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A bridge too far? The arms deal, the Coega IDZ, and economic development in the Eastern Cape

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Offsets or industrial participation have become an increasingly important part of arms procurement, with the promise of economic benefits often being an important justification for spending large amounts of public money. However, the limited but growing research on the subject casts doubt on the net value of defence offsets to national economies. An important aspect of any offset agreement is its impact at the regional and local levels. This paper contributes to the continuing debate on the topic, by undertaking a case study of the South African experience, focusing on the Coega Industrial Development Zone, which is situated on the coast some 22 kilometres north-east of Port Elizabeth. The endurance of the Coega IDZ (Industrial Development Zone) project in the face of considerable national criticism from business, other provinces, and civil society, can be explained in part by its identification as the flagship of the NIP (National Industrial Participation) programme, and its reciprocal role in helping the private and public justification of the Strategic Defence Programme (SDP). The study finds that industrial participation schemes do attract and focus investment, but that they also deform efforts at more integrated development at sub-national levels, and further fragment the terrain for industrial policy conceptualisation. It suggests that the offsets targeted for the Eastern Cape do relatively little to address backlogs in development in the region.

Introduction

By the end of the 1990s, the provision of offsets – formal obligations that require the defence firms to reinvest ('offset') arms sales proceeds in the purchasing country – had become a pervasive aspect of the international trade in arms. Arms purchased through such arrangements are generally more expensive than 'off-the-shelf' products. In providing a rationale for arms expenditure and seemingly facilitating industrial growth, offsets are claimed to offer significant benefits to developing and transitional economies (Dunne & Haines, 2001).

Until recently there was surprisingly little critical academic research on the implementation and effects of defence offsets. This situation has changed somewhat with a compact but growing body of comparative and country-specific studies on the subject (Matthews, 2000; Brauer & Dunne, 2004, 2005; Haines, 2004; Hagelin 2004; Warwar, 2004). The thrust of these studies is that the benefits have been significantly over-emphasized, even for the military sector, in respect of actual value, the linkages with the economy, the creation of new or sustainable employment, the export credits generated, and the degree of technology transfer. In addition, there have been cases of non-compliance by contractors or obligors in terms of undertaking or completing projects, with the party in question preferring to incur, or evade where possible, a modest and usually discretionary penalty (Brauer & Dunne, 2004).

The increased international usage of offsets for defence and non-defence industrial requirements is entwined with a range of other policy instruments, practices and structures aimed at stimulating export-oriented trade and industrial development. A central aspect of many a defence offset package is the granting to the obligor (defence contractor) by the procuring country of credits for exports (based on estimates of actual and estimated export sales generated by the investment). Defence contractors are also assisted by favourable export support incentives from their countries. These mechanisms have come in for increased criticism of late (e.g. CAAT, 2003)

In South Africa and elsewhere there is a temptation to utilize offsets to tie in with and to help fast-track other initiatives to reinforce export-led industrialization, such as export processing zones and other related enterprise zones. With an increasing number of Export Processing Zones (EPZ), special industrial zones and free trade areas world wide, attracting Foreign Direct Investment (FDI) to these zones becomes an increasingly competitive matter (Baissac, 2003: 9). In this context, offsets and counter-trade have a distinct seductive appeal to the planners and authorities responsible for these zones and/or the implementation of the relevant national industrial policy.

There has been an extensive debate for several decades on the efficacy of economic zones, with the World Bank and neo-classical economic economists generally seeing these zones as interim measures for the further globalization of production and trade, and with a more heterodox economic position arguing rather that '[i]n many ways Zones are leading many countries into globalization' (Haywood, 2004; Baissac, 2004). Labour activists and a range of social and economic analysts, have found the EPZs and other versions of economic processing zones to be corrosive of trade union and worker rights, offering little or no developmental benefit to host country (Jauch, 2002).

