

SMALL AND MEDIUM FIRMS IN A RUSSIAN AGRICULTURAL DISTRICT: THE CASE OF SHAKHOVSKOY.

Background

1. Shakhovskoy is a small agricultural district 150 kilometres to the West of Moscow. It has a population of 25,000, who live in the main town Shakhovskoya (population 11,000) and surrounding villages. The traditional economic role of the district was to provide dairy products and potatoes to Moscow. At one time there were 150 collective farms in the district, but by the end of the 1980's the greater part of cultivatable land, 68,400 hectares, was being farmed by 7 state farms and 3 collective farms. In 1991 there were a reported 39 individual farmers, as well as private plots which accounted for 5% of the livestock.

2. At that time there was only a minimal industrial sector, with only four medium sized factories, two concerned with timber, one that made up animal feed, and a fourth which processed dairy products. The last of these pasteurised milk for forward shipment to dairies and milk distributors in Moscow, and processed some into cottage cheese and kefir (a sour cream), again primarily for sale in the Moscow market. It did not produce either cheese or yoghurt. There was thus little value added processing in the district. Cast dairy cows and bullocks were taken to a large abattoir near Moscow for slaughter. Pigs were suckled and then sent out of the district for fattening, slaughtering and processing. Poultry production was undeveloped.

The reforms

3 In the past two years Shakhovskoy has become nationally known for its record of economic reform and in particular its development of an integrated local good economy. The architect of the programme has been the District Administrator, Nikolai Trafkin, a construction engineer by profession, who took up his post in 1990. His policy has been one of deconstructing large state enterprises and promoting small and medium ones in their stead.

Trade

4. The first step was to introduce competition into the local retail sector. When he came there were 9 shops, controlled by the State, the Union of Consumer Co-operatives, with one owned and managed by the railway. He arranged for the state shops not to be sold but transferred via municipal ownership to small shopkeepers. In addition 15 new shops were added, including a milk outlet owned by the dairy. By August 1992 more than 100 new jobs had been created and retail turnover had risen by 7 million roubles.

Agriculture

5. In agriculture Trafkin has encouraged the establishment of small and medium farms (SMFs). 7 million roubles had been advanced as credit to new farmers over the past three years, so that there are now 79 farmers, 4 of them already large producers of meat. A number of these farmers took over underused buildings from the collective farms - 29 such buildings were identified - and have used them for livestock, notably to raise pigs. In the second half of 1992 the municipality successfully pressed for the conversion of the collective farms into joint stock companies, and for the assets of the farm to be transferred to those working on the farm as well as to pensioners. Those

with rights to assets can take them as land, livestock or machinery, or some combination of the three.

6. We attended a meeting of farmers and administrators which discussed the problems arising from these redistributions. It was clear that there is considerable reluctance to dismantle the collective farms because of the advantages workers and managers have got from providing for their own private plots from collective supplies. This has been confirmed by a study of the reforms at the village level currently being undertaken by a team led by Professor Teodor Shanin. In the case of Shakhovskoy, in spite of this reluctance, it was clear that the distributions were proceeding. Farmers were receiving cows and equipment. Pensioners were taking land which they were then leasing for payment in kind to the new farmers.

7. The main issues to arise were the dangers of newly independent farmers slaughtering milking cows for conversion into cash, and the difficulty of getting farmers to take on some of the larger and less easily divisible collective assets as equal partners.. Those partnerships we visited had a lead partner with the dominant shares. Only one 'equal partnership' had so far been established. The concern of the municipality was that the parcellisation of land and cattle would lead to a drop in production (as had happened with newly established small cattle farms in 1992) and that substantial enterprises were needed to maintain the equipment servicing stations, and other input provision like artificial insemination services and seed production.

8. Trafkin's view was that the collective farms would remain in some form. But it was evident that the changes that have already taken place have prompted the development of a range of new enterprises. One farm we visited was rearing pigs and bullocks, and was in the process of building dams for fish farming, poultry houses, and a smokery for pork, fish and chicken. Another partnership was proposing to do its own beef processing and open a shop in Shakhovskoya. In short there was a clear process of horizontal and vertical diversification taking place.

Industry

9. The municipality has a parallel strategy for food processing centred round three plants, the existing feed mill and dairy, and a new meat processing plant. These were intended to be the organising focus of the local food economy.

10. As yet, substantive change in the feed mill and the dairy plant has been limited. Both have recently been transformed into joint stock companies, and the shares transferred to the managers and workers without payment. The feed mill's scope of operations remains restricted, however, because 95% of its inputs come from state subsidised supplies., As a result it is difficult to procure the right and timely balance of supplies, and the dependence on inputs means that the mill is also constrained to follow the state agricultural department's priorities in the pricing and allocation of outputs. It was supply shortages which led to the mill's annual output falling from 30,000 tons in 1991 to 21,000 in 1992, a fall which helps explain the declining condition of cows and milking productivity.

