Agriculture:

A Means to an End

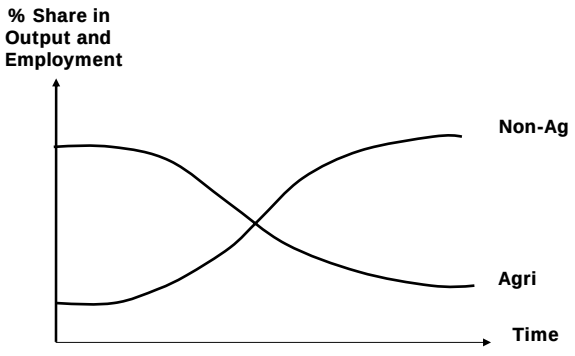
Not an End in Itself

- Today's forum is both a story telling and an advocacy exercise.
- Based on intuitive reasoning and lifetime experience as keen observer of development processes.
- The End/Objective: Economic Development (sustained equitable growth, low poverty incidence)
- Big Question: Will Agriculture remain an efficient and viable source of sustained growth?

Story Telling Part

Part A

Major Stylized Fact:



Implied Symbiosis: Role of Agriculture

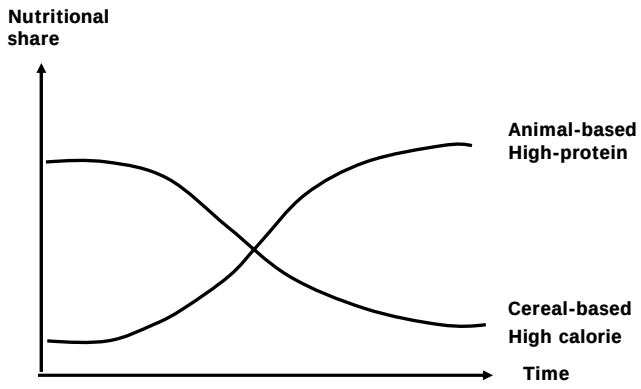
1. Factor Contribution
2. Output Contribution
3. Market Contribution
4. Forex Contribution

Table 1. Change in percent income from rice, other farming, and non-farm, selected villages in the Philippines and Thailand.

	Irrigated		Rainfed		Upland	
Country/Source	1985	1997	1985	1999	1985	1999
Philippines						
Rice	42	29	55	41	25	17
Other farming	18	6	26	10	42	22
Non-farm	10	65	19	49	33	61
Thailand	1987	1995	1987	1995	1987	1995
Suphan Buri						
Rice	56	21	53	17	83	27
Other farming	36	31	27	18	8	36
Non-farm	8	48	20	65	39	37
Khon Kaen						
Rice	46	8	28	8	30	19
Other farming	10	5	14	7	19	32
Non-farm	44	87	58	85	51	49

Source: Barker and Dawe, 2002.

Supporting Stylized Fact:



% Share of GDP (Current Prices)				
	1988	**1995**	**2000**	**2005**
Thailand				
Ag.	16	9	9	10
Industry	35	41	42	44
Services	49	50	49	46
Malaysia				
Ag.	20	16	8	8
Industry	38	40	49	50
Services	42	47	43	52
Philippines				
Ag.	23	22	16	14
Industry	35	32	32	33
Services	42	46	52	53
Taiwan				
Ag.	5	3	2	2
Industry	42	33	29	25
Services	53	64	69	73
China				
Ag.	26	20	16	13
Industry	44	49	50	47
Services	30	31	34	40

Economics: The main driving Force

- ✓ Remember the Engel's Law (1857)? As income rises, consumption of low-value high-volume foods decline in favor of high-value, low-volume foods.
- ✓ Two things occurring in conjunction with the increase in income:

a. Food Substitution: cereal high-calorie foods decline in favor of high-protein, animal-based and vegetable foods.

b. Food and non-food substitution: Due to low income elasticity of demand, total demand for food decline in favor of non-food items with high income elasticity of demand.

Therefore: In the expected transformation process as outlined above, income matters.

