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Review

The Effects of Economic Policies on Mexican Pig and Pork Production

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This work involves an analysis of economic policies and their effect on national pig and pork production. A method was developed that linked federal support instruments to the pig and pork production sector. The volume of pork production decreased at a mean rate of 0,82 per year. Per capita consumption decreased 30 percent, going from 21 to 15 kg. The trade deficit increased every six-year period, until it reached 602 thousand tons. The instruments that were developed, access to them, as well as their allocation and operation, were inefficient. This evidence sets forth the urgent need to develop effective and efficient instruments, as well as development programs that are adapted to the users' needs.

Keywords: economic policies, consumption, pig, pork, trade balance.

INTRODUCTION

This work involves an analytical approach to the results of the implementation of policies for the development of pig and pork production, throughout three decades. For this, a method was set forth to link government support plans for the pig and pork production sector, to the contextual dynamics pertaining to the behavior of the global market, thus showing their effects on productivity and on the producers' welfare. These governmental actions are framed within what has been considered to be a neoliberal ideology.

We believe it was pertinent to link the notion of policy to the economic strategies that the government has promoted, since the concept of <<ideology>> assumes taking a stand with respect to a given situation. The first one must be settled through social institutions in the parliamentary or political sphere as well as in the judicial one. The institutional transformations that have been promoted have to go through a series of complex, long-term processes.

Our country was the scenario of a comprehensive reform that began in the 1980s and was consolidated in the 1990s. For the agricultural and livestock sector, this transformation would be known as the <<Reform to the “Agrarian Reform”>>. Based on a series of ideological-political guidelines, the governments have enforced a series of structural reforms that have had a serious impact on the situation of the agriculture and livestock sector.

Thus, a political-economic analysis of these reforms is presented, through the effects they have had on the health of the pig production system. For each six-year period, we will show how the institutional framework was structured in basic terms, and how it was composed of new norms and policies for livestock production financing. For each six-year period we reconstructed a scenario that shows the context for competition that these reforms brought about, where producers with less capability were displaced or marginalized, leading to a gradual disaster. This situation still has pig producers in a severe crisis.

General panorama

To define or establish a unique concept or definition of economic policy may be an oftentimes contradictory or not wholly inclusive exercise. From a strict and economic point of view, since the 1950s, Tinbergen (1952, 36) defined economic policy as a practice that brings together a certain number of means in order to reach certain ends. Economic theory, on the other hand, considers economics as the science of allocation of scarce resources to certain given ends. Thus, economic policy is understood as a choice, in this case the government's, which tries to guide the country's economic activity towards attaining certain objectives (Greffe 1991, 66). However, this definition is very simple and may not offer enough elements to sustain political analysis of a region, state, country or economic entity.

The so-called emerging countries have promoted, as part of their economic policy instruments, the entrance of foreign capital in order to finance and promote monetary and exchange stability. The influence of foreign capital has been favored in the national sphere, where the government is forced to establish mechanisms in order to favor conditions of trust and profitability demanded by international capitals, while neglecting the national demands.

In the years after the Second World War and up to 1965, the mean growth of the Mexican agriculture and livestock sector, in terms of gross domestic product (GDP), was 5,25 per cent; however, during the following ten years, and as a result of a period of recession, the mean growth decreased to 2,06 per cent, being the agricultural GDP the one that was most affected, with mean rates of 0,87 per cent.

By the end of 1976, which was also the end of a long recession, agricultural growth recovered, with mean rates of 4,75 from 1976 to 1981, favored by the growth of agricultural prices. However this growth, mainly promoted by a set of agriculture and livestock promotion policies and the creation of an emerging governmental program called Sistema Alimentario Mexicano (SAM, or Mexican Food System), implemented from 1977 to 1982, was not enough to reactivate and resolve the lag that had been created during the years of recession.

Starting in 1982 and until 1989, a strong crisis began, not only in the agriculture and livestock sector, but in the general economy. The Mean Annual Growth Rate (MAGR) in this sector, during this period was 0,20 per cent.

