

IMPACT OF RISING OIL PRICES ON THE AGRICULTURE AND FISHERIES SECTOR

A. Based on 2000 Input-Output Tables used by NEDA.

- SMALL in terms of impact on input sectors to agriculture and fisheries (Table 1) relative to direct users of oil and oil-based products.
- SMALL in terms of impact on production costs by sector (Table 2) relative to sectors directly using of oil and oil-based products.
- But impact can be SUBSTANTIAL if we assume that the impact on production costs will cause a proportionate contraction in the value of output. A 1% increase in oil prices can translate to a 115 million peso contraction in a year's value of output (Table 3).
- Relative however to the argument that the value-added tax (VAT) should be suspended to ease the price of oil in view of its impact on economic activity, the potential savings that may be obtained from lifting the 12% VAT (P115 million X 12= P1.4 billion) while substantial is NOT AS A SIGNIFICANT STIMULUS compared to collecting this tax to fund targeted and high-impact government programs.

B. Based on BAS estimates

- A P 0.50 increase in petroleum prices results to a very insignificant (PhP0.0005) price change in rice; for meat and eggs the resulting effect ranges from 0.0006-0.0031 pesos; for fish the same amount of price change ranges from 0.0016 to 0.0182 percent; for vegetables, a resulting 0.0069 to 0.0527 percent change in prices was observed (Table 4).
- Based on BAS cost and return analysis for various crops, fuel and oil directly comprise 0.01 to 6.51 percent to the total cost of production (Table 5).

C. Based on reports of the fisheries sector

- About 50-60% of production cost accounts for fuel expense in fishing activities.

Table 1. Effect of a one percent increase in the price of petroleum on agricultural inputs

INDUSTRY	Impact of 1 percent increase in price of petroleum products(in % points)
1. Products of petroleum and coal	1.00
2. Electricity	0.12
3. Chemical and chemical products	0.10
4. Textile manufactures	0.08
5. Trade	0.05
6. Fishery	0.04
7. Private business services	0.04
8. Food manufactures	0.03
9. Private health and social services	0.03
10. Palay	0.02
11. Other crops and agricultural services	0.01
12. Livestock	0.01

Table 2. Percentage increase in cost of production per one-percent increase of oil price.

Commodity	% Increase per 1% change in oil price
Palay	0.0317
Corn	0.0155
Coconut	0.0034
Banana	0.0071
Sugarcane	0.0137
Other crops and agricultural services	0.0238
Livestock	0.0159
Poultry	0.0221
Fishery	0.0817
Forestry	0.0051
TOTAL	0.2200

Table 3. Peso value effect of one percent fuel and oil price change on GVA contribution of agriculture sub-sectors. ¹

Commodity	Effect of oil and fuel price change to value of production (constant 1985 prices) in Million Pesos
Palay	15.94
Corn	2.79
Coconut	0.78
Banana	0.86
Sugarcane	1.07
Other crops and agricultural services	15.11
Livestock	6.41
Poultry	9.82
Fishery	61.93
Forestry	0.06
TOTAL	114.77

¹ Assuming that (contraction) impact on value of output based on 2006 constant prices is proportionate to impact of oil price increase on production cost (increase).

Table 4. Effect of Oil Price Increase on the Retail Prices of Selected Agricultural Commodities, Metro Manila