Additional expectation: Structure of domestic production and trade should respond accordingly

Caveat: Policy environment does not favor the needed transformation process (e.g. policy specifically biased for a certain commodity

Part B

Policy Experiences

Policy Experiences

1. Squeeze Agriculture, Promote Industry involving the following (following Dual Economy Growth Models primarily Lewis'):

   a. Resource (capital, labor) transfer
   b. Low food prices (hence low wages)
   c. TOT favoring industry

Notable result from the above: For many countries that pushed the wrong accompanying policy buttons ➔ Rapid but unsustainable growth. Remember post-war Philippines experience. Noteworthy point: robust growth until the mid-1970s but worsening poverty and inequality.

2. Develop a diversified agriculture/cum rural industrialization (post-independence Taiwan experience, most recently, Thailand).

3. Food price policy reversal (post-war industrialized Japan): High Food prices due to

a. Agriculture land and labor constraints

b. Political exigencies of balancing agriculture and non-agriculture incomes

Notable Costs of Premature Policy Reversal under the following conditions:

a. Fledgling Non-agriculture sector
b. Thin middle class
c. Continued pronounced national poverty incidence

- ☞ Sluggish economic growth
- ☞ Prolonged poverty and inequality
- ☞ Poor economic development performance

Reasons:

a. High food prices likely bring about high wages
b. Capital-intensive, labor-saving activities
c. Too limited income /employment opportunities

Table 3. Trends in nominal protection rates of major agricultural commodities, 1970-1995 (%)[a].

Agricultural commodities	1970-79	1980-84	1985-89	1990-94	1995
Rice	-4	-13	16	19	65
Corn	24	26	67	76	150
Sugar[b]	5	42	154	81	104
Coconut products					
Copra	-17	-28	-6	0	0
Coconut oil	-4	-4	7	18	10
Dessicated coconut and copra cake and meal	-4	-4	0	0	0
Bananas, pineapple, tobacco, abaca	-4	-4	0	0	0
Pork	6	-9	43	31	44
Chicken	34	46	39	74	84

[a] - NPR is the percentage difference between domestic wholesale price and border price converted by the official exchange rate. The border price is an FOB export unit value for exportable products and the world price adjusted by 15% as a measure of CIF import unit value for importable products. In the case of pork and chicken, the import unit value of Singapore was used.

[b] - Weighted average of NPR on sugar exported to the US (ratio of export unit value to the US to the border) price and NPR on sugar for domestic use (ratio of domestic wholesale price to border price). Border price is the FOB world price of sugar adjusted by 15% to obtain the CIF price.

Source: David, Cristina C. 1996. Agricultural Policy and the WTO Agreement: The Philippine Case.

Table 8. Daily minimum wage in selected Asian countries

Country	Daily Min Wage (US$)
China	1.21
Indonesia	1.24
Philippines	5.03
Thailand	3.03 to 3.76
Vietnam	0.93

Source: Tolentino, 2002

Advocacy Part

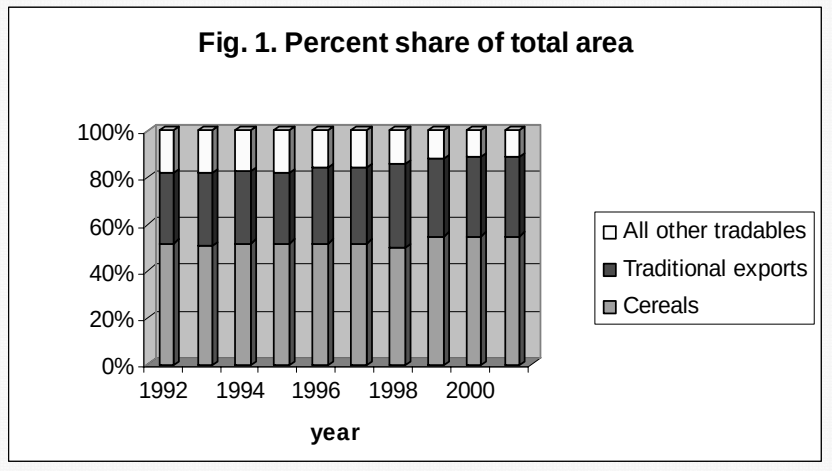
Question Again: Does agricultural development based on food-sufficiency (Philippines' rice-sufficiency) paradigm fit?