11. The municipality aims to increase the local sourcing of the mill by expanding grain output in the district by 10%, and this year we observed 4 months stock of locally grown oats being used in the mill. But it is difficult to see how the mill can double its production - as it wishes to do - without addressing the question of the subsidy and the national control of stocks. At

the moment it is caught between the national planning system on the one hand and the new pig and poultry farmers producing their own feed on the other. The mill is not itself in a position to buy cheaply and regularly on world or national markets as large mills or the state purchasing agency can do. There is scope for it to develop local sources of protein. It might also consider forming a purchasing consortium with other small mills in order to gain economies of purchasing and some complementarity in local feed source production. For the moment the development of sourcing is I suspect a greater priority before moving on to other evident investment requirements (such as off ground grain storage).

12. The milk factory has also been hit by supply shortages, with 1992 output down by 50% on the 1991 figure. There were three reasons given for this. First a decline in the cattle population from 40,00 in 1991 to 32,000 in 1992, due partly to the lack of feed and partly to the need for cash from slaughter (one farmer explained how he had slaughtered a cow to pay his workers, who had had no wages for two months.) Second, the shortage of feed and the heat of the 92 summer had led to a fall in milking productivity. Third, the milk factory estimated that the 12% of the fall was due to farms selling directly to Moscow factories who were providing milk for their workers. We also came across at least one case of a farmer with 30 cows who fed his milk output to pigs.

13. As of January 1993 the milk factory was receiving 49 tons of milk a day, half of which was pasteurised and sent on to 3 dairy factories, 10% was bottled or processed for the local market, and the remainder was sold to 14 Moscow shops or (non milk) factories. The shortage of milk meant that automated machinery for making cottage cheese (capacity 50 tons of milk a day) was lying idle, and other machinery was underutilised. So, as with the feed mill, the key question is that of supplies. In spite of the shortages, the management was experimenting with cheese production at one of its subsidiary plants, and had built premises for making ice cream as part of a joint venture agreement with an Italian firm (which had disappeared without fulfilling its part of the contract).

14. The third processing plant is a small abattoir, municipally owned, which started in December 1992, and is the keystone of an ambitious livestock strategy. The meat plant was originally planned by the central state administration, but the cuts in central budgets meant that the municipality has taken over the project and financed its completion. At the moment it processes 10 cows or 2 tons of deadweight meat during one shift a day, and is shortly to start sausage manufacture.

15. An extension is also under construction to house a goose project. Incubators have been installed to breed geese, which are then to be reared on local farms, plucked for their down, and then processed. Already there are some 2,000 (mainly breeding) geese being reared by independent farmers and partnerships, and the down is being exported. Once numbers have expanded, the project plans the construction of a sewing factory to make down-filled garments for export, along with the export of goose liver and legs. We visited two of the goose farms, and in each case they were being reared largely on home grown feed, with limited amounts of concentrates from the feedmill.

16. In addition to these three plants, the municipality has promoted a range of other food and consumer goods industries. It has set up two small bakeries, and the new municipal restaurant has just started a third. The Consumer Union, working in tandem with the municipality, is at the moment constructing a larger bakery, with a shop and restaurant attached. These bakeries depend on

flour from outside the region, but they are ensuring that shoppers in the district now have access to fresh bread.

17. The Consumer Union have also established a jam and pickle factory to process the output of private plots, gardens, and small farmers. The plant is owned by the Union, but the manager is elected by the eight staff, and reports to a sectoral chief within the Union. Its current output is 5,000 jars a month, which it sells through local shops, a market stall, the consumer union network, and two shops in Moscow.

18. The jam factory is located on a site which the Union are developing as an industrial estate with joint facilities, such as refrigerators. At the moment there is a hat and coat workshop there employing 8 people, who make up furs cured in another local Union factory. On another joint site are a knitting factory employing 11 people and a wood factory employing 7, both set up 4 years ago and owned and managed by the Consumer Union. In Râmenia, a village of 1,500 people the Union established a smokery for hams, which processes ten pigs a week supplied by farmers who do their own killing. In all, the five Union factories we visited employed 37 people. With the exception of the bakeries and the knitting workshop, all the municipal and union plants processed local materials - food, wood, and furs.

Construction

19. Another local complex is centred round construction. Nikolai Trafkin recognised that agricultural reform and industrial development would require new buildings. He accordingly set up a municipal enterprise to undertake construction and promoted the local production of building materials. 20 engineers have move from Moscow and established eight micro enterprises producing building materials, including breeze blocks. There is also a cement plant and two wood factories (the larger one with 150 workers), and there is shortly to be a brickworks.

