



#### OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.

TOGETHER

for a sustainable future

#### DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

#### FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

#### CONTACT

Please contact <u>publications@unido.org</u> for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

## **Independent Evaluation**

# South African Automotive Component Supplier Development Programme

UNIDO Project Number: SE/SAF/09/003



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO EVALUATION GROUP

Independent Evaluation of the UNIDO Project

# South African Automotive Component Supplier Development Programme

(UNIDO Project Number: SE/SAF/09/003)



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION Vienna, 2013

#### Distr. GENERAL

#### ODG/EVA/12/R.21

September 2013 Original: English

This evaluation was managed by the responsible UNIDO project manager with quality control by the Evaluation Group

The views and opinions expressed in this Evaluation Report are those of the authors based on their professional assessment of the evaluation subject. Those views and opinions do not necessarily reflect the views of UNIDO.

The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Mention of company names and commercial products does not imply the endorsement of UNIDO.

This document has not been formally edited.

# Contents

Acknowledgements	v
Abbreviations and acronyms	vi
Glossary of evaluation related terms	vii
Executive Summary	ix
1. Introduction	1
1.1: Purpose of the Programme Evaluation	1
1.2: Information sources and availability of information	3
1.3: Methodological remarks and validity of the findings-	5
2. Programme Context	6
2.1: Alignment of the programme to government policies	6
2.2: The Automotive Industry in South Africa	11
3. Programme Design	15
3.1: Programme Description	15
3.2: Programme Identification and Design	17
4. Project implementation	18
4.1: Implementation of the ACSDP	18
4.2: Programme Adjustments in Phase 2	21
4.3: Financial Implementation	27
4.4: Programme Management	30
5. Assessment	32
5.1: Relevance	32
5.2: Ownership	34
5.3: Efficiency	35
5.4: Effectiveness and Impact	37
5.5: Sustainability	45
6. Conclusions, Recommendations and Lessons Learned	47
6.1: Conclusions	47
6.2: Recommendations	50
6.3: Lessons Learned	54
Annexes	
Annex A: Terms of Reference	57
Appay Buliet of Deeple Interviewed	70

Annex B: List of People Interviewed	73
Annex C: Bibliography	74
Annex D: ACSDP Desk-based Review of Outcomes to Impact	76

## Tables and Figures:

Table 1: Stakeholders Interviewed	3
Table 2: Participant Companies Interviewed	4
Table 3: Project Expenditure as per 13 February 2013	28
Table 4: Explanation of Rating System	79
Table 5: Desk-based ROtl Assessment Table for ACSDP	80
Figure 1: Regional Spread of Treated Companies	22
Figure 2: ACSDP ROtI Theory of Change Model	77

# **Acknowledgements**

We would like express our gratitude and special thanks to all those persons involved in planning and realising the evaluation. We also gratefully acknowledge the contributions of all those who made time available for interviews and provided comments, information and documents.

We hope that the conclusions and recommendations presented will contribute to the continuous improvement of supplier development programmes and to the development of the automotive sector in South Africa.

# **Abbreviations and Acronyms**

ACSDP	Automotive Component Supplier Development Programme
AIDC	Automotive Industry Development Centre
AIEC	Automotive Industry Export Council
dti	Department of Trade and Industry
IA	Industrial Advisor
IPAP	Industrial Policy Action Plan
KZN	KwaZulu-Natal
M&E	Monitoring and Evaluation
MVA	Manufacturing Value Added
NAACAM	National Association of Automotive Component and Allied
	Manufacturer
NAAMSA	National Association of Automotive Manufacturers of South Africa
NCPC	National Cleaner Production Centre
NIPF	National Industrial Policy Framework
OEM	Original Equipment Manufacturer
SAABC	South African Automotive Benchmarking Club
SCM	Steering Committee Meeting
TOR	Terms of Reference
ТРМ	Total Productive Maintenance
UNIDO	United Nations Industrial Development Organisation

# **Glossary of Evaluation Terms**

Term	Definition	
Baseline	The situation, prior to an intervention, against which progress can be assessed.	
Effect	Intended or unintended change due directly or indirectly to an intervention.	
Effectiveness	The extent to which the objectives of a development intervention were or are expected to be achieved.	
Efficiency	A measure of how economically inputs (through activities) are converted into outputs.	
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.	
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.	
Intervention	An external action to assist a national effort to achieve specific development goals.	
Lessons learned	Generalizations based on evaluation experiences that abstract from specific to broader circumstances.	
Logframe (logical framework approach)	Management tool used to guide the planning, implementation and evaluation of an intervention. System based on MBO (management by objectives) also called RBM (results based management) principles.	
Outcomes	The achieved or likely effects of an intervention's outputs.	
Outputs	The products in terms of physical and human capacities that result from an intervention.	
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donor's policies.	
Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.	
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed.	
Target groups	The specific individuals or organizations for whose benefit an intervention is undertaken.	

# **Executive Summary**

## Scope, methodology and limitations

This terminal evaluation was undertaken in order to update the 2011 Country Evaluation's findings on the Automotive Component Supplier Development Programme (ACSDP) and to reflect on the improvements made in the roll-out phase of the programme. This evaluation was undertaken by an independent evaluator, Ms Jayanthi Aniruth, who was also part of the evaluation team that undertook the South Africa Country Evaluation.

The findings of this evaluation are based on an analysis of programme documentation, cross-checked against information from open-ended qualitative interviews with key stakeholders and a small sample of beneficiary companies. The sample of companies interviewed was kept small given the recent country evaluation and the extensive engagement with companies through the benchmarking process. Since the country evaluation was rigorous, a short evaluation update was considered appropriate and useful at this stage of the ACSDP. Since this evaluation process engaged only with key stakeholders and beneficiary companies, it might have a positive bias.

## **Project description**

The project was expected to 1) increase the Automotive Industry Development Centre (AIDC) ability to deliver more (financially) sustainable services that are relevant to the needs of a larger number of lower tier component manufacturers (target 50 in Phase 2); and to achieve gains of the participating companies in plant-level efficiency and cost savings.

Implementation of the 3-year ACSDP began in April 2009 with funding from the dti. UNIDO was designated as the project management agent and the AIDC as a key implementation partner. The ACSDP aimed to support 75 (later reduced to 65 companies due to the subtraction of project support costs by UNIDO) Tier 1 and 2 small and medium automotive component suppliers to improve their competitiveness by improving operating efficiency at the plant level. The AIDC was expected to further develop its capacity to service the automotive sector on a commercially sustainable basis through the implementation of the ACSDP. The programme was designed to be implemented in two phases of 18 months each. The existing Tirisano programme would be modified during the testing and then be implemented within 15 companies. A rigorous assessment of the programme's impact upon these companies would be undertaken, based on a third-party preand post-intervention benchmarking exercise. If the benchmarking process demonstrated the effectiveness of the programme, it would proceed to its roll-out phase, during which a further 60 (later reduced to 50) companies would be assisted.

## Main findings and conclusions

### Relevance

In 2009 NAACAM communicated to the dti the need for a supplier development programme, since South African automotive component suppliers suffer constant pressures to reduce production costs in order to compete with suppliers from countries like Brazil, India and China. The ACSDP speaks to this need articulated by industry. The programme's ultimate goal of improving the competitiveness of domestic automotive component suppliers is aligned with the policies of the South African government which aim to increase the domestic supply of automotive components and parts to the after sales market. The programme is aligned to the National Industrial Policy Framework, the Industrial Policy Action Plans, the MIDP and the APDP which target the automotive, components, and heavy and medium vehicles sector and aim to build a domestic supply capacity that is internationally competitive and creates sustainable employment.

## Ownership

The dti was the sole funder of the ACSDP, and the AIDC was responsible for the implementation of the programme, with the result that both organizations were heavily invested in the success of the programme. However, interviews indicate that industry ownership of the programme was wanting, despite the participation of NAACAM, NAAMSA and the OEM Purchasing Council on the Project Steering Committee. Ultimately, this has undermined the sustainability of the ACSDP. In 2011 NAACAM proposed the establishment of a 'Supplier Development Company' that would conduct similar supplier development activities to the ACSDP. While discussions about the Supplier Development Company appear to have abated, NAACAM and NAAMSA recently complained to the Minister of Trade and Industry about the lack of coordination between support initiatives in the automotive industry, of which the ACSDP is just one of many. This complaint has resulted in the establishment of a National Steering Committee to define industry needs and coordinate support to the industry. This is a long-term process and in the interim the dti has declined funding to most support initiatives within the industry.

## Efficiency<sup>1</sup>

The overall implementation of the ACSDP has been delayed by nine months due to: (a) UNIDO having to compensate for project budget losses due to exchange rate fluctuations; (b) delays in processing the AIDC sub-contract; (c) the change of the UNIDO project manager; (d) delays in enrolling companies onto the

<sup>&</sup>lt;sup>1</sup> While the measurement of efficiency is a complex matter, 'time' was chosen as the major criterion to measure efficiency given the nature of this evaluation exercise and the information made available to this evaluation process. In this case, time delays are taken to be an indication of how well the project was planned and managed according to schedule.

programme; (e) a delay in dti approval of funding for phase 2, part  $2^2$ ; and (f) programme adjustments and improvement between the testing phase and the rollout phase of the ACSDP. Erroneous assumptions during the project design phase also delayed project implementation. The project document implicitly assumed that the 15 participant companies in phase 1 and the 50 participant companies in phase 2 would be enrolled and 'lined up' to begin implementation at the same time, with an implementation period of 18 months. In practice, some companies started implementation later than others. Treatment of the 15 test phase companies extended over 27 months, from April 2009 until June 2011, while treatment of the 50 phase 2 companies extended over a 23 month period, from February 2011 to December 2012. The extension of the testing phase over 27 months delayed the post-intervention benchmarking and the analysis of the impact of the Tirisano programme.

## Effectiveness and impact

Support to targeted number of companies: The ACSDP was effective in reaching the targeted 15 companies in the testing and 50 companies in the rollout phase. However, the ACSDP reached only 10-15% of component suppliers in South Africa. Scale limitations mean that the ACSDP is unlikely to significantly improve the competitiveness of the automotive sector or to positively impact on the economy in terms of creating (or retaining) jobs, reducing poverty or improving living standards. However, the capacity built through the programme, together with the growing buy-in from companies, indicates that good potential exists for future impact at the sectoral level, if the programme is replicated at a larger scale.

Improvement in waste costs within participant companies: The Steering Committee agreed on a composite indicator to reflect on the overall success of the ACSDP in improving process efficiencies within participant firms and set 'an overall target of 10% reduction on the cost measure per company per year'. The benchmarking indicated that more than 70% of companies in the testing phase achieved the targeted reduction in total waste cost/turnover, despite wide variations in the individual performance of firms. The benchmarking conducted in the roll-out phase measured the total waste cost as a percentage of Manufacturing Value Added (MVA), where MVA is calculated as 'Turnover minus Materials'. The benchmarking demonstrated that waste within the Tirisano project area decreased by 2.86% of MVA from 14.25% in 2011/12 to 11.40% in 2012/13. This indicates that Tirisano companies realised a 20.04% (2.86%/14.25%) improvement in the waste as a percentage of MVA cost<sup>3</sup> in phase 2. Phase 2 companies therefore performed significantly better than the 10% reduction in costs targeted by the SCM.

Savings realised at company level: The AIDC reports that phase 2 companies realised a collective saving of R61, 927,000. Since these companies collectively paid R4, 399,300 to the AIDC in order to access Tirisano services, this indicates

<sup>&</sup>lt;sup>2</sup> Phase 2 of the ACSDP was implemented in two phases of 25 companies each, in order to deal with the workload and the promotional activities involved in enlisting companies. <sup>3</sup> E-mail from Sean Ellis, B&M Analysts, dated 14 May 2013.

that participant companies realised a phenomenal return on investment of 1308%<sup>4</sup>. However, this return on investment is based on a subsidised cost to the participant companies. If companies paid a sufficient price to cover the cost of the programme, the return on investment to participant companies collectively would still be a very attractive 275%<sup>5</sup>. This figure represents a compelling selling point for the marketing of the Tirisano programme to companies in the future.

Since the ACSDP was subsidised by the dti, one should also consider the return on investment for the dti, which spent R23, 311,882 on the delivery of the ACSDP. Across both phases, the ACSDP realised savings of R72, 267,000<sup>6</sup>. The return on investment to the dti therefore amounts to 210%<sup>7</sup> and represents very good value for money.

<u>Number of people trained:</u> The AIDC reported that a total of 3534 workers, supervisors and managers were trained through the Tirisano interventions in phase 2 and that more than 2000 individuals were trained during the testing phase of the  $ACSDP^8$ .

<u>Results of evaluation interviews:</u> The companies interviewed all indicated that the Tirisano programme had positive impacts on their companies, including improved morale among workers. They also indicated that the AIDC's use of resident student engineers<sup>9</sup> was effective in demonstrating the potential contribution of industrial engineers to shop-floor workers. This bodes well for a change in the mind-set of workers regarding the value of good industrial engineering practises.

<u>Financial sustainability of the Tirisano programme</u>: Company contributions were expected to increase over time to cover an increasing portion of project costs. Before the ACSDP, Tirisano companies paid less than 10% of the cost of the service, while in the testing phase; participant companies covered 30% of the cost of the services. The AIDC indicates that it cost them R16.5 million to deliver phase 2 of the ACSDP and R4, 399,300 was collected as company contributions, indicating that participant companies collectively contributed 27% toward the cost of the programme in phase 2. The percentage of the programme costs covered by company contributions therefore decreased slightly in phase 2<sup>10</sup> compared to phase 1.

<sup>&</sup>lt;sup>4</sup> (Total Savings in Phase 2 – Company contributions in Phase 2)/Company contributions in Phase  $2 \times 100/1 = (R61,927,000 - R4,399,300)/R4,399,300 \times 100/1 = 1308\%$ .

<sup>&</sup>lt;sup>5</sup> (Total Savings in Phase 2 – Company Contributions to cover cost of Prog.)/Company

Contributions to cover cost of Programme \* 100/1 = (R61,927,000 - R16,500,000)/R16,500,000 \* 100/1 = 275%.

<sup>&</sup>lt;sup>6</sup> R61,927,000 in Phase 2 and R10,340,000 in Phase 1 according to the ACSDP Progress Report covering December 2010 – March 2011.

<sup>&</sup>lt;sup>7</sup> (Total Savings Realised – Total Investment by dti)/Total Investment by dti = (R72,267,000 -

R23,311,882)/R23,311,882 \* 100/1 = 210%.

<sup>&</sup>lt;sup>8</sup> Progress Report covering December 2010 - March 2011.

<sup>&</sup>lt;sup>9</sup> This aspect of the programme was not funded from the budget of the ACSDP.

<sup>&</sup>lt;sup>10</sup> Five black owned companies did not pay company fees in phase 2 of the ACSDP.

However, if one views financial sustainability as the ability to sell a product perceived to be of good quality to a market that expresses a demand for the product, then one receives a better impression of the effectiveness of the ACSDP in meeting this objective. The AIDC-Eastern Cape reports that 45% of phase 2 companies in the region have signed new contracts with the AIDC to implement different Tirisano modules within their companies, with a further 8% of firms still in negotiation with the AIDC. This repeat custom is based on higher prices, ranging from R174, 000 to R480, 000 over 12 months. Despite this increase in price, the AIDC-EC accepts that many automotive component firms are unable to bear the full cost of the programme and have raised funds from the public sector to subsidise these company interventions. The AIDC-EC will reportedly seek an average contribution of 70% from participating companies.

<u>AIDC capacity to service the automotive sector:</u> All companies interviewed indicated that they were happy with the quality of the services received during phase 2. The improvement in quality has been attributed to the recruitment of more experienced staff in the scaling up of the programme, as well as capacity building by the international expert in phase 2. The AIDC has increased its service offerings as a result of the ACSDP, which introduced cleaner production and supervisory training modules into the Tirisano programme. The AIDC has also introduced Total Productive Maintenance services following the study tour to India and workshops from the international expert.

<u>Other benefits of the ACSDP</u>: The AIDC was effective in developing a cohort of 65 student industrial engineers, thereby increasing the supply of industrial engineers with work experience to the market. The ACSDP was also effective in increasing the demand for industrial engineering services by automotive companies. Sixty-two percent<sup>11</sup> of the engineering students placed at participant companies were retained by the host company or secured employment in related companies. For many participating companies, the retained Tirisano student represents the first industrial engineering capacity created within the company.

<u>Sustainability:</u> The likelihood of the Tirisano programme achieving sustainability has improved significantly since the country evaluation. A significant proportion of companies (almost 56%) of phase 2 companies in the region have contracted with the AIDC-EC to continue with new modules of the Tirisano programme. This attests to the high levels of satisfaction with the quality of services provided by the programme in phase 2. However, the ability of companies to pay the full costs of the Tirisano programme remains an issue of concern. Encouragingly, the experience in the Eastern Cape indicates that companies are willing to invest significant amounts of money in order to access support services that they deem to be of good quality. The AIDC-EC has been successful in accessing public sector funding to continue with the partial subsidisation of the Tirisano programme within the region and the AIDC in Gauteng is engaged in similar fundraising attempts. Moreover, the threat to the sustainability of the Tirisano programme posed by the Supplier Development Company proposed by NAAMSA

<sup>&</sup>lt;sup>11</sup> The AIDC report suggests that the number of student engineers retained by participant companies would have been greater except for the academic commitments of some student engineers.

and NAACAM in 2011 seems to have dissipated. These organisations are now focused on establishing a mechanism to co-ordinate support to the automotive industry, rather than attempting to set up their own supplier development services. Lastly, the companies interviewed recognized that improved competitiveness came from a long-term commitment to continuous improvement which required a change in mind-sets within the management and workforce of a company. Eighty three percent of the small sample of companies interviewed indicated that their companies will continue with the change processes initiated within their firms by the ACSDP.

#### **Recommendations to AIDC**

- A longer implementation timeframe should be considered to allow companies to better embed the change process within their organisations and would improve the ownership and sustainability of the change programme, better allowing companies to establish a culture of continuous improvement. A period of 24-36 months would be a more appropriate timeframe for the Tirisano intervention at company level.
- The programme should consider using a staged approach to better manage and measure the institutionalisation of continuous improvement within participant companies. Each stage should have defined key performance indicators and only those companies that successfully meet targets should graduate to the next stage. Input from the implementing agency should decrease over time, so that companies become increasingly independent over successive stages of the programme intervention.
- Sufficient preparation and consultation time should be built into the process in order to properly 'sell' the initiative to management and the shop-floor. If the intervention period is not substantially lengthened, the implementation agency should include a three month project preparation period to undertake the consultation and awareness activities before the start of the intervention period. Consultations with management and shop-floor awareness activities are crucial and will undermine the process of change if rushed.
- Tirisano interventions should institutionalise a second assessment of the savings 3-6 months after the interventions have been implemented in order to assess whether the changes in work processes have been embedded. Participant companies indicated that the Tirisano programme demonstrated the effects of the changes implemented by measuring and documenting the savings realised. However, the sustainability of these savings was still in question since shop-floor workers often revert to old ways of working
- AIDC should continue to provide supplier development services to the automotive components sector. While the companies that have continued to work with the AIDC, have done so at higher costs, the experience of the

ACSDP shows that many companies are unable to afford the full cost of the intervention. The AIDC should therefore intensify its attempts to leverage funds from public sector in order to subsidise the cost of the Tirisano programme. The substantial number of companies that have continued to work with the AIDC after their initial Tirisano intervention indicates that they have found the Tirisano programme to be of value in improving their production processes

#### **Recommendations to UNIDO**

UNIDO's relationship with the AIDC has spanned a decade and has enabled the continued improvement of the Tirisano material, as well as improving the AIDC's capacity to provide effective supplier development services. As a result, the Tirisano programme now appears to be gaining traction within the market, with companies renewing contracts beyond the one-year intervention period. This long term collaboration therefore appears to have been effective in supporting the development of capacity within a local industry support organisation.

