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180-97915

MINISTRY OF AGRICULTURE
PLANNING AND AGRICULTURAL
ECONOMICS ADMINISTRATION

AGRICULTURAL PLANNING
AND STATISTICS PROJECT
USAID/CHECCHI/USDA

RE-PRICING OF GASOIL AND ITS EFFECTS ON AGRICULTURE

September 1, 1984

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1

An Overview of "Re-Pricing of Gasoil and Its Effects on Agriculture", by W.M. Bateson and S.S. Sidhu.

The authors have undertaken a very comprehensive study of gasoil pricing. In addition to presenting a descriptive analysis in the main body of the report, the authors have included very detailed Annexes which provide policy makers with all their data and calculations. Their conclusions can therefore be readily verified, therefore giving the study a high degree of professional quality and integrity..

The following are the main points made in Section 2, "The Problem And A Solution":

- The fundamental problem facing all gasoil users in Sudan is an inadequate supply at the administered price.
- Non-price rationing of foreign exchange is inevitable as long as the pound is overvalued.
- There are feasible reforms in domestic pricing of gasoil which will permit an increase in supply, drive out the black market, allow the abandonment of a cumbersome, inefficient non-price allocation system.
- An appropriate increase in the administered price of gasoil actually holds the potential to improve supply and reduce the real supply price to many gasoil users.
- The fundamental problem of gasoil supply is that the real value of revenue from gasoil sales is inadequate to replace the product supplied to the market--gasoil is so heavily subsidized that the real value of revenue from 100 gallons of gasoil sales is sufficient to purchase only about 60 replacement gallons.

- The requirement is to supply gasoil to consumers at its replacement, or (real) import parity price.
- It is essential that enough foreign exchange be available to satisfy the market demand for gasoil at the higher import parity price.
- Government's immediate problem is to determine the correct import parity price of gasoil.
- The current commercial bank FX rate implies an increase of 29 percent in the Port Sudan ex-depot gasoil price; at a shadow exchange rate of Ls2.00 per dol a 41 percent increase is required; at an exchange rate of Ls2.20 per dol a 52 percent increase is required.
- However, the prices of those commodities which depend on black market gasoil may be expected to fall with the elimination of the black market for gasoil.
- Importers must be allowed to supply as much as required to meet user demand at the higher import parity price.
- The black market price over the last year has been in the range of Ls100 to Ls150 a barrel above the administered price. On a per gallon basis this is Ls2.30 to Ls3.40 above the administered price.
- Translating this into the implied price paid for foreign exchange, means black market gasoil at Ls200 per barrel has a foreign exchange value of Ls3.80 per dol (at a CIF price of 265 dols per MT). At a black market price of Ls 250 per barrel the implicit FX rate is Ls4.95 per dol.
- Because the black market exists, those who have a surplus, value gasoil in their production decisions as if it were priced on the black market.
- Those who purchase gasoil from the black market because their own allocations are inadequate make their production decisions on the basis of the black market price (their opportunity cost prevails).
- The existing Commercial Bank FX rate is not sufficiently close to the true economic value of the pound to achieve a self-financing gasoil price.
- If the price of gasoil were increased to reflect the present Commercial Bank rate, it would mean a price increase of about 50 pt per gallon. At the shadow FX rate (2.20) it would mean an increase of about 90 pt per gallon.

- If gasoil were priced at the overvalued 1.80 Commercial Bank rate, the overvalued pound can be corrected in gasoil pricing, by imposing additional taxes of 20 to 40 pt per gallon depending on the shadow rate used.

- There are strong economic arguments in favor of insuring that gasoil users are able to depend on buying gasoil at a known price. Price stability can serve an important economic role as it would permit gasoil users to make production decisions more efficiently.

- At present, private sector gasoil users make their production decisions on the basis of a volatile and excessive black market price.

- Price stability and supply security are closely linked. Without supply security there can be no effective price stability for gasoil users, since the present pricing structure does not return adequate revenues to replace gasoil consumed at the administered price.

- If the true weight of the petroleum facility (cost savings of imports) is thrown behind the import of gasoil, at a true import parity price, gasoil users will be assured of adequate supplies and the elimination of both the black market and the administrative allocation system.

To estimate the increases in the costs of production in the agricultural sector that would result from increases in gasoil prices the authors used the following methodology. They (1) estimated the gasoil use per faddan for major crops, (2) converted these data into gasoil consumption per metric ton of agric product and (3) using current farm gate prices, estimated the amount farm gate prices would have to increase to cover selected increases in the gasoil price paid by producers.