20. The municipal construction company currently has 150 workers of whom nearly a quarter are women. We saw one team of eight at work on a Saturday morning building the goose extension to the meat factory, and saw two new farm buildings they had constructed in two months, one to house pigs, the other geese. The buildings were made largely from local materials (breeze blocks and wood) plus bought-in asbestos roofing.

Services

21. Services were traditionally organised by the District Industrial Department of the Ministry of Customer Services, who themselves reported to the Moscow regional board. They determined the supply of raw materials, output levels, pricing, and the supply of equipment. In 1992 the central authorities said they would privatise these services by auction (this followed a period of 2 months when no one could work because of lack of materials), but the municipality successfully argued that they should be transferred to municipal ownership. They were made them into closed joint stock companies, their equipment was given to the staff, and shares were allocated according to length of service and level of wages. These services - shoe repair, sewing, repair shops, hairdressing - are now being run as small independent enterprises.

The role of municipal government

22. Trafkin's view of municipal government appears to be one of animation and co-ordination rather than ownership. He was firm in the conviction that the economy must be based on individual producers (and partnerships of individuals) rather than collective ownership. For this reason he sees municipal ownership as a transitional form, one that is necessary until an enterprise is established and those involved are ready to own. Thus the service enterprises, the new restaurant and municipal shops he regards essentially as privately owned. He is preparing to shift the ownership of the municipal construction company to its current manager. Only the meat factory will for the moment stay in the hands of the local council.

23. Rather than running production, he sees the public task as:

- stimulating production - finding sites for it, providing some finance, helping to get through bureaucratic tangles at the local, regional and national levels.
- co-ordinating production, through promoting linkages, and planning forward to ensure available supplies of necessary inputs (like construction materials and skills)
- ensuring competition, or when there can be no competition, regulating local monopolists.
- avoiding waste; thus he has not prevented Muscovites buying land but says he will confiscate it if it is not cultivated; he is encouraging the heating of greenhouses using the waste steam from the future brick making plant; and he has promoted a project for canning methane gas from processed pigs' manure for export to Germany.
- ensuring the welfare of the district.

24. The welfare objective is evident in many parts of the reforms. First he pressed for pensioners to be included in the share out of assets from the collective farms. Then he has encouraged the milk factory to sell its product at cost in the district, with a cross subsidy from an 11% mark up to Moscow. He intends to use the profits from the meat factory, once in full operation, to supplement the district council's welfare budget. He has also promised to tax trading superprofits if and when they arise.

25. He contrasts this policy with that of Moscow who subsidised bread, milk, and meat prices in a way which could not be sustained. Rather he wants to tie his welfare measures to the productive capacity of the district, as one of the incentives to improve productivity. In these respects Trafkin is defining the task of a district council in an economy of increasingly small private ownership as similar to that traditionally played by large Russian firms - operating a welfare programme, building houses, running cultural activities, providing training. It is one of his worries about the break up of the collective farms that there will be no body to take over these welfare and cultural functions. This is where the district council is needed in the new SME economy.

26. The problem he is already facing is how to maintain an overall co-ordination in the economy. Some of the new farmers are developing their own form of vertical integration and are bypassing the meat and milk factories and the feedmill. Trafkin has appealed to farmers to put the common interest of

the district's development before individual profitability, but much clearly depends on the relative prices being offered by the core factories, by their productivity, and by measures to ensure that quality standards are upheld in the neighbourhood. He has also introduced a credit system channelled at first through the meat factory, but to be expanded to the dairy, which he hopes will tie farmers in to the central processors.

The Strategy and its Implications

27. The Shakhovskoy programme has been remarkable in its pace. In mid 1992 an estimated 69 private enterprises had been created in five years, one third of them in the period Jan-April 1992. By September 1992 the figure for SME's was put at 158, of which 26 were purely trading businesses, while the rest were involved in production. We have no precise figures on employment, but as of January 1993 we estimate that some 10% of the working population were employed in SME's and on small farms in the district. Compared to a national figure of 3%, this provides a measure both of the extent of the change, and its limits.

28. Trafkin's strategy goes well beyond a reform programme based on privatisation, SME's and the market. At the moment he is careful to stress that the municipality will not favour any particularly type of ownership or size of firm in its financing. His emphasis is on the pluralism of forms of ownership and their competition. In promoting privatisation he has avoided an abstract voucher system in favour of passing control of enterprises and farms to those who work in them. In most cases this has been without payment, for this prevents those with shares immediately cashing them in and endangering the future of the enterprise. Thus in the feed mill and the milk factory workers who are dismissed will not be able to keep their shares.