 UNIDO should, after project completion, maintain a partnership with AIDC and supports the AIDC in its efforts to mobilize funding from public sources. This could either lead to a continuation of the Tirisano programme or to supporting the new Total Productive Maintenance (TPM) cluster and in deepening the AIDC's capacity to develop new products to assist automotive companies to improve their competitiveness.

# Recommendations to the dti and the National Steering Committee

- When designing the national automotive strategy and the national coordination mechanism due consideration should be given to the lessons learnt from the Tirisano programme and other development programmes within the South African automotive industry. A workshop that convenes the implementers of relevant development initiatives would be useful at the start of the planning stage in order to properly reflect on the experiences and the lessons of past interventions.
- The experience of other developing countries in providing effective support to their national automotive industries should be evaluated and lessons applied to the process of developing the South African strategy. The presence of the new Officer for Private Sector Development in the UNIDO regional office offers the opportunity to cost-effectively harness international experience and knowledge.

The institutional landscape in South Africa is complicated by a number of less-than-effective public entities and industry support organisations. The frequent restructuring of these organisations or the establishment of new bodies as older ones are identified as being ineffective serves only to complicate this landscape even further. In order to avoid a similar fate for the new 'coordinating mechanism' being considered for the automotive industry, it is necessary that the current process recognise the usual problems that beset these organisations and take early action to avoid these problems. A reflection on national and international experience in setting up effective public-private-institutions to support the development of specific industrial sectors should be conducted in order to enable effective action in this regard.

## Main lessons learned

- Industry ownership is crucial for the long term success of industry support programmes: The future of the Tirisano programme has been compromised by a lack of ownership of the programme by NAACAM and NAAMSA. The interview with the dti indicated that they chose not to fund a further round of the Tirisano programme because of a complaint from the industry associations regarding the *ad hoc* and uncoordinated supplier development initiatives within the automotive sector. The experience of the ACSDP indicates that it is imperative that industry owns, designs and drives the process of supplier development and industry support interventions.
- Adequate time for programme adjustments is necessary between a testing phase and the roll-out phase of a programme: Many development programmes include a pilot phase to test the suitability of a programme intervention model before committing a large amount of resources to the programme. In theory, the pilot phase offers stakeholders the opportunity to abort an intervention before implementation, if it proves to be ineffective during the pilot. However, in practice, it is often difficult for implementing agencies and project funders to abort an intervention after stakeholder expectations have been raised and multiple agencies have geared up for its implementation. It is therefore imperative that the initial planning of a programme build in sufficient time to evaluate the performance of a pilot, to reflect on the outcomes of the evaluation process and to make the necessary adjustments to improve the implementation and the results of the roll-out phase.
- The use of resident technical capacity within participant companies proved highly effective: The Tirisano Programme used "resident industrial engineers" as a tool to improve the innovation and improvement capacities of manufacturing firms. While the results of this tool were modest during the first phase, it developed into a principal asset during the second phase, due to a stronger emphasis on recruiting only high quality resident engineers and the fact that companies' acceptance and appreciation (absorptive capacity) took some time to develop.

# Introduction

### **1.1 Purpose of the Programme Evaluation**

Implementation of the Automotive Component Supplier Development Programme (ACSDP), managed by UNIDO on behalf of the South African Department of Trade and Industry (dti), was completed at the end of January 2013. In accordance with UNIDO protocol, UNIDO commissioned a terminal project evaluation in order to assess whether the project was successful in meeting project objectives and outcomes. This terminal project evaluation was undertaken by an independent evaluator, Ms Jayanthi Aniruth, in the period December 2012 to January 2013.

The objectives of this project evaluation are twofold:

- To update the results of the ACSDP, based on the overall programme objectives; and
- To reflect on the improvements made in the roll-out phase of the project (Phase 2), based on the recommendations of UNIDO's country evaluation undertaken in 2011.

The original project document listed three overall objectives of the programme:

- To improve process efficiency within the participating firms; measured by a reduction in changeover times, material handling distances, absenteeism and defect rates.
- Thereby improving competitiveness and market access for South African automotive component firms. Improved competitiveness was to have been demonstrated by the securing of new contracts with South Africa based Original Equipment Manufacturers (OEMs) and an increase in the proportion of local content sourced by South African OEMs.
- The third objective of the ACSDP was to ensure the financial sustainability of the programme. Financial sustainability of the programme was to be measured by the willingness of participating companies to pay a fee that covered the full cost of the programme by the end of the three year programme period.

However, discussions at the Steering Committee Meetings during project implementation led to the prioritisation of objectives (1) and (3), since these were seen to be more immediate and were deemed to be directly related to the project activities defined in the project document. Moreover, Objective 3 was understood to be modified from full financial sustainability to greater financial sustainability.

The TOR for this evaluation therefore highlights the following two project objectives:

- a) AIDC's ability to deliver more (financially) sustainable services that are relevant to the needs of a larger number of lower tier component manufacturers (target 50 in Phase 2); and
- b) Achieved gains of the participating companies in plant-level efficiency and cost savings.

Since this project was recently evaluated at part of the South African Country Evaluation in September 2011 this evaluation exercise also seeks to update the findings of the initial evaluation and to assess whether the recommendations of the initial evaluation were put into effect in the second phase of the project.

The Country Evaluation made the following recommendations regarding the ACSDP:

- a) Focus the second phase of the programme on 2nd and 3rd tier suppliers and SME, which are the beneficiaries proposed by the Project Document and the ones that will benefit most from the programme activities, as they usually face more problems and competitiveness challenges and have more difficulties to access adequate training and technical assistance.
- b) Improve the integration of the two key components of the programme benchmarking and technical assistance by i) making better use of benchmarking studies as a basis for defining the key features of technical assistance to be provided to client companies and ii) equipping advisors with standardized diagnostic tools to define the assistance to suppliers, so that the quality of the services provided depend less on the individual industrial advisors.
- c) Strengthen M&E to evaluate results and identify key lessons.

Please refer to Annex A for the full Terms of Reference for this project evaluation.

# **1.2 Information sources and availability of information**

The findings and recommendations from this evaluation are based on an analysis of programme documentation, cross-checked against information from openended qualitative interviews with key stakeholders and a small sample of beneficiary companies that participated in the programme. The programme documentation submitted into the evaluation process by the UNIDO project manager included the minutes of Steering Committee Meetings and teleconferences, project progress reports developed for the project funder, additional project reports from the AIDC and reports compiled by the benchmarking analysts commissioned to benchmark participating companies before and after the programme intervention. The evaluation process accessed and incorporated other documents from the key project stakeholders interviewed. These documents included mission reports from the international expert, industry information from the industry associations interviewed and specific information regarding company participants and programme results from the AIDC.

The evaluation benefitted from qualitative, open-ended telephonic interviews with twelve key stakeholders, as indicated on the table below:

ORGANISATION	PERSON/S	DESIGNATION
The dti	Renai Moothilal	Director, Automotive Sector
NAACAM	Roger Pitot	Executive Director
NAAMSA	Norman Lamprecht	Executive Director
OEM Purchasing Council	Stefan Haasbroek	Chair: OEM Purchasing Council & General Manager, Purchasing: Nissan/ Renault
AIDC - Gauteng	Nkumbuzi Ben-Mazwi	Manager, Supplier Development
	Bianca Jagger	Senior Project Manager
AIDC - Eastern Cape	Lance Schultz	Manager, Supplier Development
	Zahier Ebrahim	Senior Project Manager, Supplier Development
AIDC - KZN	Krish Reddy	Project Manager, Supplier Development, KZN
B&M Analysts	Douglas Comrie	Managing Director
UNIDO	Natascha Weisert	Industrial Development Officer
UNIDO International Consultant	Arthur David	Chief Technical Adviser, International Automotive and Supplier Development Programmes

Table 1: Stakeholders Interviewed

Qualitative, face-to-face interviews were undertaken with six beneficiary companies in order to understand how the programme was rolled out within participating companies and to solicit the views of participant companies regarding the value of participating in the programme and how the programme might be improved. The sample size was kept small since the last evaluation of the programme (as part of the country evaluation) took place only 15 months before. Moreover, participant companies were extensively interviewed/ researched through the benchmarking process.

Since the ACSDP participant companies interviewed as part of the country evaluation were based primarily in Gauteng and the Western Cape, this evaluation focused on companies based in the Eastern Cape and KwaZulu-Natal. Companies were chosen on the basis of their willingness to participate and their different experiences of the programme (the evaluation sought to include both, companies that had reported positive and negative experiences), based on the international expert's knowledge of the companies and the principals. Two of the companies interviewed were based in KwaZulu-Natal, while four were based in Eastern Cape:

COMPANY	PERSON/S	DESIGNATION
KwaZulu-Natal		
Webroy	Robin Royston	Chief Executive Officer
	Phillip Pillay	Production Manager
Euro Corrugated	Faizal Vawda	General Manager
	Vijay Maistry	Production Manager
Eastern Cape		
CRH Allmay	Lucky Lazarus	Industrial Engineer
Willard Batteries	Lourens de Beer	Factory Manager
Aveng Steel	Patrick Sparrow	Works Manager
	Riaan Opperman	Administration and Finance
Magnetto Wheels	Mr Wynand	Industrial Engineer

#### **Table 2: Participant Companies Interviewed**

Please refer to Annex B for a list of stakeholders interviewed.

# **1.3 Methodological remarks and validity of the findings**

Since this project was evaluated as part of the South African Country Evaluation at the end of 2011 this evaluation exercise was a small exercise that sought primarily to update the findings of the initial evaluation and to assess whether the recommendations of the country evaluation were put into effect in the second phase of the project. The larger part of the current Monitoring and Evaluation (M&E) intervention sought to "build the monitoring and evaluation capacity of key stakeholders of the project such as the AIDC, the dti, the OEM Purchasing Council, and relevant associations (NAAMSA, NAACAM) and other stakeholders of relevance"<sup>12</sup>. This aspect of the work is not covered by this evaluation.

The evaluation was undertaken in the two month period between the beginning of December 2012 and the end of January 2013. The evaluation period was therefore affected by the mid-December to mid-January 'summer vacation' period in South Africa, effectively reducing the time available for the evaluation to one month, with associated difficulties in terms of the availability of stakeholders and the compression of evaluation activities.

According to the project document, an important objective of the project itself was "to assess and demonstrate the impact of the Tirisano13 programme at the enterprise level", so baseline and post-intervention benchmarking within participating companies was included as an important project implementation activity meant to assess the impact of the Tirisano interventions within each company.

In addition, the programme supplemented the information from the third-party benchmarking through the generation of information by the AIDC regarding the savings realised through the implementation of identified interventions within participant companies. The project implementation process therefore generated a substantial amount of information regarding project outcomes and impact. This information was thus available for use and did not have to be generated through the evaluation process.

The evaluation process included interviews with key stakeholders like the implementing agent, the programme managers, the funders and industry associations, as well as a small sample of beneficiary companies. Since these stakeholders were integrally involved in implementing and/or benefitting from the project, they are likely to have a positive view of the project and its results. Moreover, the evaluation process did not engage with stakeholders who might have experienced unintended effects of project, so the evaluation is likely to have a positive bias.

<sup>&</sup>lt;sup>12</sup> Terms of Reference for the Final evaluation and capacity building for monitoring and evaluation (M&E) of the South African Automotive Component Supplier Development Program (ACSDP), 2011-2012 (SE/SAF/09/003).

<sup>&</sup>lt;sup>13</sup> 'Tirisano' is the brand name by which the programme is known within the automotive sector in South Africa.

# **Programme Context**

# 2.1 Alignment of the programme to Government policies

#### National Industrial Policy Framework (NIPF)

The NIPF was adopted in January 2007, two years before the initiation of the ACSDP. The NIPF provides a framework for South Africa's industrialization process. It focuses on principles and strategic processes to achieve structural change.

The vision set out by the NIPF contains the following elements:

a) Diversification beyond reliance on traditional commodities and non-tradable services; b) promotion of value addition and movement into non-traditional tradable goods and services for the domestic and export markets:

b) Long-term intensification of South Africa's industrialization process and movement toward a knowledge economy;

c) Promotion of a more labour absorbing industrialisation process;

d) Broader based industrialization with greater participation of historically disadvantaged people and regions; and

e) Promotion of industrial development and productive capabilities on the African continent.

The NIPF contains 13 strategic programmes:

- a) Sectoral Strategies: The processes that lead to the development of sectoral strategies are expected to be built on better sectoral research and high quality interactions with businesses, labour and other stakeholders, and should result in Key Action Plans for each sector that will be supported by regulatory reform and industrial financing from DTI.
- b) Industrial Financing: Would follow core principles, including a focus on new rather than existing activities and, if possible, should have spill-over

and demonstration effects. Would operate for specified periods and be linked to the achievement of measurable benchmarks by firms.

- c) Trade Policy: Would be informed by sector strategies at policy and administrative levels, focusing on decreasing input costs for labour intensive and value-adding industries and pursuing more targeted export promotion and foreign direct investment promotion activities.
- d) Skills and Education for Industrialisation: would emphasize links between industry and tertiary institutions and seek to increase technical graduates. Would also seek to mediate between high impact sectors and specific vocational institutions.
- e) Competition Policy and Regulation: monitoring and investigative role of competition authorities and sectoral regulators would be increased, with particular focus on containing costs of utilities and raw materials.
- f) Leveraging Public Expenditure: Investments in recapitalization of the electricity and transport infrastructure for the country, their on-going related operational costs, and the cost of building and upgrading stadia in preparation for the 2010 Soccer World Cup represented large opportunities for domestic companies.
- g) Industrial Upgrading: Support the development of firm-level product and process efficiencies, and for appropriate industrial infrastructure like industrial parks and sector specific infrastructure.
- h) Innovation and Technology: Further development of pockets of technology in which South Africa has a potential advantage. Support for product development and commercialization of intellectual property.
- Spatial and Industrial Infrastructure: Continue research into promoting sustainable regional industrialization. Support for appropriate industrial infrastructure like industrial parks and sector specific infrastructure in areas with latent economic potential.
- j) Finance and Services for Small Enterprises: Strengthening of financial and non-financial support and leveraging market opportunities for small firms.
- k) Leveraging Empowerment for Growth and Employment: Assist black firms to enter new growth sectors, thereby linking to growth and employment opportunities.

- I) Regional and African Industrial and Trade Framework: Explore opportunities for South African public and private sector to promote the development of productive capabilities in Africa.
- m) Coordination, Capacity and Organization: The Economic Investment and Employment Cluster will co-ordinate across different government departments that have a role to play in implementing industrial policy. Improve co-ordination at national and sub-national level and increase capacity to implement industrial policy in all relevant entities.

The NIPF stresses its role as a framework rather than a blueprint for industrial development and envisages that the detail of the individual interventions would arise from processes undertaken in line with the NIPF principles. The NIPF is therefore accompanied by associated Industrial Policy Action Plans (IPAPs).

#### Industrial Policy Action Plan (IPAP)

The first IPAP was adopted in August 2007 and presented the first detailed action plan to support the implementation of the NIPF. In terms of sectoral interventions, the IPAP focused on:

- Fast-tracking implementation of four key sectoral plans: (i) Capital/Transport Equipment and Metals; (ii) Automotives and Components; (iii) Chemicals, Plastics Fabrication and Pharmaceuticals; and (iv) Forestry, Pulp and Paper and Furniture;
- Continuing implementation of programmes supporting AsgiSA sectors: Business Process Outsourcing and Offshoring, Tourism; and Biofuels;
- Implementation of sector projects in: Diamond beneficiation and jewellery, Agro-processing, Film & Crafts;
- Further strategy work in the following sectors: Mining and minerals manufacturing; Agriculture/Agro-processing; ICT & Creative Industries, and White Goods.

In terms of cross-cutting issues, the IPAP focused on:

- Design and implementation of an Industrial Upgrading Programme;
- Revising industrial financing mechanisms to support industrial policy;
- Reducing input costs through competition policy; and
- Review of import duties on intermediate goods.

#### Industrial Policy Action Plan 2010/2011 – 2012 /13 (IPAP2)

The Key Action Plan within this IPAP focuses on:

- a) Securing sources of concessional financing for disbursement by the Industrial Development Corporation (IDC) into IPAP sectors.
- b) Leveraging procurement, with a number of specific actions listed in order to ensure that local suppliers are able to benefit from public and private procurement, including: (i) revisions of the Preferential Procurement Policy Framework Act to award preferential points to suppliers of domestically produced goods and services, including a mechanism for DTI to 'designate' a sector or sub-sector for domestic production, with specified levels of local content; (ii) Identification of strategic procurement 'fleets' and development of long term procurement and local content plans; (iii) strengthening the National Industrial Participation Programme (NIPP) by making it a pre-tender process. Any company winning a tender to provide goods or services with an imported content value equal to or exceeding USD10 million, to government- or state-owned enterprises (SOEs), is obliged to reinvest 30% of the imported content value in the South African economy, via mutually beneficial business projects with local partners.<sup>14</sup>
- c) Strengthening the Competitive Supplier Development Programme (CSDP) and its articulation with NIPP. The CSDP seeks to leverage public spending through the inclusion of localization targets within the contracts awarded to international suppliers, especially on the energy and transport recapitalisation programmes. The CSDP made it mandatory for Eskom and Transnet to prepare Competitive Supplier Development Plans for submission to the Department of Public Enterprises (DPE). These plans identify and list commodities to be purchased from local industry with due recognition to which industries are approaching competitiveness and/or are strategic in nature in terms of ensuring reliability of supply.
- d) Reviewing and aligning Broad-based Black Economic Empowerment Codes with industrial policy in order to leverage private procurement.
- e) Development Finance Institutions to include conditionalities in their financing agreements that oblige borrowers to meet local and regional content requirements.
- f) Leverage the 'Proudly South African' campaign to 'accredit' companies with high levels of local content.

<sup>&</sup>lt;sup>14</sup>Department of Trade and Industry (2008) The National Industrial Participation Programme Revised Guidelines, South Africa.

- g) Continue developmental tariff reform: apply to the International Trade Administration Commission (ITAC) for selective tariff increases on products with significant potential to create/retain jobs and products with import replacement potential.
- h) Strengthen implementation of competition policy to lower costs of intermediate goods for productive investments.

In terms of sectors, this IPAP groups sectors into three groups:

- a) Qualitatively new areas of focus: metal fabrication, capital and transport equipment, green and energy saving industries, agro-processing.
- b) Scale up interventions in existing IPAP sectors: automotives, components, heavy and medium vehicles; clothing, textiles, footwear and leather; plastics, pharmaceuticals and chemicals; biofuels; forestry, paper, pulp and furniture; cultural industries and tourism; business process servicing.
- c) Sectors with potential for long-term advanced capabilities: aerospace, nuclear and advanced materials.

The identification of the automotive and components sector as a key sector by IPAP and IPAP2, continued the long-term support offered to this sector by successive South African governments. UNIDO has contributed to the support for this sector by partnering with national and provincial government to support the development of the Automotive Industry Development Centre (AIDC) as well as the implementation of the Automotive Component Supplier Development Programme, on which the AIDC is the counterpart agency.

## 2.2 The Automotive Industry in South Africa

#### Automotive sector

While small in global terms, the automotive sector in South Africa is an important part of the country's manufacturing sector and constituted almost 12% of total exports in 2011. An estimated 90,000 people were employed within the vehicle assembly and component manufacturing sectors in 2011, despite the fact that 20000 jobs have been lost in these sectors since the economic downturn of 2008<sup>15</sup>.

