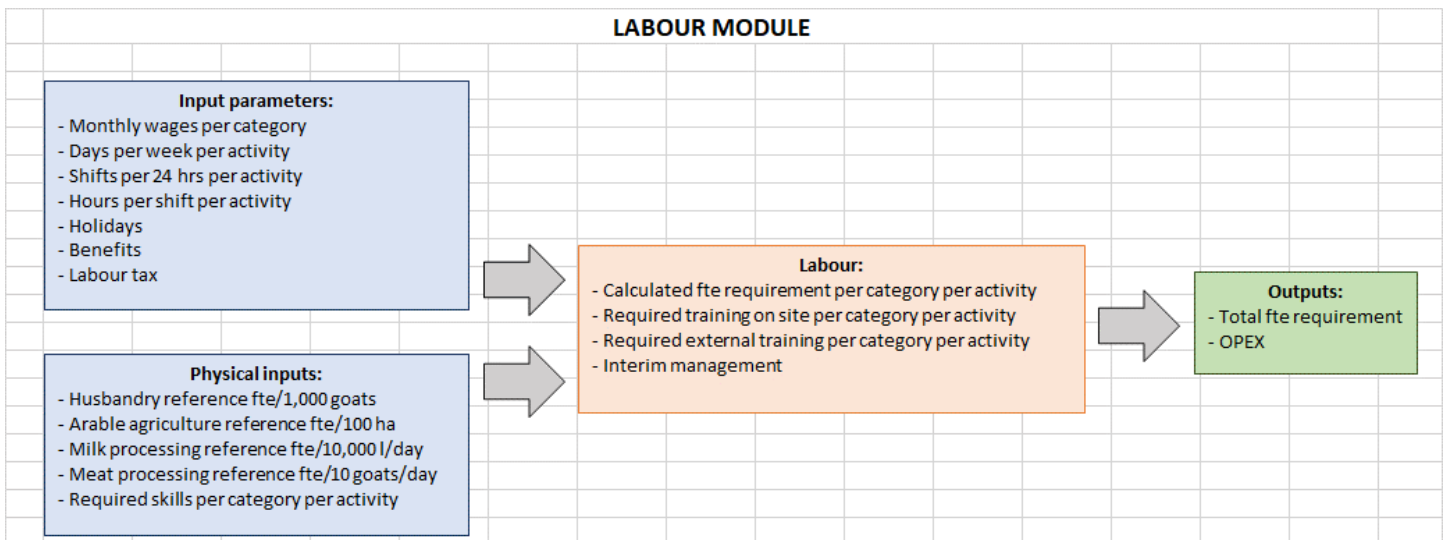
MILK PROCESSING MODULE



MEAT PROCESSING MODULE



LABOUR MODULE



ECONOMIC ANALYSES MODULE

- Input parameters:**
- Deprecion rate per asset type
 - Amortization rate
 - Maintenance rate per asset type
 - Insurance rate per asset type
 - Commercial interest rate S/T and L/T loans
 - Corporate agrifood tax
 - Import duties
 - Applicable discount rate (IRR/NPV)

- Physical inputs:**
- Operating data each activity
 - Price import goat and buck
 - Farmgate sale price 5m breeding goat
 - Internal farmgate milk price
 - Internal farmgate meat price
 - CAPEX per asset type
 - OPEX per activity
 - Ex-factory dairy product prices
 - Ex-factory meat prices
 - Days payable
 - Days receivable
 - Required solvency
 - Grant schemes
 - Dividend policy



- Economic and financial calculations:**
- CAPEX based on all assets total
 - OPEX based on operating data and other inputs
 - Working capital requirements calculation
 - Total gross and net revenue calculation
 - Capital structure
 - Discounted cashflows
 - Direct operating expenses calculation
 - Non-direct operating expenses calculation
 - Debt service calculation



- Outputs:**
- Total CAPEX
 - Total OPEX
 - 10 yr Profit & Loss
 - 10 yr Balance sheet
 - Operating cashflow
 - Investment cashflow
 - Financing cashflow
 - IRR
 - Payback time
 - NPV
 - Other ratio's
 - Financing options
 - Benchmark