29. The prime consideration is to maintain a commitment to production. In this sense the introduction of new forms of ownership are seen as instrumental for the broader goals of:

- developing self reliance within the district,
- promoting an industrial structure which is competitive and can respond rapidly to external changes,
- encouraging production that minimises waste and takes into account the ecology of the area.

This strategic perspective - self reliance, flexibility, and ecology - is one that characterises many of the successful industrial districts in Western Europe, as does the emphasis on SME's and the supporting role of local government. What marks out the Shakhovskoy experiment is the speed with which the municipality is trying to restructure.

From economies of trade to economies of production

30. In the short term, the SME strategy has proved remarkably successful. Of the 15 farms and enterprises we saw, only one was in difficulty, a knitting firm producing standard garments with low quality material. The others - although established only recently - had repaid their loans and were expanding from internal sources of funds. The reason for this success was neither quality nor scale. Many were producing at a minimal scale relative to the large plants and farms in the region. The quality of the livestock on the new

farms was good but not I suspect decisive in explaining the success of the enterprises.

31. Rather, the key advantages were those that have turned so many in the former Soviet Union to trade - the gains that can be had in a period of falling production, hyperinflation, and disrupted distribution to those who have access to sources of supply. One farmer calculated that he had made 50,000 roubles (\$120) from killing a sick cow, equivalent to six months salary for an average wage worker in the district. He, like other farmers, was able to sell milk, beef and pork direct to Moscow factories at a rate above that available from the local processing factories. The producing factories were thus able to earn trading profits because they had control of supply. Those doing less well were the plant dependent on external inputs, like the knitting factory and the feed mill. In this sense Trafkin 's policy for local self reliance has been critical for profitability in the current period of transition.

32. In the medium to long term the productive efficiency of the new enterprises will become more significant. Trafkin is acutely aware of this, and the dangers of parcelising agriculture. One of the failures, he said, was the first wave of individual small scale farms whose productivity had immediately declined. But it is important in addressing the question of productive efficiency that strategic thinking moves beyond the key features of the old form of competition - scale, low costs, standard output - to embrace the main features of the new.

The new competition

33 One of the lessons of the West European industrial districts is that the limitations of the small scale of their enterprise can be minimised by specialisation and joint services, while the advantages of small scale can be realised in design, flexibility, and quality. The food processing industry in Shakhovskoy can maintain its competitiveness in a liberalised Russian economy more through attention to product flow, quality, packaging and product innovation than by attempting to match the larger factories in scale. In all these respects there is scope for advance with modest resources over the medium term.

Flow

34 Product flow is being organised on the new farms, and in the goose project through vertical integration or co-ordination. But there is still a major problem for the milk, meat and feedmill factories-obtaining sufficient regular supplies to make use of their existing equipment.

Quality

35. The prime problems of quality are:

- bacteria levels in milk ranging are well below international standards, and in some cases require double pasteurisation and even sterilisation of the milk.

- animal feed often contains too little protein. One batch we analysed contained 57% corn and wheat, 30% bran, and only 10% protein feed additives.

- the meat we inspected was not of high quality, coming usually from cast dairy cows.

On the other hand, in spite of the poor quality of the milk, the dairy was producing a good quality cottage cheese (by manual machines) and kefir - itself a luxury product in the West.

Packaging

36. Packaging was given low priority in the Soviet economy, and this remains the case in the food industry. Yet, internationally, it is in this sector that many critical innovations are being made to maintain hygiene and product quality. The most evident case for improvement was in the packaging of cottage cheese which is currently done by wrapping the cheese in greaseproof paper. The standard of this paper is such that the cheese leaks through in the bags of shoppers, and is more difficult to handle. One alternative is small plastic containers. Plastic extruders can be operated at relatively low cost, and a small operation in Shakhovskoy (in conjunction with plastic printing machinery) could service neighbouring districts. Alternatively there are new biodegradable materials, which could also be manufactured locally and used in the wider Moscow region.

37. More generally, the design and printing quality of labels is one which is important for industries like jam and pickling if a brandname guaranteeing quality is to be established in domestic and overseas markets. A number of the ingredients and recipes used by the jam factory are quite distinct, and the plant has the added advantage of attractive low cost glass jars.

Innovation

38. The centralisation of planning and product design in the former Soviet system means that there is no long standing tradition of product innovation amongst the direct producers. The recipes for the jam and pickle factory were provided by a specialised Moscow office of the consumer co-ops. The milk factory has been confined to three main products. The range of sausages, cheeses and biscuits in the local shops was still restricted relative to the great meat and cheese regions of Eastern and Western Europe, and suggests considerable scope for Shakhovskoy firms. What is important in this respect is the creation of structures for the internal generation of new product ideas within local plants, the reviving of traditional recipes from the region, and the creation of new recipes in the household and catering economies which could be translated into commercial products.