The motor industry in South Africa was established and developed by the apartheid state, in line with import substituting industrial policies and was protected by import tariffs of up to 115%. The industry therefore produced a large variety of models with very short production runs for the small domestic market. The industry was notoriously inefficient and produced vehicles of poor quality. With the advent of democracy in South Africa and the introduction of trade liberalisation policies, the industry was expected to collapse in the face of international competition, with a devastating impact on regional economies (particularly in the Eastern Cape) and employment figures.

The Department of Trade and Industry (dti) therefore developed special sectoral policies to support the upgrading of the sector, including firm-level restructuring and supplier development programmes, clustering initiatives, and a policy package called the Motor Industry Development Programme (MIDP) that provided incentives to promote structural change and rationalization within the industry. The industry also benefited from import restrictions on used cars and a range of provincial and local government initiatives for the provision of infrastructure, factory facilities and special financial arrangements<sup>16</sup>.

#### The Motor Industry Development Programme (MIDP)

The MIDP was introduced in 1995 and operated until 2012. It was an exportimport complementation programme and was intended to assist local industry to transform from a high cost import substitution structure to an outward oriented one in which firms can reduce costs by producing fewer models at increased volumes. The programme sought to encourage OEMs to produce a small range of vehicles inside South African for both the domestic and international market, through the provision of specific incentives. This would, in turn, allow component manufacturers to rationalise their operations as they are able to focus on producing components for a smaller range of vehicles.

The MIDP programme consisted of five elements:

<sup>&</sup>lt;sup>15</sup> Extract from speech by Rob Davies, Minister of Trade and Industry at the Johannesburg International Motor Show on 10 October 2011.

<sup>&</sup>lt;sup>16</sup>Flatters, F. (2005). The Economics of MIDP and the South African Motor Industry, Canada.

- A phased reduction in import duties on vehicles and components;
- An export-import complementation scheme which allowed vehicle and component exporters to earn tradable "Import Rebate Credit Certificates" (IRCCs) to offset duties on imported vehicles and components;
- Access to the standard duty drawback programme for exporters, which allowed rebates on import duties paid on intermediate inputs used in exported vehicles;
- A duty free allowance on imported components of 27% of the value of vehicles produced for the domestic market; and
- A productive asset allowance (PAA) that provided import duty credits equal to 20% of the value of qualifying investments.

The incentives in respect of components applied only to those sold directly to OEM manufacturers. The programme therefore excluded components produced for the after-market.

The MIDP led to many new investments in the motor industry, especially in export-oriented, IRCC-generating activities, which in turn led to a substantial growth in the exports of vehicles and components. However, the industry has not achieved economies of scale by rationalising production into a smaller range of models as intended, since export subsidies have kept domestic vehicle prices high and made it possible for firms to compete, regardless of whether they achieve international efficiency levels.

Despite very large investments in capacity in the last two decades, employment levels within the motor industry have not increased significantly. In 1995 the automotive sector accounted for 85,600 jobs. This figure had increased only marginally to 90,000 jobs in 2011. Even if one includes the 20,000 jobs that were lost in the global crisis starting in 2008, the employment performance of the MIDP has been very poor relative to the cost of the programme. The effects of the MIDP were reviewed and a new programme, the Automotive Production and Development Programme (APDP), was designed to replace the MIDP fully from 2013.

#### The Automotive Production and Development Programme (APDP)

While the MIDP incentives were based on exports and benefited vehicle manufacturers, the APDP, rewards local manufacturing and offers benefits to both vehicle manufacturers and components suppliers, regardless of whether the motor vehicles are sold locally or abroad. The APDP's key objective is stimulating the expansion of the automotive manufacturing industry to produce 1.2 million vehicles per annum by 2020, with an associated deepening of the component industry, to create jobs and make a positive contribution to the balance of trade.<sup>17</sup>

The new focus under the APDP is to provide assistance to the component manufactures so that they can provide cost competitive components to the Original Equipment Manufacturers (OEMs) and to international markets via exports. In addition, the APDP offers an incentive to up-skill employees and to invest in technology, research and development (aimed at responding to global climate change and tightening of international emission standards).

The APDP contains the following suite of incentives for the automotive industry:

- The Automotive Investment Allowance (AIA) replaced the MIDP's Productive Asset Allowance from June 2009, and provides a 20% return on investments in new plant and machinery for both, OEMs and component manufacturers.
- A discretionary company specific support allowance of 10% on costs incurred for training, research and development, technology, transfer, localisation and commissioning.
- The Production Incentive (PI) replaces the import rebate credit certificate (IRCC) scheme and is based on production output rather that value of exports alone. The calculated value of the PI will be awarded to the manufacturer as an import duty credit to be rebated against future automotive imports or to be used as a refund on past component or motor vehicle imports.
- A Local Assembly Allowance (LAA) which will allow OEMs with a plant volume of at least 50,000 units per annum to import a percentage of their components duty-free. The LAA would be offered as import duty credits issued to vehicle assemblers based on the value of motor vehicles produced domestically. The MIDP duty free allowance of 27% will be reduced under the LAA to 20% in January 2013 will reduce to 18% the following year and will stabilize at this level till 2020. Even though the percentage rebate is to be reduced under the APDP, OEMs will receive import duty credits from vehicles produced for the local and export market rather than just vehicles produced for the export market.

<sup>&</sup>lt;sup>17</sup> Extract from speech by Rob Davies, Minister of Trade and Industry at the Johannesburg International Motor Show on 10 October 2011.

- Tariff protection: Import duty rates will be frozen at 20% for components and 25% for light motor vehicles from 1 January 2013. The tariffs will remain in place to discourage imports over locally produced vehicles.<sup>18</sup>

The change of the government support package for the automotive industry from the MIDP to the APDP has helped South Africa to become compliant with the World Trade Organisation's (WTO) agreement on subsidies and countervailing measures under the 1994 General Agreement on Tariffs and Trade (GATT). Whether these measures will assist the motor industry to expand annual production to 1.2 million vehicles by 2020, with an accompanying increase in employment levels, remains to be seen.

<sup>&</sup>lt;sup>18</sup> Warrington, A. (undated). What does the new Automotive Production and Development Programme mean for the industry? South Africa.

## **Programme Design**

#### 3.1 Programme Description

Implementation of the ACSDP began in April 2009 with project funding from the South African Department of Trade and Industry (the dti). UNIDO was designated as the project management agent by the dti and the AIDC was designated as the key implementation partner for the project. The dti signed a funding agreement with UNIDO for the full extent of the project budget, i.e. R23, 705,300 and UNIDO, in turn, signed a sub-contracting agreement with the AIDC for a large portion of the project budget.

The project document indicates that the ACSDP planned to support 75 (later reduced to 65 due to the subtraction of project support costs by UNIDO) Tier 1 and Tier 2 automotive component suppliers to improve their competitiveness. In line with the policies of the South African government, the project document prioritized small and medium enterprises (SMEs) and black economic empowerment (BEE) suppliers for support. The programme aimed to improve the competitiveness of South African SMEs in the automotive component industry by improving operating efficiency at the plant level, through the provision of effective continuous improvement services through the AIDC.

The project document identifies the ultimate beneficiaries of the project as the participating automotive component suppliers, which were expected to benefit from improvements in shop-floor organization, more efficient energy use, more reliable project management, and therefore, improved market access. The proximate beneficiaries of the project would be the AIDC, which would further develop its capacity to service the automotive component suppliers on a commercially sustainable basis, and the DTI, which would improve its capacity to monitor and evaluate the impact of this and of other supplier development programmes.

The programme was designed to be implemented in two phases of 18 months each, a testing phase and a rollout phase. The testing phase would modify the existing Tirisano programme to include the development of new modules for cleaner production, energy efficiency, project management, supervisory skills and single minute exchange of dies (SMED). The modified Tirisano programme would then be implemented within 15 companies and a rigorous assessment of the programme's impact upon these companies would be undertaken.

The project document indicates that the assessment of the effectiveness of the programme would be based on a benchmarking exercise within each of the 15 companies before the implementation of the programme, thereby establishing the

baseline with regard to the performance of each participating company. The benchmarking exercise would then be repeated 6 months into the programme intervention and again at 18 months, after the Tirisano programme intervention was complete. This procedure was revised during programme implementation, to one pre-intervention benchmarking exercise before the programme intervention and one post intervention benchmarking assessment after the company had completed the Tirisano programme. The pre- and post-intervention benchmarking would assist the project partners to track the changes in the performance of each company over the period of the programme intervention. The benchmarking exercise would also be undertaken within a group of companies who did not participate within the Tirisano programme, in order to understand how their performance changed over the same period, thereby controlling for external factors that impacted on the performance of automotive component suppliers isolating the effect of the Tirisano intervention on the performance of participating companies.

The evidence from the benchmarking process was intended to demonstrate the effectiveness of the Tirisano programme conclusively; thereby allowing the AIDC to market the programme to a greater number of automotive component manufacturers on the basis of results realized during the testing phase. If the results of the testing phase demonstrated the effectiveness of the programme, then phase two would be initiated, with a target of treating 60 additional companies. The Steering Committee later reduced the target to 50 companies in Phase 2 since the original project budget did not make allowance for UNIDO's project management fee. Once the fee of 13% was taken off the budget, a smaller number of companies could be assisted in Phase 2.

The project document sets out three expected outcomes for the project:

- (a) To improve process efficiency within participating firms by reducing changeover times, material handling distances, absenteeism and defect rates;
- (b) Thereby improving competitiveness and market access for South African automotive component firms by enabling the securing of new contracts with OEMs, leading to an increase in the proportion of local content sourced by locally based OEMs as well as an increase in exports of automotive components; and
- (c) To ensure the financial sustainability of the Tirisano programme and enable the AIDC to continue to provide these supplier development services to the automotive sector.

The programme outputs included:

• Development and implementation of a benchmarking methodology (process and environmental) within participating and non-participating

('control') firms, as a basis for a rigorous firm-level evaluation of the Tirisano programme impact;

- Development of new continuous improvement modules to supplement the existing Tirisano programme, including management and supervisor training, assistance with tool and die changing (SMED), cleaner production training, and project management training; and
- Roll-out of continuous improvement methodology of the Tirisano programme within 65 automotive component supplier companies.

#### **3.2 Programme Identification and Design**

The project document indicates that the ACSDP built on an existing Business Partnership Programme between UNIDO and the Automotive Industry Development Centre (AIDC), called 'Tirisano'<sup>19</sup> or 'Working Together' in Sotho. The Tirisano programme started in 2003-2004 and included the dti as a funder.

Despite this existing partnership, stakeholders on the current programme reported that the ACSDP arose out of an engagement with NAACAM (the industry association for automotive component suppliers), the dti, UNIDO and the AIDC. At a meeting with the dti, UNIDO and AIDC in 2009, NAACAM indicated that a supplier development programme was needed in order to assist automotive component manufacturers to improve production efficiencies, so as to better compete with global competitors in India, Brazil and China. UNIDO and the AIDC then designed the programme, developed the project document and reverted to NAACAM and other stakeholders for consultation regarding the proposed elements of the programme and the approval of funds.

The staff members from AIDC and UNIDO who were involved in design of the project and the development of the project document have since left their respective organizations, so the evaluator was unable to engage with these principals directly regarding the project design phase. It is worth noting that NAACAM reported that they did not feel like they could change the project design once it had been developed by UNIDO and the AIDC, despite the consultation process and the participation of NAACAM on the project steering committee.

<sup>&</sup>lt;sup>19</sup> The programme continued to be branded as the Tirisano programme to automotive companies in order to further develop brand awareness within industry in the interests of the long term sustainability of the programme which was originally conceived of as the continued delivery of the programme by the AIDC to the market, on a commercial basis.
# 4. Programme implementation

## 4.1 Implementation of the ACSDP

- 1. AIDC Sub-contract: The original project document envisaged that UNIDO, as the executing agency, would contract a National Project Manager on a part-time basis (2 days per week), as well as a full-time National Industry Advisor in addition to sub-contracting the AIDC to implement the programme at company level. However, during the implementation of the project, these roles were subsumed into the AIDC sub-contract and executed by people within the employ of the AIDC. While it is unclear what motivated this change in the execution of the project plan, this decision appears to have been a good one, since it maintained responsibility for the implementation of the programme at company level within one organization, the AIDC. This change streamlined decisionmaking regarding company-level interventions and management of the industry advisors within the AIDC and made for a more coherent programme delivery model. Moreover, this model was more empowering for the AIDC and facilitated and concentrated the building of capacity within a local South African organization, thereby increasing the chances of developing a sustainable model for delivering continuous improvement services to the South African automotive sector.
- 2. UNIDO, as the executing agent, managed the overall implementation of the ACSDP, which included sub-contracting the AIDC to modify the existing Tirisano programme, to market the programme to automotive component companies and to implement the programme at company level.
- 3. Once a company enrolled on the Tirisano programme, the AIDC assigned an industrial engineer or 'industry advisor' to undertake management orientation activities, as well as awareness activities at plant level. After this initial 'buy-in' phase, the industry advisor would then undertake a diagnostic assessment within the company in order to identify potential interventions that would improve the operations of the plant. The results of the diagnostic assessment would be shared with company management and the interventions to be undertaken as part of the 12 month Tirisano intervention would then be agreed. The industry advisor would then undertake the implementation of the agreed interventions, together with the designated representatives from the company. As a general guide, each industry advisor worked with 3-4 companies at a time and divided a work-week between each company.

- 4. In addition to the industry advisor, the AIDC also placed at least one<sup>20</sup> 'engineering intern' full-time within a participating company for the duration of the Tirisano programme. These engineering interns were usually industrial engineering students who required work experience for the completion of their course of study. These engineering interns were closely managed and mentored by the AIDC industry advisors, but also reported to the designated company representative. The placement of the engineering interns was not part of the original project design and was added on to the programme by the AIDC and was funded from sources outside of the ACSDP budget.
- 5. While the ACSDP was heavily subsidized by the dti, participant companies were expected to pay a fee for participating in the programme. In phase 1 of the programme, each company paid 26% of the cost of the programme or R7500 per month over 13 months. The project document indicates that the company fees would increase over time, so that companies' contribution approached the full cost of the programme over time. However, this issue became contentious during project implementation, with indications that those companies that most needed the assistance offered by the Tirisano programme, were least able to afford to pay the full cost of the programme. In phase 2 of the programme, the Steering Committee therefore agreed that more flexibility in determining company contributions was needed and agreed that company contributions could be calculated on a sliding scale, based on company size and turnover. Each company participating in phase 2 of the programme therefore paid between 26% and 55% of the cost of the services they received, or R7500 to R15000 over 13 months.
- 6. Benchmarking: In addition to sub-contracting the AIDC to provide technical assistance and training to beneficiary companies, UNIDO directly contracted B&M Analysts, a recognized South African consulting firm with extensive experience in benchmarking methodologies and in the South African automotive industry to conduct the baseline and postintervention benchmarking within companies. The project document indicated that approximately 80 supplier companies would be benchmarked at the outset, that the programme would then be marketed to these companies and that interested companies would then be randomly assigned to the control and participant/treatment groups in the testing phase of the project. The benchmarking would then be repeated mid and post-intervention within the companies in both the treatment and the control groups in order to understand and isolate the impact of the Tirisano programme on those companies that received support from the programme.
- 7. However, during project implementation, the benchmarking exercise was changed to one pre-intervention and one post intervention benchmark in each participating company in Phase 1. Moreover, the project did not undertake benchmarking within a control group of companies; instead, B&M Analysts identified 15 companies that participate in the South

<sup>&</sup>lt;sup>20</sup> Some companies requested more interns at different stages of the Tirisano intervention.

African Automotive Benchmarking Club (SAABC) to act as a control group and utilized the information regarding the performance of these companies on their benchmarking database. In the roll-out phase of the programme, benchmarking was undertaken within 20 of the 50 companies participating in the programme. The number of companies to be benchmarked was reduced for time and budgetary reasons and in order to include an activity that allowed the company's benchmarking results to be presented to each benchmarked company in Phase 2, in order to allow companies to understand the information generated on the performance of their company. In addition, a customer benchmarking component was added to the benchmarking process in Phase 2.

8. UNIDO also contracted the National Cleaner Production Centre (NCPC) to carry out quick environmental assessments for selected companies in phase 1 of the programme and to provide basic training in cleaner technologies to AIDC advisors and participating companies. In phase 2, the NCPC and AIDC improved their working relationship through a memorandum of understanding that improved the AIDC's ability to provide interventions around cleaner production and improved energy utilization at company level.

#### 4.2 Programme Adjustments in Phase 2

- Selection of participant companies: prioritisation of tier 1 and tier 2 companies: The country evaluation in 2011 recommended that the second phase of the programme should focus on assisting 2<sup>nd</sup> and 3<sup>rd</sup> tier suppliers since they 'are the ones that will benefit most from the programme activities, as they usually faced more problems, face more competitiveness challenges, and have more difficulties to access adequate training and technical assistance."<sup>21</sup> The dti also indicated that companies participating in phase 2 of the programme should preferably be tier 2. tier 3 or lower tier suppliers<sup>22</sup>.
- In phase 2 of the ACSDP 25 of the 50 participant companies were either tier 2 or tier 3 suppliers (44% of participant companies were tier 2 suppliers and 6% were tier 3 suppliers). Twelve (80%) of the 15 companies treated in phase 1 belonged to tier 1<sup>23</sup>. The percentage of tier 2 and lower suppliers therefore increased from 20% in phase 1 to 50% in phase 2. It is commendable that the programme was able to enrol as many as 25 tier 2 and 3 companies in phase 2 since these companies would have been harder pressed by the difficult economic circumstances experienced during the project period and would have been less able to afford the programme fees (a minimum of R97500 or R7500 per month for 13 months).
- Selection of participant companies: prioritisation of SMEs : The project document names Tier 1 and Tier 2 small and medium enterprises (SMEs) in the automotive component sector as the target beneficiaries of the ACSDP. The country evaluation also recommended that the roll-out phase of the programme prioritise the servicing of SMEs since these companies are most likely to need support services and are less likely than larger organisations to be able to afford these support services.

Information from the AIDC indicates that at least 82% of the companies treated in phase 2 of the programme were either small or medium enterprises compared to 73% in Phase 1<sup>24</sup>. The project therefore appears to have successfully prioritised the servicing of SMEs in the automotive sector.

 <sup>&</sup>lt;sup>21</sup> UNIDO (2011) Independent Evaluation Report: South Africa Country Evaluation.
 <sup>22</sup> AIDC Presentation: 'AIDC Steering Committee Feedback" 23 January 2013.

<sup>&</sup>lt;sup>23</sup> Seven of these 12 companies supply products to tier 1 suppliers as well as directly to the OEMs and might therefore be considered to be both tier 1 and tier 2 suppliers. The relative percentage of product supplied to tier 1 suppliers compared to the percentage of product supplied to OEMs is not available.

The definition of SME is contentious and differs in different contexts and sectors. For the purpose of this analysis, this report accepts the definition used by the AIDC in categorising companies for the ACSDP. This definition is based solely on the number of employees within a company, with small companies deemed to be those with less than 100 employees, medium enterprises categorised as having between 100 and 250 employees and large enterprises defined as those with more than 250 employees.

• Expanded Geographical Coverage of Programme: During programme implementation the Department of Trade and Industry emphasised that the ACSDP was a national programme that should reflect national coverage since the budget for the programme was drawn from national funds. The AIDC addressed concerns about the focus of the programme being biased toward the Gauteng and Eastern Cape provinces in phase 1 by increasing marketing and recruitment activities in the other provinces in phase 2. The charts below reflect the regional split of participant companies in phase 1 and phase 2 of the ACSDP.