Answer: No. This policy is a drag to the development process especially if achieved through a high-food price policy

Alternative: More diversified agriculture in response to the emerging global market condition, an agriculture that exemplifies dynamism

Interesting points of comparison: Thailand and Philippines

- ✓ Feeds, chicken industries
- ✓ Vegetable and fruits
- ✓ Cutflowers



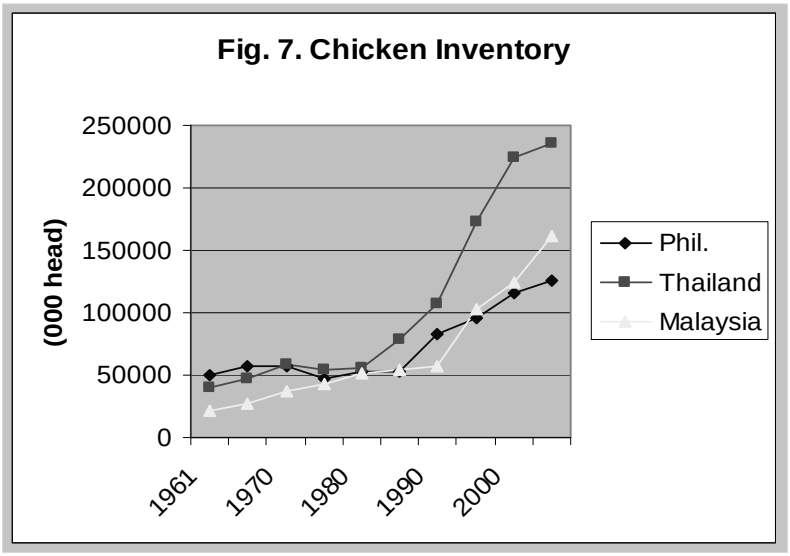


Table 9. Production and imports (metric tons) of key cash crops

	1994	2002	2003
Production			
Mongo	24,218	27,351	25,984
Onions	73,635	96,358	93,893
Garlic	15,728	16,257	15,529
Peanut	36,574	26,246	26,119
Tomato	150,632	149,259	150,059
Imports			
Mongo	20,248	37,677	41,350
Onions	1,881	11,969	16,511
Garlic	640	19,834	23,249
Peanut	41,693	48,801	37,222
Tomato	104,902	180,255	133,733
Imports/Production			
Mongo	0.84	1.38	1.59
Onions	0.03	0.12	0.18
Garlic	0.04	1.22	1.50
Peanut	1.14	1.86	1.43
Tomato	0.70	1.21	0.89

Source: Production data from BAS online. Trade data NSO

For Processed Products the following conversion factors were used
Tomato Paste: 1 kg past = 8.10 kgs of tomatoes
Garlic Powder: 1 kg powder = 3.6 kgs garlic
Onion Powder: 1 kg powder = 4.3 kgs onions
Peanut Butter: 1 kg butter = 500 gms peanuts

Table 10. World cut-flower exports: Value by major exporting country, 1995-1999.

Country	Export Value (FOB $ 000)					Ave Annual Growth (%)
	1995	1996	1997	1998	1999	
World	3830984	3869510	3615735	3686417	3880886	0.34
Netherlands	2363880	2306384	2001276	2035299	2187789	-1.29
Colombia	476719	509946	545821	556382	550376	2.97
Israel	163769	183840	169021	173768	178634	1.96
Ecuador	79423	99091	119031	161962	180400	8.47
Italy	122690	133851	109087	112334	110352	-1.64
Spain	90836	80541	110394	112484	104889	1.77
Kenya	64885	72180	77950	85951	90270	6.32
United States	40314	47502	48753	44553	41354	0.93
Belgium/Luxembourg	28001	35124	41579	51328	49648	2.8
Thailand	**34521**	**30480**	**27406**	**27287**	**30221**	-2.29
Others	365946	370571	365417	325069	356953	-0.27

Source: Floraculture International, 2000 as cited in DA 2002.

Postcript:

An agriculture that tries to achieve self-sufficiency over a century with little success and doggedly sticks to such objective is certainly not a dynamic one, much less serves as means to a society's goal of economic development.