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AND INDUSTRY**



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A CRITICAL REVIEW OF THE DCC SCHEME: PART 2

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INTRODUCTION

The Duty Credit Certificate (DCC) scheme is the Department of Trade and Industry's (DTI) key industrial restructuring tool within the clothing and textile sectors. The scheme depends on a system of duty credits as a means of encouraging export-focused growth within these two sectors. Due to a realisation that South African manufacturers lack various operational arrangements that underpin competitiveness in the export market, the scheme was structured in a way that compels beneficiaries to demonstrate a number of improvements within their firms. This represents a major departure from the department's previous incentive structures. It also necessitates an effective measurement system that can be used to ensure that the department's objectives are being realised at the firm level. As a result, the DTI (with the assistance of the National Productivity Institute - NPI) formulated a firm level auditing procedure that would assist in this regard.

The initial purpose of this report was to contrast the trends the Industrial Restructuring Project (IRP) hoped to generate from the audit reports against the responses that were captured from the survey of the scheme's beneficiaries. However, due to the gaps, inconsistencies and insufficient data to generate trends, this exercise could not be undertaken. Most importantly, the audit reports do not produce a credible data base for the generation of time series analysis and cross-tabulation. As a result of this limitation, this report has had to assume another focus.

The new focus that the report has assumed, hones in on the question of whether the audit reports and the auditing process as it stands, is sufficient to meet the expectations of the DTI. The purpose of the audit reports is to act as an evaluation tool to inform the department of the impact of the DCC scheme at the plant level. As such, the significance of these reports is substantial. The department can be expected to draw important policy related conclusions from the audit reports.

As a result of a detailed and focused assessment process, the IRP is of the impression that the audit reports (in their current constitution) do not enable the department to use them in the manner that was originally envisioned.

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RESEARCH METHODOLOGY

This second assessment of the DTI's DCC scheme¹ is primarily concerned with the auditing process that was put in place to determine the scheme's effectiveness at the firm level. As such, the research process in this instance is primarily focused upon the audit reports that the department made available to the IRP for this purpose.

The research process was dependent upon two distinct processes: i.e. qualitative interviews with the persons involved with the administration of the scheme and the structuring and implementation of the auditing process; and a thorough review of the audit reports.

The first of the interviews was conducted with Sake Van Der Wal (Deputy Director, Textiles and Clothing, DTI). This interview was carried out in Pretoria during March 1999, and focused on the DTI's administration and implementation of the auditing process. The second of the interviews was conducted during August 1999 with Jacob Graaf of the NPI in Durban. This interview focused on the design and logic that informed the structure of the auditing system.

The assessment of the audit reports entailed a detailed review of each audit report that was availed to the IRP by the department. This process was facilitated by extracting key information from the reports and capturing it in the form of a spreadsheet. This process enabled the IRP to compile a database of firm level trends from the majority of DCC participants. The construction of this database was intended to enable the IRP to carry out a comparative analysis of the scheme's impact upon its beneficiaries. A total of 52 reports were handed over to the IRP.

¹ The report forms the second part of an assessment of the DCC scheme. The first part of the report was submitted to the DTI in July 1999. That first instalment of the assessment report concentrated on the impact of the scheme at firm level. That was achieved by means of a survey of firms that benefit from the scheme.

SECTION 1: THE INTENTION OF THE DCC'S AUDITING PROCESS

In order to assess whether the DCC scheme is achieving what policy makers intended, it is essential to establish what its objectives were. As stated in the previous instalment of this report, the DCC scheme is the DTI's primary industrial and export support measure for the textile and clothing sectors. Furthermore, although the scheme is structured around the granting of duty credits to participating exporters, it also has other features that distinguish it from regular export support measures.

Firstly, the scheme is structured in a manner that favours the clothing sector as opposed to the textile sector. The rationale for this was that this structure is more likely to reach both smaller and more labour intensive firms.

Secondly (and more importantly), the DCC scheme is also intended to achieve various firm level performance improvements within participating firms. It is this aspect of the scheme that was meant to be evaluated by the audit reports. To further this objective, the DTI implemented the Productivity Performance Monitoring Scheme (PPMS) that was drafted in collaboration with the NPI. The PPMS is informed by two distinct processes: site visits and a Productivity Performance Report (PPR).