#### Figure 1: Regional Spread of Treated Companies

The companies participating in phase 1 of the programme were drawn largely from the Eastern Cape and Gauteng. Two companies treated in phase 1 were based in the Western Cape and one in KwaZulu-Natal. The chart on the right indicates that the split between the different provinces improved in phase two, with 24% of the participant companies being drawn from KwaZulu-Natal (up from 2% in phase 1). Consequently, a much smaller proportion of treated companies were based in Gauteng and the Easter Cape in phase 2. The proportion of treated companies that were based in KwaZulu-Natal and Gauteng were quite similar in phase 2, at 24% and 28% respectively. While companies from Eastern Cape accounted for a smaller proportion of the sample. In conclusion, the geographical spread of companies treated by the ACSDP improved in phase 2 and more closely resembled the spread of automotive companies within South Africa.

Enrolment of companies on phase 2 of the ACSDP: The main delay in the testing phase of the project was due to the difficulties experienced in enrolling companies to participate in the programme during a period where the global automotive industry was in crisis. Besides this, the country evaluation indicated that this might be due to the existence of competing programmes within the automotive sector, but also, potentially, because the programme had failed to establish itself as a proposition that offered good value for money.

The project funders and the execution agency also expressed concerns about difficulties in enrolling the targeted number of companies in phase 2. The fifth Steering Committee Meeting (SCM) in mid-2011 indicated that a decision on whether the programme would continue would be made at the sixth SCM and would depend on the number of companies enrolled for phase 2 by that time. The AIDC then scaled up marketing efforts through the organisation of supplier workshops, the Auto Industry Seminar and presentations at NAACAM regional meetings. The OEM Purchasing Council also assisted in the marketing process by issuing letters to automotive supplier companies in order to encourage them to participate in the ACSDP. This intensive marketing campaign enabled the AIDC to report that they had signed up 41 companies by the beginning of October 2011, with another four companies due to sign up before the end of October and 11 companies in the process of signing up, thereby allowing the programme to more than meet the target of 50 companies for phase 2 and allowing the programme to proceed to the roll-out phase. Thus, the vigorous marketing efforts undertaken in phase 2 meant that enrolment of companies improved dramatically and the targeted number of companies was assisted by the programme.

- AIDC Capacity: The country evaluation indicated that some stakeholders from industry articulated reservations regarding the capacity of some of the industry advisors used by the AIDC in phase 1 and the resultant quality of the Tirisano interventions identified and implemented by these industry advisors. The primary problem appeared to be the relative youth of these advisors and their limited experience within industry, as well as a certain lack of standardisation in the implementation of the programme. These capacity constraints within AIDC were addressed in three ways in phase 2 of the programme:
  - o Augmentation of the pool of industrial advisors through the recruitment of more experienced, retired personnel from OEMs;
  - On-the-job training undertaken by the international expert recruited by UNIDO, as well as workshops that promoted a shared understanding of industry issues and a standard application of the Tirisano material; and
  - Exposure to international best practise in terms of production practises within the automotive sector, as well as the development of an effective industry support structure through a study tour to India. This study tour, combined with the Total Productivity Maintenance (TPM) workshops conducted by the international expert has led the AIDC to launch a new TPM Cluster in the Eastern Cape.

It is worth noting that all industry stakeholders and companies interviewed during the current evaluation indicated that they were happy with the quality of the interventions implemented by the AIDC in phase 2, as well as the general quality of the advice and support received from the Tirisano industry advisors.

Benchmarking: The country evaluation recommended that the benchmarking and the technical assistance aspects of the ACSDP be better integrated in phase 2, so that the information from the baseline benchmarking exercise could be utilised as part of the diagnostic evaluation of the company and the identification and prioritisation of interventions. However, the timing of the benchmarking undertaken within participant companies made it impractical to integrate the benchmarking results into the identification of company interventions, since the finalisation of the baseline information within companies usually lagged the start of the Tirisano intervention by several months. According to the UNIDO project manager, this lag in timing was partially due to the fact that phase 2 was relatively short and it was therefore necessary to start with company counselling in parallel to benchmarking efforts.

According to a revised work plan dated 19 October 2012 submitted by B&M Analysts to UNIDO, the shortest lag between the start of a company intervention and the finalisation of the baseline benchmarking data was 3 months, while 20% of the companies benchmarked in phase 2 had their baseline benchmarking data finalised only after the Tirisano intervention within the company had been completed.

The delay in finalising the baseline benchmarking data for participant companies also raises questions regarding the reliability of the exercise as a measure of the impact of the Tirisano programme. The impact assessment report notes that "The timing of receipt of (finalised) baseline data in some cases occurring after completion of the project intervention, which is problematic given the intended purpose of the baseline assessment process"<sup>25</sup>.

The country evaluation report, as well as UNIDO's reports that reflected on the lessons of the testing phase, noted that the benchmarking process undertaken in phase 1 did not adequately reflect the impact of the Tirisano programme since the benchmarking tracked high level company performance indicators, while the Tirisano interventions were usually localised within a pilot area of the company's operations and were unlikely to be detected at the aggregate level. This issue was addressed in Phase 2 of the programme by augmenting the B&M benchmarking with some intervention-specific KPIs to make the benchmarking more relevant to the interventions conducted at company level.

 UNIDO Value-add in Phase 2: The country evaluation report noted that "although UNIDO has implemented similar programmes in other countries, UNIDO seems to provide little value added to the automotive

<sup>&</sup>lt;sup>25</sup> B&M Analysts (2013) UNIDO Automotive Component Supplier Development Programme Impact Assessment Report.

supplier development programme in South Africa". The value-add from UNIDO increased in phase 2 through the recruitment of an international expert on a part-time basis in order to provide guidance to the AIDC in the implementation of the programme at company level. UNIDO contracted-in this international expertise in order to build the capacity of the industrial advisors within AIDC through a mixture of issue-based workshops and onthe-job training. His employment on the programme was also intended to improve the quality of the company based interventions through company visits and the identification of additional improvements to be implemented at shop-floor level. It is notable that all of the companies interviewed during this evaluation exercise, albeit a small sample of the participating companies in phase 2, expressed satisfaction with the quality of the AIDC industrial advisors and the work they undertook within their companies. This was a markedly different from the responses of companies interviewed during the country evaluation, which indicated a high degree of variability in the quality of the industry advisors and the satisfaction of the participant companies.

The international expert was also seen as a critical addition to the programme by the industry associations and the AIDC for his ability to 'bring together industry' and mobilise support for the programme.

In addition, UNIDO sought to improve M&E systems and local capacity to evaluate supplier development programmes through the implementation of an M&E capacity building exercise at the end of the programme. The primary activity within this intervention was an M&E workshop conducted by UNIDO for project stakeholders. Participants at this workshop included the AIDC, the dti and B&M Analysts. The main aim of this activity was to review the intervention logic of the ACSDP and to discuss key project design tools so that future projects, including those prepared by the National Steering Committee, would have a sound results chain and monitoring framework. UNIDO also attempted to add value to the development of the South African automotive sector through involvement in policy deliberations and public-private dialogue facilitation, including continuous communication with the dti, AIDC, NAACAM, NAAMSA and the OEM Purchasing Council.<sup>26</sup>

• Standardisation of the Tirisano Programme: The report from the UNIDO project manager that reflected on the lessons of the testing phase as well as the country evaluation noted a need for greater standardisation of diagnostic tools in order to better control the quality of Tirisano interventions undertaken at company level in phase 2. Interviews with the UNIDO project manager indicate that the standard tools and material are available within the Tirisano programme and that greater standardisation in application of these tools has been encouraged through the capacity building workshops undertaken by the international expert with the AIDC industry advisors. However, interviews with industry advisors in different

<sup>&</sup>lt;sup>26</sup> UNIDO presentation to the ACSDP Steering Committee meeting on 23 January 2013.

regions and the international expert indicate that there are still variations in approach across regions and individual IAs.

- Cross-company learning: The country evaluation report indicated that good practices established in the original Tirisano programme which involved the sharing of experience across participating companies had not been evident in phase 1 of the ACSDP. Interviews during this evaluation exercise have indicated that more events that encouraged sharing of experience and knowledge between companies did occur in phase 2. However, this varied across regions and in some cases, appear to have occurred because it was an expedient way to minimise the time needed for monthly review meetings with participating companies, rather than as a conscious knowledge sharing mechanism employed by the programme. On the other hand, a couple of the companies interviewed indicated that while they found the opportunity to learn from other companies useful, they did not always have the time to attend the events that were organised in phase 2.
- Improved capacity to evaluate programme impact: The country evaluation report indicated that the "... programme should ... develop) an effective evaluation system that serves to evaluate the impacts of the programme interventions in the beneficiary companies' operational efficiency and competitiveness and to identify lessons from experience". As noted earlier, phase 2 of the programme augmented the benchmarking methodology used in phase 1 with the addition of new key performance indicators that were more closely linked to interventions undertaken within each company. However, the effectiveness of the benchmarking exercise in evaluating the impact of the company level interventions may not be entirely accurate given the disjuncture between the timing of the baseline benchmarking exercise in relation to the implementation of the Tirisano interventions within a company. This disjuncture in timing required companies to recollect/reconstruct information regarding performance before the Tirisano intervention several months after the intervention had begun.

The AIDC also measured changes in key performance indicators for individual companies. The KPIs for each company was chosen on the basis of the Tirisano interventions to be implemented in each company and the relevant measures that these interventions were expected to affect. These measurements formed the basis for the preparation of ten case studies for phase 2 companies. These case studies reflected on the experience and outcome of the Tirisano programme within the selected companies and are intended to be used as learning material as well as marketing material.

### **4.3 Financial Implementation**

Project Budget:The project document includes a budget that reflects the cost attached to broad activities to be undertaken in implementing the project. However, the budget lumps various costs together in order to arrive at an activity related cost and does not make explicit the component costs or the assumptions on which the activity costs are based, making it difficult to reflect on the credibility of the budget.

Moreover, financial reporting on the project uses the standard UNIDO budget lines to report on project expenditure. The fact that the financial reporting format is different from the budgeting format makes comparison between the planned expenditure and actual expenditure difficult. The UNIDO implementation team assisted the evaluation process by converting the activity-based budget contained in the project document into the budget lines used in the UNIDO financial reporting system (see columns I and J in Table 3 on the following page).

A comparison of the total allotment budget with the total budget from the project document indicates an 11% variance of €181 557.61. This variance has not been explained but might be due to changes in the exchange rate<sup>27</sup> since a significant amount of time elapsed between the approval of the project and the allocation of funds in the UNIDO accounting system. The UNIDO implementation team indicated that the ACSDP was approved by the UNIDO Programme Approval Committee on 2 July 2008, however the project document was signed by the dti and UNIDO only in March-April 2009 and the first allocation of funds in the UNIDO accounting system took place a year later in March 2010.

<sup>&</sup>lt;sup>27</sup> During the course of project implementation, UNIDO made a contribution of €27,500 to budget line '2100 – Subcontracts' to offset losses due to fluctuations in the Euro/Rand exchange rate.

Bud Line	Description of Budget Line	Allotment* (Euro €)	Committed Funds (Euro €)	Disbursements (Euro €)	Total Expenditure (Euro €)	Funds Available (Euro €)	Bud Line as % of Total Expanses	Original Budget in PRODOC (Rands)	Original Budget in PRODOC (Euro)
Α	В	С	D	E	F	G	Н	I	J
1100	International Experts	141 828.46	17 434.86	127 118.62	144 553.48	-2 725.02	9.15	1 380 713.00	104 747.64
1500	Local travel	73 352.55	12 842.68	54 053.19	66 895.87	6 456.68	4.24	0.00	0.00
1600	Mission costs (UNIDO Staff)	42 619.00	4 310.01	26 944.97	31 254.98	7 064.02	1.98	810 018.00	61 451.93
1700	National Experts	82 314.92	31 478.20	52 769.43	84 247.63	-1 932.71	5.33	17 059 470.00	1 294 214.83
2100	Subcontracts (AIDC)	1 267 250.40	250 965.64	999 324.09	1 250 289.73	16 960.67	79.16	601 377.00	45 623.40
4500	Equipment	0.00	0.00	0.00	0.00	0.00	0	613 650.00	46 554.49
5100	Sundries	9 477.06	749.29	1 243.15	1 992.44	7 484.62	0.13	0	0
		1 616 842.39	317 882.21	1 261 514.67	1 579 396.88	33 145.51	99.99	23 705 300.00	1 798 400.00

#### Table 3: Project Expenditure as per 13 February 2013

Financial Allotment for total ACSDP, including Phase 1 & 2: Table 3, based on the financial report from the UNIDO implementation team, indicates that total expenditure on the project amounted to  $\in$ 1,579,396.88<sup>28</sup> and that  $\in$ 33,145.51 is to be returned to the South African Department of Trade and Industry<sup>29</sup>.

Expenditure on the project was split into seven categories: international consultants, local travel, mission costs, national consultants, subcontracts and sundries. The 'Subcontracts' budget line reflects the funds transferred to the AIDC for the implementation of the Tirisano programme at company level. This was the single largest category of expenditure, accounting for almost 80% of total expenditure on the project. A comparison of the figure related to 'Subcontracts' in column J indicates that only €45,623.40 was originally budgeted for the work to be undertaken by the AIDC. This figure was increased dramatically in the allotment budget (Column C) to €1,267,250.40. This increase reflects the decision to make the AIDC solely responsible for the implementation of the programme at company level, including the hiring of local project staff.

International expertise accounted for the second largest category of expenditure at 9.15% of project expenditure. Some of the expenditure reflected in the 'Local Travel' budget line (4.24% of project expenditure) was also associated with the travel costs of the international expert within South Africa. This level of expenditure on international expertise is congruent with the focus of the project on building the capacity of the AIDC industry advisors in the roll-out phase of the project.

The other significant category of expenditure was "National Experts" which accounted for 5.33% of project expenditure and largely reflects the costs of the pre- and post-intervention benchmarking undertaken in the testing and roll-out phases of the project. The cost of missions undertaken by UNIDO staff accounted for 1.98% of project expenditure. This figure does not include the 13% project management fee that is a standard fee on projects implemented by UNIDO. This management fee compensates UNIDO for the time of the project manager, Regional Office staff and staff involved in procurement, financial administration, human resource management, etcetera, on the project.

<sup>&</sup>lt;sup>28</sup> It should be noted that this figure does not reflect the total cost of delivering the ACSDP, since it does not include the funds raised by the AIDC through company contributions, which have been reinvested in the programme.
<sup>29</sup> Disclaimer: some costs are paid by the UNIDO Office in Protoria and might not yet be reflected.

<sup>&</sup>lt;sup>29</sup> Disclaimer: some costs are paid by the UNIDO Office in Pretoria and might not yet be reflected on this table. Moreover, UNIDO's recent transition to SAP and the data import process might mean that the figures reflected on Table 3 are not completely accurate.

## 4.4 Programme Management

The Automotive Component Supplier Development Programme was designed and managed according to the 'agency execution' model, according to which UNIDO was responsible for the implementation of the programme activities, including the management of financial resources and the sourcing and management of human resources. However, the institutional arrangements outlined in the project document and approved by the project funder named certain institutions, like the AIDC and the National Cleaner Production Centre (NCPC) as project partners responsible for implementing particular activities of the programme.

UNIDO therefore subcontracted these entities in order to provide the services mentioned in the project document, which were further defined through the negotiation and contracting process during programme implementation. The AIDC was therefore contracted by UNIDO to implement the Tirisano programme at company level. This included the modification of the Tirisano programme material, the marketing of the programme, the selection of companies, the hiring of industrial advisors, undertaking diagnostic analyses within participant companies and identifying and implementing of company level interventions in order to improve production processes. The AIDC was therefore the primary vehicle responsible for the delivery of project activities to automotive component supplier companies, with the AIDC sub-contract accounting for 80% of the project budget, once UNIDO's management fee is excluded.

As indicated before, the AIDC sub-contract negotiated during programme implementation ultimately subsumed the positions of National Programme Manager and National Industry Advisor, resources that the project document indicated would be recruited and managed by UNIDO directly. These roles were therefore performed by employees of the AIDC during programme implementation. This change was a positive one since it allowed the AIDC to assume overall responsibility for the delivery of the Tirisano programme at company level. The AIDC prepared formal reports to the UNIDO project manager in line with the terms of the subcontract. The reporting period was usually related to the release of payments on the sub-contract, which was in turn related to the operational requirements of the programme and the volume of work being undertaken on the programme. The first phase of the project, which serviced only 15 companies and therefore required fewer human resources involved the transfer of funds from UNIDO to the AIDC in three payments. However, the rollout phase of the project involved the provision of services to 50 companies and required a scaling up of human resources on the part of the AIDC; reporting and payments were therefore linked to the signing up and servicing of companies in groups of five.

The UNIDO project manager for the ACSDP was based in at UNIDO headquarters in Vienna and appears to have undertaken project related missions to South Africa in order to coincide with the nine Steering Committee Meetings held in the 46 month period between April 2009 when the project started and

January 2013 when the project ended. Project reports from UNIDO to the dti were usually prepared for submission before the SCM held every 5-6 months or upon special request from the dti in order to feed into their internal reporting process. For part of the project implementation period, UNIDO also used an intern/junior consultant based at the regional office in Pretoria in order to co-ordinate with local stakeholders, organise SCMs and undertake desk-top research to reconcile information from different sources regarding the impact of the testing phase of the project.

Despite a delay of nine months in the implementation of the ACSDP, the project funders reported that they were happy with the way the AIDC implemented supplier development activities and the way that UNIDO managed the programme. It is to be noted that the UNIDO project manager changed about 18 months into the project implementation period. The country evaluation report indicates that some part of the delay in project implementation was due to the change in project managers. However, the change also resulted in a more reflective and considered management of the project, with documented evidence that the new project manager consciously unpacked the theory of change that underpinned the project design and attempted to get the project funder and the steering committee to consider and address the gaps in the project intervention logic.

The project steering committee included the project funders, the dti, the implementing agents, UNIDO and AIDC, and industry representatives from NAACAM, NAAMSA and the OEM Purchasing Council. The steering committee was active and met nine times during the implementation of the project. However, some industry organisations, reported that the steering committee meetings were primarily a feedback session with project implementing agents reporting back on project progresses and challenges. While this mechanism was useful in soliciting support from the member organisations for the implementation of the programme, for example support from NAACAM and the OEM Purchasing Council in marketing the programme in phase 2, members of the steering committee did not feel empowered to substantively steer and redirect the programme.

## Assessment

## 5.1 Relevance

# Relevance to the development of South Africa and the automotive sector

The automotive sector in South Africa is an important part of the country's manufacturing sector and in 2011 accounted for almost 12% of total exports and provided 90,000 jobs. Historically, the motor industry in South Africa benefitted from the import substituting industrial policies of apartheid South Africa and enjoyed import tariff protection of up to 115%. The industry therefore produced a large variety of models with very short production runs for the small domestic market. The industry was notoriously inefficient and was expected to collapse in the face of international competition when trade liberalisation policies were introduced in the 1990s.

Given the importance of the automotive sector to the national and regional economies within South Africa and the high growth multipliers associated with the sector<sup>30</sup>, government and industry stakeholders have attempted to work together to improve the international competitiveness of the sector. In addition to the provision of incentives to promote rationalisation within the industry, support interventions have included firm-level restructuring and supplier development programmes.<sup>31</sup> The need for a supplier development programme like the ACSDP was articulated by NAACAM, the association for automotive component manufacturers, in a meeting with the dti in 2009 and is relevant to the needs of the automotive component suppliers who face constant pressure to cut production costs or lose business to competitors from countries like Brazil, India and China.

