

9.0 TWO SECTORS WITH PARTICULAR SIGNIFICANCE IN SOUTH WEST SUB REGIONS

- 9.1 Though this study has focussed on sectors which have been given priority status in SWRDA regional economic development strategy, two other sectors with more local focus have also been recognised as being of particular significance to some particular sub-regions:
- ◆ The polymers sector in Wiltshire and Swindon
 - ◆ Printing and/or packaging in West of England (the former County of Avon), in Wiltshire and Swindon, and in Bournemouth, Dorset and Poole
- 9.2 These sectors are reviewed here, more briefly than in the case of the 'regional' sectors, to identify *key skill issues* affecting them.

POLYMERS IN WILTSHIRE AND SWINDON

Scale of the industry

- 9.3 Plastics and rubber production and manufacturing employs 1,650 people in Swindon and 4,600 people in Wiltshire – around a quarter of all employees in the industry in the South West. Employment grew sharply in Swindon during the 1990s but was stable in Wiltshire.
- 9.4 A series of key trends affecting the industry at national level have been identified as:
- ◆ Consolidation and rationalisation.
 - ◆ Increasing global competition.
 - ◆ Supply chain pressures leading to lower margins and driving increased productivity
 - ◆ Growth potential as polymers are used to replace other materials.
 - ◆ Fast technological development.
 - ◆ Demand for recycling, degradable products, and clean processes under environmental pressure.
 - ◆ Export opportunities in emerging markets.
- 9.5 It is not clear how the balance of these opportunities and threats will work out for UK producers. Some production (such as tyre manufacture) is clearly being lost to areas in South and East Asia offering low wage costs

and skilled workers. The shift of car production and component industries into Eastern Europe generates further threats. And the current sterling exchange rate places further pressure on the industry, making exports to Europe difficult and increasing the level of imports.

- 9.6 The general perception is that, as in other sectors, polymer manufacturing will be increasingly forced into areas of production where short runs, just-in-time manufacture, and high design inputs retain local advantage whilst volume, low-added value output will decline. And, therefore, that high skill levels in management, product and process engineering, and at craft level will become more important whilst machine setting and minding – operator skills – will decline in volume.

SKILLS DEMAND

- 9.7 Key occupational groups in the workforce are set out below. The table assumes that the local, Wiltshire and Swindon, workforce has broadly the same structure as the national one:

Table 9.1: Estimated occupational structure of the polymers industry in Wiltshire and Swindon

	Number
Managers/administrators	1,000
Professional/technical	875
Clerical	750
Craft	875
Operatives	2,750
	6,250

- 9.8 As we have noted above, levels of future growth in the sector are hard to project. On the one hand, the sector grew fairly strongly at national level and locally (within Swindon) during the 1990s; but on the other hand, new levels and patterns of competition are developing which may take UK companies' market share both here and overseas.
- 9.9 It is difficult to predict future employment levels, therefore. However, whether employment levels fall or rise, the effect is likely to be relatively small in relation to replacement effects (as in other manufacturing sectors). If we assume neutral employment change in all current occupational groups (even though, as above, we would expect some shift to higher skill occupations) and project typical replacement requirements on to the local occupational structure then a very crude demand forecast can be made:

Table 9.2: Estimated replacement demand in polymer industry in Wiltshire and Swindon 2002-2010

	Total replacement
Managers/administrators	360
Professional/technical	470
Clerical	280
Craft	440
Operatives	825
Total	2,375

SKILLS SUPPLY

9.10 As in other sectors, information on supply is mainly qualitative rather than quantitative. Some key points are:

- ◆ The workforce in the sector is ageing with the proportion of workers aged over 55 doubling during the 1990s. This may point both to difficulty in recruiting young entrants to the industry and to forthcoming supply difficulties as these workers retire.
- ◆ Women account for about a quarter of the workforce, three quarters of whom work part-time. The suggestion is two-fold. Firstly, that women are often used as a 'flexible' resource being recruited or laid-off to meet fluctuations in order levels. Second, that the industry is not 'family friendly' enough – and, thereby, is losing out on considerable skills and labour potential.
- ◆ Though the proportion of employees without qualifications is declining, more workers have no qualifications (23%) than is true in the general workforce and fewer (10%) have graduate level qualifications. The implication is of an industry that is not strongly equipped to meet new skills challenges arising from change in the structure, focus and competitive framework of the industry.
- ◆ The perception is held in the polymer industry, as in other manufacturing sectors, that young people are not attracted by training/career routes which follow a path through maths/science at GCSE/A level into 'technical' subjects in FE/HE and through into manufacturing employment. A wide range of 'supply' issues, therefore, concern maths and science options in school, careers guidance pre-16, declining provision in FE, lack of high quality entrants to materials technology and processing courses at graduate level.