According to DTI guidelines the site visits were meant to provide a qualitative impression of the performance trends within the participating firms:

"The consultant must visit the client company and its management and SACTWU to assess whether the company has materially² complied with the productivity recommendations listed in the set-up report. The skills and experience of the consultant, particularly regarding the clothing and textile industry is crucial. [The] consultant has to use his/her knowledge and insight to determine whether there was material compliance and his or her capacity to report so honestly and unbiased" (DTI, 1998.).

The PPR on the other hand, served to analyse participating firms by means of a "performance matrix" that was supposed to reflect sub-sectoral trends related to participating firms. This aspect of the auditing process was entirely constructed by the NPI and depended on criteria that could be generated from information within its databases. Upon the basis of the PPR reports, auditing consultants were expected to make a comparison against a participating firm's previous performance, and draft a report and recommendations.

The structure of the auditing process was flexible enough to allow firms to select an auditing firm that best suited their needs. However, consultants who wished to grant such services to DCC participants had to register with the DTI after proving their competency to carry out the audits as stipulated by the department's guidelines. Nonetheless, the majority of the auditing was carried out by the NPI (Table 1). The DTI cited that organisation's superior network of regional branches as the key determinant for this outcome. However, given the fact that the NPI had almost individually been responsible for the drafting of the auditing process, that organisation would have had a superior understanding of the auditing system. This would have surely enhanced its ability to command the bulk of the auditing work. Nonetheless, it can be argued that this outcome could have actually facilitated an easier process of implementation.

Table 1: The Distribution of Work Among DCC Auditing Firms.
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² The emphasis is carried over from the original text.

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Auditing Consultant	Proportion of Audits Carried Out (%)
NPI	78
Productivity Assignments	8
Productivity Improvement Consulting	6
Roman Management Services	8

1.1 An assessment of the site visits' reporting process

As a result of interviews with the DTI and the NPI and by referring to the items that were meant to be covered by the site visits, it is possible to outline the areas of key interest to the department.

Table 2 outlines the key points of concern for the department as far as plant level performance is concerned. For the sake of analysis, the areas of concerns can be quantified into three distinct categories: Financial performance, Labour relations and Manufacturing Performance.

Table 2: Structure of the DCC scheme's auditing reports (site visits)
Qualitative Points to be Captured by the Auditing reports
<ol style="list-style-type: none"> 1. Financial Analysis 2. Human resources- employee development 3. Multi-skilling 4. System of participation 5. Ergonomic and the workplace conditions 6. Incentive payment systems 7. Absenteeism and labour turnover 8. Disciplinary procedure 9. Quality 10. Delivery performance 11. Quick response 12. Production systems 13. Export systems and marketing programme

Source: DTI, 1998

1.2 Financial performance

In the case of the financial performance of the participants, the audit reports covered key areas such as the cost structure of firms, financial liquidity, financial leverage (i.e. profitability, and productivity (measured by sales per square meter, sales per employee, capital productivity and material productivity). This set of concerns is basically sufficient to gauge the financial performance of a firm. However, it is interesting to note that the auditing process failed to cover other key areas such as output performance and market share trends.

The measurement of output is essential in that it is a useful proxy measurement of a firm's market performance. Furthermore, this measurement is essential to ensure that productivity improvements (especially in the case of sales per

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employee) are not being achieved solely through the process of work intensification - i.e. producing the same levels of outputs with fewer workers. This is an essential socio-political consideration for policymakers because the continued participation of labour and labour organisations in the scheme depends heavily upon the growth of employment opportunities or at least the maintenance of current employment levels. Furthermore, measurement of output trends together with market share ensures that participants are compelled to nuance their understanding of productivity performance to factor in the performance of management as well.

1.3 Human resource development

In the case of industrial relations issues, the audit reports focused upon the following key areas: employee development and training, multi-skilling, systems of participation, absenteeism, turnover, and disciplinary/grievance procedures. In this instance, the auditing reports were found to be overly concerned with quantitative interventions as opposed to qualitative measures to ensure labour participation and development.

While the IRP concedes that measurements relating to issues such as training expenditure and disciplinary procedures are important, it is important to note that they are not enough to gauge the nature of industrial relations within a plant. As a result of extensive experience that stems from interactions with firms, the IRP has come to appreciate that such numerical measurement often hide gross inefficiencies or inactivity in this regard.

In order to unpack whether qualitative employee development occurs within firms, it is advisable to interrogate the nature of the systems that firms employ to further that objective. The structure of the audit reports makes allowance for this process under the heading of "Systems of participation". However upon analysis, the reporting in the audit reports was found to be inadequately critical (see box below for examples).