#### **Relevance to South African government policies**

The ACSDP's ultimate goal of improving the competitiveness of domestic automotive component suppliers was aligned with the policies of the South African government which aim to increase the domestic supply of automotive components and parts to the after sales market. The programme is aligned to the National Industrial Policy Framework (NIPF) and the Industrial Policy Action Plans (IPAP), which target the automotives, components, and heavy and medium vehicles sector as a critical sector in which sectoral interventions should be

<sup>&</sup>lt;sup>30</sup>Department of Trade and Industry (2011). Industrial Policy Action Plan 2011/12- 2013/14, South Africa.

<sup>&</sup>lt;sup>31</sup>Flatters, F. (2005). The Economics of MIDP and the South African Motor Industry, Canada.

scaled up. The programme design was aligned to the NIPF, as it aimed to build a domestic supply capacity that is internationally competitive and that creates sustainable employment. Moreover, the programme's preference for servicing SMEs and Black Economic Empowerment (BEE) suppliers supported the South African government's aim to broaden the ownership base within the economy. The ACSDP, which sought to support the upgrading of automotive component suppliers so that they could provide cost-competitive components locally and to export markets was also congruent with the objectives of the Motor Industry Development Programme (MIDP), which incentivized the export of motor vehicles and automotive components, as well as the new Automotive Production and Development Programme (APDP), which offers a local manufacturing incentive, regardless of whether the motor vehicles are sold locally or abroad.

#### Relevance to UNIDO

'Trade Capacity Building' is one of three thematic priorities that drive the work of UNIDO. The ACSDP fits into the work conducted in this thematic area, which seeks to improve the capacity of developing countries to compete within global value chains and benefit from international trade. UNIDO seeks to provide developing countries with assistance to upgrade manufacturing processes in sectors with high-export potential in order to meet the quality, cost and reliability requirements of international markets. The ACSDP, which sought to improve the production processes of South African automotive component suppliers in order to better service domestic OEMS and global export markets therefore articulated well with this portfolio within UNIDO.

UNIDO has implemented similar programmes in other countries including Belarus, India, Russia and Serbia and will soon include the Ukraine and Colombia in this list. UNIDO has recently made efforts to develop a comprehensive technical assistance offer to support the automotive industry in developing countries, transition economies and emerging markets, with a specific focus on automotive component manufacturers, automotive clusters, and support institutions of particular relevance to the sector. Such comprehensive support would include a wider range of competitiveness-related services, paying specific attention to environmental, energy and overall resource efficiency considerations and greenhouse gas accounting, but also occupational health and safety, traceability, and compliance with particular standards or buyer requirements. The ACSDP, by explicitly integrating cleaner production and benchmarking components fits well into this strategic orientation.

## 5.2 Ownership

The alignment of the ACSDP with national policies and the active participation of the AIDC and the dti in the preparation of the project document resulted in a high degree of ownership of the programme by both these organizations. The dti was the sole funder of the ACSDP, and the AIDC was responsible for the implementation of the programme at company level, with the result that both organizations were heavily invested in the success of the programme.

However, industry ownership of the programme was found to be wanting, despite the participation of NAACAM, NAAMSA and the OEM Purchasing Council on the Project Steering Committee. Although NAACAM was involved in project conceptualization with the dti, UNIDO and AIDC at the outset, they reported that they had limited involvement in the actual design of the different elements of the programme. The project was reportedly designed by UNIDO and the AIDC and presented to the industry stakeholders for 'consultation' only. Likewise, interviews with the industry associations indicate that the Project Steering Committee meetings provided a platform for the project implementers to share information regarding project progress and challenges, but did not allow industry stakeholders to make substantive changes to the programme.

Ultimately, the sustainability of the ACSDP has been undermined by the lack of industry ownership of the programme. The industry associations recently wrote to the Minister of Trade and Industry complaining about the lack of coordination between the various initiatives to support the development of the automotive industry. As a result, a National Steering Committee has been set up in order to define the needs of and coordinate support to the industry. This process is likely to take a while and in the interim the dti has declined to support most automotive development programmes. Instead, the dti has asked the OEM Purchasing Council to define short-term interventions in order to address problems they have identified within the value chain.

## 5.3 Efficiency

The implementation of the ACSDP has been delayed by nine months, with the expected completion date moving from March 2012 to December 2012<sup>32</sup>. Project stakeholders attributed this delay to the following reasons:

- A delay caused by UNIDO having to compensate for losses in the project budget due to exchange rate fluctuations at the beginning of the project;
- A delay in the processing of the sub-contract for AIDC within UNIDO. This
  was a large sub-contract accounting for a large proportion of the project
  budget and the pre-identification of the AIDC as the preferred subcontractor/service provider within the project document meant that
  UNIDO's usual procurement protocols had to be waived;
- A small delay caused by the change of the UNIDO project manager in the second year of the project;
- A delay in enlisting companies to participate in the Tirisano programme, especially in the testing phase;
- A delay in the approval of funding for phase 2, part 2 by the dti; and
- A delay caused by the period of programme adjustment and improvement between the testing phase and the rollout phase of the ACSDP.

The largest part of the delay in project implementation appears to be a result of the difficulty experienced in enlisting companies to participate in the programme. This is reported to have been especially problematic in the testing phase. Different reasons have been advanced for this difficulty:

- The existence of competing programmes within the automotive sector;
- The difficulty in convincing automotive companies to outlay funds on a discretionary development programme during a period when the global automotive crisis had squeezed company margins even further;
- The cost of the programme might have been too high for the smaller manufacturers who were the primary target market for the ACSDP; and
- The programme might not have established a reputation within the market as a good value for money proposition, especially in the testing phase.

<sup>&</sup>lt;sup>32</sup> Programme activities at company level ended at the end of December 2012, however the preparation of final programme reports by the project implementers, the impact assessment and the programme evaluation continued into February 2013.

The implementation of the ACSDP started in April 2009, with an expected completion date of April 2012. Each of the two phases, the testing phase and the rollout phase was expected to last 18 months. Since the actual intervention period within companies participating on the Tirisano programme was 12 months, this project period would have allowed a six month period in which to set up project management systems, to identify and contract the necessary expertise needed to implement the programme, to modify the Tirisano programme and to enroll the 15 companies to participate in the testing phase. After the testing phase, the 36 month project period would also have allowed a six month period for programme adjustments, the recruitment of the necessary resources to implement the larger roll-out phase and the identification of the 50 participant companies for phase 2.

However, the project document implicitly assumes that the 15 participant companies in phase 1 and the 50 participant companies in phase 2 would be enrolled and 'lined up' to begin programme implementation at the same time. In practise, the difficulties in enlisting companies onto the programme and resource limitations meant that some companies started implementation later than others. Treatment of the 15 companies that participated in the testing phase therefore extended over a period of 27 months, from April 2009 until June 2011. Treatment of the 50 companies that participated in the roll-out phase extended over a 23 month period, with the first companies coming on line in February 2011 and the last companies officially ending their programme interventions at the end of December 2012. There was therefore a period of five months between February 2011 and June 2011 when the implementation of the testing phase and the roll-out phase overlapped.

The extension of the testing phase over 27 months delayed the post-intervention benchmarking within participant companies and the analysis of the impact of the Tirisano programme. The AIDC began work with the first lot of companies in phase 2, at risk, before the analysis of the impact of the testing phase and an explicit decision from the SCM to continue with the second phase of the project. This decision, taken in the interests of meeting programme timeframes, was validated by the ultimate decision of the SCM and the dti to take the ACSDP to scale, as well as the fact that the severe time pressures experienced by the programme in the latter half of 2012 would have been seriously compounded without this action on the part of the AIDC.

## **5.4 Effectiveness and Impact**

Although the project document sets out three expected outcomes for the project, discussions between UNIDO and the dti during project implementation indicated that the project should focus on achieving the following objective:

"The AIDC will be in a position to deliver commercially viable services that enable firms to achieve gains in terms of plant-level efficiency and cost savings"<sup>83</sup>.

This decision therefore prioritised the achievement of two of the original project objectives:

(a) The improvement of process efficiencies within participating firms; and

(b) The increased financial sustainability of the services provided by the AIDC.

The decision to prioritize these two outcomes during the implementation of the project was based on the dti's understanding that increasing the proportion of local content sourced by locally based OEMs and increasing exports of South African automotive components were objectives that could only be achieved in the longer term. It is important to note that while the outputs and activities of the ACSDP will contribute to realising these outcomes, the achievement of these outcomes are not solely dependent on the project and extraneous factors beyond the control of the project will impact on the achievement of these longer term outcomes.

This section of the evaluation report will review the progress of the programme toward achieving the prioritised outcomes of the ACSDP in order to reflect on the effectiveness of the programme, since this terminal evaluation has been conducted at the end of the programme implementation and it is too early to reflect on the long-term impact of the programme

<sup>&</sup>lt;sup>33</sup> Minutes from teleconference 2011-03-10.

#### Outcome 1: To improve process efficiency within participating firms by reducing changeover times, material handling distances, absenteeism and defect rates

• <u>Support to targeted number of companies</u>: The ACSDP was effective in reaching and providing support to the targeted number of companies, despite difficulties experienced in enrolling companies on to the programme, especially in the testing phase. The programme serviced 15 companies in the testing phase and 50<sup>34</sup> companies in the rollout phase. The enlisting of companies onto the programme was complicated by the difficult economic circumstances that affected automotive component manufacturers at the start of project implementation in 2009, and beyond. However, active marketing via the industry associations, OEMs and Tier 1 suppliers allowed the AIDC to successfully enrol the targeted number of companies onto the programme.

Nonetheless, the 65 companies reached by the programme accounts for a small proportion of the universe of South African automotive suppliers. At the seventh Steering Committee Meeting, conducted on 31 January 2012, the AIDC indicated that the 65 companies targeted by the programme accounted for approximately 10-15% of the automotive component manufacturers. The limited scale of the programme therefore renders it unlikely that the ACSDP will improve the competiveness of the automotive component manufacturing sector significantly.

The limited scale of the ACSDP means that the programme, even if effective in engendering improvements at the participant company level, is unlikely to significantly improve the competitiveness of the automotive sector in South Africa. Neither will it lead to a positive impact on the economy as a whole in terms of job creation (or retention), the reduction of poverty or the improvement (or safeguarding) of living standards within South Africa. However, the capacity built through the Tirisano programme (tools and methods developed, AIDC staff trained, growing pool of experience in upgrading companies) combined with the growing buy-in from companies within the automotive sector, indicates that good potential exists for future impact at the sectoral level, if the programme is replicated at a larger scale.

Improvement in waste costs within participant companies: The project document indicates that the improvement in process efficiencies within participating firms would be measured by reduction in changeover times, material handling distances, absenteeism and defect rates. These KPIs were measured by the AIDC in the course of implementing the Tirisano interventions at each firm. However, Steering Committee members also agreed on a composite indicator to reflect on the overall success of the ACSDP and to provide the SCM with a comprehensive but

<sup>&</sup>lt;sup>34</sup> According to the UNIDO presentation to the SCM on 23 January 2013, 49 companies successfully completed the Tirisano programme by the end of December 2012.

simple criterion by which to take a decision on whether to continue with the programme after the testing phase. The composite measure was suggested by B&M Analysts based on the improvements that a good company could be expected to make within the intervention period. According to the mminutes of the third Steering Committee Meeting<sup>35</sup> 'an overall target of 10% reduction on the cost measure per company per year' was the target agreed upon for the Tirisano Programme.

According to the impact assessment conducted in the testing phase, this target was expressed as a 10% improvement in total waste cost as a percentage of turnover and was achieved, on average, by the firms participating in the testing phase. The benchmarking conducted in the rollout phase of the project modified this indicator and measured the total waste cost as a percentage of Manufacturing Value Added (MVA), where MVA is calculated as 'Turnover minus Materials'. According to recent discussions with B&M Analysts, this provides a better measure of analysing waste since material costs are largely beyond a firm's direct control, while Manufacturing Value Added is an area of operations that a firm can influence.

The results of the impact assessment completed by B&M Analysts indicate that the companies treated by the Tirisano programme in the rollout phase showed a significant improvement of 8.06% in costs as a percentage of MVA during the project timeframe, compared to a 2.12% improvement for South African comparator firms in the same period. These figures indicate that Tirisano firms achieved a 25.30% (8.06%/31.86%) improvement on this measure compared to an 11.22% (2.12%/18.89%) improvement within similar South African firms in the same period<sup>36</sup>. On the face of it, this would indicate that the Tirisano intervention markedly improved the management of waste costs within participant companies. However, this firm-level improvement is difficult to link directly to the Tirisano interventions.

Stakeholder's primary criticism of the benchmarking undertaken by B&M Analysts in the testing phase was based on the fact that the benchmarking analysis focused at the level of the company as a whole, while the Tirisano interventions usually happened in a localised project area within the company. It was argued that the benefits of the Tirisano intervention were not always likely to be detected at a company level and might therefore not be directly shown by the benchmarking. Consequently, the benchmarking in the roll-out phase was supplemented by the collection and analysis of information at the level of the localised project area.

The benchmarking for the rollout phase therefore measured the reduction in waste at the level of the project area targeted by the Tirisano interventions. The results of the impact assessment show that waste within the project area decreased by a smaller percentage of 2.86% of

<sup>&</sup>lt;sup>35</sup> Held on 16<sup>th</sup> April 2010.

<sup>&</sup>lt;sup>36</sup> E-mail from Sean Ellis, B&M Analysts, dated 14 May 2013.

MVA<sup>37</sup>. This figure is based on the total project waste figure improving from 14.25% in 2011/12 to 11.40% in 2012/13. This means that phase 2 Tirisano companies realised a 20.04% (2.86%/14.25%) improvement in the waste to MVA costs<sup>38</sup>. The Tirisano programme in the roll-out phase therefore performed significantly better than the 10% reduction in costs targeted by the SCM.

Savings realised at company level: The results of the third party benchmarking were supplemented by information collected by AIDC during project implementation regarding the savings at each participant company arising from the interventions implemented by the Tirisano programme. While the AIDC collected this information, the savings information was verified through interaction between the company management and the AIDC.

The AIDC reports that companies participating in the roll-out phase realised a collective saving of R61, 927,000<sup>39</sup>. Companies participating in the roll-out phase of the project paid a collective fee of R4, 399,300<sup>40</sup> to the AIDC in order to access Tirisano services. This indicates that participant companies in the roll-out phase of the ACSDP realised a phenomenal return on investment of 1308%<sup>41</sup>.

However, this return on investment is based on a subsidised cost to the participant companies and would be lower if companies were required to pay the full cost of the service. In order to judge whether the Tirisano programme offers a good value for money proposition to potential clients in future, it would be useful to compute the rate of return to participant companies without the subsidy. The AIDC reports that it spent R16, 500,000 in order to service the 50 participant companies in phase 2. If the ACSDP was not subsidised, contributions from participant companies would have been required to cover this entire cost. If phase 2 companies paid a sufficient price to cover the cost of the programme, the return on investment to participant companies collectively would still have been an extremely attractive 275%<sup>42</sup>. This figure represents a compelling selling point in marketing the Tirisano programme to other companies in future.

The ACSDP was, however, heavily subsidised by the dti, so one should also consider the return on investment for the dti in order to establish whether the programme qualifies as fruitful expenditure of public funds. According to the budget snapshot compiled by UNIDO, the dti transferred R23, 705,300 to UNIDO and UNIDO will be returning approximately R393,

<sup>&</sup>lt;sup>37</sup> B&M Analysts (January 2013) UNIDO Automotive Component Supplier Development Program South Africa Impact Assessment Report.

<sup>&</sup>lt;sup>38</sup> E-mail from Sean Ellis, B&M Analysts, dated 14 May 2013.

<sup>&</sup>lt;sup>39</sup> E-mail from AIDC dated 22 April 2013. E-mail also indicated that 5 Broad-based Black Economic Empowerment companies did not pay fees in Phase 2 of the ACSDP.

AIDC (December 2012) Automotive Component Supplier Development Programme: Final Report <sup>41</sup> (Total Savings in Phase 2 – Company contributions in Phase 2)/Company contributions in Phase  $2 \times 100/1 = (R61, 927,000 - R4, 399,300)/R4, 399,300 \times 100/1 = 1308\%.$ <sup>42</sup> (Total Savings in Phase 2 – Company Contributions to cover cost of Programme)/Company

Contributions to cover cost of Programme \* 100/1 = (R61, 927,000 - R16, 500,000)/R16, 500,000 \* 100/1 = 275%.

418.52 at the current exchange rate<sup>43</sup>. This means that the dti spent R23, 311,882 on the delivery of the ACSDP to the South African automotive sector over both the testing and the roll-out phases. Across both phases, the ACSDP realised savings of R72, 267,000<sup>44</sup>. The return on investment to the dti over both phases of the ACSDP therefore amounts to 210%<sup>45</sup> and therefore represents very good value for money.

- In addition to the figures regarding the savings realised by participating companies, the AIDC also tracked the number of people trained within participating companies and reported that a total of 3534 workers, supervisors and managers were trained through the Tirisano interventions at company level in Phase 2 of the programme. Furthermore, the project documentation indicates that more than 2000 individuals were trained during the testing phase of the  $ACSDP^{46}$ .
- This evaluation process interviewed a very small sample<sup>47</sup> of the companies that participated in the roll-out phase of the ACSDP. These interviews indicated that the Tirisano programme was well received by participant companies who all reported positive outcomes from interventions at company level, including improved morale among workers. Companies also indicated that AIDC's use of a resident student engineer within each participating company was effective in demonstrating the potential contribution of industrial engineers to shopfloor workers who were previously sceptical of the value of this discipline. This bodes well for a change in the mind-set of workers regarding the value of improving manufacturing processes in line with good industrial engineering practises.

<sup>&</sup>lt;sup>43</sup> Exchange rate of €1.00 to R11.87 on 5 March 2013.

<sup>&</sup>lt;sup>44</sup> R61,927,000 in Phase 2 and R10,340,000 in Phase 1 according to the ACSDP Progress Report covering December 2010 - March 2011.

<sup>(</sup>Total Savings Realised - Total Investment by dti)/Total Investment by dti \* 100/1 = (R72,267,000 - R23,311,882)/R23,311,882 \* 100/1 = 210%. <sup>46</sup> Progress Report covering December 2010 - March 2011.

<sup>&</sup>lt;sup>47</sup> The sample size was kept small since the project had been recently evaluated as part of the country evaluation and since companies had been extensively engaged through the impact assessment process conducted by B&M Analysts.

Outcome 2: To ensure the financial sustainability of the Tirisano programme and enable the AIDC to continue to provide supplier development services to the automotive sector.

 One objective of the ACSDP was to increase the commercial viability of the Tirisano programme by increasing the perceived quality of the programme by participant companies and the market, such that subsequent companies participating in the roll-out phase of the programme would be willing to pay the full cost of the programme without the need of a public sector subsidy.

However, during the implementation of the testing phase, the experience of the project implementation team indicated that the SMEs and lower tier component suppliers that most needed the services offered by the programme were also least likely to be able to afford to pay for the programme, even at the subsidised level. A continued adherence to this measure of commercial viability would thus have undermined the ability of the ACSDP to service its target beneficiaries. The Steering Committee therefore agreed that the company contribution to the costs of the programme in the roll-out phase would be calculated on a sliding scale between 30% and 55%, based on the size and the financial ability of each company.

Company contributions were expected to increase in order to cover an increasing portion of project costs over the life of the project. The project documentation reports that prior to the start of the ACSDP, Tirisano companies paid less than 10% of the cost of the programme, while in the testing phase of the ACSDP, participant companies covered 30% of the cost of the services they received. According to the AIDC final report, it cost the AIDC R16.5 million to deliver phase 2 of the ACSDP and R4, 399,300 million was collected as company contributions toward these costs, indicating that the company contribution accounted for 27% of the cost of the programme in the roll-out phase. The percentage of the programme costs covered by company contributions therefore decreased slightly in phase 2 compared to Phase 1<sup>48</sup>.