According to Calva (1994), the economic-political causes of this crisis can be found in:

- The decrease in the internal demand for food, which reduced relative agricultural prices in the open market.
- The fall in profitability of agricultural investment and of capital accumulation in certain branches of rural production. This brought about the fall in relative prices of agricultural products and the rise of prices of capital goods and consumables.
- The fall in public investment as a result of economic policies implemented by the State in 1982.

The agriculture and livestock MAGR, from 1990 to 2008, was 1,61 per cent, so that the recovery of the sector has not been significant. The liberalization strategy and the signing of different commercial agreements with America and Europe, unfavorable price policies for consumables and agricultural and livestock products, inefficient marketing systems, deficient credit allocation policies and the devaluation of the currency at the end of 1994, have made the growth of the agriculture and livestock sector more difficult.

Rivera (1997) mentions that this devaluation caused a considerable increase in rates of interest and inflation, affecting the sector with high prices of raw materials, increases in costs of production and a decrease in profitability. The devaluation of the peso in 1995 kept the margin of value for the currency at -1,33 per cent for this year, and -0,86 per cent for the following year (Barrón et al. 2000, 376).

Besides all this, the withdrawal of state support from this sector, in activities such as credits, insurance, research, technical assistance, subsidies, marketing, together with the limited income generated by this activity, worsened the crisis (Gómez and Schwentesius 1995, 35-8).

Economic transition

The incorporation of Mexico into the new world economic processes came late. It began in the mid 1980s with a rapid and deep unilateral and multilateral opening to trade and financial flows, without carrying out the necessary progressive adjustments nor negotiated openings.

The transition in the Mexican economic model started with the trade opening of the 1980s, which culminated with the signing of the North American Free Trade Agreement (NAFTA) in 1994. The reduction in tariffs, elimination of permits prior to imports and lifting of certain restrictions to foreign trade, turned into a re-alignment of internal relative prices.

The profound structural changes introduced by the Federal Executive power were directed towards a reorganization of the Mexican economy; however, in the '90s, the macroeconomic indicators showed their worse behavior. For this reason, it is not surprising that the economic reform, having as objectives the reduction of state intervention, decreasing distortions and providing greater efficiency and market mechanisms in economic activities, had such dramatic results (Clavijo y Valdivieso 2000, 15).

One of the main characteristics of the Mexican economy during the period of import substitutions (trade liberalization), was the concurrence of instruments of economic policies. The first generation reforms (which started at the beginning of the 1980s) did not favor their two main objectives: fiscal consolidation and economic stabilization. On the one hand, tax reform and privatizations headed towards the ending of fiscal consolidation. On the other hand, trade liberalization and foreign trade liberalization, deregulation and internal as well as external financial liberalization, were opposed to the objective of reaching macroeconomic stability.

According to Clavijo and Valdivieso (2000), the analysis of macroeconomic policies implemented since the 1980s, showed that the structural reforms adopted throughout this period led to a reduction in freedom at the level of macroeconomic policies and in the number of available instruments. For example, the net expenditures of the federal government went from 10 per cent in 1970 to 18 per cent in 1980 and to 31 per cent in 1987.

International trade liberalization came with federal fiscal reforms, reduction of the public sector and deregulation of internal productive activities.

In terms of the GDP, from 1981 to 1989 there were practically no changes, with a variation of 0,027 per cent. The GDP per inhabitant in 1988 was reduced by 23,62 per cent with respect to 1981.

Between 1980 and 1989, there were a hyperinflationary processes of 697 per cent.

Negative indicators also affected the real value of salaries. In 1988, this decreased by 61 per cent with respect to 1980; the annual nominal yield rate during 1983 and 1988 averaged 75 per cent; the nominal exchange rate (FIX) to settle liabilities in a foreign currency increased 31,4 per cent in 18 years, with a value of 0,0229 in 1980 and 9,16 pesos per dollar in 1988.

Given the hyperinflationary levels of 1986, 1987 and 1988, which averaged 85, 129 and 125 per cent, respectively, an announcement was made to the effect that it was necessary to have a new economic stabilization plan and program (ESP).

The objective of the ESP was to reduce inflation and create conditions for an economic reactivation. The exchange rate was the main banner for the program, subordinating fiscal policy.

The central bank implemented severe monetary and credit policies with high interest rates, restricting investment and economic activity in order to relieve pressure towards the foreign/external sector and the demand on imports and foreign currency.

