An analytical Study of the Impact of Inflation on the Economics of Some Agricultural Commodities in Egypt

Inflation is considered as one of the most importantproblems which influence other sectors of the nationaleconomy.Economic development is accompained, in general, byincrease in general level of prices.This is due to achievingthe infra-structure projects which need large quatities ofcapital costs inducing actual demand, and creatingincreasing consumption of commodities (industrial andagricultural) and services.For these considerations, agricultural sector is verysensitive to inflatory pressures.The study is composed of four parts:Part one: presents the various theories of inflation intwo chaptrs.Chapert one definitions, Kinds and forces leading todemand push and costpull. They were explained using indexnumbers and coefficient of monetary stability with specialrefer~nces to developing countries.Chapter two reviews the literature concerning inflationat the national and agricUltural levels. Studies on pricepolicy, money exchange rate, and their effects on agriculturalsector were explained.Part two: is dealing with inflation and its effects onthe national economy during the period of 1976-1990, usingthe various infaltion indices. It was found that the coefficientmonetary stability had been flactuatedat a minimumof 0.87 in 1984 and maximum of 10.8 at 1983,showing the highpressure of inflation upon Egyptian economy during thisperiod.The rate of financing facilities in 1990 was 20greater than in 1976. The inflatory gap began to increase(using net demand excess) from 4.5 in 1976 to about 819.2%in 1990. Figures of increase in monetary supply had beenflactuated from its minimum of 330.8 LE in 1980 to maximumof 23425 LE in 1988.The study showed that the Egyptian expoerts were mostlyof raw materials. The world demand for them is characterizedby high elasticity. On the contrary the demand of Egyptianimports had a wide range of elasticity. The gap betweenexports and imports is widening at 7.69’. The effect ofimported inflation was clrealy observed.The study showed that exchange rate induced inflation- 3 -pressure, where official and free ones raised price increaseby 9.46% and 11.36% yearly.It had been shown that valyes of agricultural productiveutilities such fertilizers, pesticides and seeds wereraising by 6.45% annually.All these factors reflected inflation pressures onagricultural production. At last the budget deficit duringthe period of study reached a decrease of an average of19.45% per year.The third chapter deals with studying and analysis ofthe inflation in the agricultural sector in Egypt during theperiod 1976-1990, where the index numbers of wholesaleprices of agricultural crops, consumers index numbers andcost index of rural living have an increasing trend with anannual growth rate of 49%, 46% and 45.8% respectively.The annual rate of increase in values of imports andexports were 11.13% and 2.9’ respectively. Most of theincrease in national imports due to increase of imports ofagricultural commodities.In Egypt the agricultural credit bank loans increased31 times during the period of 1976-1990,because most of thegovernment subsidised interest rates. Agricultural income inEgypt has grown at a lower rate than the rate of increase inagricultural loans, in addition the internal elasicity ofagricultural loans during the last three years were nagative.The study showed also the decreasing share per personof crop area from 0.296 feddan to 0.207 feddan and cultivatedarea from 0.153 feddan to 0.113 feddan showing that theagricultural sector cannot sustain the food requirements ofpopulation, therefore, imports have been necessary forsolving this difficult problems.Relations between productivity,

wages and prices werestudied, where annual growth rate of these items were 5.4%,13.6%, 14.49% respectively during the period 1976 to 1990.Wages increases were higher than these of productivitieswhich induced iflation pressure at the national level.The annual growth rate of current agricultural capitaland fixed capital investement (at fixed prices) were only4.7% ad 3.5% respectively which led to retardation of theagricultural sector. The study showed that the annual ratesof increase in production value, value of production inputsand agricultural income at current prices were 12.05%,12.23% and 11.94% respectively. Annual increase rates ofagricultural investement and agricultural subsidies were11.2% and 10.43% respectively.Estimations obtained in this research showed a significantpositive relation between the index number of wholesaleprices of agricultural products and index numbers of pricesof seeds, fertilizers, pesticides and wages in agriculturalsector. The R2 between these four productions inputs andwholesale prices of agricultural products were 0.96, 0.97,0.84 and 0.92 respectively. It means that 96%, 97%, 84% and92% of price flactuation were due to inflation in thatsector. The double logarithmic model estimated the elasicitybetween the wholesale prices and the four inputs prices.Increase in the index number by 10% of these four productioninputs the wholesale prices of agricultural products willincrease by 9.7%, 10.8%, 16.6% and 8.9% respectively.Correlation between interest rate and inflation ratewas positive but not statistically significant. This can beexplained by the stability of interest rate during the firsthalf of period under investigation.This disseration reveals a positive significant correlationbetween agricultural loans and interest rate, alsobetween investement and interest rate leading to highproduction costs.The first part of the fourth chapter deals with theeffect of inflation upon certain crops which are wheat,summer rice, summer corn, cotton, sugarcane, summer potatoesand winter tomatoes with respect of production costs,profitability and farm gate price, in addition to thecorrelation between production costs and net revenue perfeddan for these seven crops.Period of stUdy 1976-1990 has been characterized by thefollowing:1. Steady rate of interest during 1976-1981.2. Beginning of consumer price liberation.3. Rising inflation rate.4. Infaltion rate was gester than interest rate.Period of study was subdivided into two subperiods tobe able to explain the effects of liberating interest rateupon the consumes prices of the seven crops under investigation.The interest rate was increasing at higher rate thanthe rate of inflation during the period of stUdy. Productioncosts were affected seriously by increasing interest ratewhich showed a general positive trrnd statistically significantwith an average annual increase of 6.14%.Using the first subperiod (1976-1981) as basicindex number of interest rate was 210.5, for theperiodsecondsUbperiod (1982-1990), while inflation rate was only 176.16for the second sUbperiod.Inflation rate of production inputs of wheat, summerrice, summer corn, cotton, sugracane, summer potatoes andwinter tomatos were 12.13, 11.98%, 12.09%, 12.32%, 11.42%,13.16% and 11.04% respectively.Also inflation rate for wages were 10.23%, 10.45%,10.74%, 10.48%, 10.98%, 10.94% and 10.48% respectively.Inflation rate of farm gate prices per unit were15.92%, 12.56%, 12.93%, 13.91%, 12.85%, 5.93% and 10.18%respectively.Inflation rate of net revenue per feddan were 11.94%,12.83%, 12.05%. 15.25%, 14.63%, 10.31% and 13.11%respectively.Inflation rate of production cost per unit were 9.32%,10.44%, 9.85%, 12.54%, 10.61%, 10.54% and 11.54%respectively.Most of these crops were affected by inflationespe,cially wheat, potatos, tomatoes to a less degree thancotton, sugarcane because they were not liberated yet at thetime of study.