However, if one adopts a different view of the measure of financial sustainability of the Tirisano programme and views this as the ability to continue to sell a product that is perceived to be of good quality to a market that expresses a demand for the product, then one receives a better impression of the effectiveness of the ACSDP in meeting this project objective. The AIDC-Eastern Cape reports that of the 24 companies serviced in the region in phase 2 of the ACSDP, 45% have renewed contracts with the AIDC in order to implement different modules of the Tirisano programme within their

<sup>&</sup>lt;sup>48</sup> Five black owned companies that participated in Phase 2 of the ACSDP did not pay fees.

companies, with a further 8% of companies still in negotiation with the AIDC about the matter.

This repeat custom, post the ACSDP, is based on higher prices than that paid during the programme, ranging from R174,000 to R480,000 over twelve months. The cost to the company is based on the cost of servicing the company (determined by the kind of interventions required, the number of industry advisors necessary and the travel distance to the company) as well as the financial circumstances of the company. Despite this increase in price, the AIDC-EC accepts that many automotive component firms are unable to bear the full cost of the Tirisano intervention and have raised funds from a provincial public entity, the Eastern Cape Development Corporation, in order to subsidise these company interventions. The AIDC-EC will reportedly seek an average contribution of 70% from participating companies.

The continued subscription to the services of the Tirisano programme indicates that companies were more than satisfied with the quality of the services received. Moreover, all companies interviewed indicated that they either have or would recommend the Tirisano programme to other component manufacturers. These factors speak very positively to the issue of the financial sustainability of the Tirisano programme.

- AIDC capacity to service the automotive sector: The programme appears to have significantly improved the capacity of the AIDC to provide quality services to the automotive sector. The Country Evaluation indicated that companies that participated in the testing phase of the programme had varying experiences with the quality of the services received from the Tirisano programme. Companies interviewed during this evaluation all indicated that they were happy with the quality of the services received during the roll-out phase of the programme. The improvement in the quality of services offered can be attributed to both, the recruitment of more experienced staff in the scaling up of the programme, as well as the training and capacity building undertaken by the international advisor within the AIDC.
- The AIDC also appears to have increased its service offering to the automotive sector as a result of the ACSDP. The workshops conducted by the international advisor and the study tour to India, organised as part of the capacity building initiatives of the programme, and led the AIDC to introduce services focusing on the implementation of Total Productive Maintenance (TPM) within automotive companies. A group of six companies within the Eastern Cape have subscribed to a clustering initiative focused on the implementation of TPM within their companies.

In addition, the ACSDP led to the introduction of a cleaner production module and a supervisory training module within the Tirisano programme. Companies may subscribe to each of these modules independently, depending on their needs.

#### Other benefits arising from the implementation of the ACSDP

- The AIDC, through the implementation of the ACSDP, was effective in developing a cohort of 65 student industrial engineers, thereby increasing the supply of industrial engineers with work experience to the market. The AIDC paired a student engineer with an experienced industrial advisor and placed the student engineer on-site at participant companies during the period of the Tirisano intervention. The student engineers were mentored and managed by the AIDC industrial advisors and gained valuable industry experience through the process.
- The programme was also effective in increasing the demand for industrial engineering services by automotive companies. Sixty-two percent (40 out of 65)<sup>49</sup> of the engineering students placed at participant companies were retained by the host company or secured employment in related companies. For many of the participating companies, the retained Tirisano student appears to represent the first industrial engineering capacity created within the company. The ACSDP was therefore effective in getting many participant companies to acknowledge the value of industrial engineering services in improving the process efficiencies within a company. This bodes well for the continued improvement of manufacturing processes within participant companies.

<sup>&</sup>lt;sup>49</sup> The AIDC report suggests that the number of student engineers retained by participant companies would have been greater except for the academic commitments of some student engineers.

## 5.5 Sustainability

The Country Evaluation indicated that the Tirisano programme's likelihood of achieving sustainability was low due to a number of factors:

- a) The services provided by the project had not yet developed a reputation for good quality and consequently, might not be in demand among automotive companies;
- Fees that are high enough to fully cover the costs of the services provided to companies were likely to be too high for a significant proportion of them; and
- c) The industry associations, NAAMSA and NAACAM indicated to the evaluation mission that they were developing an alternative supplier development programme which would contract retired managers from the automotive industry to act as industry advisors to automotive component suppliers.

The terminal evaluation found that these factors had changed significantly, thereby increasing the likelihood of the Tirisano programme achieving sustainability. In response to point (a) above, the evaluation found that the industry associations, stakeholders and beneficiary companies were all satisfied with the quality of services provided by the Tirisano programme in the roll-out phase. Moreover, a significant proportion of companies (almost 56%) of phase 2 companies in the Eastern and Western Cape have contracted with the AIDC-EC to continue with new modules of the Tirisano programme. Fifty percent of participant companies in KwaZulu-Natal and 100% of phase 2 participant companies in Gauteng have also indicated a wish to continue with the programme. The high proportion of companies who would like to continue with the implementation of other modules of the Tirisano programme attests to the high levels of satisfaction with the quality of services provided by the Tirisano programme attests to the high levels of satisfaction with the quality of services provided by the programme in phase 2.

With respect to point (b), the ability of automotive companies to pay the full costs of the Tirisano programme remains an issue of concern, with the industry associations, AIDC and UNIDO all making a case for the continued subsidisation of the services. The sustainability of the Tirisano programme is therefore likely to depend on the ability of the AIDC to leverage public sector funding to co-fund company interventions, with a partial contribution from participant companies. Encouragingly, the experience in the Eastern Cape, where companies, post the ACSDP, are now paying between R174,000 to R480,000 for Tirisano services indicates that companies are willing to invest significant amounts of money in order to access support services that they deem to be of good quality. The AIDC-EC has been successful in accessing public sector funding to continue with the partial subsidisation of the Tirisano programme within the region and the AIDC in Gauteng is engaged in similar fund-raising attempts.

The threat to the sustainability of the Tirisano programme, expressed in (c) above, appears to have dissipated. NAAMSA and NAACAM, together with the OEM Purchasing Council are now focused on establishing a mechanism to coordinate support to the automotive industry, rather than attempting to set up their own 'Supplier Development Company' as proposed in 2011. The industry associations have also acknowledged the importance of the AIDC as a service provider to the automotive industry and have involved them in the process of researching, benchmarking and proposing short-term interventions to improve identified supply chains within the industry.

Lastly, the companies inter 63297viewed during the evaluation process recognized that improved competitiveness came from a commitment to continuous improvement. They recognized this as a long term process that required a change in mind-sets within the management and workforce of a company. Eighty three percent of the small sample of companies interviewed indicated that their companies will continue with the change processes initiated within their firms by the ACSDP. This bodes well for the sustainability of the change process initiated by the programme within participant companies.

# Conclusions, Recommendations and Lessons Learned

#### 6.1 Conclusions

6.

The ACSDP was initiated in 2009, after a consultation between the dti, AIDC, UNIDO and NAACAM identified the need for a national supplier development programme within the automotive industry. The project design was undertaken primarily by the AIDC and UNIDO and built on the Tirisano programme that was jointly designed in 2002-2003. Although the project document was presented to NAACAM and NAAMSA and although these industry organizations formed part of the project steering committee, representatives of these organizations reported that they did not feel able to make substantive changes to the programme, which eventually impacted negatively on the sustainability of the programme in terms of continued access to funding from the dti.

The ACSDP was funded by the dti, together with the participation fee paid by companies. The dti appointed UNIDO as the executing agency responsible for the overall management of the programme. UNIDO subcontracted the AIDC as the implementing agency responsible for rolling out the Tirisano programme at company level, in accordance with the project document.

The programme experienced substantial delays in implementation, due to a variety of reasons<sup>51</sup>. The largest part of the project implementation delays were due to the difficulties experienced in recruiting the expected number of firms, especially in the testing phase, which raised questions about the quality of the services being provided by the programme and the relevance of the programme to the companies it sought to service. However, vigorous and targeted marketing and recruitment activities improved the enrollment of companies in phase 2 of the programme and alleviated these concerns about the relevance and perceived quality of the programme<sup>52</sup>.

It was one of the major objectives of the ACSDP to assess and demonstrate the impact of the Tirisano programme at enterprise level. Toward this end, the programme chose to retain the services of B&M Analysts in order to benchmark the performance of participant companies before and after their involvement in the Tirisano programme. The benchmarking exercise assessed improvements in company performance over time, but also compared the performance of

<sup>&</sup>lt;sup>50</sup> See section VI. 2. Ownership for more detail.

<sup>&</sup>lt;sup>51</sup> See section VI. 3. Efficiency for more detail.

<sup>&</sup>lt;sup>52</sup> See section V. Programme Implementation, Programme Adjustments in Phase 2.

participant companies to a group of international automotive component suppliers and a group of South African automotive suppliers. In addition to the impact assessment at the end of the testing phase, the AIDC and UNIDO also conducted a company survey in order to assess the level of client satisfaction with the programme. Moreover, an independent country evaluation of UNIDO's co-operation activities within South African was undertaken toward the end of 2011 and included a reflection on the performance of the ACSDP.

These evaluation activities identified some problems with the implementation of the ACSDP in the testing phase. One of the problems identified in the country evaluation was the 'heterogeneous quality of the services provided to component suppliers' since some of the companies interviewed indicated that they were not entirely happy with the quality of services received. The country evaluation attributed this to a 'lack of standardization of the assistance provided to the companies, which has depended highly on the capacity and methods used by each individual industrial advisor'. This issue was addressed in phase 2 through a focus by the international expert on ensuring greater standardisation in the application of the Tirisano tools and material by the AIDC industry advisors through a series of capacity building workshops.

The country evaluation indicated that some stakeholders associated the Tirisano model of pairing a relatively inexperienced industrial advisor (who visited a company a couple of times a week) with an industrial engineering student who was placed at the company full-time for the duration of the Tirisano intervention, as being inadequate to provide the necessary expertise to improve production processes within participant companies. UNIDO's report at the end of phase 1 indicated that the placement of the student industrial engineers within participant companies posed a potential risk to the reputation of the programme. Phase 2 of the programme therefore saw the introduction of stricter recruitment and management policies with regard to the student advisors. All companies interviewed as part of this evaluation process indicated that they were very happy with the contributions and performance of the student industrial engineers. Some companies noted that the full-time placement of the student engineer on the premises was effective in demonstrating to shop-floor workers the potential contribution of industrial engineers in improving production processes.

The capacity of the AIDC to provide quality guidance to participant companies was improved in phase 2 by the recruitment of some retired personnel from OEMs, as well as on-the-job training and workshops conducted by the international expert recruited by UNIDO<sup>53</sup>.

UNIDO's contribution to the implementation of the ACSDP improved in phase 2 of the programme with the recruitment of the international expert who was instrumental in rallying industry around the programme as well as in building the capacity of the AIDC industry advisors. Moreover, UNIDO has provided reflective project management that has interrogated the project intervention logic and attempted to get stakeholders to consciously reflect on possible gaps in the

<sup>&</sup>lt;sup>53</sup> See section V. Programme Implementation, Programme Adjustments in Phase 2.

causal chain, thereby enhancing the ability of the steering committee members to provide effective project direction.

Phase 2 of the ACSDP improved the evaluation of the programme through the augmentation of the company wide benchmarking with intervention-specific key performance indicators (KPIs). The AIDC measured performance against these KPIs for each company, as they implemented the Tirisano programme. However, the mismatch between the timing of the pre-intervention benchmarking and the start of the Tirisano interventions within each company calls into question the validity of the instrument in capturing the impact of the Tirisano intervention within a company<sup>54</sup>. Moreover, the delays in finalizing the pre-intervention benchmarking within each company in phase 2 meant that the information from the benchmarking was not utilized to augment the diagnostic evaluations undertaken by the AIDC and did not feed into the identification and prioritization of interventions within a company, as recommended by the country evaluation.

Phase 2 of the ACSDP successfully treated the targeted 50<sup>55</sup> companies and increased the geographical reach of the programme while focusing on the servicing of small and medium enterprises<sup>56</sup>. The savings information collated by the AIDC and the benchmarking studies undertaken by B&M Analysts indicate that the roll-out phase of the ACSDP was effective in helping participant companies to improve production processes and improve their cost structures<sup>57</sup>.

<sup>&</sup>lt;sup>54</sup> See section V. Programme Implementation, Programme Adjustments in Phase 2.

<sup>&</sup>lt;sup>55</sup> The project document indicates that the roll-out phase of the project would target 60 companies. However, during project implementation it was discovered that the project budget did not include the 13% fee to be paid to UNIDO. Since the funding available to the project was fixed, accommodating UNIDO's project management fee required a scaling back of the number of companies to be treated in phase 2 from 60 to 50.

<sup>&</sup>lt;sup>56</sup> At least 82% of the companies treated in phase 2 were SMEs (as defined by the programme) compared to 73% in the testing phase.

<sup>&</sup>lt;sup>57</sup> See section VI.4. Effectiveness and Impact.

## 6.2 Recommendations

#### **Recommendations to AIDC**

The Tirisano programme intervention within each participant company lasted a period of 12 months. This intervention period was reported by most programme stakeholders, including the project implementers and the participant companies, as being too short. Participant companies reported that the programme offered enough technical input and training, but did not allow sufficient time for companies to process information, deliberate on decisions and take ownership of the changes implemented on the basis of this technical input.

The timeframe of 12 months meant that the AIDC industrial advisors could not afford to allow staff members and shop-floor workers too much time to digest information and had to maintain a rate of implementation activity that might have compromised the ability of the company to take better ownership of the change process within the company. The discussions with participant companies indicated that a longer implementation timeframe would allow companies to better embed the process of change within their organisations and would improve the ownership and sustainability of the change programme, better allowing companies to establish a culture of continuous improvement within their organisations. Project stakeholders indicated that a period of 24-36 months would have been a more appropriate timeframe for the intervention at company level.

• The programme implementers should consider using a staged approach to project implementation in order to better manage and measure the introduction and institutionalising of a culture of continuous improvement within participant companies. Each stage should have defined key performance indicators linked to the change interventions identified within each company. Only those companies that successfully meet targets should graduate to the next stage of the programme. The input from the implementing agency should decrease over time, so that companies become increasingly independent over successive stages of the programme intervention.

The twelve month intervention period of the Tirisano programme included the time necessary to consult with management as well as shop-floor awareness activities. These activities are crucial to ensuring that all employees understand the intention, the process and the necessity for the intervention programme. If these activities are abbreviated or rushed they will serve to undermine the process of change. Moreover, the changes suggested through the diagnostic evaluations undertaken by the implementation agency are less likely to be supported by workers on the shop-floor.

Whatever the decision regarding the lengthening of the intervention period, it is essential that sufficient preparation and consultation time is built into the process in order to properly 'sell' the initiative to management and the shop-floor.

• The implementation agency should at least consider the option of including a three month project preparation period to undertake the consultation and awareness activities before the start of the intervention period.

The companies interviewed indicated that the Tirisano programme placed great importance on demonstrating the effect of the changes recommended by the AIDC. This was done by measuring and documenting the savings and improvements in relevant metrics realised by participant companies through the implementation of the recommended changes.

However, companies indicated that the sustainability of these savings still remained to be demonstrated, since shop-floor workers often revert to old ways of working after a while. It therefore needs to be demonstrated that the new work processes and the associated savings are sustained over time.

• New Tirisano interventions should therefore institutionalise a second assessment of the savings realised through interventions 3-6 months after implementation in order to assess whether the changes in work processes have been embedded.

The responses of sampled participant companies, as well as the substantial number of companies that have chosen to continue to work with the AIDC after their initial Tirisano intervention, indicate that beneficiary companies have found the Tirisano programme to be of value in their bid to improve their production processes.

• AIDC should continue to provide supplier development services to the automotive components sector.

While some of the companies that have continued to work with the AIDC, have done so at something approaching the cost of providing the service, the experience of the ACSDP indicated that most companies (especially the least competitive and therefore those who most need the programme) are unable to afford the full cost of the intervention.

• AIDC should intensify its attempts to leverage funds from other sources, since dti funding is not forthcoming, in order to subsidise the cost of delivering the Tirisano programme to automotive companies<sup>58</sup>.

<sup>&</sup>lt;sup>58</sup> For example, the AIDC in the Eastern Cape has leveraged funding from provincial government in the Eastern Cape in order to continue to service a limited number of companies within the province.

#### **Recommendations to UNIDO**

Even though the dti has chosen not to fund a further round of the Tirisano programme in deference to the National Steering Committee process that is currently underway, the AIDC is nonetheless recognised as being an important support organisation within the automotive industry. In recognition of this fact, the OEM Purchasing Council has retained the AIDC to assist in defining the short-term interventions to be undertaken while the national strategy and the national co-ordination mechanism are developed.

In order to roll-out the second phase of the Tirisano programme, the AIDC recruited and developed human resources and the institutional capacity to service a larger number of companies. Given the recognition of the AIDC as an important support institution within the industry, it would be a grave pity to lose the capacity that has been developed while the national strategy is developed. The AIDC has indicated that it will continue to provide supplier development services on the request of individual companies and that they will continue to attempt to raise funds from the public sector in order to subsidise these services.

UNIDO's relationship with the AIDC and the Tirisano programme dates back to 2002-2003, when they first collaborated on the design and development of the materials used in the Tirisano programme. The relationship between UNIDO and the AIDC has therefore spanned a decade. This long term relationship has enabled the continued development and improvement of the technical material used within the Tirisano programme, as well as the development of the AIDC's capacity to provide effective supplier development services to the automotive sector.

As a result, the Tirisano programme now appears to be gaining traction within the market, with companies renewing contracts beyond the one-year intervention period and requesting continued services from the AIDC.

This long term collaboration therefore appears to have been effective in supporting the development of capacity within a local industry support organisation within the context of a developing country.

 UNIDO should, after project completion, maintain a partnership with AIDC and supports the AIDC in its efforts to mobilize funding from public sources with a view to further building supplier development capacity that is effective in supporting the automotive value chain within South Africa. This should either lead to a continuation of the Tirisano programme or to supporting the new Total Productive Maintenance (TPM) cluster and in deepening the AIDC's capacity to develop new products to assist automotive companies to improve their competitiveness.

#### Recommendations to the dti and the National Steering Committee

In order to increase the chances of success, due consideration should be given to the lessons learnt from the implementation of the Tirisano programme and other development interventions within the South African automotive industry when designing the national strategy and national coordination mechanism.

• A workshop that convenes the implementers of relevant development initiatives within South Africa would be useful at the outset of the planning stage in order to properly reflect on the experiences and the lessons of past interventions.

At the meeting of 23 January 2013, UNIDO intimated that they would stand ready to be involved in the process of defining the national automotive strategy if the National Steering Committee should wish to draw UNIDO into the process in order to gain access to information and contacts from an international context.

 The experience of other developing countries in providing effective support to the development of their national automotive industries should be evaluated and lessons applied into the process of developing the new South African strategy for the automotive industry. The presence of the new Officer for Private Sector Development in the UNIDO regional office offers the opportunity of cost-effectively harnessing international experience and knowledge into the strategy development process.

The institutional landscape in South Africa is complicated by a number of lessthan-effective public entities and industry support organisations. This institutional landscape is usually complicated even further by the fairly frequent restructuring of these organisations or the institution of new bodies as older ones are identified as being ineffective. In order to avoid a similar fate for the new 'coordinating mechanism' being considered for the automotive industry, it is necessary that the current process recognise the usual problems that beset these organisations and take early action to avoid these problems.