39. In this respect the position of Shakhovskoya on the main road and railway between Moscow and Riga, and the rapid development of shops and restaurants is particularly significant. It is important that the two restaurants and the proposed motel see it as part of their function to be a shop window for local produce and products. There is always the temptation to rely on national and even imported products to signify catering quality, (one restaurant for example only served imported beer), but it has come to be recognised in the West that the best restaurants are those which have access to high quality local ingredients. In this sense the caterers are as important for stimulating the local food economy as the growing range of shops.

40. It was put to us that for Russia at the moment the issue in the food industry is quantity not quality, and that the issues raised above - food quality, packaging, new product development, - are luxuries suitable for a more advanced stage of industrial development. But what has become clear from

the last decade of applied industrial research is that quantity and quality are not alternatives but complements. The emphasis now in Western management on total quality, continuous improvement, zero defects, preventative maintenance and just in time production has not only improved the quality of products but has significantly lowered costs.

41. To give only one example from the Shakhovskoy district. A programme to reduce bacteria levels by increasing milking hygiene, and tightening payment levels to suppliers in accordance with quality achieved, is not a question of investment but farming practise. The result would be that the milk would not have to be pasteurised twice, or indeed homogenised, so that there would be production savings at the same time as improving the quality of the product. The achievement of quality in this and all other parts of the food industry would only add to the district's overall reputation.

Elements of an industrial district.

42. The industrial districts in Western Europe have developed slowly over decades. Only recently has attention been paid to the key features of these districts and how they can be promoted more rapidly in order to strengthen newly growing districts. Four features stand out which are relevant to Shakhovskoy:

(i) a local technical college/research centre

43. In many districts the local technical college has been the hub of the economy. The Mondragon network of 170 co-operatives started from a technical college; the industrialisation of Jutland in the West of Denmark was built round a group of technical colleges set up in railway towns; in the small towns of the middle Italy the technical college is almost always prominent. These colleges are specialised and provide a set of skills geared to local industry. But they are more than this. Industrialists come in the evening to teach. The colleges act as meeting places, and centres for discussion. In some cases their equipment is used by the industry - for example for the quality testing of shoes. They are central resource for the SME's in the area.

44 At the moment the nearest college to Shakhovskoy is in the neighbouring district of Volokolamsk, but for many trades students have to go to Moscow. The only formal training facility in the district is provided by the courses of the Army and Sports club, which trains 400 people a year, in such trades as tractor driving, and mechanics. There has also been some on the job training provided by the collective farms.

45. For the wider development of the food industry it is important that there should be some local educational facility both for farming and food processing. In talking to the new entrepreneurs in Shakhovskoy we were struck by the high technical level of some of them. One of the small bacon factories had all three of its workforce with good technical qualifications. The farms had been started by those who had either managed collective farms or occupied senior positions in it - vets, agronomists, and so on. If those with high levels of professional and technical training are the ones to start up the small farms, this leaves the question of the training of the less qualified - whether they remain on the collective farms or start upon their own.

46. The problem in agriculture appears to be that the collective farm permitted specialism and an advanced division of labour. The development of small and medium farms (SMFs) and their product diversification means that

skills for mixed farming are needed. This requires multiskilling, so that farmers have experience not only of stock rearing and crops, but farm management, agronomy, and some on farm processing. Just as the agricultural reforms require the construction of new buildings, so they require the development of new skills.

47. Some of those running the new food processing factories had little formal training. For example those in the meat factory had worked for a short time in a neighbouring abattoir. Those in the jam factory had been on a training course provided by the Consumers Union. If such plants are to remain competitive and autonomous ways need to be found to expand the skill base. We suspect that this will be true for many agricultural districts undertaking reforms.

48. One model worth considering is that established in Honduras for the Latin American food industry. The Zamurano Food and Agricultural College runs farms and factories where students are required to work in parallel with their taught courses. The factories cover the main sub sectors of food processing - dairy, meat processing, jam and pickle production, bakery products - and students spend some time in each, being trained for the various jobs within the factory so they have direct experience of how such plants operate. The emphasis in the factories is on quality and innovation, and so successful have they been that the profits generated provide scholarships for many of the students.

49. We did not have the opportunity to make a detailed audit of skills and training facilities, but the discussions we had on the subject with firms and district officials suggested that initiatives were needed in this field to decentralise training to the district, to link it more closely to production, and to expand multiple skilling.

ii) centres for real services

50. Over the past decade it has come to be recognised that SME's have advantages and disadvantages vis a vis large firms with respect to information and industrial knowledge. Their advantage is their knowledge of the local economy, their disadvantage the lack of specialist knowledge and networks in the national and international economy. Industrial districts have developed three responses:

a) establishing consortia of SME's to service international markets, raise finance, and more rarely to purchase inputs;

b) work through a large firm which provides these networks and services.

c) set up centres for real services, whose task is to provide these non financial services to the whole industry.