Example 1:

The broader issues of participation and communication such as green areas, small group activities and worker forums are not in existence.

However, the open-door policy which is practised and the apparent informal inter-relationship observed is considered to be adequate.

The company has a recognition agreement with SACTWU and consultation and negotiation takes place on an ongoing basis.

Example 2:

The implications of the Labour Relations Act were outlined in some detail. Other than an open door policy, [firm X] has no plans to install alternative participation systems unless and until occasion demands.

Source: DCC Audit Reports (1997)

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The brevity and lack of detail that is apparent from the cited examples means that policy makers lack the ability to gauge the true nature of participation systems within firms. The process of assessing the viability and impact of such systems within firms should depend upon the following system of analysis and observation:

- Who is participating in these processes?
- What is the nature and quality of facilities that have been availed to facilitate such processes, e.g. are the display charts prominently displayed; are the green areas conducive to discussion; and is the equipment usable and actually being used by workers?
- How often do these engagements occur?
- When (during the production day) do these activities occur?
- Who drives such activities, e.g. who is responsible for filling out display charts? And
- What is the impact of such activities upon production performance and organisation?

In order to establish such issues it is essential to carry out plant level observations and not depend entirely on the opinion of management. Furthermore, this process needs to incorporate views from employees. Having assessed the quality of reporting by the audit reports in this regard, the IRP has come to the conclusion that labour interviews were not carried out during the assessment process. Furthermore, the quality of the reports is not sufficient to deduce how these measures impact upon the improvement of operations.

1.4 Manufacturing performance

In the case of the manufacturing performance of the participating firms, the auditing process focused upon the following areas: quality performance and accreditation, delivery performance, response times, and capital expenditure.

The reports were found to be reasonably adequate in their reporting of most of the items listed. However, in the case of quality performance, the audit reports were often very sketchy in their reporting. Quality measurements were usually confined to the measurement of rejects. As such, the reports do not make a distinction between defects, reworks or scrapped products. Furthermore, customer returns were not being consistently captured. This shortcoming makes it difficult to assess where quality problems are located within the production process. Essentially, a simplistic measurement of quality usually paints an unrealistic picture of a firm's true quality performance.

However, a key problem in this section was the lack of attention that was paid to the actual organisation of manufacturing within the firms. For instance, the audit reports make no provision for the assessment of a firm's layout. The layout of a firm is essential in determining the efficient flow of material through the production process. This may entail cellular layouts for firms that have short production runs or a Fordist system for high volume producers. Factors such as layout, the organisation of manufacturing and the appropriateness of a firm's technological profile are key determinants of a firm's ability to meet the demands of its market. The audit report consistently evaluated this aspect of firm performance without considering value-chain dynamics. As a result, there is no way of deducing the kind of constraints that limit or enhance performance at the both supply or demand end of production.

Furthermore, there is a general dearth of information relating to the nature and appropriateness of technology that is being employed by firms. Machine downtimes and change over-times were also hardly ever measured. Inventory levels were also neglected in the measurement process.

Therefore, although some useful information was being collected by the auditors, the general impressions that were yielded were not enough to explain manufacturing performance. The manufacturing process within the participating firms

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thus remains a “black box” to potential policy makers due to inadequate documentation. In the era of supply-side support, this characteristic becomes particularly critical. Supply-side measures are typically aimed at improving the operational performance of firms. Therefore, it becomes critical that policy makers have a good grasp of the dynamics that occur within firms. A failure to develop such understandings can easily lead to the formulation of sub-optimal policy.

1.5 An assessment of the PPR auditing system

The PPR matrix was employed as a scoring system to determine the performance of participating firms in relation to the performance of other manufacturers within that firm’s industrial sector. The matrix comprises fourteen measurements that are useful in the determination of a firm’s overall productivity levels (Table 3)

Table 3: Structure of the DCC scheme’s auditing reports (PPR matrix).

Key Productivity factors Captured by the PPR Matrix
1. Gross sales/employee
2. Value added/employee
3. Raw material costs as a percentage of gross sales
4. Overhead costs as a percentage of gross sales
5. Distribution costs/gross sales
6. Factory rent as a percentage of gross sales
7. Sales/square meter of the factory area
8. Sales/R1000 of fixed operating assets
9. Sales/R1000 of current operating assets
10. Current ratio (profitability)
11. Quick ratio (profitability)
12. Financial leverage
13. Return on sales
14. Return on assets

Source: DTI, 1998

The benefit of the PPR is immediately obvious - the matrix summarises significant aspects of firm performance to facilitate easy assimilation and offers an instant comparison against industry norms.

