

# How Big a Problem is Polish Agriculture?

Working Paper No. 2

Witold Orlowski, Hilary Ingham & Mike Ingham

September 2002

Address for correspondence:

Department of Economics Lancaster University Lancaster LA1 4YX

e-mail: <u>h.ingham@lancaster.ac.uk</u>

### 1. Introduction

The enduring size and semi-subsistence character of Poland's agricultural sector, largely untouched by the collectivisation imperatives of the communist era, continue to threaten to undermine the country's quest for early EU membership. While a variety of historical and social forces underpinned the emergence of this form of farming, its survival from the Second World War into the twenty-first century has largely been the result of extensive transfer payments. Along with macroeconomic stabilisation, the agricultural restructuring and associated rural development, that would reduce the burden of transfers and spread the benefits of transformation more widely, should be, although evidently is not, a major policy priority. Indeed, there is still an ongoing debate about both the precise scale of the problem to be addressed and the route to its solution.

The largest, but most realistic, estimate is that the country currently has in excess of four million farmers, who account for 28 per cent of its employed workforce (GUS, 2001: 2).<sup>1</sup> This compares with the present EU-15 total of 6.8 million farmers, or 4.3 per cent of those in work (EC, 2001: 86). Poland's entry into the EU would alone therefore increase the latter's agricultural workforce by sixty per cent. Of all the countries now applying for membership, Poland has the most farmers and the second highest rate of agricultural employment. However, although Romania has more than three million farmers, accounting for almost forty per cent of its workforce (Ingham and Ingham, 2002: 118), it is inconceivable that the country will be included in the next expansion wave. Nevertheless, the path of the EU's agriculture negotiations with Poland will provide valuable lessons for those not only with Romania, but also with Bulgaria, Latvia and Lithuania, which have significantly smaller populations, but high concentrations of employment in agriculture.

Some argue that the common image of Polish agriculture within the EU is distorted by a range of 'simplifications and stereotypes' that exist because of a lack of information and misinterpretation of the facts (FAPA/SAEPR, 2000: 3). Whether this is true or not, the perceived agricultural threat within current member states from Poland's accession has two dimensions. The first concerns the possible implications for the Common Agricultural Policy (CAP), in particular those arising from direct income payments. However, most of the country's farms are too small and inefficient to permit their owners to benefit from this scheme as it currently operates and there is little prospect of significant rationalisation in the foreseeable future. The second and, it will be argued here, more important issue is that admitting a new member with such a large and backward farming population threatens the Union's objective of economic and social cohesion. As discussed below, Poland's farming communities are already geographically peripheral and relatively disadvantaged and these handicaps will be exacerbated upon entry to the EU. Indeed the farmers are the most Eurosceptic section of Polish society and their opposition may yet serve to derail the country's membership ambitions.

The next section of the paper examines the character of Poland's agriculture sector and draws out the key features of the debate regarding the true numbers of both farms and farmers. Those who employ restrictive statistical conventions to minimise the apparent size of the sector are issued with the challenge of how to deal equitably with the millions of poorly educated, small-scale landowners and their families who survive off a mixture of subsistence farming and welfare. This leaves open the question of why traditional peasant farming has been so resilient to the forces unleashed in the past dozen years, a subject that occupies the third section of the paper. Notwithstanding the absence of past change, a bewildering array of schemes emanating from both the domestic government and international organizations hold out the promise of progress in the future. The fourth section of the paper outlines the major initiatives and considers their prospects of success. All of this must be seen in the context of the course of Poland's troubled negotiations for entry into the EU and the impact that this is having on the attitudes and outlook of its farming community, subjects which occupy the penultimate section of the work. A summary and conclusion close the paper.

## 2. Agriculture in Poland

At the end of the communist era, the available official statistics reported that Poland had over two million farms (GUS, 1997: 346), more than five million farmers (GUS, 1990: 195) and a dual system of agricultural production. Nineteen per cent of farmland was in the hands of large state farms, whose average size was 3,140 hectares, but the majority of farmers were engaged in the small, fragmented private sector where operations had an average size of only 6.6 hectares (Ingham and Ingham, op. cit.: 121). In common with other CEE economies, agricultural production in Poland was characterised by an excessive use of all factors of production, resulting in low productivity levels for both capital and labour. Part-time farming was a widespread phenomenon: even workers employed on the state farms were allowed to earn extra income from domestic plots. For the state enterprises, non-farm activities, which ranged from food processing to construction, were significant and provided work during seasons when agricultural production was low.

With an inverse relationship between agricultural employment and growth being a stylised constant in the process of economic development and the fact that real gross output grew by 47.6 per cent in the nineteen-nineties (GUS, 2001: 527), one would expect that there had been major restructuring in the agricultural labour market. Certainly, one Polish commentator observed that: "[c]onsidering the many areas covered by economic and political transformation in Poland, the changes in agriculture have been the widest and essentially the deepest ... [w]e have said good-bye to the Polish peasant .... the social category of the peasantry, for whom farming was a way of life, is already gone for good" (Warsaw Voice, 2000). The data, however, cast some doubt on this view and Table 1 reveals that there was a relatively modest fall of 16 per cent in agricultural employment between 1988 and 2000. This figure, however, masks two conflicting trends, with the decline attributable in its entirety to the collapse of the state farms, where over 850,000 jobs disappeared. No such reduction was apparent in the case of the private sector, which actually experienced modest employment growth over the period. At the same time, while the number of private farms with a land area in excess of 15 hectares grew from 6.1% to 8.5% of the total, the number with less than two hectares increased by almost five percentage points (GUS, op. cit.: 337). Such facts belie the claim that the traditional peasant farmer has been consigned to Poland's history.

The country conforms to the northern European agricultural norm in producing arable crops and livestock. However, its agricultural operations are mainly 'extensive' (low productivity) in contrast to the 'intensive' (high productivity) mode of production typical in existing member states. Thus, Pouliquen, (2001: 27) shows that Poland achieves only 21 per cent of the EU average gross product (net of fodder costs) per hectare of utilised agricultural land for crops and 38 per cent for livestock. Nevertheless, the structure of the Polish farming sector remains dualist, with large intensive holdings being found in the north and the west of the country and the semi-subsistence, small farm sector being located in the peripheral east/south-east areas. The latter group represents the major focus of this paper.