51. In the food industry, the Spanish region of Valencia has recently established such a service centre for the food industry. It focuses particularly on keeping abreast of international food technology and circulating the information to the participating firms. In the Italian region of Emilia Romagna there are a network of such service centres - specialising in pork, cheese, fruit, and wine. They see their task as ensuring quality throughout the sector, helping SME's to provide their own test equipment, conducting 'super tests' of the firms' own testing, and liaising with the local universities to use specialist testing equipment. The centres also

administer trade marks for those products which meet the standards, and provide international market and technological information to farmers and food processing firms. The centres are managed and part funded by the industry with help from the local and regional government, and have been key to the establishment of such foods as Parmesan cheese, and proscuitto ham as global products

52. In Shakhovskoy the immediate needs are not for market information - the new enterprises are primarily serving local and regional markets through networks of contacts. Rather what is required are:

*** systems of quality control, which should be linked to local or enterprise brand names.**

53. There is already an infrastructure for quality control. There is a government laboratory in Ramenia. The milk factory has three laboratories (10% of its staff work in these labs); the feedmill has one with three technicians, and the meat factory has one which is used by the vet and a technician concerned primarily with recipes. Each of these core factories could use their laboratories to raise quality in the industry. The milk factory already does this. If bacteria levels are too high, a technician goes to the producer to discuss the cause of the problems. But without strong financial incentives to improve quality, the levels have remained high. The feedmill could follow the practise of small feedmills elsewhere, and work with the farmers to provide feed which is customised to the needs and finances of the farmer. Western manufacturing firms - particularly smaller ones - are redefining their task as providing services through customised commodities rather than simply manufacturing to a standard formula. This approach is particularly relevant to quality control facilities in the food industry.

*** technological and commercial information about machinery and supplies.**

54. Purchasing has in the past been a specialised function. Few of the managers we spoke to had purchased their own machinery. But in the meat factory we saw the cost of this practise. Although the factory had only started in December 1992, the manager was complaining about frequent breakdowns. The saw was quite inadequate, as was the mincing machine. Already he said his need was for new machinery. The common reaction in these situations is to say that Russian capital goods are sub standard and that Western machines are required. In some cases this may be so, but in the case of the abattoir, the problem was in the specification as well as the performance. Some of the machinery had been made by a military firm which was in the process of 'conversion'. From what we were told the problem was not in the skills of the machine makers but their lack of experience in designing food machinery.

55. It is clearly critical for the new processing and farming enterprises to have machinery which is well designed and reliable. At the moment information about machines and suppliers is available to local managers mainly through the specialist press and we presume trade fairs and exhibitions. But with so rapid a pace of change taking place in the CIS, with new ex military capacities becoming available, and with increasing decentralisation and competition in the machine industry, it is important to improve the channels of food machinery information and for managers to establish relations with manufacturers they can trust and who can respond to their needs.

56. Similar points would apply to inputs such as packaging, printing, and animal feed ingredients.

*** innovation and diffusion in management, technology, and product development.**

57. One set of institutions which has been important for SME's in the food industry in Western Europe has been the network of fairs, festivals, consumer magazines and the specialist press, radio and TV programmes, and local markets. These generate new ideas and spread them. They help to create a culture in the industry. In Russia there has also been a tradition of fairs and competitions. These are particularly useful at a time when there are many new enterprises who have developed their own products, who are keen to learn from others in the same industry, and from consumers. It is not appropriate for us to suggest the most suitable form such gatherings, only to underline their importance in strengthening SMF and SME industries.

58. Producers also need to have access to books and publications, providing national and international experience and guidance. This is one of the most important functions of a centre of real services. We visited the library at Shakhovskoy, and were impressed by its size and facilities. The food section was, however, relatively small for the significance it has in the local economy, and we could not find specialist journals and newspapers providing up to date information. What is needed is to provide an area where producers can consult up to date material, which is comfortable and has access at the times they are free. This area could be located in the library (which has meeting space and video facilities) or in a specialist site such as a section of the museum.

iii) machine maintenance and construction.

59. A striking feature of industrial districts producing light industrial goods is that they have generated a complementary specialist machinery industry. For example, the town of Sassuolo in Italy, which together with a small group of neighbouring towns accounts for more than 50% of world exports of ceramic tiles, has within it two of the leading world producers of ceramic tile machinery. They started by adapting imported machines to local conditions, and then began producing their own equipment. In this case the consumer goods industry prompted the growth of the capital goods industry rather than the other way round, and the same is true of the Italian foods industry.