On the negative side, the matrix depends heavily on the set of criteria that is increasingly considered insufficient to gauge firm level performance, especially for the purpose of informing policy intervention. Most importantly, the PPR matrix is heavily biased towards financial performance indicators and thus fails to cover the critical area of plant level operational performance sufficiently.

It is obviously difficult to structure a conclusive matrix presentation of a firm’s operational performance. But that does not mean that aspects of such performance trends can not be captured in a matrix format. However, in order to achieve this with a measure of credibility, it is essential to disaggregate the quantifiable aspects that relate to manufacturing operations. For example, disaggregated measurements relating to machine utilisation such as downtime, changeover time and the average age of machinery would be critical. Other significant measurements that could be easily captured within the matrix’s system of presentation relate to:

- Inventories: i.e. work in progress, finished goods, and raw materials.

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- Quality: reworks, defects, scraps and customer returns.
- Delivery reliability: throughput time and response rates.
- Labour participation: frequency of green area meetings, suggestions schemes and their implementation rates, etc.

To summarise, the assessment of the auditing procedures that have been set-up for the DTI's DCC scheme do manage to capture some useful information regarding the performance of the participating firms. However, due to low levels of detail and inconsistent data collection with regard to the site visit reports, and gaps in the formulation of the PPR matrix, the audit reports seem to provide an insufficient quality of information for the purpose of informing policymakers. Most importantly, the reports fail to adequately unpack the "black-box" of manufacturing organisation and operations. Low levels of data regarding this aspect will significantly retard the process of formulating appropriate interventions to improve the operational efficiency of the participating firms.

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SECTION 2: RECOMMENDATIONS

The need to adequately gauge the effect that the DCC scheme has upon the operational efficiency of participants is crucial because this is one of the factors that were supposed to be affected by the scheme. However, the participating firms appear to be sceptical about the relationship that exists between matters of operational efficiency and the DCC scheme, as highlighted in Table 4. In this regard, a survey of DCC beneficiaries revealed that the majority of the scheme's participants felt that it had not impacted upon their performance with regard to inventory levels³ and production lead times. Furthermore, half of these firms also indicated that the scheme had failed to impact upon their quality performance.

Table 4: How DCC Beneficiaries Rate the Impact of the Scheme upon the Operational Efficiency of their Firms.

Operational Efficiency Indicators			
	Positive	No effect	Negative
% of turnover spent on R&D.	60%	40%	0
Raw material inventory	20%	70%	10%
Work in progress levels	20%	77%	3%
Finished goods inventory	27%	70%	3%
Quality performance.	50%	50%	0
Production lead times.	37%	63%	0

Given the gaps that exist within the auditing process in relation to these factors, it is instructive to note that this key characteristic of the scheme is not being adequately captured to inform future policy options. However, a closer evaluation of the scheme reveals that its formulation did not make provision to compel beneficiaries to reassess their strategic priorities, especially in relation to value-chain management issues.

2.1 Recommendations regarding the auditing process

In the course of the IRP's assessment of the auditing system that was constructed to monitor the progress of the DCC scheme, it was noted that the PPMS process depended upon two sets of monitoring systems to effect the evaluation. The PPMS was informed by observations gathered during site visits by the evaluating consultants, and the compilation of a PPR matrix.

As far the site visit reports are concerned, it was noted that although the financial performance aspect was well covered, gaps existed with regard to the reporting on human resource development and manufacturing performance issues. In the case of human resource development, the evaluation was biased towards quantitative interventions. As a result, the audits have a limited potential to inform policymakers about the actual functioning and sustainability of such measures. As far as manufacturing performance is concerned, the reporting did not adequately cover issues relating to inventory management or value-chain dynamics.

³ The measurement of inventory is a good proxy measure of operational efficiency. A manufacturing system with sub-optimal levels of efficiencies tends to accumulate inventory buffers along the production process as a way of compensating for such weaknesses. This trend often results in high levels of raw material inputs, and an accumulation of work-in-progress along the production process as well as finished goods in the warehouse.