Surely the most startling feature of the Polish agricultural debate is the wide range of estimates that appear in the literature regarding the actual numbers of farmers in the sector. For example, "[a]ccording to Polish figures, the agricultural employment rate is still quite high with 25% of total employment (the EUROSTAT figures cite 18%)" (EC, 1999a: 1) and "[t]here are major statistical problems with the definition of a 'farmer' in Poland .... " (Dries and Swinnen, 2002: 472). Official Polish Statistical Office data show that over four and one-quarter million individuals were employed in agriculture, hunting, forestry and fishing in 2000 and they accounted for 28 per cent of total employment (GUS, 2001a: 2). This figure is based on a yearly survey that covers all production units in the national economy, regardless of size of employment or sector of activity. It represents the definition of agricultural employment adopted by government agencies such as the Ministry for Agriculture and Rural Development (MARD) and is the figure used in the government's negotiation position in the area of agriculture that has been presented to the European Commission.<sup>2</sup> A disaggregation of the total figure for the year 2000 is presented in Table 2, which requires two further points of clarification. First, the statistics cover all employees, part-time and full-time, and no attempt is made to convert part-timers to full-time equivalents. Second, the statistical authorities revise the survey data on persons employed in private sector agriculture according to extrapolations from the 1996 Agricultural Census (GUS, 1997a). As the table indicates, over four million agricultural workers are owners, co-owners or family helpers, the latter of whom receive no financial remuneration for their labour services. Paid employment based on the external labour market is not a common contractual form in this sector and it accounts for less than four per cent of the total agricultural workforce.

The statistical authorities of the EU do not use such an all-embracing definition; for an individual to be counted as employed in agriculture, he/she must derive a significant proportion (at least 62.7 per cent) of their income from this sector. This is the procedure adopted by the Eurostat Labour Force Surveys (LFS) and Poland has conducted quarterly exercises that are consistent with Eurostat definitions since 1992. That for the fourth quarter of 2000 estimated that there were almost two and three-quarter million persons, 18.9 per cent of those in employment, engaged in agriculture, hunting and forestry and, of these, almost 97 per cent worked in the private sector (GUS, 2001b: 17). Nevertheless, the disaggregation afforded by the LFS, shown in Table 3, again demonstrates the importance of individual agriculture, with most of those working in the sector being employed in 'family enterprises', even under the restrictive definition used by the Survey. The data also reveal the importance of family workers - individuals who work without pay in an economic enterprise operated by a related person living in the same household - in agriculture. In the private sector, such workers account for almost one-quarter of the total.

The narrowest definition of agricultural employment is based on the OECD classification of full-time workers under which an individual is only enumerated as being employed in the sector if he/she works a minimum of 2,120 hours per annum, which equates to a working week in excess of forty hours. Hunek (2000), in an idiosyncratic, but strangely influential, paper claims to adopt this convention and estimates that the share of the Polish workforce employed in the agriculture sector is between eight and nine per cent. However, the LFS casts doubt on his assertion, since over eighty per cent of those employed in agriculture and related activities report that they work in excess of forty hours. This finding implies that, on the OECD definition, 15.6 per cent of those in employment work in agriculture.<sup>3</sup> It might also be noted that Hunek fails to extend his definition to other sectors of the economy or to consider the labour market status of those individuals he removes from agriculture. But, however one categorises those attached to Poland's small farms, they assuredly exist, many are amongst the poorest members of Polish society and, as shown below, they absorb significant central government transfers. Their presence in an enlarged EU will impose additional pressure on the already strained credibility of a Europe striving for economic and social cohesion.

Almost half of Poland's employed rural residents were primarily engaged in agriculture in 1999. Furthermore, 15 per cent of those whose main job was not in agriculture had additional employment there. This implies that almost two-thirds of Poland's employed rural population depend, to some degree, on farming and related activities as a source of income.<sup>4</sup> The development literature frequently confirms that semi-subsistence farmers actually derive the bulk of their income away from their own plot and that their domestic farming activities simply generate an additional source of income, whether in cash or in kind. Table 4 demonstrates the relevance of this modus operandi to the Polish case, insofar as the 1996 Agricultural Census revealed that less that one-third of rural residents counted work in agriculture as their main source of income, while the corresponding LFS figure for 1999 is more than ten percentage points lower.<sup>5</sup>

However, the data provide little evidence to suggest that non-agricultural employment opportunities abound in the rural areas, with only between one-fifth and one-quarter of their workers deriving the bulk of their income from non-agricultural production activities. In fact, both the Census and the LFS reveal that the modal source of income in the rural areas is a transfer payment, whether a pension or unemployment benefit. The Census figures indicate that almost two-thirds of rural residents rely on agriculture or benefits, with the lower figure from the LFS being almost wholly attributable to a mysterious jump in the numbers relying on other non-earned income sources. Both sources therefore provide scant evidence to suggest the existence of part-time farmers with off-farm jobs: the reality would appear to be part-timing farming topped up with benefits.

Just as there is no agreement on the number of true farmers, there is also no consensus as to the true complexion of Poland's farming enterprises. The official data for

2000 recorded that there were 1,881,000 private farms, covering over fifteen million hectares of land, with an average size of only 7.2 hectares (GUS, 2002: 343 & 345). The 1996 Agricultural Census reported a total of 1,992,000 private farms engaged in agricultural production, of which some 260,000 (12.7 per cent of the total) produced solely for their own consumption. The corollary of this is that more than 85 per cent of Poland's farms are generating at least some marketable output. Hunek, (op. cit.) on the other hand, on the basis of a three-tier classification, characterises the 69 per cent of Polish farms that produce only five per cent of total agricultural output as 'nominal' farmers producing primarily for their own need - so-called 'hobby' farmers (ibid.: 39). His methods consign in excess of one million more farms into this hobby category than does the Census.

According to Hunek, many of the farmers in this group are either retired or have other sources of income and their farming practices are both labour intensive and technically inefficient. However, he sees no scope for this labour to be engaged productively in other activities and hence their farms are creating 'work' for individuals for whom no alternatives exist. Furthermore, their current status ensures that they do not suffer social exclusion from the local communities in which they reside. This leads him to conclude that the appropriate policy is to leave these farms intact, as the problem will decline over time. The only intervention required to ensure that this benign solution to Poland's agricultural problem transpires is that young people should be 'removed' from the farms in question in order to prevent inter-generational continuance (ibid.: 41). Unfortunately, Hunek fails to recognise that there are few off-farm employment opportunities in rural areas and that migration is hardly an option when two-thirds of the country's three million unemployed reside in urban areas (GUS, 2002a: 11 - unemployment book).

Hunek's second tier of farms produce mainly for their own consumption, but with surpluses sold on local markets, and account for 22.4 per cent of the total number of agricultural enterprises and produce a similar percentage of the sector's total output. However, the Agricultural Census reports that such farms represent 37.4 per cent of the total number (MARD, 2000: 14). Although Hunek contends that it is possible that some of these could expand and become competitive players in the agricultural market of an enlarged EU, this is not considered to be a viable option for the majority. However, he recognises that some such undertakings must continue in order to ensure low cost food for local markets. For the rest, he recommends that their localities be provided with infrastructure and new workplaces in order that the dependence on agriculture might be reduced. The mechanisms by which this is to be achieved are once again not specified.