 A reflection on national and international experience in setting up effective public-private-institutions to support the development of specific industrial sectors is should be conducted in order to enable effective action in this regard.
# 6.3 Lessons Learned

 Industry ownership of supplier development programmes and other development interventions is crucial for the long term success of these interventions: The future of the Tirisano programme, in terms of the future subsidisation of services, has been compromised by a lack of ownership of the programme by NAACAM and NAAMSA. Even though NAACAM and NAAMSA were members of the Steering Committee for the ACSDP, they patently did not feel a sense of ownership for the programme. Discussions with the industry associations indicate that this might be due to the fact that these organisations saw the Steering Committee as a platform for feeding back information, but did not feel that they could make substantive changes to the programme.

The experience of the ACSDP indicates that it is imperative that industry owns, designs and drives the process of supplier development and industry support interventions. Hopefully, the National Steering Committee process that is currently underway will engender the necessary degree of industry ownership of the new automotive development strategy for South Africa.

• Adequate time for reflection and programme adjustments is necessary between a testing phase and the roll-out phase of a programme: Many development programmes, especially those that are new to a sector, an organisation or a country, include a pilot phase as a learning mechanism. The pilot phase offers the opportunity to test the suitability of a programme intervention model before committing a large amount of resources to the programme. In theory, the experience of a pilot phase offers stakeholders the opportunity to abort an intervention before full-scale implementation if it proves to be ineffective during the pilot. However, in practise, a substantial amount of inertia is built into the delivery of a programme, making it difficult for implementing agencies as well as the project funders to abort an intervention after stakeholder expectations have been raised and multiple agencies have planned and/or geared up for its implementation. It is therefore imperative that the initial planning of the programme build in sufficient time to evaluate the performance of a pilot, to reflect on the outcomes of the evaluation process and to make the necessary adjustments to the programme in order to improve the implementation and the results of the roll-out phase.

The original project implementation plan for the ACSDP did not allow sufficient time for this review, reflection and revision period after the testing phase, which further delayed the implementation of a programme that had already fallen behind schedule due to the difficulties in recruiting participant companies in the testing phase.

 Project planning documents should articulate the assumptions on which programme design is based and think through the implications of assumptions not holding: The largest delays in the implementation of the ACSDP were due primarily to the difficulty experienced in enlisting companies on to the programme. The original project timeframe was based on the assumption that the 15 companies for the testing phase and the 50 companies for the roll-out phase of the programme would be identified and 'lined up' to begin implementation at the same time. In practise, the difficulties in enlisting companies and resource limitations meant that some companies started implementation later than others. Therefore, even though the intervention period within a company was only 12 months, treatment of the 15 companies in the testing phase extended over a period of 27 months, from April 2009 until June 2011. Treatment of the 50 companies in the roll-out phase extended over a 23 month period, with the first companies coming on line in February 2011 and the last companies officially ending their programme interventions at the end of December 2012.

Consequently, the ACSDP, which was supposed to have ended in April 2012, was delayed by nine months. Such delays are quite common within the development sector, given the complexities of implementing programmes that involve multiple stakeholders. However, in the second half of 2012, the dti indicated that the implementation of the programme would have to end by December 2012 and that no companies could be serviced beyond this date. This meant that the intervention period for a number of companies in Phase 2, Part 2 had to be abbreviated. It is understood that the dti's urgency in concluding the programme arose from concerns regarding their budgetary commitments within the current financial year.

This pressure and the consequent reduction in the intervention period for a number of companies could have been avoided if the original project document made explicit the assumptions on which the project timeframe was based and tested the validity of this assumption.

The use of resident technical capacity within participant companies proved highly effective: The Tirisano Programme introduced the provision of "resident industrial engineers" as a tool to improve the innovation and continuing improvement capacities of manufacturing firms. While the acceptance and results of this tool during the first phase of the programme were modest, it developed into a principal asset during its second phase. This was due to a stronger emphasis on recruiting only high quality resident engineers and to the fact that companies' acceptance and appreciation (absorptive capacity) took some time to develop.

Using the concept of resident industrial engineers is a valuable tool for longerterm manufacturing support programmes, with a potential to increase the innovation and process-development capacities of participating firms.

# **ANNEX A: Terms of Reference**



Terms of Reference for the Final evaluation and capacity building for monitoring and evaluation (M&E) of the South African Automotive Component Supplier Development Program (ACSDP), 2011-2012 (SE/SAF/09/003)

## Contents

1.	Background and context	
2.	Rationale and purpose	60
3.	Scope and focus	60
4.	Evaluation issues and key evaluation questions	61
5.	Evaluation approach and methodology	63
6.	Time schedule and deliverables/outputs	64
7.	Evaluation team composition	65
8.	Governance and management of the evaluation process	65
9.	Quality assurance	66
Annex	A: Job Descriptions	67
Annex	B: Checklist on evaluation report quality	72

# 1. Background and context

The automotive industry in South Africa is an important part of the country's manufacturing sector and currently constitutes almost 12% of total exports. An estimated 90,000 people are currently employed within the vehicle assembly and component manufacturing sectors, despite the fact that 20,000 jobs have been lost in these sectors since the economic downturn of 2008<sup>59</sup>.

Building on the Tirisano Programme, a business partnership between UNIDO and the Automotive Industry Development Centre (AIDC) initiated in 2003, the Automotive Component Suppliers Development Programme (ACSDP) was signed by UNIDO and the Department of Trade and Industry (the dti) in April 2009 with an estimated budget of ZAR 20,623,611 (excluding support costs; approximately USD 2.2 million at that time). The ACSDP was scheduled to run for three years and to be implemented in two 18-month phases, i.e., a Testing and a Rollout phase.

Despite the presence of a number of global automotive manufacturers in S.A, the local automotive component manufacturers have not been able to raise their share in the local content to more than 30%. In addition, the export basket of the industry is being dominated by a few components only, showing a lack of diversification in components export. In response, the ACSDP was designed to assist small and medium sized component manufacturers to improve their competitiveness and reduce their production costs in order to rise up to the challenges being put by their global competitors.

The ultimate beneficiaries of the project are tier 1 to tier 3, recently incubated MSME and Black Economic Empowerment (BEE) component manufacturers at the national level. They are expected to have benefited from improvements in terms of their plant-level operating efficiency through waste and downtime reduction, worker safety, and the enhancement of teamwork and employee motivation in line with the results from the testing phase that were confirmed a benchmarking exercise. The AIDC should also acquire the capacity to serve automotive component suppliers on a more sustainable basis and key stakeholders should be equipped with an enhanced capacity to monitor and evaluate the impact of this and other supplier development programmes.

ACSDP's activities during the testing phase included firstly the development and implementation of a benchmarking methodology (for process upgrading and improved environmental management/performance) and secondly the development and implementation of new continuous improvement activities, which consisted of modifications to the Tirisano programme to include management and supervisory skills training, SMED, cleaner production, and energy efficiency. During the testing phase, 15 component manufacturers were covered. Support services that had been assessed to be of great added value to

<sup>&</sup>lt;sup>59</sup> Extract from speech by Rob Davies, Minister of Trade and Industry at the Johannesburg International Motor Show on 10 October 2011.

component manufacturers were then applied to a further 50 component manufacturers during the rollout phase.

The overall objective and expected output of the ACSDP was improved capacity of participating companies to meet the contractual demands of OEMs in a more reliable and efficient manner, with a particular emphasis on process upgrading/productivity enhancement and improved resource efficiency and environmental management. Ultimately, this is expected to lead to an increase in the share of the component manufacturers in the OEM's local content as well as an increase in the components manufacturers' share in the industry's export basket. Finally, it was expected that through ACSDP, AIDC would be able to increase the financial sustainability of its services and to extent its outreach to minimum 65 component manufacturers by January 2013.

Several project progress reports have been developed by the UNIDO project manager on a six-month basis. Additional reports from the AIDC, the benchmarking analysts and the South African Cleaner Production Centre are also available for consultation during the evaluation process. In addition, in 2011 an independent country evaluation of technical cooperation programmes in South Africa was carried out by UNIDO, which contained an interim assessment of the ACSDP. More specifically, the country evaluation reflected on the challenges that ACSDP had faced already and put forward a set of recommendation on how the project could be improved to deliver the envisaged results. In general, the report suggests that the ACSDP:

- a) Focuses the second phase of the programme on 2<sup>nd</sup> and 3<sup>rd</sup> tier suppliers and micro, small and medium-sized enterprises (MSMEs), which are the beneficiaries proposed by the Project Document and the ones that will benefit most from the programme activities, as they usually face more stringent problems and greater competitiveness challenges, as well as find it more difficult to access adequate training and technical assistance.
- b) Improves the integration of the two key components of the programme benchmarking and technical assistance – by i) making better use of benchmarking studies as a basis for defining the key features of technical assistance to be provided to client companies and ii) equipping advisors with standardized diagnostic tools to define the assistance to suppliers, so that the quality of the services provided will depend less on the individual industrial advisors.
- c) Strengthen local M&E systems and capacities to evaluate results and identify key lessons for a continuation or replication of the project approach.

# 2. Rationale and purpose

As the ACSDP programme will come to an end in January 2013, this evaluation study will conclude the programme by serving two purposes. Firstly, it seeks to update on results of the ACSDP project in South Africa based on the overall programme objectives and to follow up on improvements being made based on the recommendations of UNIDO's country evaluation report since 2011.

Secondly and based on the lessons learned from the programme implementation thus far, it is proposed to use the evaluation exercise to build the monitoring and evaluation capacity of key stakeholders of the project such as the AIDC, the dti, the OEM Purchasing Council, and relevant associations (NAAMSA, NAACAM) and other stakeholders of relevance.

Based on UNIDO's Monitoring Framework (that was developed in the context of its cluster development approach) and related tools, the causal chain of the interventions undertaken should be revisited and its weakest links (to the overarching programme objectives) identified to ultimately enhance the capacity of mentioned stakeholders to develop sound and effective projects in future to support the component manufacturers in South Africa.

# 3. Scope and focus

This evaluation exercise project will mainly consider the Rollout phase of the ACSDP spanning from July 2011 to January 2013. The geographical spread of project's beneficiaries during the rollout phase and thus the coverage of the evaluation exercise will include five provinces of South Africa, namely KwaZulu Natal, Guateng, Eastern Cape, Western Cape and North West.

Specifically, the evaluation exercise will focus on:

**Issue 1 (evaluation of ACSDP):** The project's overall results in terms of a) AIDC's ability to deliver more (financially) sustainable services that are relevant to the needs of a larger number of lower tier component manufacturers (target 50) and b) achieved gains of the participating companies in plant-level efficiency and cost savings.

**Issue 2 (Capacity Building on M&E):** Enhanced capacity of key stakeholders from public and private sector (e.g. AIDC, the dti, NAAMSA, NAACAM and OEM Purchasing Council) in terms of Monitoring and Evaluation (M&E) of their projects and enhanced capacity to develop new projects accordingly

## 4. Evaluation issues and key evaluation questions

**Issue 1:** The first area of concern to this evaluation project is to understand how the programme has developed since the latest country evaluation report in 2011 and how it has lived up to the challenges and associated recommendations provided by the country evaluation. The main objective for this part of the evaluation should be to reflect on the overall outcome of the ACSDP based on its main objectives and expected outputs.

- Were the different components of the project implemented according to the schedule? And have they led to expected results?
- How has the AIDC fared in reaching out to their beneficiaries and was the appropriate number of component manufacturers targeted?
- What have been the effects of the programme on participating firm's operational performance and competitiveness at the aggregate level?
- Have the interventions during the Rollout phase taken the findings and recommendations of the previous country report into account, and if so, how and to what extent?
- Was the focus of the programme shifted successfully to 2<sup>nd</sup> and 3<sup>rd</sup> tier suppliers and MSMEs?
- Has the project reached out to the manufacturers for which technical assistance was vital?
- How many firms have been evaluated based on the benchmarking results?
- To what extent were the previous benchmarking results from the Testing phase used to tailor services according individual firms needs?
- Have the benchmarking analysis and the Tirisano counseling become more integrated/aligned and can the benchmarking results be more clearly linked to the interventions of the Tirisano Programme?
- Has the support service provision become more commercially viable for the AIDC?
- Are the services suitable for the targeted beneficiary component manufacturers and has demand for these services increased as a result of the ACSDP?

- Has the perceived quality of the Tirisano Programme been acknowledged by the main associations and overall stakeholder coordination improved?
- Briefly, what are the key external factors that have influenced the success
  of the project in achieving its set objectives? Examples include drastic
  shifts in the market, the availability of competitor programmes and of
  government incentive schemes.
- The evaluation exercise will also consider the relevance and conceptual coherence of the interventions carried out with a view to achieving the desired impact of the programme and by considering the output, outcome, impact linkage of the project. By considering this broader question, the evaluation exercise will be linked to the capacity building component of this evaluation exercise, which will start with a participatory discussion of the overall project concept (Theory of Change – ToC).

**Issue 2:** There is a need to strengthen the capacity of key stakeholders of the South African automotive (component) industry, including the AIDC, the dti, the NAAMSA, the NAACAM, the OEM Purchasing Council and other vital support service providers, to formulate and implement supplier development programmes in the future. The area of monitoring and evaluation is of central importance for that capacity, thus the second area of concern of this evaluation exercise is to reflect on the programme's improvements in this respect and to use experiences together with capacity building/training events as a learning tool for the aforementioned stakeholders. In this context, the following questions/issues will be addressed.

- What is the results chain or underlying ToC<sup>60</sup> of the automotive supplier development project?
- Do key stakeholders of relevance to the automotive (component) industry of South Africa agree on the overarching objectives of supplier development initiatives in the country? Do they agree on the challenges faced by the suppliers and the issues that ACSDP is aiming to address? What are areas of agreement and disagreement? (the ToC developed in consultation with the expert on issue 1 will be used as a basis for the related discussions)
- Do key stakeholders understand the results chain behind the ACSDP?
- Can they identify related strengths and weaknesses and determine areas for improvement?

<sup>&</sup>lt;sup>60</sup> The theory of change of the project should be drafted by the evaluation team on the basis of the logical framework contained in the document, using information from document review and interviews to adapt it to project reality, including the most important external factors (impact drivers, assumptions). The evaluation team will use the "Review of Outcomes to Impact (ROTI)" approach as described in the "ROTI guidelines and procedures", published by GEF evaluation office, 2009.

- Do key stakeholders understand the need for a monitoring framework? If so, what indicators would be important to them? Which ones would be important to determine the success of the ACSDP and similar initiatives to them?
- What is currently done to track project progress and results (system, actors, responsibilities, content (indicators etc.) and reporting lines) and are these activities institutionalized in any way?
- Do key stakeholders understand the relevance of contextual factors (Risks/Assumptions) in determining project success and/or failure? Do they have similar views on the prevailing project context; do they agree on key contextual factors that should be part of a monitoring system?
- Who is / should be involved in tracking project progress and results and what kind of decisions do key stakeholders need to take based on monitoring information? Responsibilities?
- Implementation monitoring and how to do it? An assessment of current project experiences and suggested considerations for future project implementation.

### 5. Evaluation approach and methodology

For the update of the programme evaluation, available resources such as project and programme documents, progress reports, mission reports, benchmarking reports, UNIDO data bases and evaluation reports will be used to extract secondary information and to better delineate the needs for additional data and information collection. Based on these identified primary data needs, structured and semi-structured personal, telephone, and/or email interviews will be conducted. In addition, the evaluation should take a participatory approach to ensure the full reflection of the opinion and key stakeholders and assessment in the analysis of results.

For the capacity building activities, the approach undertaken will be in line with the UNIDO Monitoring Framework for Cluster Development and related tools and training materials.

# 6. Time schedule and deliverables/outputs

Issue 1 (Evaluation)	Estimated date
Collection of documentation at HQ	10 <sup>th</sup> October 2012
Desk Review by the principal evaluation consultant	19 <sup>th</sup> October 2012
Data collection in the field	22 <sup>nd</sup> October – 19th November 2012
Presentation of preliminary findings	26 <sup>th</sup> November 2012
Review by stakeholders and incorporation of comments	3 <sup>rd</sup> December 2012
Finalization of evaluation report and submission to the dti	17 <sup>th</sup> December 2012
Optional: Presentation of Evaluation Findings to the ACSDP Steering Committee	January 2013
Issue 2 (Capacity Building on M&E)	Estimated date
Collection of documentation at HQ and engagement of International Technical Adviser on the Automotive Industry	10 <sup>th</sup> October 2012
Engagement with stakeholders (confirmation of M&E focal points) and determination of capacity building approach (in line with stakeholder needs)	12 <sup>th</sup> October – 26 <sup>th</sup> October 2012
M&E workshop/s	22 <sup>nd</sup> November 2012 (Arthur's mission dates?; availability of key stakeholders
Feedback from stakeholders and additional support (as required) on new project development	26 <sup>th</sup> November – 07 December 2012
Final report (to be incorporated into final report for submission to the dti)	17 <sup>th</sup> December 2012
Optional: Presentation of Results from the Capacity Building activities to the ACSDP Steering Committee	January 2013

# 7. Evaluation team composition

The evaluation team will consist of:

- One International/National Evaluation Consultant who will carry out the evaluation activities on the ground such as data collection, organization of interviews and drafting of report and contribute to the assessments under the direction of the International Consultant. She/he will also be responsible for providing inputs to the design and preparation of the workshop's training material in collaboration with the International Capacity Building Expert.
- 2) International Capacity Building Expert on M&E with the responsibility to develop, organize and carry out a series of capacity building activities and events for key stakeholders of the ACSDP including the AIDC, dti, NAAMSA, NAACAM and OEM Purchasing Council.
- 3) Both experts will liaise closely with the International Technical Adviser on the ACSDP on all technical questions and in particular on the coordination with and approaching of key South African stakeholders of the automotive industry. Interventions related to capacity building on M&E should be scheduled in such a way that the International Technical Adviser can cofacilitate the events/seminars to be organized.

# 8. Governance and management of the evaluation/capacity building process

The TOR for this evaluation project were drafted by the Project Manager in HQ/Vienna (PTC/BIT/CBL) and reviewed by ODG/EVA.

The following deliverables are expected from the evaluation exercise:

Inception report: After the team has been constituted and the ToC of the project under consideration been developed, an inception report should be prepared for discussion with and review by PTC/BIT/CBL and ODG/EVA to endorse the workplan.

Draft evaluation report: The draft evaluation report will be shared with all major stakeholders for initial review and consultation. They may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. The consultation also seeks agreement on the findings and recommendations. The evaluators will take the comments into consideration in preparing the final version of the report.

Final evaluation report: The main deliverable of the evaluation exercise is the final evaluation report, including an executive summary. The report should cover the key evaluation issues outlined above. It should describe the methodology used and highlight any methodological limitations, identify key concerns and present evidence-based findings, conclusions, recommendations and lessons learned. A draft outline should be shared with UNIDO for approval prior to finalizing the evaluation report. Reporting language will be English.

As far as the capacity building exercise is concerned, the following deliverables are expected:

Inception report: After the team has been constituted and the ToC of the project under consideration been developed, an inception report should be prepared for discussion with and review by PTC/BIT/CBL and ODG/EVA to endorse the overall workplan. The capacity building part should be more extensive and already propose a draft training agenda and key stakeholders to consider for participation.

Organization of trainings/preparation of training materials: These should be developed by the expert in line with existing UNIDO materials on M&E and shared with training participants and key counterparts.

Final capacity building report: The main deliverable of the capacity building exercise is the final report, including an executive summary. The report should cover the rationale behind the structure of the capacity building activities, results of the training workshop/s, feedback from stakeholders and relevance to future project development (capacity of participants). A case study based on the lessons learned from the activities and destined for integration into the UNIDO Cluster Development website should also be developed.

A draft outline of the report should be shared with UNIDO for approval prior to finalization. Reporting language will be English and all training agendas, materials and list of participants should be attached.

#### 9. Quality assurance

All UNIDO evaluations are subject to quality assessments by the UNIDO Evaluation Group. Quality control is exercised throughout the evaluation process in line with the evaluation, coordination and review principles outlined under point 8. The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality, attached as Annex B.