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These gaps in the reporting process suggest that the evaluation process needs to be structured around a more contemporary site evaluation system that could more adequately (and systematically) accommodate the consideration of market demands and supply chain dynamics. For instance, previous IRP research has revealed the following about demands that retailers place upon high-value added (i.e. AB market) clothing manufactures:

“Buyer are more discriminating about what they require from the AB segment. In addition to keener prices, which is now simply an order qualifying market-entry requirement, greater emphasis is being place on a large number of non-price competitive factors such as: prompt delivery, reliability, higher quality, repeatability, shorter runs, shorter lead times, and quick responses than in the CD segments”
(Morris and Kaplinsky, 1997).

In order to determine how the performances of firms respond to these demands, the IRP currently depends on a ‘market driver’ approach (Table 5) as one of its instruments of measurement during the site visits it conducts. The market driver approach groups measurements under particular market drivers. This linkage is informed by the realisation that internal performance and measurements thereof should be informed by market demands. The approach thus allows the monitoring process to determine whether a firm’s manufacturing and organisational arrangements can be expected to facilitate performance improvements.

Table 5: A Summary of the Market Driver Approach		
Market drivers	Performance measures	Organisational practices
1. Cost	Inventory use (raw materials, work in progress, finished goods)	Single unit flow, quality at source, cellular production, multi-skilling, production pulling (kanbans)
2. Quality	Customer return rate, internal defect and scrap rate	Statistical process control, quality circles, team working
3. Lead times (external flexibility)	Time from customer order to delivery, delivery frequency of suppliers	Business process engineering, cellular structures in order processing and dispatch, supply chain management
4. Internal flexibility	Delivery frequency to customers, machine changeover times, batch sizes, lot sizes, inventory levels, throughput time through factory, production flow	Value chain relationships, JIT, single minute exchange of dies, multi tasking and multi skilling, cellular production in manufacturing
5. Capacity to change (Human Resource Development)	Suggestion schemes, labour turnover and absenteeism (proxies for employee commitment), employee development/training	Continuous improvement (kaizen), worker development and commitment
6. Innovation	R&D expenditure, development of new products	Concurrent engineering, R&D

As far as the PPR matrix is concerned, the IRP notes that its ability to compress masses of data into a user-friendly and tabular form has the potential to greatly improve the processing of information from many firms. Given the capacity constraints within the DTI, this characteristic is especially significant. However, the effectiveness of the PPR matrix could be further enhanced by capturing other important measurements of firm performance, e.g. inventories, quality, throughput time, response rates and the effectiveness of labour participation.

CONCLUSION

This report on the DCC scheme is the final instalment of a two-part report on the industry support programme. As a result, this concluding section will not be focusing exclusively on the contents of this particular paper. Instead, this section seeks to draw conclusions that relate to both parts of the report.

The DCC scheme is the DTI's primary instrument of industry support and restructuring within the clothing and textile sectors. In this respect, the scheme depends upon both "carrot and stick" characteristics to induce firm participation and thus hopefully realise desired performance improvements. The "carrot" aspect of the scheme depends on a system of duty credits or rebates to exporters. As result of South Africa's membership of international regulatory bodies such as the World Trade Organisation (WTO), it is almost certain that the use of duty credits as an industry support measure cannot be expected to continue much further into the future. Nonetheless, the DCC scheme as an industry support measure contains certain characteristic that should perhaps be carried-over into its potential replacement.

As an industrial restructuring measure, the DCC scheme can be characterised as a typical "Product Market Intervention" (PMI):

"[PMIs] are primarily motivated by a desire to make markets perform better. The underlying premise is that most economic decisions are made at the microeconomic level, but made through the market mechanism. The proper allocation of resources requires that these markets operate efficiently". (Mohan, 1998).

PMIs typically rely on two types of instruments: trade policy and/or supply-side support. The trade policy aspect of PMIs usually relies on quantitative restrictions such as import and export tariffs. Supply-side support usually covers measures to improve market efficiencies and performance with regard to various aspects such as research and development, technological improvements, human resource development and information provision. The DCC scheme, by incorporating the use of both duty credit certificates and measures to improve productivity and human resource development, combined both aspects of PMIs in its design. This characteristic is particularly significant because it aimed to ensure that competitiveness was not going to be achieved through a short-term focus on profit margins. This is too often a preoccupation of manufacturers who face competition from lower cost producers (as is the case for the South African clothing and textile sectors in both the domestic and foreign markets). The "pursuit of a self-defeating and unidimensional strategy of cost-cutting" can only bring about limited and short lived success, as opposed to strategies that also focus on training and the improvement of operational and organisational efficiency (Scott, 1996).