This monetary policy generated expectations for the reduction of inflation and exchange rate stability, which stimulated the entrance of capitals and increased the supply of foreign currency because of the exchange rate; this in turn kept the pressures on the external/foreign sector latent, and even more due to productive lags that originate these policies.

On the one hand, the restriction on fiscal policies increased public income and restricted expenditures, and on the other, it contributed to an appreciation of the exchange rate, reducing accumulation in businesses and generating high levels of debt; all this maintained bank instability and halted investment. Subordination had as its costs, the elimination of subsidies for the productive sector, the reduction of investment expenditures and of social welfare, jeopardizing the growth of strategic state sectors in power, as well as the infrastructure to promote sustained growth (Huerta 2001, 10-8).

The success and failure of the economic strategy mainly had their origin in the distortions of the exchange rate and the interest rates. The overvaluation of the Mexican peso reached levels over 30 per cent and the real interest rates charged to lenders were extraordinarily high. The success of the governmental strategy was manifested in the economic growth and control of inflation during 1989-1994 (Puente 2001).

Failure came about with the economic-financial crisis of 1995, which led to changes in the behavior of authorities and economic agents, but the model was kept.

The management of these instruments threatened the internal market and profits of the productive class, while capital flow was assigned to the non-productive sector.

According to Huerta (2001, 10-8), the economic liberalization was very costly since, besides the structural problems of underdevelopment, which worsened, we do not have monetary, credit and fiscal policies to face these problems and bring about sustained and generalized economic growth.

With the signing of the trade agreement with North America, the concept of liberalization reached its peak.

In the agriculture and livestock chapter, Romero and Puyana (2004) conclude that the reforms to which this sector was subjected were too severe and brought about the economic recession, affecting the internal demand, including agriculture. On the other hand, some agricultural activities or certain producers that had benefitted from protective measures and subsidies during the time of import substitutions, were given support once again, inducing real high rates for protection. These sectors managed to conserve some of the support policies, which resulted in ambiguous effects of the structural reforms on agriculture.

Economic growth policy

Five major objectives have been proposed to achieve quality economic growth, each one with its respective strategies within the National Development Plan (NDP) of Fox's government for the 2001-2006 periods. These objectives are summarized as follows:

- Responsible management of economic practice
- Increasing and extending competitiveness
- Guarantee an inclusive development
- Promote balanced regional economic development
- Create conditions for sustainable development

Previously, the 1982-1988 NDP for example, was implemented through derived programs such as the 1984 National Program for Industrial Promotion and Foreign Trade (PRONAFICE, in Spanish) and the Program for Industrial Promotion of Mexican Exports (PROFIEX, in Spanish). These established alternatives for industrial and foreign trade policies. The measures were supported by the Baker Financial Plans (implemented in 1985) and the Brady Plan (implemented in 1987), which proposed to rescue the country from financial bankruptcy. However, the 1983 structural reforms and the economic uncertainty of 1985-1986, which went on until 1989, made the autonomy of the economic policy in general, and of the trade policy particularly, even more vulnerable. Mexico's dependence on the U.S., its main commercial partner, became more and more evident.

Deficient diagnoses have not allowed us to adequately detect the strengths and weaknesses of the national economy. The National Development Plans have predicted growth and surplus based, it seems, only on the strengths of the national economic system; however, they do not mention nor consider the internal weaknesses of the Mexican economy and the external threats.

In order to have responsible management, the strategies of the new economic plan included:

- Promotion of a new public Treasury Department that will improve the allocation of public expenditures of tax money and the financial system required by development. In the framework of this new promotion, the main supports were directed under a scheme of commercial competitiveness, leaving aside the state's role as investor and manager of development.
- Promotion of a solid and efficient commercial bank, offering credit resources. It is very clear that access to this type of financial instruments is through low rate credits which due

to their characteristics exclude the undercapitalized sectors.

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• Strengthening of the non-banking intermediaries, promoting savings and financing, which have an impact on the service-providing sector.

• Creation of a social bank based on two actions – ordering the savings and popular credit sector and creating a surveillance system. This type of policy was not designed and did not reach the agriculture and livestock sector.

