

Price of Fertilizers to Increase Production Cost of Agriculture by 0.15 percent

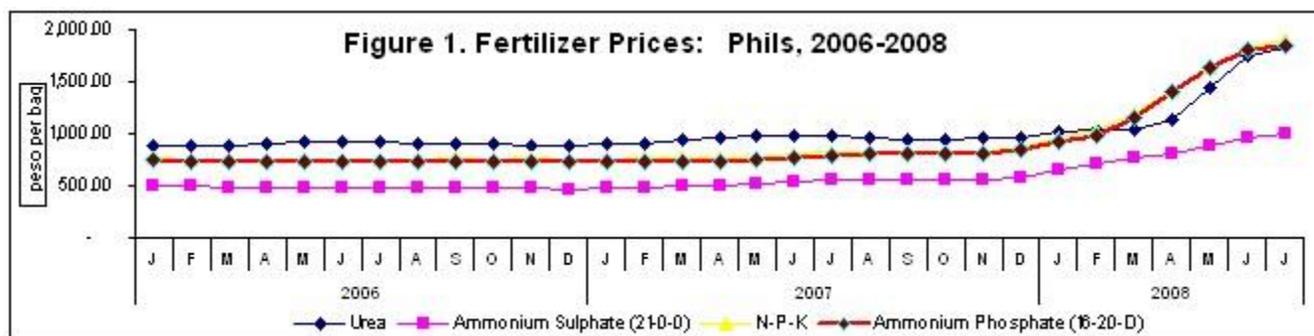
(FS-200808-ES1-02, posted 15 September 2008)

Fertilizers, as intermediate input to the production process, account for 30-40¹ percent of total cost of production of agricultural crops. Fertilizers are natural or synthetic chemical substance or mixture used to enrich soil so as to promote plant growth. The three common nutritional elements that are present in fertilizers are nitrogen, phosphorus, and potassium. Fertilizers are commonly used in food crops like palay and corn. Ideally, palay farmers should use six bags of fertilizer to ensure a harvest of four to seven tons of rice per hectare², though many farmers apply more to boost production. Meanwhile, 2.96¹ of fertilizer bags are needed for white corn and 4.80¹ bags for yellow corn. Banana, which is one of the major agricultural crops, needs six lbs of fertilizers per tree³.

But with the steep price increases from January to July of 2008 of the major fertilizers used in farming: Urea up by 38.29 percent, Ammonium Sulphate up by 55.09 percent, N-P-K up by 77.82 percent and Ammonium Phosphate up by 80.05 percent (Figure 1), can farmers still produce the target agricultural production for this year?

The high cost of fertilizers translates to higher cost of production. Fertilizer price increases can be attributed to the high price of natural gas in the world market which increased by 53.6 percent⁴ in the second quarter of 2008. Natural gas when converted into ammonia is used to produce ammonium nitrate, a key ingredient in fertilizers. This may be one of the reasons why price of palay increased by 50.7⁵ percent in the same period of 2008. In fact, average monthly retail price of one kilo of rice increased by 57.0 percent to P 38.76 in July 2008⁶ from P 24.69 last year.

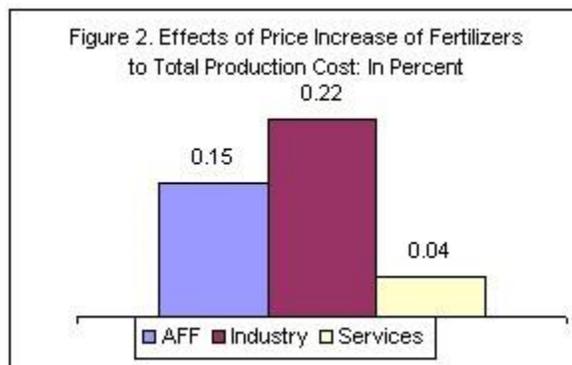
Figure 1. Fertilizer Prices: Phil, 2006-2008



Source: BAS

To analyze the effect of the soaring prices of fertilizers the National Statistical Coordination Board (NSCB) conducted a Price Cost Analysis using the 2000 Input-Output Table. The results are the following:

- The production cost of agriculture will increase by 0.15 percent. Among the agricultural crops, palay will have the biggest increase with 0.06 percent followed by banana at 0.02 percent. Sugarcane including muscovado sugar done in farm and corn will both increase by 0.01 percent;
- Production cost of industry will increase by 0.22 percent. Among the industry sectors affected are rice and corn milling by 0.06 percent, sugar milling and refining by 0.01 percent and canning and preserving of fruits and vegetables by 0.005;
- Service sector will increase its production cost by 0.04 percent;
- Average prices of goods and services will increase by 0.60 percent. Among the major sectors, agriculture, fishery and forestry will increase by 1.49 percent, industry by 0.62 percent and service sector by 0.08 percent, on the average; and



5. Household expenditure will rise by 0.34 percent on top of normal inflation. This means that a family of five living in the National Capital Region (NCR) with an average daily expenditure of P337⁷ will need an extra amount of P43 to cover the additional expenses for food and non-food items given a normal inflation of 12.5 percent⁸. Prices of milled rice and corn will increase by 0.12 percent and those of trade services by 0.03 percent. Milled sugar and services of eating and drinking places will each increase by 0.02 percent while the rest such as leafy and stem vegetables, banana, other fruits and nuts and miscellaneous food products will increase by a total of 0.15 percent.

Source:

¹Cost and Return Survey, 2002, www.bas.gov.ph

²<http://www.da.gov.ph/wps/wcm/connect/DA+Site/News/News+Archives/2008/August/005+PGMA+orders+D.A.+to+fine-tune+palay+programs+for+wet+season+in+line+with+SONA+commitments?ID=e588b209b042e7e&source=content&pagedesign=Print-Template>

³ <http://www.da.gov.ph/wps/wcm/resources/file/eb3c3b416df82d0/BANANA.pdf>

⁴ http://siteresources.worldbank.org/INTDAILYPROSPECTS/Resources/Pnk_0808.xls

⁵ Performance of Agriculture, as of August 2008, www.bas.gov.ph

⁶ Rice and Corn Situationer July 2008, www.bas.gov.ph

⁷ [Special Computation of the Daily Poverty Threshold for NCR made by NSCB Technical Staff using the June 2008 price data from NSO and BAS](#)

⁸ Inflation as of August 2008