Nonetheless, the impact of the DCC has actually been sub-optimal despite its innovative design. On the positive side, the scheme's beneficiaries felt that their firms' employment, profit, output and export performance had been affected positively. However, management at these firms felt that quality was only moderately affected. Furthermore, performance regarding inventory levels, throughput and machine changeover times were not affected by the scheme. The scheme also had significantly low levels of participation among firms in the affected sectors. This was particularly the case for smaller enterprises.

The correction of the sub-optimal performance of the scheme will have to be one of the areas that the DTI focuses on when the time comes to consider possible replacements for the scheme. In this regard, there are a number of approaches that have been suggested by international researchers looking into the question of improving the effectiveness of industry support measures in developing countries. One of these measures is the so-called "Triple-C" approach (Humphrey and

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Schmitz, 1996). This approach emphasises three characteristics to ensure optimal results from industry support measures:

1. Customer orientation: Policy should be targeted towards helping firms to meet customer demands. In this regard access to a dynamic market channel that provides an impetus towards restructuring and makes specific performance demands is essential.
2. Collectivity: Industry support is likely to be more effective when its is directed towards groups of firms as opposed to individual operations.
3. Cumulativeness: Once-off measures tend to be ineffective. This is mainly due to the fact that competitiveness is not a state but a process that requires ongoing improvements.

Another strategy in this regard is the “Eight-Cs” approach (Romijn, 1999) which build upon the three characteristics of the Triple-C approach to give a more holistic approach (Table 6). This approach makes a distinction between appropriate policy attributes and implementation attributes in the design of industry support measures.

Table 6: A Summary of the Eight-Cs Approach

Attributes relating to project objectives and focus.	Attributes relating to the mode of implementation.
<u>Customer focus:</u> Ensure access to a dynamic market to guarantee compatibility between market demands and restructuring within firms.	<u>Collectiveness:</u> Aim to target groups of companies as opposed to individual firms.
<u>Capability focus:</u> Avoid once-off intervention by focusing on invention that will result in ongoing improvement capacity, and ensure that the industry has the skills and capacity to absorb new techniques.	<u>Concentration:</u> Ensure focused delivery through selective targeting, i.e. a sub-sectoral or value-chain identification approach will result in the development of “in-depth” expertise around the needs of particular market segments.
<u>Context:</u> Construct an enabling macro-economic environment that encourages information sharing.	<u>Co-ordination:</u> Streamline delivery through institutional complementarity and co-ordination between providers of support.
<u>Complementarity:</u> The support measures to firms need to fit into the existing macro-economic infrastructure and the development level of the country.	<u>Carrot and Sticks:</u> The policy should be able to reward participants and sanction those firms that fail to restructure.

Source: Romijn, 1999.

In contrasting the implementation of the DCC scheme against the Eight-Cs approach, it is quite clear that a number of key undertakings that ensure successful implementation were not satisfied. One of these, is the fact that the scheme was rolled out to individual companies as opposed to groups. Furthermore, the scheme lacked a sub-sectoral focus (i.e. concentration). As a result, the DTI was unable to discriminate between sustainable and unsustainable exporters. There was also a lack of structured co-ordination between the implementation of the scheme and other export support measures of the DTI. For instance, programmes such as the Technology and Human Resources for Industry Programme (THRIP), Workplace Challenge, and Export Marketing and Investing Assistance (EMIA). Finally, the other key area that the scheme

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neglected was the facilitation of a collaborative context at the firm level that could lead to the development of an information rich environment.

On the positive side, the DTI did ensure that ongoing nature of DCC support to ensure continuous learning by participants. By virtue of being an export support measure, the DCC scheme also ensures that participants are exposed to a dynamic market that requires them to engage in change processes. Furthermore, the scheme fits into the broad macro-economic policy framework of the Department of Trade and Industry .

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REFERENCES

DTI- “Official Guideline for the Duty Credit Certificate”, Pretoria, 1998

Mohan, Rakesh- “Industrial Policy for Restructuring: Best Practice Policy Instruments in a Market Economy, TIPS, Johannesburg, 1998.

Morris, Mike & Kaplinsky, Raphael- “Formulation and Implementation of Industrial Policy in South Africa: A View From the Edge”, TIPS, Johannesburg, 1998

Romijn, Henry- “Technology Support for Small Industries in Developing Countries: From Supply-push to Eightfold-C”, International Development Centre-Oxford University, Oxford, 1999.