- ◆ One particular bright spot in the supply situation is the presence of a potential centre of excellence in polymers in Wiltshire College, Trowbridge building on its existing expertise and its position as part of the National Network for Polymer Training.
 - ◆ There is a high degree of within-sector poaching discouraging investment in training.
 - ◆ Entry level training is supported by Modern Apprenticeships and Traineeships but take-up, particularly of the latter, is believed to be poor.
 - ◆ Most in-house training provision by employers is short-courses related to particular production needs rather than career development training for industry specialists.
- 9.11 Overall, therefore, there are indications that the match of supply of skills to meet demand generated by growing skill needs and high labour turnover may not be wholly adequate in Wiltshire and Swindon. The picture is of an industry which tends to take a minimalist view on skills and training in respect of basic production – employing a high proportion of people without qualifications, absorbing part-time staff to meet production peaks, poaching staff to meet skill shortages and recruitment needs, and minimising training to minimise costs.

SKILLS MISMATCH

- 9.12 This perspective is borne out by a range of perceptions that current skills supply is inadequate:
- ◆ Local recruitment difficulties particularly for technical positions.
 - ◆ Technical skills gaps in craft, technician, and operative grades.
 - ◆ Gaps in management skills at managerial and supervisory levels.
 - ◆ Gaps in IT skills amongst sales, administrative and production staff.
 - ◆ Significant problems with literacy and numeracy amongst operative and unskilled staff.
 - ◆ Needs for better communication skills and adaptability/willingness to learn/flexibility.

SKILLS ISSUES

9.13 Correspondingly, therefore, key issues for the sector are:

- ◆ Stronger sectoral collaboration as the basis for a more strategic sectoral approach to workforce development.
- ◆ A connected approach to entry to the industry which attracts more and better-qualified young people. This will require promotion (particularly via guidance services), more attractive conditions of service and career paths and better mapping of the relevant qualification framework. The quality of the Trowbridge FE facility provides a valuable focus for this process.
- ◆ A more settled approach to employment and employee development – which builds an ‘investor in people’ philosophy more frequently into human resource management in order to reduce labour turnover, to increase employee commitment, and to permit experience and skills developed in the industry to be retained. The relatively high penetration of the LiP standard in the sector is an encouraging start.
- ◆ Evidently, commercial pressures on the sector place downward pressure on training budgets and lean staffing discourages managers from losing staff time to off-site training. The use of on-line and CF-ROM-based training packages may be one tactic to counter this problem. Development and promotion of this approach may be a useful contribution to skills development.

PRINTING AND PACKAGING IN BOURNEMOUTH, DORSET AND POOLE, THE WEST OF ENGLAND, AND WILTSHIRE AND SWINDON

- 9.14 Little reliable quantitative information on this sector is available at regional or local level and such information as is available also suffers definitional imprecision – some statistics addressing ‘printing and packaging’, others addressing ‘printing and graphics communications’.
- 9.15 Our review, therefore, simply recognises that the industry is particularly significant to at least 3 local economies in the South West (Bournemouth, Dorset and Poole; the West of England; Wiltshire and Swindon) and has a significant presence in the remainder of the region. For example, it is estimated that 10,000 people are employed variously in printing and packaging functions in the West of England alone.
- 9.16 Then we extrapolate from national discussion (though occasionally informed by local intelligence) to generate a ‘key points’ analysis of skills issues in the sector which is mainly non-statistical in character. The extent to which that analysis applies in any particular local economy must be tested against research and local knowledge which is not available to this study.

KEY INDUSTRY CHARACTERISTICS AND TRENDS

9.17 In that light, key industrial characteristics trends are likely to be:

- ◆ Printing and graphics industries (excluding packaging) are a major contributor to GDP generating output of £13.5 billion in 1998.
- ◆ Competition is strong with some over capacity, leading to pressure on margins and driving efficiency restructuring.
- ◆ 8% of total UK employment in printing and graphics (270,000) is based in the South West (about 16,000 jobs).
- ◆ The industry is undertaking a fundamental technology shift from conventional presses to digital processes; but the high costs of the latter technology is constraining the pace of transition and it is likely that conventional methods will persist for many years to come in smaller print operations.
- ◆ There is also a strong shift, assisted by new technologies, to compress the printing chain (marketing, graphic design, print) into single operations.
- ◆ The Internet is globalising production allowing world-wide print operations to compete for UK work with transmission outward of draft copy and inward of pre-print copy.