The final group of farms in Hunek's scheme account for less than nine per cent of the total, but cover over forty per cent of agricultural land and produce almost three quarters of the value of total output. This he contends represents true agribusiness, not peasant farming. Farmers in this group have a typical Schumpeterian mentality and are innovative, creative and risk-taking and their enterprises conform to the typical developed market economy agriculture model. However, he recognises that to remain competitive in the new Europe these farms must diversify in order to become enterprises with integrated systems of production, processing and distribution. In contrast, the Census reports that 47.4 per cent of Poland's farms are producing marketable output, with more than ninety

per cent of the associated holdings having fifteen hectares of utilised agricultural area or more. These figures suggest that rather more of Poland's farms might prosper within an enlarged Union, but they provide no solace for the country's peasant farmers.

Notwithstanding the differing estimates of the number of people engaged in genuine agriculture in Poland and how many farms actually produce marketable output, there is general agreement that the agricultural workforce is poorly educated (FAPA/SAEPR, op. cit.) and that this will hinder the restructuring of the sector and rural development in general. More broadly, the low educational attainment of most of the peasant farmers will impose additional strains on the quest for economic and social cohesion and indeed might be seen as a further obstacle to the emergence of a true European citizenry (Cresson, 2000). Evidence from the LFS, reported in Table 5, reveals that only slightly in excess of one per cent of individuals working in agriculture have a tertiary, or higher, level of education, whereas the figure for the total employed population exceeds fourteen per cent (GUS, 2001b). Likewise, over forty per cent of the agricultural workforce has, at best, primary education and those in farming are also less likely to have a general secondary level of education (ibid.). It could be surmised that this maldistribution is attributable to demand side factors, insofar as young people in agricultural communities place little value on education because they see their future in farming and feel that any investment in qualifications is unlikely to produce a significant financial return. However, while not conclusive, the 1997 PGSS reveals that almost half of Poland's farmers are dissatisfied to some degree with their education (Cichomski and Morawski, 1998).

This suggests an alternative explanation for the poor academic achievements of most of Poland's farmers, which recognises that the provision of educational establishments, both in terms of quantity and of quality, has been and remains, poorer in the rural than in the urban areas of the country. Universities are located in metropolitan centres and the provision of post-secondary opportunities outside of these is sub-standard, as indeed are the number of pre-school (up to eight years of age) facilities. In addition, the quality of the teachers has historically been poorer in the rural areas (FAPA/SAEPR, op. cit.). The only way for young people in agricultural communities to obtain a satisfactory level of education is either to commute or migrate. However, poor transport and infrastructure provision hinders the former, while Poland has been confronted with an acute and persistent housing shortage (Juraś and Marszał, 1998) that has limited the latter. Educational choice has therefore been determined by local supply.

The mix of peasant farming and low educational attainment has a predictable corollary in terms of the distribution of income. Thus, even with state transfer payments and the imputed value of own consumption, farming households have per capita incomes that are less than eighty per cent of the national average, below even those of pensioners (GUS, 2001c: 180). They are also the social group that devotes the largest proportion of its income to the consumption of food (ibid.: 182). Furthermore, they tend to be spatially concentrated, with their regions being in consequence particularly poor. For example, the old voivodship of Zamość in which agriculture accounted for 63 per cent of all employment (GUS, 1998: 22) had a per capita GDP in 1997 that was only 58 per cent of the national average (GUS/USK, 1999: 54 & 62).<sup>6</sup> With the most recent figures indicating that Poland's GDP per capita in purchasing power standards is only 36 per cent

of EU-15 average (EC, 2001a: 74), the threat posed by the country's private agricultural sector to economic and social cohesion is evident. Furthermore, it is futile to expect that the Structural Funds, including the Cohesion Fund, will be the source of salvation. They are not devoted solely to agriculture, or even to rural areas, and their maximum total annual limit is capped at four per cent of the recipient's GDP. In addition, they normally require matched funds from domestic sources. Given that the use of the Funds is increasingly subject to monitoring by the Commission, the temptation for the Polish government to cherry-pick 'winners', rather than attempt to tackle pressing, but problematic, policy concerns that could not in any case be solved by stimulating indigenous potential is likely to prove irresistible.

## **3.** Barriers to Change

This section considers three ongoing impediments to the reform and restructuring of Poland's private agricultural sector: the farmers' social security system, political realities and imperfections in the land market.

### KRUS (Kasa Rolniczego Ubezpieczenia Społecznego)

In common with other CEE governments, successive administrations have had to address the problem of how to allocate their available finance between measures designed to promote the modernisation of the economy and passive transfers such as social security payments. It is certainly true that in the Polish case the bulk of the funds have gone to the latter. The Farmers' Social Security Fund (KRUS), re-launched in 1990, provides pensions (retirement and disability) and medical insurance for the rural population. Men are eligible for a retirement pension at the age of 65, women five years earlier, on the condition that they have contributed to a pension scheme for a minimum of one hundred quarters (Christensen and Lacroix (1997)). Upon retirement, the farmers must give up all of their land except for one hectare; but this does not preclude its transfer to other family members and neither does it mean that KRUS beneficiary must give up farming. Likewise, the move aimed at improving the age structure of the sector by allowing male farmers to qualify for retirement benefits at the age of sixty on the condition that they have contributed to a scheme for at least 120 quarters and are prepared to transfer their land, free of charge, to a successor who is less than forty years old has had no effect on either employment patterns.

Finance for KRUS comes predominantly from central government (ninety per cent) and represents a significant income transfer to the rural population. This is reflected in the fact that seventy per cent of farmers' non-agricultural income comes from social transfers, most notably agricultural retirement pensions. Currently, KRUS absorbs between two and three times more public funding than direct aid to agricultural production (Pouliquen, op. cit.: 43) and the demographic structure of the agricultural population suggests that this situation is unlikely to change in the near future. In 2000, for example, production support was less than two and one-half billion złoty - 1.6 per cent of the state budget - while KRUS received almost five and one-half times this amount (GUS, 2002b: 258 & 260). As the system stands, it is really a non-means tested social

welfare programme, which provides no incentive for surplus labour to shift into nonagricultural employment and, if unreformed, renders it unlikely that Poland will achieve its economic potential (IMF, 2002).

Of course, Poland has received significant external financing from inter alia the EU, the US government and the World Bank aimed at smoothing its systemic transition. For example, between 1990 and 2000 the EU's PHARE programme allocated 2,534 million euro to Poland (CEC, 2001: 10). However, in its own evaluation of the agricultural modernisation and restructuring projects undertaken beneath the PHARE banner, the Commission was openly critical of the use to which the finance had been put. Ninety one per cent of the money went to temporary employment subsidies and seventy per cent of the jobs created were in agriculture itself (EC, 1999a: 87). In the view of the Commission, the need was for the generation of long-term sustainable economic development, albeit if only temporary.<sup>7</sup> The net result is that, to date, the fundamentals required for the future diversification of employment opportunities have not been addressed.

