PRECONDITIONS TO STRUCTURAL CHANGES OF POLAND’S AGRICULTURE

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Poland has been undergoing systemic transformations for over 10 years, with the national economy structure subject to both subjective and objective transformations. The assessment criteria of such transformations also changed with time. Under previous economic system, the economic structure had been evaluated basing upon planned development criteria. Such criteria included features such as harmony, cohesiveness, flexibility, sophistication, complexity, high efficiency, etc. The responsibility for shaping the structure of economy was vested in the State. Structural change plans initiated by the State not only failed to bring expected effects, but to the contrary, the economic structure tended to become permanent. Highly energy- and material-intensive economy forced the State to continue investments into power- and material-generating industries and branches. The share of such branches in national economy has several times been noted excessive.

In the period of transformations, the structural changes assessment system is subject to revaluation. Structural changes in the economy are subject to mega-trends in world economy, into the mainstream of which Poland has been introduced during the transformation period. Such mega-trends include:

1. Globalisation and international integration of corporate operations;
2. Privatisation and deregulation;
3. Mass production adaptation to customised consumption;
4. Enormous acceleration of IT technologies development.

In the globalisation of company operations and Poland’s integration with the European Union, the issue of harmony, flexibility, structural complexity is losing importance, while the ability to compete on international markets becomes an issue of key importance. This last ability alone enables Poland to maintain high employment level and low inflation rate, guaranteeing civilisational development.

Of the structural changes under way in Poland, one of the most urgent and difficult tasks the State and the Society are facing now is the deep restructuring of agriculture and the acceleration of economic activisation of rural areas.

Poland’s agriculture is characterised with considerable production capacity, the structure of which, however, is highly inadequate. The production capacity was generated under conditions of extensive farming and is insufficiently adapted to market economy conditions. Structural defects of this capacity include very high share of passive assets and low share of sophisticated technologies.

Poland ranks among countries with medium-level arable land. The feeding area computed as the arable land per one inhabitant is relatively large at approx. 0.5 hectare. The quality of soils constituting the basic component of sustenance eco-system is rather low, as evidenced by the relatively high arable land bonitation ratio (0.79), high share of poor and very poor soils (35%), and small share of good and very good soils (11%) in the total arable land area. In terms of valorisation of agricultural production space, Poland’s agriculture ranks as one of the poorest in Europe.

Much richer than the soil resources available to Poland’s agriculture are its human resources. Agricultural sector employees approximately 5 million persons, equivalent to 3.6 million full jobs, i.e. 21 persons per 1 hectare of arable land. This figure is much higher than in case of higher developed countries (in EU Member States similar ratios never exceed 6 persons. Moreover, unfortunately, the formal education level of agricultural workers, both general and vocational, is very low).

The third production factor, i.e. fixed assets, are sufficient to increase agricultural output. However, in terms of effectiveness (and only such approach is justified) it turns out that the structure and dislocation of such assets constitute major impediments to increasing effective output of high-quality products. One of the major barriers is the inadequacy of such assets to the requirements of specialisation and concentration.

Current level of agricultural output has been reached at relatively low consumption of mineral fertilisers (approx. 90 kg NPK and 132 kg CaO per 1 ha of arable land (less than half of the ratio before transformations) and only 0,4 kg of pesticides (active substance) per 1 ha of land.

Excessive dispersion of land is a separate problem. Poland's agrarian structure is a consequence of individual farming, covering 82% of all arable land. The structure is dominated by small farms. In 2000, the total number of farms with arable land was estimated at 1885,8 thousand. Of that number, 1884,2 thousand was classified into the private sector, and 1,6 thousand – into the public sector. An average private farm had the area of 7.2 hectares. Poland still has over 1 million farms with area below 5 hectares (nearly 56% of all farms), and 371 thousand farms of over 10 hectares (19%). Farms classified into the former group cover 21% of all private owned farmland, and the latter – 51%, which is not bad. In the future, it will be the latter group that will bear a decisive impact upon the image of Poland's agriculture. It doesn't mean, however, that smaller farms have no chances for development. Some such farms, especially the ones oriented at industrial gardening or the production of herbs, chickens or seed material are characterised with high economic and production effectiveness.

In the year 2000, of 1 842,1 thousand private farms with more than 1 hectare of arable land, 92.7% have been running agricultural operations. Most farms consisted of 2-3 plots. The owners of vast majority of private farms (97.4%) were running their farms. The education level of persons running farms was low, only 56.9% had agricultural education. Of that number, only 20.2% had higher or secondary education.

Growing unemployment, excessive population density in rural areas and inflexible labour market in Poland resulted in a diversification mechanism, much stronger in Poland than in other countries. Agriculture cannot be considered a monolith, as it is strongly diversified, both in terms of ownership and economy. Out of 1880 thousand private farms, only 350 –450 thousand are economically viable.