60. The link between the two sectors is important for an SME strategy such as that being pursued in Shakhovskoy because we understand that Soviet machine factories are not used to making equipment for small scale production. This was the case in the meat factory, and in the new bakery, whose manager told us that they knew of only one factory in Russia which produced micro bakery equipment. In as much as there is a growth of small scale production as the result of the reforms - particularly as the food industry is decentralised - there are clear opportunities for industrial expansion.

61. Most of the factories we visited were able to call on the services of mechanics, but in general we saw few signs of preventative maintenance and machine care being undertaken. On the farms tractors and machinery stood out in the snow. In one of the larger factories there was a similar stock of uncovered machinery, although its equipment in operation was, we were told, able to keep within a 10% variation of the daily norm.

62. In only one of the factories did we find evidence of machine adaptation. The factory had been set up as a co-op and the initial co-operators had constructed most of the equipment themselves, from spare parts and surplus machinery they had picked up cheaply. If the problem of machine supply to new enterprises is anything like that experienced by the meat factory, then this capacity for adaptation - particularly for small runs, with rapid changeover times - will be of prime importance.

63. There is already a significant presence of mechanics in Shakhovskoy, both those attached to the collective farms, and those who have moved into the district from elsewhere. There is the possibility that these numbers will be added to shortly. What is important is that these skills be made available to the food industry, and this should be taken into account in the siting of machine workshops (for example on the new industrial parks).

iv) local banks and financial mechanisms

64. Successful SME industrial districts have been marked by decentralised banking and financial arrangements. In Italy and Germany, there is still a strong infrastructure of regional banks and local savings institutions. Indeed in Germany in the three decades since 1960 they have grown faster than the large banks. Italy is also marked by financial consortia, arrangements between firms to lend and provide financial guarantees. In the case of the loan guarantee consortia, a regional bank will advance money to a firm, once the local industrial backers have considered the project and agreed to guarantee part of the loan. These consortia have shown low rates of bad debts.

65. In many areas there have been development banking institutions, either funded by local and regional government, or co-operatively owned by enterprises. The Mondragon bank in northern Spain is a leading example. It raises funds from the savings of local co-operative firms, and of the local population. In Britain the development banks began as municipal enterprises, but most are now private. One source of finance they have successfully used has been local authority pension funds.

66. What is common to these forms of finance is that their lending is not bound by the standardised formula of the large commercial banks. Being local they have a closer knowledge of the would be borrowers and of the industries in which they work. In as much as risk is in part a reflection of lack of knowledge, the greater knowledge of the local banks reduces risk and therefore the cost of borrowing. One of the Italian loan guarantee consortia managed to bargain with the local banks because of the low failure rate, and eventually knocked 4% of the normal commercial interest rates being charged to firms in the area.

67. Shakhovskoy is in a different position to the West European industrial districts. First there is no efficient clearing system. Second, the main state bank represented in the district is short of funds, and the rates from the new commercial banks are prohibitively high. Available funds from all sources are short term, with 95% of all loans in Russia being lent for less than a year. Of the eleven enterprises we visited for whom financial data were available, only one had borrowed from a commercial bank, and said they would try never to do so again because of the problems they had in repaying the loan.

68. What is clear from the financing data in Table 3 is that external funds have been raised either through the state banks, or through credits from the

Table 3

Source of funds for new enterprises in the Sharkhovskoy District

Enterprise	Capital required	Source of funds	Funds for expansion
Existing			
A	working capital 400m r other	state loan at 28% suppliers credits	
B	factory extension new equipment	bank credit at 40% (repaid)	joint venture with Italians (not materialised)
New			
C	fixed investment factory extension	national government municipality	needs 37 m. roubles
D	fixed investment (1.6m r)	Union of Co-ops	
E	fixed investment (1.2m r) other fixed investment and working capital	Gosbank 800,000 r at 55% (repaid) Union of Co-ops	own funds
F	machinery (200,000 r)	Union of Co-ops	own funds
G	machinery working capital	Union of Co-ops available only from Gosbank (83%)	
H	fixed investment	largely in kind	
I	fixed investment	Agricultural Bank at 8%	own funds
J	machinery (1.5m r)	municipality 1 year credit of 900,000 r	own funds
K	farm buildings & working capital	municipal credit Agricultural Bank at 8%	own funds

municipality, the consumers union and purchasers. Once operations have started, working capital and new investment funds have been largely internally generated.

69. We did not come across any projects which had not been started through lack of investment funds. This was mainly because most investments were small and the municipality and the consumer union were able to provide start up help in kind and through short term finance. The municipality was also able to help secure low cost state loans for new agricultural ventures. In all 7 million roubles had been advanced to individual farmers in the period up to September 1992. As from February 1993 the municipality has arranged a new source of funds of 58 million roubles to be channelled to farms through the meat factory. This credit has been raised from Moscow factories who wish to prepay for meat contracts to feed their workers and use as currency.