#### *Political considerations*

Perhaps paradoxically, political expediency has also been an important constraint on agricultural restructuring. First, the presence of farmers' parties, such as the Polish Peasant Party (PSL), as minority partners in coalition governments has been a persistent feature of the political landscape. Such parties are committed to retaining the traditional mode of farming and would oppose policies designed to facilitate significant emigration from the rural areas. Their views are typified by the words of a former Minister of Agriculture and Rural Development: "[w]e want to improve the structure of farms but at the same time we do not want villages to disappear from the Polish landscape. We want to decrease employment in agriculture but we do not want industrial farms to replace family farms" (Balazs, 2001: 7). Currently, the president of PSL, Jarosław Kalinowski, is the Deputy Prime Minister and the Minister for Agriculture and Rural Development, positions he also held in the earlier administration of Włodzimierz Cimoszewicz.

In addition, maintenance of the private farming sector has provided a labour market buffer zone, both by sparing individuals from open unemployment and offering some form of work to people from farming families made redundant by industrial enterprises. With the registered unemployment rate in Poland standing at 18.1 per cent in March 2002 (GUS, 2002c), the political significance of the cushion offered by the sector should not be underestimated. Furthermore, family farms provide their owners with a source of cheap food; an important consideration given that Poles, on average, spend in excess of thirty per cent of their income on food and that, in the nineteen-nineties, its price increased seven-fold (GUS, 2002: 191 & 197).

#### Imperfections in the land market

Changes in agricultural land ownership patterns during the nineteen-nineties have come about mainly via the liquidation of the state farms whose land was transferred initially to the Agricultural Property Agency (APA). Typically, the APA's stock of land, some 3.5 million hectares, is leased in large parcels - 76 per cent in units over 100

hectares (CEC, 2001: 52) - despite the fact that the optimum size for Polish farms has been estimated as lying between ten and fifteen hectares (Van Zyl et al., 1996). Two factors have caused leasing to be preferred to sale. First, in some cases, property rights over the land remain ill defined, thus effectively ruling out sale in the short-term pending the construction of an accurate land register. Second, successive Polish governments have refused to sanction the unrestricted sale of agricultural land to foreigners, and, eventually, a twelve-year transitional period was agreed with the Commission during the course of the accession negotiations.<sup>8</sup> In the absence of willing and able domestic purchasers, foreign leasers bring much needed capital and expertise into the sector. Given the APA's preference for releasing land in large parcels, neither purchase nor lease is possible for most private domestic farmers: they simply cannot afford it.<sup>9</sup> The APA's strategy has attracted criticism from the European Commission: "land consolidation has been approached as a technical instrument to increase agricultural parcel size, and not as a tool for improvement of farming and the quality of rural living conditions" (EC, 1999b: 74).

In the private small farm sector, on the other hand, little has changed and many agricultural holdings are cultivated extensively insofar as the land area is considerably in excess of that needed for the production levels achieved (Pouliquen, op. cit.: 42). There are two reasons for this. First maintenance, or even expansion, of a family's land base protects family members from the vicissitudes of the labour market by providing them with an acceptable refuge in the event of redundancy. Second, land is a rational investment in the face of inflation and the prospects of increasing land prices after accession. Of course, some families lease part of their land on an informal basis to neighbours but, as such transactions evade both the tax authorities and the statistics, their significance cannot be gauged and, in any event, the practice would hardly seem to constitute a satisfactory base upon which rational restructuring could proceed. Indeed, such practices merely serve to further sub-divide an already overly fragmented pattern of land holding and there is widespread agreement that some level of land consolidation is necessary to preserve the long-term viability of Poland's small-scale agriculture (Munroe, 2001).

# 4. Future Prospects for Change

Various government agricultural and rural development initiatives have recently been announced - 'The Medium-Term Strategy for Agriculture and Rural Areas Development' (adopted April 1998), 'The Coherent Structural Development Policy for Rural Areas' (adopted July 1999) and 'The Pact for Agriculture and Rural Areas' (adopted September 2000) - although their potential significance can only be a source of conjecture. Agriculture cannot be insulated from overall economic policy objectives and 'macroeconomic and budgetary stability' (EC, 2000) is of fundamental importance to the Polish government in the run up to accession. Currently, the country's debt/GDP ratio is 40.9 per cent (GUS, 2002: 496), which satisfies the Maastricht Treaty convergence criteria for membership of the eurozone and the general annual net borrowing of the government was reduced in the mid nineteen-nineties. However, the latter increased again to stand at almost four per cent of GDP at the end of the decade (CEC, 2001), which, on a strict interpretation, fails to satisfy the Maastricht criteria.<sup>10</sup> In fact, the Commission urged that an appropriate degree of deficit reduction should be defined in the medium term in its latest report on Poland's progress towards accession (ibid.: 30). Its specific recommendation was that a profound reform of the social security system was necessary, given that transfer payments represent a fixed element of the budget. At present, these constitute approximately one-half of the Polish government's total general expenditure, or about one-fifth of GDP. The Commission particularly stressed its ongoing concern over KRUS, whose flat rate contributions and generous, non-means tested benefits generate targeting and incentive problems. However, significant change to the system is not envisaged (Polish Government, 2000).

The latest wave of EU pre-accession funding allocated annual sums of 398 million euro from the PHARE programme, 186.6 million euro from the SAPARD (Special Pre-Accession Programme for Agriculture and Rural Development) programme and between 312 and 385 million euro from ISPA (Instrument for Structural Policies for pre-Accession) over the period 2000-2002 (CEC, 2001: 10). Of these, SAPARD is the most relevant to agricultural restructuring and Poland has chosen to focus its allocation on increasing the efficiency of the agri-food sector and improving rural conditions (Ingham and Ingham, op. cit.:126; MARD, 2000), with the major benefits to be targeted on those farmers less than fifty years of age. However, only limited funds have yet flowed from SAPARD since the EU only signed the decision to confer the management of these funds on the Polish authorities in June 2002. Such lags hardly bode well for the imminent onset of significant restructuring.

The European Bank for Reconstruction and Development (EBRD) has signalled its willingness to assist in financing the modernisation of the agricultural sector provided that the Polish government undertakes certain structural reforms (EBRD, 2002), the Bank being of the opinion that the benefits of its interventions will be impeded if these are not carried out. The measures identified include improvements in food and hygiene standards, acceleration in land consolidation and so-called 'institution building'. In its programme, the Bank proposes a three-fold approach: providing financial assistance for private investment aimed at improving hygiene standards, developing landmark projects to assist the farming sector, and activities to increase the sophistication of financing to the agri-business sector (ibid.: 22). All of these measures are necessary and non-contentious although, with respect to the latter, the issue of take-up is frequently found to be an important constraint (Ingham et. al., 1998). It might further be noted that EBRD is considering pre-financing Poland's SAPARD programme in advance of the receipt of funds from the Commission.