SKILLS DEMAND

9.18 Some outline demand factors are:

- ◆ An occupational structure for printing in the SW region can be inferred as in the table below. Application of some national estimates for replacement demand suggests a positive recruitment trend given that movement in the actual numbers of jobs is likely to be considerably lower:

Table 9.3: Estimated employment structure for printing sector in the South West; estimated replacement demand, 1999-2010

	%	Number	Estimated total replacement demand 1999-2010
Managers	10	1,600	400
Supervisors	6	960	240
Administrators/estimators	5	800	370
Machine printers	17	2,720	1,360
Finishers	16	2,560	1,280
Pre-press staff	5	800	400
Clerical	10	1,600	590
Transport/distribution	4	640	190
Maintenance	4	640	320
Sales & marketing	6	960	470
Other/general	17	2,720	1,200
	100	16,000	6,820

9.19 Qualitatively, key *skill* demands – those of growing importance in the industry – have been identified as:

- ◆ Information technology as a management, technical and communications tool.
- ◆ Oral communication skills.
- ◆ Customer service and relationship skills.
- ◆ Management and supervisory skills (particularly HR management)
- ◆ Practical job-specific skills
- ◆ ‘Continuous learning’ skills.

SKILLS SUPPLY

9.20 Some key *supply side* issues are:

- ◆ Deficiencies in training provision at graduate level (between City and Guilds Level 3 and post-graduate levels).

- ◆ Limited management training facilities (only available in two colleges, in Leeds and London) and deficiencies in the supply of managerial skills.
- ◆ Limited training provision for customer care skills.
- ◆ General decline in the number of colleges offering printing and publishing courses.
- ◆ SMEs offer only limited volumes of training – with chief constraints being the cost of courses and of time off-the-job.
- ◆ Some developments are occurring in distance learning supported by the Internet and CD-ROM which may circumvent some of these constraints.
- ◆ Limited use of Modern Apprenticeship to increase the flow of entrants to the sector.
- ◆ Low levels of qualification in many print occupations (e.g. 37% of finishers and 27% of machine printers have no qualifications. Even amongst managers, 22% lack any qualification. The proportion of graduates in the sector is low).

SKILLS MISMATCHES

9.21 Indicators as to skills shortages and gaps are that these exist in:

- ◆ Management skills
- ◆ Personal skills
- ◆ Computer literacy
- ◆ Problem solving
- ◆ Customer service
- ◆ Flexibility

9.22 56% of firms in the industry (nationally) reported skills gaps in 1999 and 42% (in West of England) reported skills gaps in 2000.

9.23 Skilled printer (craft) occupations and sales positions were most difficult to recruit (in West of England, 2000).

SKILLS ISSUES

9.24 For the print industry, the main skills issues are:

- ◆ Developing the skills which are taking printing from the era of dirty, mechanical processes into the current era of computer controlled and/or digital printing. These are:
 - Customer care skills to assist clients with small print runs undertaken on demand – able to take the client through the whole process and ready to make print adjustments quickly.
 - Technical abilities to enable printers to liaise externally with customers via exchanges of digital communications.
 - Flexibility skills to enable printers to move between non-demarcated functions, to work shifts and, to assimilate new technologies.
 - Change management skills to enable managers to manage the introduction of new working methods and processes.
 - 'Extended responsibility' skills in flatter management structures which place greater responsibility on supervisors and teams.

9.25 Generally, therefore, in an industry which continues to be subject to very rapid technological change, the broad skills issues are those of *adaptability* in existing workforces together with maintaining an *adequate flow* of young, better qualified people *into* the workforce.

9.26 In this, key priorities for action in the industry are:

- ◆ Promotion of the industry to young people.
- ◆ Increasing training investment by SMEs.
- ◆ Improving partnership arrangements to support workforce development in the industry.
- ◆ Increasing between-firm collaboration to strengthen the industry in face of globalising competition.
- ◆ Developing the range and relevance of industry qualifications within a stronger qualification framework.
- ◆ Improving course provision and take-up of Modern Apprenticeship/ Traineeship to improve the standard of industry entry.
- ◆ Increasing the availability of ICT based learning and training provision.
- ◆ Developing flexible management development programmes.