The economic condition of Agricultural Production Co-operatives is very bad. Most such co-operatives were unable to adjust to the new, market economy conditions.

The condition of large-area farms established in result to the privatisation of former State-Owned Farms (PGR) is diversified. The results of surveys conducted since 1993 indicate growing effectiveness of such farms, with farms established by way of land purchase by a new user indicating highest growth rates. Slower growth rates are noted in case of employee-owned companies and land leased from the Agricultural Property Agency of the State Treasury (Agencja Wlasnosci Rolnej Skarbu Panstwa AWRSP).

The regional diversification of Poland’s agriculture is of considerable importance, with highest productivity levels found in the voivodships with specialised production (former Warsaw, Radom, Ciechanów, Plock and Kraków Voivodships). The above constitutes a major difference in comparison to the pre-transformation period, when highest output was noted in voivodships characterised with highest material outlays in agriculture (former Poznan, Bydgoszcz and Wroclaw voivodships). Voivodships with large share of post-PGR land reach low level of agricultural GDP.

In terms of conditions conducive to the development of agriculture, three mega-regions can be distinguished in Poland. The mega-region covering the south-eastern and southern voivodships, with overpopulated rural areas and agriculture, the main objective is to implement non-agricultural industrialisation of rural areas. Fully-fledged farms from that region are capable of providing full employment to no more than 15-20% of rural population in productive age. The remaining population within the same age group should gradually seek employment either inside or outside rural areas. To most such people, employment in agriculture will remain an additional source of income. The process of rural industrialisation of highly dispersed farms in southern Poland will need support from the State.

In the mega-region with high share of post-PGR land, such as the northern and western Voivodships, relatively large, sustainable farms should be established. Poorly developed infrastructure in such areas, coupled with clearly visible tendencies for instating grain monocultures may threaten agricultural development in such areas.

In the central mega-region, the issue of highest importance is to establish and enhance development-oriented farms, capable of implementing progress coupled with creating non-agricultural jobs. The region is characterised with considerable hidden agricultural unemployment among non-farming rural population.

The restructuring of Poland’s agriculture is a slow process. Poland’s agriculture and its direct environment failed to develop adequate institutions, necessary for effective functioning within highly competitive environment. The most visible element of restructuring is the polarisation of area structure of farms. The overall number of farms is not subject to considerable changes; the number of auxiliary farms is high, the share of medium-size farms is slightly falling, and the share of very large farms, even according to Western European standards, is growing. The agricultural census conducted in 1996 indicated that Poland has 9 thousand private farms with the area of over 50 ha or more, including 3,3 thousand farms of over 100 hectares. This latter group is growing, mainly in result to taking over the land previously owned by the PGRs.

The restructuring of agriculture is inhibited by certain barriers, none of which, however, is absolute. These barriers can be challenged by relevant policies. Most concerning are the changes in the size and structure of demand, demographic pressure, the barrier of accumulation and investment capacity and the rate of changes within the agricultural environment.

The basic factor and simultaneously the chance for the development of Poland's food sector, including agriculture, is the development of food market, i.e. absorption growth and structural changes of demand. Since the turn of eighties until the end of the decade, the demand for agricultural products has fallen by approx. 10%, caused by growing poverty, changes in the diet of more affluent social groups, excessive prices of domestic agricultural products compared to world prices, prohibiting their exports without subsidies, etc. Another significant reason includes long-lasting prosperity drops in the CIS countries.

Excess agricultural production caused the price growth rate to fall in relation to inflation rate. In the second half of nineties, the price brackets index (growth rate of prices of agricultural products to the growth rate of prices of means of production) has reached the level of from 91.4% to 96%. The year 2000 was an exception, with the above ratio reaching the level slightly more favourable to agriculture.

The development of agricultural and food products market depends mainly upon the growth rate of national economy. Economic growth of a country always results in growing income of its population, and hence growing purchasing power of potential food buyers. Although in the nearest future savings and investment rate growth will exceed GDP, the growth of food expenditures from personal income will be only slightly lower than GDP growth. At the same time, pursuant to Engel's law, the share of income allocated to increasing food consumption will continue to fall. This phenomenon has already been noted in Poland in the recent years and is expected to continue in the future. Over a short period of time the process may be either inhibited or even partly reversed in result to the integration of Poland's economy with the European Union. Food consumption growth rate cannot fall below 30-40% of GDP growth rate. This, in turn, means that the level of food consumption in real terms will grow at the rate of approximately 1.6 –1.8% annually, accompanied by falling share of food costs in household expenditures. Simultaneously, the production capacity of our agriculture renders it possible to increase its output by 2%-2.2% annually.