• Reactivation of the development bank, establishing the bases to finance those sectors that, due to market imperfections, do not receive the services of private financial intermediaries. For pig and pork production and the agriculture and livestock sector as a whole, this objective was not fulfilled.

• Promotion of the efficacy of the stock market.

• Promotion of the public sector's productivity, turning it into a driving agent for efficacy and for the structural transformation of the economy.

• Development of tools for risk control and the promotion of stability, leaving aside the microeconomic environment in regional terms.

In order to increase and expand the country's competitiveness, different strategies were set forth, such as:

• Promotion of development and sectorial competitiveness, eliminating difficulties, which inhibit competitiveness and the integration of value chains, establishing intense market competition. Today, pig and pork production as a whole lacks schemes to allow an equitable redistribution of value within the chain.

• Creation of quality infrastructure and public services.

• Training of qualified human resources, as well as the development of a new business culture. An attempt was made to radically transform the research centers working on issues pertaining to the country (Colpos, INIFAP, Dry Areas, Water Research, among others).

• Promotion of a work culture and a reform of the labor framework, which will broaden the opportunities for worker development.

• Advantageous insertion of the country in the international arena and in the new economy, favoring productive diversification and the expansion of external markets for its products, guaranteeing its access in conditions of reciprocity.

• Promotion of use and better use of information technology.

• Consolidation and promotion of the institutional framework, simplifying the administrative load of businesses.

• Promotion of direct foreign investment flows.

• Strengthening of the internal market with competitive commercial distribution, health commercial practices, judicial safety, information, timely and sufficient supply.

• Implementation of a comprehensive policy for business development.

The strategies for an inclusive development include support for small businesses and independent workers so they can establish productive links with the market through consulting and training; establishing financial institutions that will strengthen productive capability and savings, allow for access to diverse credits through the strengthening of social banks and through resources granted through financial intermediaries; promotion of rural development and improvement of socioeconomic conditions of families in this sector, through support for investment, the integration of productive chains, the development and transfer of technology; the creation and development of productive projects that provide direct benefits to vulnerable groups of indigenous communities; a broadening of basic infrastructure for digital transmission, expanding coverage to marginal rural and urban localities.

Due to great differences between the five Mexican regions, a balanced regional economic development is an important objective, with emphasis on making each region's economic structure more dynamic.

These strategies include the strengthening of regional economies, specially the ones that are lagging behind in their progress, through the introduction of basic infrastructure, training of human resources and the integration of production chains; support and respect for the urban development plans and the territorial ordering of each locality; guaranteeing the ecological sustainability of economic development in all regions, as well as the protection and restoration of the natural habitat; support for municipal, state and regional tourist development; creation of sustainable nuclei to discourage regional migration; projection and participation, together with state and municipal governments, to set forth the regional agenda, detection of needs, alternatives and actions leading to a better and more rational use of resources, preserving cultures and customs, rights and the environment; and the development of the northern and southern border zones, according to their economic potential and to specific natural and social aspects.

The fifth guiding objective in the perspective of growth with quality is sustainable development which seeks to promote the use of natural resources, focusing on efficient use of water and energy; promotion of a comprehensive and decentralized environmental management; strengthening of scientific research and technological innovation to support the country's development as well as the adoption of productive processes and clean technologies; promotion of educational processes, training, communication and strengthening of citizen participation with respect to environmental protection and use of natural resources; improvement of actions by the Federal Public Administration in environmental matters; design and implementation of national strategies for sustainable development and progress towards mitigation of greenhouse gases.

The Executive's economic growth policy for 2001- 2006 has limitations. More than a firm strategic plan, it does a general reflective analysis including a series of strategies and medium term objectives.

There is a wrong idea of the import substitution model which sees it as being mercantilist and the social and economic costs of the neoliberal strategy are not adequately evaluated. Topics pertaining to internal and external competitiveness are not analyzed in-depth, which according to the great number of commercial agreements established with different countries, are a main element since margins are not established in the currency's exchange rate.

Also, in terms of security, health and other matters, the possible reforms needed to solve them are not established. The absolute lack of political agreements on social situations that may or may not be risks or threats to the Mexican national security have been historically constant (Piñeyro 2004). There are no goals, priorities, tools, resource allocations, responsibilities and times of execution, which makes the operation, planning and assignment of Expenditure Plans more difficult.

