Financial Support

Potential Sub-Sectors and Factors for Diversification in Agriculture and Agro-Processing Industry in Cambodia

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Outline

This Paper

- What I Do
  - Explore to identify key factors or sub-sectors in agriculture and agro-processing that the Agricultural and Rural Development Bank should focus on providing financial support.
- Main Research Question
  - What are the sub-sectors and factors in agriculture and agro-processing industry that the Agricultural and Rural Development Bank should support financially?

This Paper

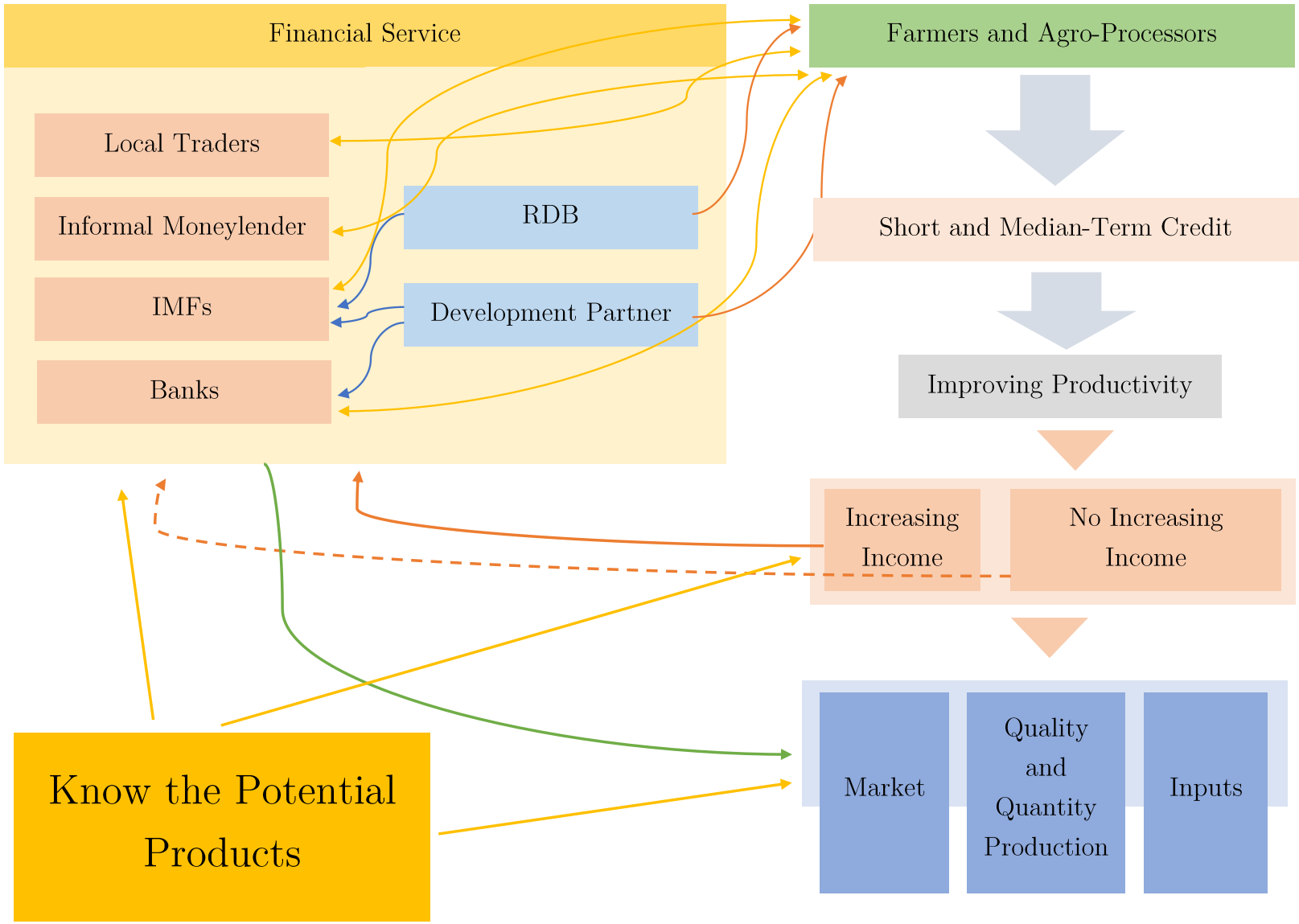
- Sub-Research Question:
  - What products of the agriculture and agro-processing industry have the potential to develop?
  - What are the essential factors to stimulate production in the agriculture and agro-processing industry sectors?
  - What are the critical factors in the agriculture and agro-processing industry that require financial support?
  - What types of policies are necessary for the Agricultural and Rural Development Bank to respond to sustainable development in agriculture and agro-processing industry?