The following are the main points made in Section 3 of the report, "Estimated Effects of a Gasoil Price Increase":

- The impacts of gasoil price increases will be fully felt on the agricultural corporations where the effective gasoil price is the administered price. The impacts will be less in the private sector because the new administered price of gasoil will be less than the present black market price.

- The estimated maximum effects of gasoil price increases on the cost of production for selected crops if the gasoil price increases by 90 pt per gallon (namely import parity pricing at the 2.20/\$ exchange rate are summarized below). In addition, the percentage increase in farm prices to cover this gasoil price increase are also shown.

- Crop	Sector	Increase In Ls per MT	Percentage Increase In Farm Prices
Sorghum	Gezira	4.50	2.0
Sorghum	Pump Schemes	20.00	8.9
Sorghum	Mech Rainfed	7.40	3.3
Sorghum	Trad Rainfed	-	-
Sesame	Mech Rainfed	17.10	3.0
Wheat	Gezira	4.60	1.3
Cotton Ls	Gezira	20.20	2.7
Cotton Ls	Pump Schemes	48.50	6.4
Gnuts	Gezira	1.60	0.3
Gnuts	Trad Rainfed	-	-
Gnuts	Pump Schemes	12.50	2.3

Note: Table 1 page 13 includes additional crops 4 exchange rates and consequently 4 alternative gasoil price increases.

- Gasoil using farmers in the private sector will begin to make production decisions on the basis of an import parity price which will be less than the previous black market price. These decisions will be in the direction of increased utilization of capacity and movement toward more efficient utilization of productive resources.

- The actual increase in the administered gasoil price will depend on the CIF price of gasoil, the exchange rate used, the extent of taxes levied, and the cost of internal transport of gasoil.

- The petroleum facility will reduce the effective CIF price by eliminating the need for costly credit arrangements. This will permit Sudan to increase total petroleum imports by an estimated 17 percent. If earmarked exclusively for gasoil imports, the total gasoil availability could increase by 30 percent.

- At 265 dls per MT CIF, the gasoil price per gallon is 0.98 dol. The price of gasoil then will increase by 10 pt per gallon for each 10 pt increase in the Ls per dol exchange rate.
- Increases of up to Ls1.00 per gallon in the gasoil price will have no substantial effect on marketing costs.
- A decline of Ls1.00 per gallon in the cost of gasoil to dirt road truckers means a reduction of Ls1.60 per ton per 100 km.
- If gasoil prices paid to private haulers in Dongola were to decline by only Ls2 per gallon, this would translate into a reduction in the cost of transporting broadbeans to Khartoum by Ls17.40 per MT.
- It is quite possible to break the black market price and eliminate the administrative allocation system if gasoil is priced at an implied exchange rate of Ls2.20, or at 1.80 per dol, plus 40 pt per gallon in taxes.

The main conclusions of this report are the following:

1. The Petroleum Facility by saving Sudan about \$60 million in petroleum imports could increase the supply of gasoil by up to 30 percent.
2. Since gasoil sales revenue is not sufficient to replace the quantity sold (revenue is only sufficient to replace 62 percent of the quantity sold), it is necessary to price gasoil at its real replacement or import parity price.
3. The real import parity price should be based upon the Shadow foreign exchange rate of Ls2.20/\$. This would translate into a 90 Pt per gallon price gasoil price increase. Pricing gasoil at the Ls2.00/\$ rate would require a 70 Pt price increase.

4. When gasoil in the black market sells for Ls200 per barrel, the buyer in effect, is paying a price which would justify the import of gasoil at the exchange rate of Ls3.80/\$.
5. Increases in the cost of agricultural production resulting from pricing gasoil at import parity will be manageable. For most crops the price increases necessary will be less than 5 percent. For cotton produced on the pump schemes the necessary producer price increase will be less than 10 percent. For the private sector without access to sufficient gasoil at the official rate, the cost of production will actually decline.
6. Price stability and supply security are closely linked. Without supply security there can be no effective price stability for gasoil users, since the present pricing structure does not return adequate revenues to replace gasoil consumed.
7. To achieve adequate supplies of gasoil, security of price and supply, and consequently increase agricultural production and foreign exchange earning it is necessary that the government assure:
 - a) adequate allocation of foreign exchange to the Petroleum Facility,
 - b) adopt import parity pricing of gasoil at the Shadow

foreign exchange rate and

- c) if supply and demand for gasoil do not come into equilibrium, stand ready to impose a tax on gasoil.