Sectorial policies

The Mexican territory has 198 million hectares, of which close to 32 million (16 per cent) are for agricultural use, 121 (61 per cent) are grazing lands and 45 (21 per cent) are woods and rainforests.

Per capita arable land is decreasing rapidly, going from 0,72 ha in 1960 to 0,34 in 2000. This phenomenon is expected to continue, reaching only 0,25 ha in 2010 (SAGARPA 2001).

Livestock-related activities are extremely important in the country's socio-economic environment since they provide food and raw materials, employment, foreign exchange, use of natural resources which are not suitable for other activities, may be used as a platform for development, etc.

In the 1980s, cattle production was based on the horizontal growth of production with an excessive use of natural resources in activities where ruminants were involved, leading to a deterioration of the ecosystems by over-grazing. Since the 1990s, there was a considerable increase in the incorporation of technology in all areas of the livestock sector, with growth in productivity and a decrease in the costs of production. However, this situation was not regular and homogenous, and only the strata with more capital were benefitted, since they were able to finance their investments.

According to Romero and Puyana (2004), there is a dual nature in this sector since there is a great number of small owners and another small group of owners who accumulate a great number of lands and much capital. The concentration of rural property resulted in a dual model of development in this sector, since large scale agriculture, oriented towards production of raw materials for industry and for exports received similar stimuli to those of industries during the substitution model: credit given with real negative interest, appreciated exchange rates for acquisition of capital goods, investments in subsidized irrigation works, low cost agricultural consumables and privileged access to new technologies and scientific advances.

At the same time, prices of subsidized basic foods were maintained to reduce the costs of urban salaries. Those mechanisms discriminated against the small and medium producer, who is especially oriented towards the national market.

Stockbreeding is the most widely disseminated productive activity in the Mexican rural environment. It is done, without exception, in all ecological regions and climatic conditions of the country, adding up to a total surface of 110 million hectares.

Data on production show a sustained growth of 2,42 per cent from 1982 to 2006. The AAGR (Average Annual Growth Rate) during the first ten years of the analyzed period was -0,77 per cent; this evolution recovered in the 1990s, with a mean rate of 4,57 per cent.

The progress experienced by several stockbreeding sectors foresees a continuous growth with tendencies towards concentration and formation of consortia of producers and integrated businesses, dissociating the medium and small producers from the different economic agents, with possible repercussions.

Livestock policies

The livestock policy was included in three large groups and six objectives whose main purpose was to improve the livelihoods of the stockbreeders and increase production. This was in order to sufficiently supply the domestic market with quality products and to explore new options in the international arena, based on the transformation of the prevailing economic and social structures and their relationships of exchange. Reducing migration from the rural areas, favoring a balanced growth in rural as well as urban areas was part of this objective (SAGARPA 2001).1982-1988 Six-year Period

During this six-year period, pork production had an AAGR of -7,39 per cent and a deficit of 624 thousand tons; imports grew with an AAGR of 13,33 per cent and went from 67 to 142 thousand tons. Exports do not show a clear tendency since there is much variation from one year to the other. In 1984, 25 tons were exported and in 1987, 450 tons.

The price of live swine in 1982 was 14,81 and in 1988 it was 17,61, which was an increase of 2,74 pesos, but the price from 1984 to 1986 decreased by 2,14 pesos. During 1983 and 1985-1986, live swine prices decreased by 21 and 15 per cent with respect to the previous year; this was equivalent to -3,06 and -2,10 pesos respectively.

The price of swine carcass during 1983-1984 and 1986-1987 decreased 21 and nine per cent with respect to the previous year, which is equivalent to -6,14 and -2,43 pesos, respectively. During 1985 and 1988, prices of swine carcass increased by 11 and 21 per cent with respect to the previous year; this was equivalent to 2,73 and 5,10 pesos. Rather than benefiting the pig and pork sector, these increases caused large negative gaps in the sector. The purchasing power of Mexican families was decreased by 65 and 52 per cent in 1985 and 1988 respectively. The 5,10 extra pesos that were paid per kilogram of meat were preceded by a hyperinflation of 159 per cent in 1987. Meat per capita consumption decreased by 37,57 per cent, going from 20,59 kg in 1982 to 12,85 in 1988. The accumulated inflation of this six-year period was 520 per cent. A kg of pork in nominal terms, in 1982, cost 110 (old pesos); the price of this same kg was 5.140 (old pesos). This evident difference was not reflected in salary adjustments.