Related Literature

- Financial Constraints and Difficult Access to Credit
  - Ovesen et al. (2012), Phlong, (2009), Sam (2019), Sothorn (2020)
- Public Banks (Poor Country) are Less Profitable and Efficient
  - Shen et al. (2014), Galindo and Micco (2004), Dinç, (2005), Porta and Shleifer (2000), Micco et al. (2007), Iannotta et al. (2007)
- Public Banks are Created to Achieve Political, Public and Socially Beneficial Objectives
  - Andrianova et al. (2012), Shen et al. (2014), Stiglitz (1994), Doh and Kim (2014), Kim et al. (2004)
- Economic Diversification
  - Garía et al. (2005, 2008), Revilla et al. (2015), Kilkenny and Nalbarte (2002), Jouida (2018), Blackman et al. (2017)

Conceptual Framework

Figure: Conceptual Framework



Model

- Leontief Model is a quantitative economic model
  - That quantifies the mutual interrelationships between industries in a nation's economy (Miller & Blair, 2009; Soto & Monterrey, 2008). $\Rightarrow$ Input = Output or Consumption = Production
  - The Matrix Equation:

$$AX + D = X \Rightarrow (I - A)X = D$$

$\triangleright$ The logical is required the inverse of $(I - A)$ to be non-negative and non-singular.

$$X = (I - A)^{-1}D$$

Where A: the input-output matrix, D: the final demand vector, X: the production level vector.

Data

- Panel Data: A time series between 2009 to 2019 with many cross-sectional units. See Dataset
  - We are losing many years of data on agricultural export products.
  - We lose many variables and many years of data on the use of technology in agriculture or manufacturing.
  - We do not have or do not know the number of product shares for a particular group. See Example
  - Many variables have different unit.
  - I have some concerns about the analysis data in the statistical software. $\Longrightarrow$ I just some understand the basic concept of Matlab.

    MATLAB allows matrix manipulations, plotting of functions and data, implementation of algorithms, creation of user interfaces, and interfacing with programs.

Next Step

- Write an administrative letter to MAFF and MoC when requesting a formal letter from FF.
- Write the O/I model code in Matlab and try to pilot outcome.
- Join UNCTAD Summer School: From the Transformation of Economics to Economic Transformation (Online) from August 16-23, 2020.
  - The summer school will be for me an expert mentor in I/O analysis.
- Draft Literature Review, Data, and Methodology Session.

THANK YOU!

Data

Back

	Producers as Consumers			Final Demand				
	Bananas	Chicken	Rice	Personal Consumption Expenditures	Gross Private Domestic Investment	Government Purchases	Net Exports	Total Output
Bananas	0	0	0	34	24	6	33	
Chicken	0	0	0	44	14	10	7	
Rice	0	0	0	54	32	22	30	
Employees	34	50	60	34	4	56	3	
Trans	10	12	20	5	4	5	13	
Owner & Capital	12	14	20	0	0	0	0	
Taxes	.10	.10	.10	.10	.10			
Total Input								