In Southern Africa, the majority of countries in recent years have passed enabling legislation for the establishment of EPZs. In South Africa the largely neo-liberal Growth, Employment and Redistribution macro economic strategy, provided the framework for 'industrial development zones' (IDZs) – geographically defined areas in which incentives are made available to selected firms to establish themselves. Apart from national investment incentives, local municipalities can grant special incentives such as subsidized water, electricity or land. Firms can also benefit from infrastructure provided by the state, such as rail and road links, and harbours. These IDZs are seen as covert EPZs by a number of scholars and labour officials (Hosking & Jauch, 1997; Newman, 1998; Jauch, 2002; Bond, 2002).

Whether these efforts in South and Southern Africa will be successful is questionable.

For one, EPZs are in danger of being superseded by more thoroughgoing neoliberal policies. In Southern Africa they are more likely to attract less desirable firms interested in exploiting the EPZs for shorter-term gains, without commensurate investment in new technologies and human capital, and with no substantial linkages with the local economy (ILO, 1998; Jauch, 2002).

This paper considers the impact on and implications for the Eastern Cape of the changing offset investments and initiatives associated with the Strategic Defence Package (SDP), via a case study of the Coega IDZ. Section one discusses briefly the context of the arms trade offsets and development in South Africa; Section two considers the development experience and prospects of the Eastern Cape. Section three examines the controversial Coega IDZ. The interplay between the Coega IDZ and local economic development in the Nelson Mandela Metropole (NMM) is explored in the fourth section. The other offsets made to date in the NMM and the Eastern Cape more generally are also considered. The final section presents the conclusions and policy implications.

The reasons for the emphasis on the Coega IDZ in this paper are threefold. For one, the Coega initiative was the first of the IDZs to be formally proclaimed, and was seen both materially and symbolically as a catalyst for economic development in the Eastern Cape. Secondly, with a set of clustered offsets this IDZ was originally intended to be the flagship project of the SDP exercise. Finally, our analysis makes a distinct contribution to the critical literature on arms trade offsets by showing that potential and actual offset projects can have an impact well beyond their projected costs and results, and may condition macro-level development policy decisions.

1. Arms trade offsets and development in the Eastern Cape

The growing international debate on arms trade offsets has been enriched by the South African experience of the large and extensive defence offset programme, which commenced in late 1998. This $5 bn defence procurement exercise (the SDP) includes both defence-related counter-trade investment, namely the Defence Industrial Participation (DIP) scheme, and non-defence-related investment, namely the National Industrial Participation (NIP) scheme (DTI, 1997, 2002a, 2003). These two forms of offsets are seen by their public and private sector protagonists as providing a major boost to industrial and developmental investment, and job creation. Defence offsets, in turn, form part of a broader Industrial Participation (IP) programme which includes both defence and non-defence procurement offsets. IP has grown massively since the later 1990s, and now constitutes a substantive set of interventions in the South African industrial economy (DTI, 2002a).

The four main international defence firms involved in the SDP are BAE Systems/Saab, Agusta (now part of AgustaWestland), and the German Frigate and Submarine Consortia. BAE Systems/Saab are providing the joint package of 28 Gripen advanced fighters and 24 Hawk 100 lead-in fighter-trainers, and Agusta/Westland is providing 30 A109 Power light utility helicopters and a number of navy helicopters. The German Frigate Consortium (GFC), composed of Blohm+Voss, Howaldtswerke-Deutsche Werft (HDW) and Thyssen Rheinstahl, (with Thales as chief sub-contractors) are supplying four Meko A200SAN corvettes, and the German Submarine Consortium (GSC) of HDW, Thyssen Nordseewerke and Ferrostaal[1] are the suppliers of three submarines. Thint Holdings (previouslyThales) is the main sub-contractor for the corvettes and is responsible for supplying combat suites for the ships. Ferrostaal and Thyssen are the respective commercial arms of the submarine and corvette consortia (GCIS, 1999, DTI, 2002a).

A key criterion in the evaluation process in selecting the contractors for the SDP was the bidders' industrial participation or offset packages, in particular the commercial projects that would hinge on the commercial contracts signed. The foreign bidders and their governments have been generally active in their search for projects which would be deemed suitable by the South African government. The Defence Ministry estimated in 1999 that the preferred bids would result in R110 bn of industrial benefits over seven years, comprising direct investment, exports, and local sales (GCIS, 1999). It originally anticipated that in the region of 65 000 jobs would be created, and that 280% of the original cost of the project would be generated through the benefits (Dunne & Haines, 2001). The SDP was originally costed at R29.8 bn at the time. This soon grew to R33 bn because aspects of the loan agreement had not been included in this amount. By the early 21st century, the costs of the SDP had climbed to over R50 bn (Haines, 2004).