Growing population income and gradual achievement of EU economic development level create the possibilities to limit the stratification of society. Fast systemic changes resulted in strong diversification of economic condition of households, i.e. by concentrating income in a small group of affluent citizens accompanied by strong growth of impoverished population while the size of average income population group is kept at more or less stable level. As the general level of affluence and civilisational progress grow, limiting the sphere of poverty and increasing the share of medium class becomes a realistic prospect. Such changes are of considerable importance to the development of food market.

The second demand-shaping factor, i.e. the prices, will in the nearest future force the consumers to take a more conservative approach to food expenditures. Although relative reduction of food prices seems to be a tendency characteristic to developed economies, in the current decade experience the level and structure of price in Poland will gradually match their corresponding Western European levels. To the Polish food consumers it will be equivalent to growing prices in real terms of numerous products, and in particular of dairy and grain products, sugar, beef and many varieties of fruit and vegetables.

All the above mentioned factors will cause changes in the food consumption model towards higher consumption of dairy products, fish, fruit, vegetables, cereals and potatoes. The consumption of sugar, eggs, fat is going to fall, and so will the consumption of meat after a brief period of higher prices.

Increasing affluence of the society and changing consumption models will also lead to growing quality expectations of the consumers.

The growth rate and structural transformations in the foreign trade in food and agricultural products should be conducive to the development of Poland’s food industry, which already accelerated its growth rate in the nineties.

In the nearest future it will be possible to maintain high growth rate of foreign trade in food products, enhanced by:

?? Growing liberalisation of foreign trade,

?? Integration with the UE inhibiting the barriers to entry of Polish food products into the Western European and Polish markets,

?? Economic normalisation within the CIS Member States, opening a potentially large food market,

Apart from factors conducive to the development of demand for food, a number of threats and barriers may inhibit it. Such main risk is the risk of falling economic growth rate, caused both by internal factors and falling prosperity on foreign markets. Among internal reasons, principal significance is attributed to high unemployment, budget deficit, high foreign trade deficit and social resistance, as well as unsuccessful institutional reforms and public sector restructuring. These phenomena, in turn, may result in falling population income growth rate, followed by falling demand for goods and services, food included. Other ensuing risks include the risk of re-emergence of high inflation rate and falling inflow of foreign capital.

Structural changes in Poland's agriculture are taking place under strong demographic pressure. Until 2010, Poland's population in productive age will grow by over 1.5 million, while in the EU Member States the number of population in productive age will fall by approximately one million.

Rural population, including the population living off agriculture is still very large in Poland. Private farming structure, frozen still under conditions of real socialism, absorbed a considerable portion of labour. Workers/farmers accounted for considerable part of that labour force. Economic transformations were not conducive to improving agrarian structure nor to the outflow of labour from agriculture. To the contrary, rural areas were forced to absorb a considerable share of working population, made redundant by restructured and privatised non-agricultural enterprises. According to rough estimates, agriculture absorbed no less than 500 thousand persons. Economisation of Poland's business processes and high birth rate resulted in very high unemployment rate. At the moment, over 1.1 million persons are registered as unemployed in rural areas, with concealed unemployment estimated at another 500 thousand persons in private farms and 300 thousand persons rural households without land. Poland's total unemployment is estimated at approximately 3 million persons (official data). The demographic barrier to structural changes will start to deteriorate after 2005 with the falling number of persons in productive-age entering the labour market and growing number of jobs in rural areas. For a number of years, however, it will remain an important impediment to structural transformations not only in the food sector, but touching the entire national economy.

Upgrading efforts in agriculture are limited by low income barrier. According to estimates, only approx. 10% of private farms, using approx. 25% of arable land can achieve positive accumulation and make investments to increase production capacity. Low income barrier may be limited by active investment policy (focusing budget assets and other investment funds on most promising projects from the point of view of farming effectiveness and efficiency. In the State structural policy, preference must be given to non-agricultural activities in the rural areas, creating jobs to persons leaving agriculture, thus increasing the income of both rural and urban population and preventing the depopulation of rural areas, as well as facilitating the development of infrastructure and its better use. The hitherto agricultural policy, envisaging outlays for additional retirement pension benefits (72% of all budgetary expenditures on agriculture) was not conducive to the restructuring of agriculture, upgrading farms and improving competitiveness on foreign markets.

Transformations within agricultural environment and mainly in the food processing industry will bear important impact upon the structural and upgrading changes.

Under centrally planning economy, agricultural and food processing industry was dominated by public sector companies, with State-Owned Enterprises in the lead. Numerous small and medium-size enterprises functioned as co-operatives, mainly in dairy industry and industrial farming. Food processing was also one of the supplementary operations conducted by many State-Owned Farms. In 1988, the food processing industry in Poland was extremely dispersed. Out of over 26 thousand businesses operating in that sector, nearly 60% were small private businesses and only 3.2% had the either the status of co-operatives or SOEs. In terms of employment and sales volume, however, the share of industrial companies stood at 65% and nearly 80%, respectively.