Commodity	Retail Price (January 28, 2008)	Petroleum Products Price Increase per Liter											
		P 0.50		P 1.00		P 1.50		P 2.00		P 2.50		P 3.00	
		In Percent	In Peso	In Percent	In Peso	In Percent	In Peso	In Percent	In Peso	In Percent	In Peso	In Percent	In Peso
Cereal													
Rice (special)	26.00	0.0020	0.0005	0.0041	0.0011	0.0061	0.0016	0.0081	0.0021	0.0102	0.0026	0.0122	0.0032
Vegetables													
Ampalaya	60.00	0.0069	0.0042	0.0139	0.0083	0.0208	0.0125	0.0278	0.0167	0.0347	0.0208	0.0416	0.0250
Cabbage	35.00	0.0328	0.0115	0.0656	0.0230	0.0984	0.0344	0.1312	0.0459	0.1640	0.0574	0.1968	0.0689
Carrots	50.00	0.0527	0.0263	0.1054	0.0527	0.1580	0.0790	0.2107	0.1054	0.2634	0.1317	0.3161	0.1580
Eggplant	60.00	0.0077	0.0046	0.0155	0.0093	0.0232	0.0139	0.0310	0.0186	0.0387	0.0232	0.0465	0.0279
Onion red	120.00	0.0088	0.0106	0.0176	0.0212	0.0265	0.0317	0.0353	0.0423	0.0441	0.0529	0.0529	0.0635
Pechay native	30.00	0.0100	0.0030	0.0200	0.0060	0.0300	0.0090	0.0400	0.0120	0.0499	0.0150	0.0599	0.0180
Potato	45.00	0.0308	0.0139	0.0616	0.0277	0.0924	0.0416	0.1232	0.0554	0.1540	0.0693	0.1847	0.0831
Tomato	40.00	0.0219	0.0088	0.0438	0.0175	0.0656	0.0263	0.0875	0.0350	0.1094	0.0438	0.1313	0.0525
Meats and eggs													
Pork ham/lean meat	140.00	0.0005	0.0007	0.0010	0.0014	0.0015	0.0020	0.0019	0.0027	0.0024	0.0034	0.0029	0.0041
Beef rump	220.00	0.0003	0.0006	0.0006	0.0013	0.0009	0.0019	0.0012	0.0026	0.0015	0.0032	0.0017	0.0038
Dressed chicken	120.00	0.0026	0.0031	0.0051	0.0062	0.0077	0.0093	0.0103	0.0123	0.0129	0.0154	0.0154	0.0185
Chicken egg	4.00	0.0296	0.0012	0.0593	0.0024	0.0889	0.0036	0.1185	0.0047	0.1481	0.0059	0.1778	0.0071
Fish													
Bangus	80.00	0.0016	0.0013	0.0032	0.0026	0.0048	0.0039	0.0064	0.0051	0.0080	0.0064	0.0096	0.0077
Tilapia	80.00	0.0182	0.0145	0.0363	0.0291	0.0545	0.0436	0.0727	0.0581	0.0908	0.0727	0.1090	0.0872

Table 5. Share of Fuel and Oil to Total Production Cost for Selected Commodities

Commodity	2004			2005			2006		
	Fuel and and Oil (P)	All Costs (P)	Percent to Total (%)	Fuel and and Oil (P)	All Costs (P)	Percent to Total (%)	Fuel and and Oil (P)	All Costs (P)	Percent to Total (%)
Palay	349.00	25,256.00	1.38%	410.00	27,925.00	1.47%	482.00	28,647.00	1.68%
Corn	60.00	14,045.00	0.43%	71.00	15,161.00	0.47%	83.00	16,097.00	0.52%
Calamansi	315.00	40,205.00	0.78%	370.00	44,006.00	0.84%	434.00	46,483.00	0.93%
Durian	7.00	59,691.00	0.01%	8.00	61,475.00	0.01%	9.00	64,638.00	0.01%
Mango	945.00	45,367.00	2.08%	1,111.00	49,000.00	2.27%	1,305.00	50,345.00	2.59%
Papaya	5,360.00	96,928.00	5.53%	6,302.00	110,062.00	5.73%	7,398.00	113,573.00	6.51%
Pineapple	51.00	53,490.00	0.10%	60.00	60,264.00	0.10%	70.00	57,983.00	0.12%
Watermelon	503.00	42,789.00	1.18%	591.00	46,596.00	1.27%	694.00	48,327.00	1.44%
Sweet Potato	279.00	16,860.00	1.65%	328.00	18,099.00	1.81%	385.00	19,605.00	1.96%
Onion (Bulb)	2,316.00	100,749.00	2.30%	2,723.00	137,978.00	1.97%			
Onion (Native)	2,396.00	79,053.00	3.03%	2,817.00	108,791.00	2.59%			
Garlic	3,067.00	103,451.00	2.96%	3,606.00	128,936.00	2.80%			
Ampalaya	1,806.00	104,323.00	1.73%	2,123.00	113,011.00	1.88%	2,492.00	118,357.00	2.11%
Eggplant	1,964.00	86,722.00	2.26%	2,309.00	93,474.00	2.47%	2,711.00	98,052.00	2.76%
Stringbeans	2,950.00	95,360.00	3.09%	3,468.00	103,191.00	3.36%	4,071.00	107,111.00	3.80%
Tomato	869.00	67,038.00	1.30%	1,022.00	72,645.00	1.41%	1,200.00	74,928.00	1.60%
Mongo	102.00	9,711.00	1.05%	120.00	10,584.00	1.13%	141.00	11,400.00	1.24%
Peanut	160.00	20,100.00	0.80%	188.00	21,808.00	0.86%	221.00	22,884.00	0.97%
Coffee	137.00	21,042.00	0.65%	161.00	23,243.00	0.69%	189.00	24,200.00	0.78%
Milkfish	178.00	23,969.00	0.74%	211.00	26,768.00	0.79%			

Source: Bureau of Agricultural Statistics