As noted already, the agri-rural education deficit is a cause of major concern, although recent developments might be regarded as the basis for a certain amount of cautious optimism. The 1999 educational reforms mean that, in principle, all children will have the opportunity to acquire a secondary level education, in a well-equipped school with modern facilities and trained personnel, and new college preparatory schools will provide a route into higher education for rural youth from August 2002. Since 1998, the APA has provided secondary school scholarships for the children of former state farm workers and World Bank finance is currently being used to improve the education of rural young people. Also, the Agency for the Restructuring and Modernisation of

Agriculture (ARMA) is introducing a training programme for farmers that is designed to improve their vocational qualifications (FAPA/SAEPR, op. cit.). A similar scheme is also scheduled to operate under the auspices of the SAPARD programme, although it will be extremely limited in its coverage. For example, if the training courses were to be of one year's duration, they would finance 200 participants. Even if short two-month courses were to be offered, there would be 1,250 trainees.(MARD, 2000: 111). Some disappointment was also voiced over the Commission's decision not to support the education of rural youths under this initiative (FAPA/SAEPR - stereotypes). It is therefore ironic that in its 2001 assessment of Poland's progress towards membership, the Commission noted "[o]ne of the key challenges to be faced is the need for combined efforts to put in place an integrated policy for rural education" (CEC, 2001: 57). In any event, it is open to question whether educational innovations alone will provide a sufficient stimulus for sustainable development trajectories to emerge in the more disadvantaged rural areas.

Finally, two points regarding the outstanding task of agricultural restructuring should be noted. First, the future of the ex-state farms will depend upon the strategies adopted when the initial leases expire. Any sales will be contingent upon the existence of accurate land registers, so that the necessary exchange of property rights can take place. In terms of the small farm sector there is little to suggest that there will be radical changes in the short term; in fact, these farms may be required to absorb yet more workers as large-scale privatisation proceeds. Also, land reform may be further stifled if a controversial draft bill that has been prepared by Kalinowski (Warsaw Voice, 2002) ever enters the legislation. Under his proposals, the maximum size of a farm must not exceed three hundred hectares, although the figure has regional variations, with the proposed maximum in eastern Poland being only one hundred hectares. However, provincial local government assemblies and agricultural chambers would have the right to increase the proposed areas by up to fifty per cent and the law would not apply to existing farms. The draft bill proposes that only individuals with agricultural qualifications, or who have a certificate attesting that they have worked in the agricultural sector for at least five years, will be able to buy farmland. Upon purchase, they will have to commit themselves to cultivating it for at least ten years and to guarantee that they will live on the farm. Whether the Commission adjudges that the proposal is consistent with EU law, as is necessary under the Accession Partnership, remains to be seen.

# 5. Agriculture Negotiations with the EU

All of the foregoing developments must be seen in the light of, and sometimes have been conditional upon, Poland's position in the EU membership queue. The accession negotiations with applicant countries are conducted over a set of 31 policy issues (chapters), all of which should in principle be closed before an applicant is accepted into membership. In Poland's case, the agricultural negotiations, which began formally in June 2000, have been particularly contentious. Given the political significance of the sector, the failure to resolve the problems has become a core feature of the entire negotiation process (FAPA/SAEPR, op. cit.) and conceivably could derail the country's membership ambitions. From the outset the government's demands were clear:

- Full incorporation of Polish agriculture into the CAP.
- Awarding to Poland the production quotas at the level of natural potential for environment friendly agricultural production on the one hand, and ensuring maintenance of stable income sources for [the] agricultural population on the other.
- Inclusion of the Polish agri-food products market into the Single European Market.

(Polish Government, 2000: 109)

Agenda 2000 (EC, 1998) had, of course, already stated the EU's firm opposition to the first of these. Beyond this, the Commission's initial response can only be inferred from its annual Progress Reports, which continued to be critical (CEC, 2000). The Road Map of the Commission's Enlargement Strategy Paper foresaw that it would table draft proposals (so-called 'common positions') in response to the applicants' requests during the first half of 2002, with a view to the closure of the chapter for the best-prepared countries shortly thereafter (EC, 2002: 19). It was not anticipated, however, that the finalised positions would be presented before the end of June and the main outstanding issues at the time of writing are: direct payments; the determination of reference quantities for production quotas; progress towards the establishment of administrative structures for Common Market Organisations, and veterinary issues such as animal identification, border inspection, public health protection and animal welfare.

Of these, the first two are the most contentious. The Commission justified its original opposition to granting access to direct income support payments on the grounds that they were originally introduced to compensate farmers for the loss of price support revenues that they had suffered since the introduction of the McSharray reforms (Ingham and Ingham, op. cit.: 113). In its view, as the applicant countries had never enjoyed these price supports there was no need to compensate them for their loss. However, at the beginning of 2002, the Commission published a draft issues paper acknowledging that, after ten years, these payments had lost their compensatory nature and were now just direct aid (CEC, 2002). Furthermore, as direct payments are part of the CAP acquis, permanently excluding the new member states would not be consistent with the concept of a single market in agricultural products. A phased approach was therefore proposed for any candidate country accepted into membership whereby they would receive 25 per cent of the full entitlement in 2004, 30 per cent in 2005 and 35 per cent in 2006. After 2006, their payments would be increased in percentage steps until 2013 when the new members would enjoy the full support levels (ibid.: 6). This means that the applicant countries have effectively been told that, when they join the EU, they face a ten-year transitional period before they can receive full CAP funding.

In addition to the obvious financial savings that this strategy achieves, the Commission defends its proposals as being optimal for the applicant countries themselves. If full direct payments were to be made to the new members from the day of entry it would have an immediate positive effect on farm incomes, but it might also have a negative effect on restructuring. Particularly for the semi-subsistence farms, high payments would simply ossify old practices by ensuring their financial viability, thereby stifling change. If this were to occur, the vicious circle of low productivity, low standards and high hidden unemployment would be perpetuated. Furthermore, excessive cash injections to one professional group are seen as likely to create considerable income disparities and social distortions; both within the rural areas, where there are differences in land ownership, and between the rural and urban areas. Low, but rising, direct payments are therefore viewed as a means to stabilise agricultural incomes without compromising restructuring.

The Commission has also decided that the most appropriate reference period on which to base production quotas is 1995-1999 (or 2000 when available) whereas Poland, in common with other applicant states, requested that earlier reference periods be used. For example, in the case of arable crops the Commission wants to use "the average of the median" three years for the period 1994/95-1998/1999 (ibid.) while Poland's request was that the same average be calculated over the period 1986/87-1990/91. As with most products, the net effect of this would be to increase Poland's reference yield; in this case, by some fifteen percentage points above that proposed by the Commission (ibid.:25). In defence of its stance, Brussels points to the greater reliability of the statistics for the later period and also to the fact that production and consumption levels during this time reflected more accurately the adaptation of production structures and consumer tastes to more open markets and to the introduction of World Trade Organization constraints. As an additional incentive, the Commission also noted that it would be proposing a special measure for semi-subsistence farms (3-15 hectares). Although this would apply to farmers in all applicant states, its introduction was inspired largely by the importance of such enterprises in Poland. The maximum flat rate aid would be 750 euro, but payment would be conditional on the submission of a business plan that demonstrates the future viability of the farm (ibid.). Whether the level of support proposed would cover the costs of preparing a business plan is open to question.