The SDP offsets in the Eastern Cape are mainly of a non-defence nature, and are concentrated mostly within the Fish River Spatial Development Initiative (SDI). In 2004, a subsequent offset – the resuscitation of the Magwa Tea Estate within the Wild Coast SDI – was mooted. The bulk of the offsets were initially allocated to the Coega IDZ, some 22 kilometres from Port Elizabeth. Several NIP offsets were allocated to Port Elizabeth, and a Uitenhage-based defence contractor, Comau-Aims, has been the recipient of orders under the DIP side of the offsets since 1999 (Dunne & Haines, 2001). A couple of small NIP offsets – a brewer and a condom factory – were later directed to the newly-declared East London IDZ. A further offset focuses on the export of Eastern Cape agricultural products to Germany, based on a memorandum of agreement between a South African firm and a German importer (DTI, 2002a, 2003).

2. Development profile of the Eastern Cape

The Eastern Cape occupies about 16% of South Africa, houses about 15.5% of its population, and generates about 7.6% of its total GDP[2]. It is the poorest of South Africa's nine provinces in terms of imputed household expenditure (Hirschowitz, 2000). In 2000, the imputed mean monthly household expenditure was R1,702 p.a., about 40% of that of Gauteng.

The main sectors of the Eastern Cape economy are:

- Manufacturing
- Trade, Catering and Accommodation
- Community, Social and Personal Services
- Agriculture, Forestry and Fishing (SSA, 2003).

Its two major cities, Port Elizabeth and East London, have a long tradition of manufactur-

1. Ferrostaal is a large German steel producing and manufacturing conglomerate.
2. *www.SAembassy*, 2003.

ing in sectors such as the motor industry, clothing and textiles, and food-processing. Both urban centres have experienced industrial decline, especially in the 1980s. While there have been signs of recovery, the economic prospects of the province have remained uncertain (Driver, 1998).

During the latter half of the 1990s, regional development planning in the Eastern Cape was centred on spatial development initiatives (SDIs) with the professed aim of generating sustainable employment (Hosking and Jauch, 1997). There were two SDIs designated by the Department of Trade and Industries (DTI) for the Eastern Cape. The Wild Coast SDI was essentially an agro-tourist initiative, but has seen little progress. The Fish River SDI was essentially an industrial initiative, although it included much of the most productive agricultural land in the province (Hosking and Jauch, 1997). It incorporated the metropoles of both East London and Port Elizabeth, which together generate most of the Eastern Cape's income. The major elements of this SDI were two industrial development zones – the East London IDZ in East London, and the Coega IDZ and Harbour project, at the mouth of the Coega River. Both IDZs aimed to create clusters of heavy and light industry, to produce and export industrial goods at internationally competitive prices. The Coega IDZ and Harbour project was undoubtedly the showpiece of the Fish River SDI, and the recipient of substantial investment (actual and potential) via the defence offset arrangements (Batchelor & Dunne, 2000). Of late, these SDIs have declined in strategic importance for government, with the emphasis shifting to new policies such as the value chain approach to manufacturing (DTI, 2002b, Haines & Wellman, 2005).

In an early study of the Fish River SDI, Amanda Driver argued that the initiative would probably succeed only in 'the very narrow sense of a once-off increase in investment and employment' (Driver, 1998: 806). She stressed that there was insufficient evidence to deduce that linkages would develop between new macro-investment projects and the local economy. Lewis and Bloch (1998) in a not dissimilar vein, warned against an over-reliance on exogenous approaches and projects to spur economic development in the Eastern Cape. Such points regarding the SDI have been reinforced by subsequent research (e.g. Bond & Hosking, 2002; Haines, 2003a.)