1988-1994 Six-year Period

Pork production during this period ended with a negative tendency, but there was no evidence of recovery or growth. The AAGR was 0,22 per cent, which meant a growth of only 12 thousand tons in six years.

In foreign trade, exports had an annual growth of 22,17 per cent, going from 117 to 3.678 tons. On the other hand, growth of imports was 10,26 annually, going from 142 to 270 thousand tons. This shows that the policy was oriented towards imports instead of towards reactivating the sector. During 1989-1990, live swine prices decreased 17 and 20 per cent with respect to the previous year; this is equivalent to -2,88 and -3,01 pesos, respectively.

The price of live swine in this six-year period decreased 26,83 per cent, equivalent to 4,73 pesos; in 1988, the price was 17,61 pesos. In 1991, the price of live swine increased by three per cent, equivalent to 0,46 pesos. However, this increase was not significant since in this year the real price decreased by 13 per cent.

The price of swine carcass during the 1988-1994 period decreased by 31,84 per cent, equivalent to 9,31 pesos. In 1988 the price of meat was 29,25 pesos. This decrease meant for producers a loss in total income and repercussions in profit margins. This scenario was partly responsible for the scarce growth in production. In 1993, there was a price increase of 2,31 per cent, equivalent to 0,50 pesos. This economic fact is discouraging since in this year the total decrease in the price of meat was -24 per cent.

In spite of this adverse scenario during the last six-year period, per capita consumption remained unchanged.

The accumulated inflation during this six-year period was 95 per cent.

1994-2000 Six-Year Period

Growth of pork production during this six-year period was even worse than during the previous six-year period. The recorded rate was 0,05 per cent.

Imports as well as exports grew, with an AAGR of 12,28 per cent and 31,57 per cent, respectively. Imports went from 183 thousand to 368 thousand tons and exports from 6 thousand to 33 thousand tons. However, the trade balance increased instead of decreasing.

The price of live swine and swine carcass remained practically the same (± 0,40 pesos Kg^{-1}), which allows us to suppose that price stability was an incentive to meat consumption. Per capita consumption increased by 9,44 per cent, going from 13 to 14 kg during this period. This consumption was covered by imports and not by the increase in volumes of national production nor by exports.

2000-2006 Six-Year Period

Growth in pork production was similar to the previous six-year period, with an AAGR of 0,05 per cent. This six-year period is one of three periods in which the growth rate was under one digit. This reflects the deficient implementation of programs to promote and support the sector.

Imports grew by 12,51 per cent annually and went from 368 thousand to 807 thousand tons; exports, on the other hand, grew from 33 to 205 thousand tons, with an AAGR of 33,43 per cent.

The price of live swine during this six-year period decreased by 3,4 per cent, which was equivalent to 2,72 pesos, and the price of swine carcass during this same period decreased by 4,8 per cent, equivalent to 6,19 pesos kg. These prices were probably affected by the increase in volumes of imports at dumping prices.

Per capita consumption increased by 16,5 per cent, equivalent to 2,31 kg. In 2000, 14 kg were being consumed from pork imports.

Accumulated inflation was the lowest of the three previous six-year periods, at 27 per cent, with an average 4,4 per cent annually. These economic indicators favored consumption and not production, which would have led to food security.

Final discussion

Within the food-related programs, different objectives are linked to the livestock sector; among them are to promote safety and quality of foods, through the integration, operation and consolidation of the National Program for Safety of Foods of Animal Origin and to contribute to productivity and marketing of animals and their products; to promote the generation, transfer and adoption of innovative technologies.

In order to finance the sector, the Agriculture, Livestock, Rural Development, Fishing and Food Secretariat (SAGARPA) will develop strategies and actions to promote a financial system that includes financing elements and risk capital.

There will be coverage including price variations, climate and sanitary contingencies, market and fixed-assets loans, risk capital investments for programs requiring several years to reach maturity, besides micro financing for small agri-businesses.