The Commission's view is that its terms are 'the best possible offer for the candidate countries .... [and] .... it is a good proposal when you consider that direct payments were not even calculated in the Berlin agreement' (ibid: 2). Such enthusiasm was not, however, apparent in Poland. For example, the proposals were openly criticised by Kalinowski: '[e]qual terms of competing with the agricultural sector of the EU 15 member states are of vital importance to Polish farmers. Accession without direct payments, or with payments set at a low level but applicable in both Poland and the EU 15, and combined with the removal of production quota limits .... would be .... a much better solution (Warsaw Voice, 2000a: 3). Władysław Serafin, the chairman of the National Union of Farmers' Organizations, described the Commission's proposals on direct payments as 'an assault on the sovereignty of Polish agriculture' (Warsaw Voice, 2002a: 2) and, in February 2002, his organization picketed the premises of the EU mission in Warsaw. Bogdan Pęk, a deputy of the PSL, was equally unimpressed, stating: "[i]t's no longer just insolence; it's a pack of lies and foolishness. They treat us as if we were people who can't count to five" (Warsaw Voice, 2002b:1).

The official stance of the current Polish administration is that: "the proposed starting level for the direct income support (25% of the level set down in existing EU

regulations) is far from satisfactory. The proposal for a 10-year transition to introduce full payments cannot be accepted" (Polish Government, 2002: 1). However when Franz Fischler, the EU's Commissioner for Agriculture, Rural Development and Fisheries, spoke to the farm ministers of the EU-15 and the 13 candidate countries in April, he called on both sides to be pragmatic regarding their negotiation objectives. "In particular the candidate countries should shape their negotiating approach in a realistic way. It is of crucial importance that you do not raise false expectations amongst farmers. To insist on 100% direct payments and to make this point over and over again will not be a winning strategy. Look at the whole package, which is much broader" (EC, 2002a:1). Clearly, some distance between the two sides remains.

As a further demonstration of the benefits the Commission believes that its agricultural proposals offer to the candidate countries, the Directorate General for Agriculture produced a paper assessing the impact on agricultural markets and farming incomes of enlargement (EC, 2002b). This provides quantified outcomes for the applicants under four scenarios: (i) non-accession; (ii) accession without direct payments, using recent reference periods for production quotas; (iv) accession according to the candidates' requests (full direct payments and earlier reference periods for production quotas). Curiously, the one scenario that is not presented in the document is the phased direct payments scheme that the Commission proposed in its draft common positions paper (CEC, 2002).

Using a base year of 2002 and a hypothetical 20-hectare farm, Table 6 details the benefits that Poland can expect to receive in 2007 under each of the four possibilities. The data reveal that even though the value of crop output is predicted to rise above its 2002 levels, the value of livestock output and agricultural incomes are projected to fall, if the country does not accede. What the paper stresses is the fact that, even if the new member states were not offered any direct payments and if the Commission used recent data for its reference period, Poland's agricultural community would still benefit quite considerably from membership. Crop values increase by more than 17 per cent, livestock values by more than thirty per cent and incomes by almost 35 per cent. Obviously, if the Commission introduces the proposed phased direct income payments, Poland's gains are greater. On the other hand, if the Commission were to accede to Poland's request, the value of livestock would increase by almost fifty per cent between 2002 and 2007 and agricultural incomes at the end of the period would be more than 225 per cent of what they had been at the start. This latter finding suggests that the adoption of such a policy would cause huge income disparities between eligible farmers and others in the rural areas, an outcome which would impair any policy measures designed to enhance cohesion.

The Polish Prime Minister ordered a thorough analysis of the EU proposals and his government's response was based on a paper prepared by the Polish Foundation of Assistance Programmes for Agriculture (FAPA/SAEPR, 2002). The Foundation challenged the Commission on a number of issues. First, they questioned the validity of basing simulations on a 20-hectare farm when such is not the norm in Poland; in fact, only five per cent of Polish farms are of this size. Second, they argued that the choice of 1999 as a base year meant that the price gaps between Poland and the EU had been over-

estimated and that this problem would be exacerbated because the likely impact of accession on real exchange rates had been ignored. Third, they dismissed the argument that extending full direct income payments to Polish farmers would impede restructuring since such payments are typically based on acreage, yield or head of livestock. As such, and central to the message of this paper, the small farm sector, where all agree that land consolidation is necessary, would receive very little of such monies. They concluded with the assertion that the EU's offer would leave Poland as a significant net contributor to the Union's budget - up to one billion euro per annum - and that, if accession takes place in 2004, this will coincide with the time when the country's costs of financing foreign debt peak. The gulf between the two parties remains wide.

The dangers inherent in the increasingly public gulf between the two sides are indicated vividly by the hardening opinions of the Polish public, both farm and non-farm, towards the EU, particularly as the country is committed to holding a referendum prior to the acceptance of any offer of membership. By May 2000, only 19 per cent of Polish farmers believed that accession would have a favourable influence on the country's farms (down from forty per cent in June 1994), while sixty per cent (24 per cent in June 1994) thought that the impact would be unfavourable (Warsaw Voice, 2000). A poll conducted in 2001 found that 53 per cent of farmers believed that the proposed, and now agreed, 12year transition period for non-Polish EU citizens to be able to purchase farmland in the country was too short and 48 per cent of them believed that the seven year transition period for the purchase of recreational plots was too short (CBOS, 2001). Indeed, half of all Poles believe that EU citizens should not be allowed to buy land freely in other member countries (CBOS, 2001a). Furthermore, 59 per cent of the population think that Poland should demand full payments for farmers from the moment of accession, even if it is associated with a risk of deadlock and the failure of the accession process. Amongst farmers this figure rises to eighty per cent (CBOS, 2002).

### 6. Summary and Conclusion

The current indications are that eastward enlargement of the EU will commence shortly and this should bestow significant benefits on many citizens in the new member countries. Certain sections of the population, however, will suffer yet another transitional shock that could be enduring and the members of Poland's traditional farming community represent one of the largest identifiable groups confronting this prospect. While debate continues over how many of them are true farmers, there can be no dispute that, however labelled, large numbers of them are poor and have little chance of securing alternative livelihoods without development interventions on a scale not so far attempted and currently not envisaged. Contrary to popular perception, they will not be saved by benefits emanating from the CAP, but they may well, quite understandably, impose additional strains on the EU's pursuit of economic and social cohesion between the citizens of its member states.