70. The overall situation is that start up credit has been available, and that high rates of profit have meant that loans are rapidly paid back. The municipality has played a central part in arranging funds, and has been funding its own budgetary short fall by the sale of land within the district. In the medium and long term there clearly needs to be a more structured financial system, capable of raising investment funds by tapping the considerable surplus being generated in the early phase of reform development.

The role of development banking.

71. The purpose of this study of an agricultural district in the midst of economic reforms has been to identify where if at all development banks - and external funding - could play a positive role. My conclusions are the following:

1. Loan funds.

The priority at the moment is for development support rather than loan finance. A modest amount of finance (say \$500,000) at low interest rates would help speed up the current process of reform, but in the long term the health of the new SME and SMF sector will be more dependent on the establishment of enterprise support structures.

2. Development Aid

Among the immediate priorities are:

i) Start up and post start up support.

It is significant that many of the new enterprises have been initiated under the umbrella of two parent organisations - the municipality and the consumer union. Both have provided financial support, have helped in locating buildings and purchasing equipment, and arranged for a modicum of training. The emphasis - particularly in the case of the municipality - has been on speed. The considerable scope for trading profits has provided a buoyancy for the new enterprises in their initial stages. But as competition extends and the focus turns to productive efficiency there will be a premium on effective preparation of new projects and the strengthening of the old.

Of the many SME promotion institutions, one that would be particularly relevant is that of Mondragon. The strong record of the 170 co-operatives that

have been established there owes a great deal to the method of project preparation;

- the assessment of new production ideas by the development section of the bank;
- the finance of the future co-operators during the feasibility and start up period so they can obtain the necessary skills, get to know the industry through travel and procurement of machinery, and learn management techniques.

* It would be useful for representatives from the municipality and the Consumers Union to visit the Mondragon Bank, or alternatively invite a representative from the Development section to visit Shakhovskoy.

ii) Training.

There needs to be a training initiative which displays a similar vigour to that shown in finding finance and establishing the enterprises. Not all the training need be provided locally, but it requires a figure as senior as those responsible for trade and economic reform in the municipality to ensure that training becomes a priority for new and established enterprises.

* A seed corn training fund should be established to:

- promote training in the SME's
- arrange for the expansion of existing training capacity
- consider the establishment of a local technical college

iii) Technological information and advice centre.

Two things are needed:

* a centre for the local food industry, to include

- a library with up to date industry publications and consultancy reports
- translation facilities and a digest of foreign language food industry publications
- a meeting place for lectures, discussions, demonstrations
- a small exhibition of the progress of the local food economy, with videos, both for the inhabitants of the district and to inform the increasing flow of outside visitors (who should as a rule be asked to contribute to Shakhovskoy's programme by giving lectures, providing relevant materials, videos and so on)

* a specialist adviser for food processing, who is acquainted with the international experience of SME's in the food sector.

iv) Mechanisms for establishing a district trade mark for key products of the area. This would require:

- improvements in packaging and labelling
- quality control facilities available to all producers, with adequate test equipment and laboratory personnel.

Grant funds (of an estimated \$500,000) are needed by the district for the above purposes.

3. A local development bank

It is important that any new agencies established as a vehicle for development funds and the provision of real services should be local based, serving either the district or a group of participating districts. At this point Nikolai Trafkin is cautious about establishing a bank because of unfortunate experiences in many of the recently established banks. He favours rather a small joint unit of one external partner (either the EBRD or its agent) and an officer from the municipality, to keep overheads low and relations between the EBRD and Shakhovskoy direct. He suggests that such an agency could administer the EBRD funds in line with the strategy outlined above, guaranteeing local knowledge, speed of action and probity.

Conclusions

During my visit to Russia I found two contrasting approaches. The first was pessimistic about Russia's capacity to restructure its economy as envisaged in the reforms, and looked to Western machinery, technology, technical assistance and finance to solve the problems. The second was wary of dependence on external assistance, and saw the need rather to establish a clear economic strategy before engaging in joint ventures, machinery imports or loans. The administration in Shakhovskoy is an example of the second approach. They have put a premium on local self reliance and are concerned not to take on obligations which they can fulfil. The past two years has shown how much can be achieved on this basis.

Nevertheless, there are clearly needs which the EBRD could help to address in its role as a development bank. Industry in the district is not yet well enough established, nor yet engaged with the world market, to make it feasible for it to borrow from the EBRD under merchant banking conditions. What would help is a modest sum, part development grant, part loan, to strengthen the impressive economic programme already under way.

I was given to understand that there were now districts all over Russia working in similar ways to Shakhovskoy. Any EBRD involvement in the latter should be seen as a pilot for later expansion throughout the Republic if it proves successful.

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February 9th 1993