Just as in the NDP (National Development Plan) in the sectorial program, mechanisms were not described for the execution of its objectives. It does not indicate the role and levels of governmental support, particularly with respect to the financing of the agriculture and livestock sector as a trigger for economic growth.

An example of the deficit in the livestock development programs is the productive decrease that doesn't allow the sector to satisfy the demand for products, in this case pork. In 1982, the deficit was of 68 thousand tons. By 1988, it was 142 thousand tons, in 1994 it was 166 thousand tons, in 2000 it reached 336 thousand tons and in 2006 the deficit was over 600 thousand tons.

Within the framework of administrative improvement, and based on the Law of Rural Sustainable Development and the applicable laws, the interinstitutional coordination has been favored in actions such as the fight against technical commercial contraband, tariff evade, compliance with rules pertaining to origin, quality and sanitation, respect for Mexican quality norms, etc. In the same way, actions in terms of sanitation, safety and quality have been directed towards compliance and surveillance of production norms, product management and marketing, sanitary inspection of imported products, implementation of quality and safety standards, interinstitutional coordination, market re-ordering, etc.

The Poultry and Pig Production Program is part of the Livestock Promotion Programs. In 2.000 it operated on four per cent of the total resources assigned to this type of program, reaching 67,9 million pesos. The federal and state governments, as well as producers, contributed 23, 19 and 58 per cent of these resources, respectively; this benefited 701 producers, of which 404 were small business owners and 297 were from the social sector. Fifty five poultry production projects were supported and 272 pig and pork production projects.

The mean amount of support per beneficiary was 86.620 pesos. The productive performance of the program achieved a 49 per cent increase in productive capability, 68 per cent in technical change, an increase in animal production, 79 per cent in sales of better and more processed products, 50 per cent increase in production yields, 40 per cent in changes in quality and 64 per cent in the value of production (SAGARPA-FAO 2000).

According to the afore-mentioned data and considering the average cost of a sow that is a first-time mother / gilt at 3.800 Mexican pesos as well as the average cost of an installed sow (under technified conditions) and doing a quick comparison, the amount of support would have meant approximately the installation of three sows under technified conditions or the acquisition of 30 replacement gilts.

During the 1986-2005 period, the Mexican state transferred to agriculture the fabulous amount of 1,69 trillion pesos equivalent to 156.880 million dollars today. This result allows us to reject the predominant idea that support to the Mexican rural areas have been meager (OECD, 2007).

González and Sánchez (2008, 24) report the inefficiencies in resource allocation to the agriculture and livestock sector and set forth the need for structural changes in national policies.

Statistical evidence shows the amounts directed towards promotion and productivity, which we have not seen reflected in productivity, competitiveness nor social welfare.

Historically, neither strategies nor economical and financial mechanisms have distinguished themselves by fulfilling the objectives that have been set forth.

What is clear is the permanent deterioration of the production units and of the national pig and pork production structure.

The objective of promoting and supporting productivity, competitiveness, as well as productive restructuring through credit instrument has generally been a negative policy.

Credit in the agriculture and livestock sector has decreased considerably and is scarcely competitive, compared to commercial clients. Mexican credit is approximately three times more expensive than credit in the U.S. Also, risk coverage instruments have not been widely accepted in the sector and are also unfavorable with respect to those offered by other countries.

The commercial bank does not offer services required by the rural sector since it considers it an expensive and high risk portfolio, while the development bank, with direct access to the producer, has not been able to satisfy the sector's demands.

The government's agriculture and livestock credit instruments are not offered by the secretariat that is responsible for rural development.

CONCLUSION

The deficit of the livestock development programs, in the case of pork, meant in 1982 a deficit of 68 thousand tons; by 1988, 142 thousand tons; in 1994, 166 thousand tons; in 2000, 336 thousand tons; and in 2006, a deficit of 602 thousand tons.

In terms of policies, the instruments for promotion of productivity, developed by the federal executive power, and their implementation, did not have a favorable result in supporting pig and pork production.

There was no favorable result in policies for promotion of nor support for pork consumption.

Total consumption of pork increased but per capita consumption decreased.

Access to financing instruments has been complicated and the instruments have been inefficient.

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