The capacity building exercise will be assessed mainly by PTC/BIT/CBL.

#### Annex 1: Job Descriptions

Job description – Issue 1

Post title:	International/National evaluation consultant
Duration:	13 days spread over 2 months
Date required:	01 October 2012
Duty station:	Home-based; local travel, if and when required, will be authorized separately

**Duties:** Under the supervision of the UNIDO Evaluation Unit and in close coordination with the project manager (PM) of the ACSDP and the International Technical Adviser on the Automotive Industry, the consultant will be responsible for the updating of the project-specific part of the South Africa country evaluation and in line with the *findings of* the earlier evaluation. He/she will participate in all evaluation activities and assess the UNIDO activities in the light of the overall policy and economic context, programme objectives, stakeholder participation, implementation modalities and results achieved. In particular, he/she will be expected to:

Duties	Duration	Location	Results
Study relevant programme and project documentation including progress reports and documentary outputs and TOR; Study relevant background information (national policies, international frameworks, etc)	2 days	Home-based	Analytical overview of available documents; list of issues/key evaluation questions to be clarified prepared; primary data to be collected determined and an action plan prepared
Liaise with/support the International Capacity Building Expert on developing the results change/ToC underlying the project under consideration	1 day	Home-based	Joint inception report prepared with the International Capacity Building Expert which presents the ToC and determines the timeframe and activities to be undertaken by expert (support responsibility)
Organize and conduct interviews and review sessions in line with the primary data needs	3 days	Home-based (with in- country travel, as required)	Notes, tables; information gathered on issues specified in ToR and in line with the clarified evaluation questions and data needs
Draft an outline and then a preliminary evaluation report based on all secondary and primary information collected	2 days	Home-based (with in- country travel, as required)	Draft outline submitted and approved by UNIDO Draft conclusions and recommendations prepared in the form of a draft evaluation report
Carry out additional interviews as required; collect stakeholder comments and update the evaluation report	1.5 day	Home-based (with in- country travel, as required)	Interview protocols, findings incorporated in evaluation report

Duties	Duration	Location	Results
Finalize/submit the final evaluation report	2 days	Home-based	Inputs to the report
Provide inputs to the International Evaluation Consultant in regards to the M&E workshop	1.5 days	Home-based	Inputs to the workshop
Total	13 days		

#### Qualifications

- Advanced university degree in economics, development studies or other fields related to industrial development;
- Knowledge of South Africa's industrial development situation, institutions, programmes and policies; in particular with regard to manufacturing sector/industrial competitiveness
- Knowledge in the field of private sector development an asset;
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks (MDGs, Paris Declaration, etc) desirable;
- Knowledge of UNIDO activities an asset;
- Working experience within the UN system an asset;
- Good writing and communication skills
- Evaluation experience desirable, ideally with a focus on South Africa.

#### Languages: English

**Impartiality:**According to UNIDO rules, the consultant must not have been involved in the preparation, implementation or supervision of the project subject to this evaluation.

#### Job description – Issue 2 (Capacity Building on M&E)

Post title:	International Capacity Building Expert on Monitoring and Evaluation (M&E)
Duration of contract:	2 w/ m (approx. 41 working days)
Entry on duty date:	01 October 2012
Duty station:	Home-based, with travel to Vienna HQ and South Africa, to be authorized separately

**Duties**: The International Capacity Building Expert will work in close coordiation with the UNIDO Project Manager (PM) at PTC/BIT/CBL and the International Technical Adviser of the Automotive Industry. S/he will be responsible for developing an M&E capacity building component for key stakeholders of the ACSDP as well as for delivering M&E training workshop/s to these stakeholders. She/he will liaise with the evaluation expert to delineate training needs on the results change/theory of change behind the ACSDP and possible future supplier development programmes in South Africa, with a particular focus on addressing the output-outcome-impact linkages and related responsibilities and expectations by key stakeholders in the South African context.

	Duties	Duration	Location	Results
Pr ∘	eparatory phase Study programme and project documentation (including progress reports and documentary outputs, but with a particular focus on the project document and the existing intervention logic as well as regarding the programme objectives and changes in expectations on the part of the dti over time) Study relevant background information (national policies, international frameworks, etc.)	3 days	Home-based	Analytical overview of available documents and of UNIDO
Br dis o	iefing and preparatory scussions at UNIDO HQ Interviews with project managers and key stakeholders at HQ and the international technical adviser on the automotive industry (via phone) Develop capacity building methodology and training approach, including an action plan Prepare training agenda and liaise with key stakeholders on their participation/interest in the capacity building exercise to finalize the	3 days	Home-based and UNIDO HQ, Vienna	Capacity building approach identified and action plan prepared Training agenda developed

The International Capacity Building Expert will perform the following tasks:

Duties	Duration	Location	Results
agenda			
Draw up the results change/ToC underlying the project under consideration and liaise with the Evaluation Expert on its validation and review	6 days	Home-based	Joint inception report prepared with the Evaluation Consultant which presents the ToC and determines the timeframe and activities to be undertaken by each expert (lead responsibility)
<ul> <li>Preparation for and undertaking of Field mission to South Africa</li> <li>Plan a (series of) capacity building events and meetings with stakeholders to review the results chain of the project, clarify the overarching objectives and discuss monitoring and information needs (as well as an ideal monitoring framework and associated stakeholder responsibilities for future supplier development programmes)</li> <li>Prepare the learning materials</li> </ul>	8 days	South Africa with in- country travel	Training materials finalized Training organized in consultation with PTC/BIT/CBL and the International Adviser on the Automotive Industry
<ul> <li>Delivering M&amp;E workshop</li> <li>Undertake/co-facilitate the capacity building events together with the international technical adviser at a suitable location in South Africa</li> <li>Drafting the main conclusions and recommendations, and present them to stakeholders</li> <li>Preparation of the capacity building report outline/structure</li> </ul>	14 days (including travel)	South Africa	Workshop organized and key stakeholders received training
<ul> <li>Debriefing in Vienna</li> <li>Present preliminary findings and recommendations to UNIDO</li> </ul>	1 days	Vienna, UNIDO HQ	Feedback on preliminary findings; short note on lessons learned prepared
Stakeholder support on M&E o In line with stakeholder needs, provide additional backstopping/coaching for the	2 days	Home-based	
design of enhanced supplier development programmes in South Africa			

Duties	Duration	Location	Results
<ul> <li>Drafting of capacity building report</li> <li>Based on participants' feedback and the results of the training workshop/s prepare a final report on the capacity building approach and results achieved.</li> <li>Prepare a case study based on the lessons learned for integration into the UNIDO Cluster Development website</li> </ul>	4 days	Home-based	Final capacity building report and case study developed
Total	41 days		

#### Qualifications

- Advanced university degree in economics, development studies or other fields related to industrial development;
- Experience in evaluation and supervision of evaluation teams;
- Experience in organizing and delivering M&E training workshop;
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks (MDGs, Paris Declaration, etc) desirable;
- Knowledge of UNIDO activities an asset;
- Working experience within the UN system an asset;
- Prior experience in the field of automotive component supplier development an asset;
- Working experience in South Africa an asset;
- Good writing and communication skills.

Languages: English

#### Annex 2: Checklist on evaluation report quality

REPORT QUALITY CRITERIA	UNIDO EVALUATION GROUP ASSESSMENT NOTES	RATING
Did the report present an assessment of relevant outcomes and achievement of programme objectives?		
Were the report consistent and the evidence complete and convincing?		
Did the report present a sound assessment of sustainability of outcomes or did it explain why this is not (yet) possible?		
Did the evidence presented support the lessons and recommendations?		
Did the report include the actual programme costs (total and per activity)?		
Quality of the lessons: Were lessons readily applicable in other contexts? Did they suggest prescriptive action?		
Quality of the recommendations: Did recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?)'. Can they be implemented?		
Was the report well written? (Clear language and correct grammar)		
Were all evaluation aspects specified in the ToR adequately addressed?		
Was the report delivered in a timely manner?		

#### Rating system for quality of evaluation reports

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1, and unable to assess = 0.

# Annex B: List of people interviewed

Name	Job title/Position in company/organization	Name of company/organization
Mkhululi Mlota	Chief Director, Automotive	The dti
Renai Moothilal	Director, Automotive	The dti
Roger Pitot	Executive Director	NAACAM
Nico Vermeulen	Director	NAAMSA
Stefan Haasbroek	General Manager, Purchasing Nissan/ Renault. Chair, OEM Purchasing Council	OEMPurchasing Council
Nkumbusi Ben-Mazwi	Manager, Supplier Development	AIDC
Bianca Jagger	Senior Project Manager	AIDC
Lance Schultz	Department Manager, Supplier Development	AIDC – Eastern Cape
Zahier Ebrahim	Senior Project manager, Supplier Development	AIDC – Eastern Cape
Krish Reddy	Project Manager, Supplier Development, KZN	AIDC - KZN
Douglas Comrie	Managing Director	B&M Analysts
Natascha Weisert	Industrial Development Officer	UNIDO
Arthur David	Chief Technical Adviser, International Automotive and Supplier Development Programmes	UNIDO Consultant
Robin Royston	Chief Executive Officer	Webroy, KwaZulu-Natal
Phillip Pillay	Production Manager	Webroy, KwaZulu-Natal
Faizal Vawda	General Manager	Euro Corrugated, KwaZulu- Natal
Vijay Maistry	Production Manager	Euro Corrugated, KwaZulu- Natal
Lucky Lazarus	Industrial Engineer	CRH Allmay, Eastern Cape
Lourens de Beer	Factory Manager	Willard Batteries, Eastern Cape
Patrick Sparrow	Works Manager	Aveng Steel, Eastern Cape
Riaan Opperman	Administration and Finance	Aveng Steel, Eastern Cape
Wynand	Industrial Engineer	Magnetto Wheels, Eastern Cape

# **Annex C: Bibliography**

AIEC. Automotive Export Manual South Africa 2012, South Africa, (2012)

Department of Trade and Industry. , South Africa, Pretoria. The National Industrial Policy Framework. (2007)

Department of Trade and Industry The National Industrial Participation Programme Revised Guidelines, South Africa. (2008)

Department of Trade and Industry Industrial Policy Action Plan 2011/12- 2013/14, South Africa. (2011)

Flatters, F. The Economics of MIDP and the South African Motor Industry, Canada. (2005)

GEF The ROtl Handbook: Towards Enhancing the Impacts of Environmental Projects, Methodological Paper 2, USA. (2009)

Humphrey, J & Memedovic, O. The Global Automotive Industry Value Chain: What Prospects for Upgrading by Developing Countries, UNIDO, Vienna. (2003)

National Planning Commission & Department of Performance Monitoring and Evaluation Development Indicators, South Africa. (2010)

National Planning Commission Economy Diagnostic, South Africa. (2011)

National Planning Commission Institutions and Governance Diagnostic, South Africa. (2011)

Roux, A. Everyone's Guide to the South African Economy, South Africa. (2011)

Statistics South Africa, Quarterly Labour Force Survey, Quarter 3, 2011. South Africa. (2011)

The Presidency Accelerated and Shared Growth Initiative – South Africa (AsgiSA), South Africa. (2006)

The Republic of South Africa Broad-Based Black Economic Empowerment, Act 53 of 2003, South Africa. (2003)

The Republic of South Africa. The Preferential Procurement Policy Framework Act, No. 5 of 2000, South Africa. (2000)

UNIDO. Independent Evaluation Report South Africa Country Evaluation, Vienna. (2011)

Warrington, A. What do the new Automotive Production and Development Programme mean for the industry? South Africa.

# Annex D: ACSDP Desk-based Review of Outcomes to Impact (ROtl)

According to the Theory of Change approach underlying the 'Review of Outcomes to Impact' (ROtI) as set out in the ROtI Handbook: Towards Enhancing the Impacts of Environmental Projects published by GEF in 2009, the transformation of project outcomes into impacts is a complex process which occurs over an extended period of time, mostly outside the lifespan of the project. The method introduces new elements in order to model this underlying Theory of Change. The new elements incorporated into the TOC are intermediate states, impact drivers and assumptions. These new elements are defined as follows:

**Intermediate states:** Are the transitional conditions that must be achieved in order to convert the projects outcomes into the intended impacts.

**Impact drivers:** Are the significant factors that, if present, are expected to contribute to the ultimate realisation of project impacts and that are within the ability of the project to influence.

**Assumptions:** Are the significant factors that, if present, are expected to contribute to the ultimate realisation of project impacts, but that are largely beyond the power of the project to influence or address (GEF, 2009).

The ROtI methodology is based on the premise that once a project's intended impacts are understood and the Theory of Change has been mapped out, it should be possible to confirm whether the TOC (the outcomes-impacts pathway) is realistic and in the process of being delivered and, therefore, whether the project is on track to deliver its intended impacts. In this way, the ROtI method provides an indirect means of assessing whether a project is in the process of delivering its intended impacts, and to understand better the underlying reasons for this, without actually measuring the delivery of impacts directly (GEF, 2009). The desk-based ROtl assessment relies on documentation relating to the lifespan of the project and reflects primarily on the status at the end of the project, when the project outcomes are in the process of being realised, and when the process of converting project outcomes to impacts is in its infancy. At this stage, the intermediate states are unlikely to have been delivered, and the assumptions and impact drivers may not yet have been realised. However, well-conceived projects will have anticipated assumptions that need to be addressed, barriers that need to be removed, and the need for certain impact drivers in order to achieve ultimate impact. The needed actions should therefore have been built into the project design (GEF, 2009).

Figure 1, below, sets out the Theory of Change Model for the ACSDP. The outputs, outcomes and impacts reflect the theory of change that is encapsulated within a project's logical framework that is contained within the project document. Other aspects of the model are based on the information contained in project documents, including the UNIDO presentation at the Monitoring and Evaluation Workshop conducted at the end of January 2.

#### Figure 2: ACSDP ROtl Theory of Change Model



This assessment is being undertaken at the end of project implementation, at a time when outcomes are yet to be fully realised and converted into intermediate states, especially the outcome 'Demonstrated effectiveness of Tirisano drives take-up of programme within the automotive components sector'. The intermediate states necessary to reach the long term impacts ('increased levels of local content in products of local OEMs' and 'Increased exports of automotive components') are characterised as: i. Large scale take-up of Tirisano services by automotive component companies, ii. Continuous improvement processes embedded within companies and iii. Companies translate productivity improvements into more competitive prices and win more contracts locally and internationally.

The realisation of these intermediate states, especially the large scale take-up of the services of the Tirisano programme is hampered by the limited ability of automotive companies to pay the full cost of the services provided by the programme, the fact that management within many companies fail to recognise the need for change, lack of OEM pressure, the possibility that the AIDC's reputation within the broader industry is still wanting and lack of widespread knowledge about the programme. Experience during the implementation of the ACSDP indicated that automotive companies are largely unable (or unwilling) to bear the full cost of the programme and that those companies most in need of the services of the programme (i.e. small companies and companies experiencing difficulties) are least able to afford the services.

While, the programme has made a significant start in initiating production process improvements within participant companies, it is not clear that continuous improvement practises have been embedded within participant companies. Stakeholders and participants called for a longer Tirisano intervention period in order to allow for the more successful embedding of this process.

The impact drivers (and the recommendations within the evaluation report) reflect on the factors necessary in order to attain the intermediate states and the long-term impacts of the programme: (a) Funding models to enable take-up of Tirisano services; (b) Longer term support for change processes within firms; (c) Demonstration sites (participant companies willing to demonstrate the improvements engendered by the programme to other companies in the industry) and the effective marketing of Tirisano; (d) Industry associations & OEMs promote take-up of Tirisano programme within sector; and (f) Government agencies facilitate wider adoption of services.

Table 4 presents the Desk-based ROtI assessment for the ACSDP, together with ratings (Table 3). This table summarises the findings of the ROtI assessment, using a four-letter scale, from A to D, to rate the project outcomes achieved and the intermediate states necessary for the project to achieve its defined long-term impacts. The methodology does not rate the achievement of project outputs since these are activities carried out with project funding and are assumed to have been achieved within the project timeframe.

The ROtl Handbook explains the rating scale used in the following manner.

Outcome Rating	Rating on progress toward Intermediate States	Impact Rating
D: The project's intended outcomes were not delivered	D: The conditions necessary to achieve intermediate states are unlikely to be met	The impact column is given a rating of "+" if measurable impacts or threat reduction is achieved and documented within the project life-span.
C: The outcomes delivered were not designed to feed into a continuing process after project funding	C: The conditions necessary to achieve intermediate states are in place, but are not likely to lead to impact.	
B: The outcomes delivered were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	B: The conditions necessary to achieve intermediate states are in place and have produced secondary outcomes or impacts, with moderate likelihood that they will progress toward the intended long-term impact.	
A: The outcomes delivered were designed to feed into a continuing process, with specific allocation of responsibilities after project funding	A: The conditions necessary to achieve intermediate states are in place and have produced secondary outcomes or impacts, with high likelihood that they will progress toward the intended long-term impact.	

#### Table: 4 Explanation of Rating System

The overall ROtI rating for the ACSDP indicates that the programme is moderately likely to realise long-term impacts, if project partners take the necessary remedial actions to put in place the conditions necessary to achieve the intermediate states set out in this ROtI assessment.

DESK-BASED ROTI ASSESSMENT TABLE FOR THE ACSDP							
OUTPUTS	OUTCOMES	OUTCOME RATING (A-D)	INTERMEDIATE STATES	IS RATING (A-D)	IMPACT	IMPACT RATING (+)	OVERALL 61
Modified Tirisano Programme Material	Improved Tirisano Programme with new modules on Cleaner Production and Supervisor Training	В	-Large scale take-up of Tirisano services by auto component companies -Continuous improvement processes embedded within companies -Companies translate productivity improvements into more competitive prices and win more contracts locally and internationally	C	-Increased levels of local supply content in locally based OEMs -Increased exports of automotive component s	No measure- able impacts were documented within the project life- span	BC
Implementation of new Tirisano Programme in 65 automotive component companies	<ul> <li>-Cost savings and improved production efficiencies within 65 participant companies</li> <li>-Adoption of new production practises within 65 participant companies</li> <li>-Improved ability to implement continuous improvement programmes within 65 participant companies.</li> </ul>						
Pre- and post- intervention benchmarking reports for the testing and roll- out phases of the ACSDP	Demonstration of effectiveness of the Tirisano programme increases take-up of the programme within the automotive components sector.						

#### Table 5: Desk-based ROtl Assessment Table for ACSDP

61							
Highly Likely	Likely	Moderately Likely	Moderately Unlikely	Unlikely	Highly Unlikely		
AA BA AB CA	BB CB DA DB	AC BC	CC DC	AD BD	CD DD		
BB+ CB+ DA+ DB+	AC+ BC+	CC+ DC+	AD+ BD+	CD+ DD+			

DESK-BASED ROTI ASSESSMENT TABLE FOR THE ACSDP							
RATING JUSTIFICATION SUMM	ARY	RATING JUSTIFICATION SUMMARY	RATING JUSTIFICATIONSUMMARY				
The outcomes delivered were des feed into a continuing process, wir responsibility for continued deliver Tirisano services allocated to AID However, responsibility for continu of companies in embedding the cl process was not allocated.	igned to th cy of c. ued support nange	The conditions necessary to achieve intermediate states are not currently in place, but could still be achieved through prompt remedial measures by project partners These measures should focus on constructing funding models to enable large scale take- up of Tirisano services, longer term support for the change process within firms and vigorous and effective marketing of Tirisano as well as mobilising support for the programme among industry players.	Measurable impacts have not been achieved and documented within the project life-span.	Moderately likely			

#### Table 5: Desk-based ROtl Assessment Table for ACSDP