Parallel to the progress of market reforms in national economy, also the structure of food processing industry was subject to deep and extremely rapid ownership transformations.

During the first period of transformations (1989-1992), fast growth of private food processing plants was noted, mainly focused on generating high profits at the smallest capital commitment possible. Such companies effectively filled market gaps emerging after the liquidation of shortage economy or ensuing from falling production output of the public sector.

In most cases, such enterprises were limited in size and with low technical and technological standard. They competed with the industrialised part of food processing sector with low fixed costs, high operating flexibility and better access to dispersed distribution network. However, the had no chances to compete in production quality.

After a short period of food processing industry stratification, reverse tendencies started to change the structure and competitiveness of Poland's food processing industry, such as:

?? Fast sector privatisation;

?? Re-emergence of tendencies to industrialise food processing;

?? Increasing degree of processing;

?? Private and foreign investments into new, sophisticated plants with medium- or large-scale production capacity, investment and upgrading of production capacity.

?? Re-emergence of tendencies to concentrate and integrate the sector.

According to data from the Central Office of Statistics GUS, in 2000 as many as 25.5 thousand food processing businesses were operating in Poland. Over 2/3 of processing operations are situated in large and medium-size industrial processing plants. Agricultural and food processing industry is characterised with high structural liquidity and high liquidity diversification in various industries. Structure liquidity means that economically weak and badly managed companies with bad assets and capital structure and low product mix competitiveness fall out of the market and file for bankruptcy. On the other hand, companies with strong economy, focusing on strong market and marketing activities and high standard of market offer, as well as influx of foreign investments achieve competitive edge over weaker food processing businesses. All the above phenomena confirm the existence of mechanisms enforcing effectiveness, ensuing from the adjustment process of the entire sector to market economy conditions.

Despite recurring processes of food processing industry concentration, its level still remains low. In the last decade, the share of largest and large companies in the sector has fallen, to the benefit of average and mediocre companies.

Contemporary structure of Poland's food industry is being increasingly shaped by the fast developing groups of companies. Such groups emerged in each food processing industry in result to its ownership transformations. The groups are built mainly by strategic investors, participating in the privatisation of SOEs. The emergence of groups and their further transformations lead Poland’s food industry into the processes of economic globalisation. Most groups and sector leaders already acquired large foreign investors, operating on numerous markets. Globalisation processes are even ahead of the concentration processes, and are most advanced in the tobacco, sugar, edible oil, food concentrates, animal fodder and brewery sectors.

Current image of Poland’s food sector dramatically differs from its status ten years ago. The past decade has certainly been a period of deep transformations of food processing industry, mainly aimed at its adjustment to market economy conditions. These transformations are still under way, although they are already past the critical point.

Food industry generates demand for agricultural produce, but not only. The development of integration processes bears a considerable impact upon agriculture modernisation trends. After several years of loosening integration bonds between agriculture and processing, efforts are taken to recover the lost balance. Individual industry leaders realised that the competitiveness of their product offer depends not only upon the costs and efficiency of processing operations, but also upon raw material quality. Quality management system currently implemented force the processors to extend their control over the production and distribution of agricultural raw materials. The problem of raw material quality stability is also growing. The above factors influence not only the building of bonds between farms and processing companies, but also the restructuring of agriculture by enhancing production concentration processes. Their effects have already become visible in Poland’s agriculture, and in particular in the production of raw materials for dairy industry.

Recapitulating

Poland’s agriculture is and will remain private farm-based. Other sectors will continue to develop but will not assume a dominating role. However, it is important that private farms and their direct environment will change, thus creating a new structural quality. The market supply-oriented farming sector will grow stronger, while on the other end the number of units losing the status of a farm will grow. The latter will be transformed into hobby farms, growing food for families with weak market bonds.

The launching of market mechanisms and growing competition with foreign producers revealed the structural and effectiveness-oriented deficiencies of Poland's agriculture. However, the response to such weaknesses and ensuing progress were very limited, caused by both the agrarian structures inherited from previous system, burdening farming families with high social expenditures (official and concealed unemployment rate), as well as in consequence to incohesive and ineffective agricultural policy.

The scale of institutional changes taking place in agriculture in the past decade was considerably smaller than in other social and economic sectors. Hence, agriculture is still waiting for basic systemic transformations.

The main development problem of Poland's agriculture is the fact that the substitution rate between its capacity components is close to zero. Hence, its structure cannot be improved by re-allocation of existing resources. New structural quality may be generated only be growing outlays for state-of-the-art technologies and associated know-how. Such projects, however, are extremely costly and exceed by far the accumulation capacity of farmers.