Various barriers continue to thwart even modest improvements in the situation of Poland's peasant farmers including central government budgetary stress, the disincentives inherent in the farmers' social security fund, inappropriate utilisation of external development aid, political imperatives from both within and without the sector, and imperfections in capital and land markets. Furthermore, it would appear unwise to place undue faith in the initiatives, domestic or external, that are currently taking shape, not least because of the poor record of the Polish authorities in managing rural assistance programmes and of the additional constraints placed upon them by the EU's convergence criteria and the ceiling imposed upon payments from the Structural Funds.

Many aspects of Poland's accession negotiations with the EU have progressed smoothly, although this cannot be said of those relating to agriculture. In the course of the latter, particularly heated disagreements have arisen over CAP funding arrangements and the setting of production quotas. These have certainly embittered key figures within the farmers' political parties and it is of some significance that the Polish Minister of Agriculture is the head of one of these. Furthermore, the resentment has spread not only to the farmers themselves, but also to the wider population. Ultimately, it may prove to be unduly alarmist to suggest that the brinkmanship widely advocated for those negotiating with the Commission over the country's agriculture chapter could de-rail the entire accession project. It is no exaggeration, however, to conclude that farming in Poland remains a major problem.

### References

- Balazs, A. (2001), 'The European Union Summit in Nice Opened the Door to the EU to Poland', *Polish Food*, Winter, pp. 6-7.
- CBOS (Centrum Badania Opinii Społecznej) (2002) 'Polish Public Opinion' February, Warsaw.
- CBOS (Centrum Badania Opinii Społecznej) (2001) 'Polish Public Opinion' December, Warsaw.
- CBOS (Centrum Badania Opinii Społecznej) (2001) 'Polish Public Opinion' March, Warsaw.
- CEC (Commission of the European Communities) (2002), 'Enlargement and Agriculture: Successfully Integrating the New Member States into the CAP', Issues Paper, SEC(2002) 95 final, January.
- CEC (Commission of the European Communities) (2001), 'Regular Report on Poland's Progress Towards Accession', Brussels.
- CEC (Commission of the European Communities) (2000), 'Regular Report on Poland's Progress Towards Accession', Brussels.
- Christensen, G. and R. Lacroix (1997), 'Competitiveness and Employment: A Framework for Rural Development in Poland', World Bank Discussion Paper No. 383, Washington, D.C.: The World Bank.
- Cichomski, B. and P. Morawski (1998), 'Polish General Social Surveys, 1992-1997. Machine readable data file.' Warsaw: Institute for Social Studies, University of Warsaw, producer and distributor.
- Cresson, E. (2000), 'Learning for Active Citizenship, Foreword', available at http://europa.eu.int/comm/education/citizen.citiz.en.html.
- Dries, L. and J.F.M. Swinnen (2002), 'Institutional Reform and Labor Reallocation during Transition: Lessons From Polish Agriculture', *World Development*, vol. 30, no. 30, pp. 457-74.
- EBRD (European Bank for Reconstruction and Development) (2002), 'Strategy for Poland', available at http://www.ebrd.com/english/about/strategy/country/poland.
- EC (European Commission)(2002), 'Enlargement of the European Union Guide to the Negotiations Chapter by Chapter', DG Enlargement, April.
- EC (European Commission) (2002a), 'Enlargement: Fischler gives CEEC farm ministers "10 good reasons" for Commission proposal', IP/02/434, 19 March, available at
- EC (European Commission) (2002b), 'Analysis of the Impact of Agricultural Markets and Incomes of EU Enlargement to the CEECs', Directorate General for Agriculture', March.
- EC (European Commission) (2001), *European Social Statistics Labour Force Survey: Results 2000*, Luxembourg: Office for Official Publications of the European Communities.
- EC (European Commission) (2001a), *Unity, Solidarity, Diversity for Europe, its People and its Territory*, Second Report on Economic and Social Cohesion, Statistical Annex, Luxembourg: Office for Official Publications of the European Communities.

- EC (European Commission) (2000), 'Poland: Accession Partnership 1999', DG Enlargement, Final Version, February.
- EC (European Commission) (1999), 'Poland Agriculture and Enlargement', DG Agriculture'.
- EC (European Commission) (1999a), 'An Evaluation of PHARE Financed Agricultural Reform Programmes in the Candidate Member States, Final Report, vol. 1, November.
- EC (European Commission) (1999b), 'An Evaluation of PHARE Financed Agricultural Reform Programmes in the Candidate Member States, Final Report, vol. 3, November.
- EC (European Commission) (1998), 'Agenda 2000: The Legislative Proposals', IP/98/258, March.
- FAPA/SAEPR (Foundation of Assistance Programmes for Agriculture, Agricultural Policy Analysis Unit) (2002), 'Analysis and Evaluation of the European Commission Proposal of January 30<sup>th</sup>, 2002, for Candidate Countries', April, Warsaw.
- FAPA/SAEPR (Foundation of Assistance Programmes for Agriculture, Agricultural Policy Analysis Unit) (2000), 'Stereotypes in the European Union Concerning Polish Agriculture', Warsaw.
- GUS (Główny Urząd Statystyczny) (2002), Rocznik Statystyczny 2001, Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (2002a), Bezrobocie Rejestrowane w 2001 R., Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (2002b), Rocznik Statystyczny Rolnictwa 2001, Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (2002c), www.http://stat.gov.pl.
- GUS (Główny Urząd Statystyczny) (2001), Rocznik Statystyczny 2000, Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (2001a), Pracujący w Gospodarce Narodowej w 2000 R., Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (2001b), Aktywność Ekonomiczna Ludności Polski IV Kwartał 2000, Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (2001c), Mały Rocznik Statystyczny Polski 2001, Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (1998), *Pracujący w Gospodarce Narodowej w 1997 R.*, Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (1997), Rocznik Statystyczny 1996, Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (1997a), Powszechny Spis Rolny 1996, Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (1991), Praca 1990, Warsaw: GUS.
- GUS (Główny Urząd Statystyczny) (1990), Narodowy Spis Powsżechny: Struktura Demograficzna i Społeczno-Zawodowa Ludności, Warsaw: GUS.
- GUS/USK (Główny Urząd Statystyczny/ Urząd Statystyczny w Katowicach) (1998), *Produkt Krajowy Brutto Według Województw za Lata 1995-1997*, Katowice: GUS/USK.
- Hunek, T. (2000), 'Agriculture', in: A. Stepniak (ed.) Enlargement of the European Union to the East. Consequences for Prosperity and Employment in Europe,

Warsaw: Government Plenipotentiary for Poland's Accession to the European Union, Chancellery of the Prime Minister of the Republic of Poland.

- IMF (International Monetary Fund) (2002), 'Poland 2002 Article IV Consultation, Concluding Statement of the IMF Mission', available at http://www.imf.org/external/np/ms/2002/031402.htm.
- Ingham, H. and M. Ingham (2002), 'EU Expansion to the East: The Problem of Agriculture', in: H. Ingham and M. Ingham (eds) EU Expansion to the East: Prospects and Problems, Cheltenham and Northampton, Mass.: Edward Elgar, pp. 110-133.
- Ingham, H., M. Ingham and G. Wecławowicz (1998), 'Agricultural Reform in Post-Transition Poland', *Tijdschrift voor Economische en Sociale Geografie*, vol. 89, no. 2, pp. 150-60.
- Juraś, J. and T. Marszał (1998) 'Housing Market and Policy in Poland' in R. Domański (ed.) *Emerging Spatial and Regional Structures of an Economy in Transition*, Warsaw: Polish Academy of Sciences, Committee for Space Economy and Regional Planning.
- MARD (Ministry of Agriculture and Rural Development) (2000), SAPARD: Operational Programme for Poland, Warsaw: MARD.
- Munroe, D. (2001), 'Economic Efficiency and Polish Peasant Farming: An International Perspective', *Regional Studies*, vol. 35, no. 5, pp. 461-71.
- Polish Government (2002), 'Reaction of the Polish Government to the European Commission communication on the financial aspects of enlargement concerning agriculture', available at http://home.btclick.com/polishembassy/reaction\_of\_the\_polish\_government.htm.
- Polish Government (2000), 'Negotiation Position Chapter 7: Agriculture', available at http://www.ukie.gov.pl.
- Pouliquen, A. (2001), 'Competitiveness and Farm Incomes in the CEEC Agri-Food Sectors: Implications Before and After Accession for EU Markets and Policies', European Commission.
- Van Zyl, J., B.R. Miller and A. Parker (1996), 'Agrarian Structure in Poland: The Myth of Large-Farm Superiority', Policy Studies Working Paper 1596, International Bank of Reconstruction and Development.
- Warsaw Voice (2000), 'From Peasant to Entrepreneur', October 29, No. 44 (627), available at: http://www.warsawvoice.com.pl/v627/PV05.html.
- Warsaw Voice (2002), 'Controversial Proposal', April 14, No. 15 (703), available at: http://www.warsawvoice.pl/v703/News05.html.
- Warsaw Voice (2002a), 'A Bitter Harvest', February 10, No. 6 (694), available at: http://www.warsawvoice.pl/v694/News00.html.
- Warsaw Voice (2002b), 'Viewpoint', March 31, No. 13 (701), available at: http://www.warsawvoice.pl/v701/Viewpoint01.html.

	1988	2000	Δ 1988-2000	%Δ 1988 <b>-</b> 2000
Total	5,133,800	4,314,959	-818,841	-15.9
Public Sector	920,456	61,920	-858,626	-93.3
Private Sector	4,213,254	4,253,039	+39,785	+0.9

Table 1 Agricultural Employment 1988-2000

Source: GUS (1991, 2001a).

Table 2 Agricultural Employment, 2000

	Public Sector (%)	Private Sector (%)	Total (%)
Owners, co-owners	-	4,092,863	4,092,863
& family helpers		(96.4)	(95.1)
Paid employees	56,805	131,454	188,259
	(99.9)	(3.1)	(4.4)
Outworkers	10	41	51
	(-)	(-)	(-)
Agents	19	175	194
-	(-)	(-)	(-)
Members of	-	23,260	23,260
agricultural co-operatives		(0.5)	(0.5)
Total	56,834	4,247,793	4,304,627

Source: GUS (2001).

	Public Sector	Private Sector	Total
	(%)	(%)	(%)
Employers	-	70	70
		(2.6)	(2.8)
Own account	-	1,804	1,804
workers		(67.9)	(65.8)
Contributing family	-	654	654
workers		(24.6)	(23.9)
Paid employees	83	130	213
	(98.8)	(4.9)	(7.8)
Total	84	2,658	2,742

# 3 LFS Agricultural Employment, Quarter IV 2000 ('000)

Note: Due to rounding the sums in the columns do not equal the totals. Source: GUS (2001b).

# Table 4 Main Source of Rural Income

	1999 LFS (%)	1996 Agricultural Census (%)
Work in Agriculture	20.9	31.2
Work in Non-Agriculture	26.7	21.9
Pension (Patiramant/Disability/Othar)	27.5	30.8
(Retirement/Disability/Other) Unemployment Benefit	1.3	3.3
Other Non-Earned	23.6	12.8

Source: MARD (2000) and own calculations from 1999 LFS.

Table 5 Education Attainment of Farmers, LFS Quarter IV 2000 ('000) Particular	

	Population	Employed in
	(%)	Agriculture
		(%)
Tertiary	2,055	36
	(14.1)	(1.3)
Vocational Secondary	4,433	460
(including Post-Secondary)	(30.5)	(16.8)
General Secondary	1,011	80
	(7.0)	(2.9)
Basic Vocational	4,884	1,004
	(33.6)	(36.6)
Primary & Incomplete	2156	1,162
Primary	(14.8)	(42.4)

Source: GUS (2001b).

1	2	3	4
€ per h	ectare, 2002=100		
102.4	117.8	123.5	123.4
94.2	130.8	129.5	148.3
96.9	134.7	187.7	228.7
	102.4 94.2	€ per hectare, 2002=100 102.4 117.8 94.2 130.8 96.9 134.7	€ per hectare, 2002=100 102.4 117.8 123.5 94.2 130.8 129.5 96.9 134.7 187.7

Table 6 Projected crop and livestock values and agricultural income, 2007

## Notes

<sup>1</sup> Greece is the current member state with the highest proportion of its workforce engaged in the sector, but this is only 17 per cent of a workforce that is one-quarter the size of Poland's (EC, 2001:85).

<sup>2</sup> See, for example, MARD (2000).

<sup>3</sup> These figures exclude individuals who had a job but were not working during the reference week.

<sup>4</sup> The figures cited in the text are based on calculations from the 1999 LFS source data file.

<sup>5</sup> It should also be noted that of the 23.6 per cent whose main source of income is 'other non-earned', 4.4 per cent claimed that someone working in agriculture supported them. <sup>6</sup> The Polish local government reform, in force from 1999, reduced the number of voivodships from 49 to

16, thereby rendering regional GDP comparisons much less informative. The latest figures published for the old classification are those for 1997.

For example, a four million ECU pilot capital fund was established that was designed to promote employment generation in rural areas, although this was directed mainly towards those voivodships that were suffering high levels of unemployment in the aftermath of the collapse of state agriculture.

<sup>8</sup> In principle foreigners have the right to purchase land if they receive prior approval from the Ministry of Agriculture and Rural Development. Seemingly, such approval is difficult to acquire. Under the agreement reached with the Commission certain foreign tenant farmers will have the right to purchase agricultural land upon accession.

<sup>9</sup> The poor provision of credit in rural areas coupled with farmers' mistrust of debt has exacerbated this problem.<sup>10</sup> The IMF estimates that this figure will rise to five per cent in 2002 (IMF, op. cit.).