From its very inception the Coega IDZ and harbour project was built around plans of mega smelters – zinc, then stainless steel and then aluminum. The plan was to lure them with cheap electricity deals and other government incentives – a common practice in many export processing zones all around the world (Hosking & Jauch, 1997). However, these plans never made any connection with the realities of Port Elizabeth's strengths – its automotive industries.

Since the year 2000 less and less mention has being made in government policy statements of the Fish River SDI as a whole. Government attention has increasingly been focused on the two IDZs and developments in them.

During the decade the IDZ initiatives have been at the forefront of development planning, economic globalisation has had a dramatic impact on the Eastern Cape and the country more generally, and has contributed to an observable restructuring of industrial production and work processes. Probably the most devastating and observable effect has been the job losses in manufacturing over the last two decades. The situation has been compounded by tariff reduction, weak controls on illicit imports, and economic deregulation, which has hastened the shift offshore of various local companies. This region's engagement with globalisation is mediated and shaped by the nature of state intervention in industrial policy and by continued spatial economic inequalities (Cunningham & Haines, 2002).

The Eastern Cape government appears to be conscious of the above concerns, and for this reason has gone through a relatively extensive process of refining its own macro-development strategy. This refinement entails a greater emphasis on poverty reduction, and promoting integrated regional, district, and local development planning (Eastern Cape Provincial Government, 2003). The new Provincial Growth and Development Plan (PGDP) moves away from the conventional five-year format to a 'medium-to-long range' ten-year strategic planning framework to prioritise and address structural deficiencies in the economy and conditions of society. The Plan is described as a 'step forward from previous development planning processes in the Province, which have tended to be sectionally driven and fragmented, short-term and somewhat reactive.' (EC Govt, 2003: 1) The Plan is to be fleshed out by a series of 'detailed and sequenced strategies, plans and programmes'.

Though the PGDP went through a relatively extensive participative process and embodies, in its spin-in strategies, substantive academic research inputs from local and national scholars, debate about the conceptualisation and proposed operationalisation of the Plan is still in its infancy. The Plan attempts to ensure more integrated development in the somewhat fragmented provincial economy, and to link more closely urban and rural-based production. There is more explicit emphasis on the incorporation of the former Ciskei and Trankei homeland areas into the functional economy.

The key thrusts are three-fold (EC Govt, 2003, 2004):

(i) Industrial development and specifically manufacturing remains at the heart of the PGDP. Ensuring that existing manufacturing competencies and facilities are sustained and expanded is a priority. At the same time, there is to be a concerted push for industrial diversification through:

- Developing links between the existing industries and new and emerging industries in related fields
- *Creating substantive linkages between the Coega and East London IDZs and the respective metropoles (NMM and Buffalo City)* [our emphasis]
- Linking manufacturing more directly with rural industrial ventures and processes
- Promoting a more intensive and extensive beneficiation of primary and natural resources.

(ii) There is an increased emphasis on the promotion of tourism throughout the province, with a special emphasis on eco-tourism. This emphasis builds on earlier tourism strategy documents from the late 1990s and early 2000s.

(iii) A multi-pronged effort to stimulate and integrate rural development, and tackle mass poverty in the old Transkei and Ciskei areas, through a more overt market-oriented approach. The aim is to increase subsistence production and achieve relative self-sufficiency (from the current low 20% to around 80%).

3. The Coega IDZ

3.1 How the arms offset deal became a pillar of the Coega IDZ Project

By the year 2000, the Coega IDZ had become the flagship of the NIP offsets (Dunne & Haines, 2001a; Hosking et.al., 2002). Interestingly, a key factor in government's selection of the German submarine and corvette offerings – despite significantly higher tender prices in both cases – was the additional IP benefits offered by the respective consortia. Of these IP projects, the potential contribution of the German Submarine Consortium (commercially represented by Ferrostaal) to specialist steel and steel beneficiation projects was a central feature. These strong arms offset linkages[3] have been generally downplayed by the Coega Development Corporation (CDC), the state-endorsed PPP agency charged with administering the project (e.g. CDC, 2001:31).

The potential for industrial development in the area of the Coega mouth was first drawn to the public's attention in 1970, when local landowners and businessmen proposed that the mouth be used as a site for a ship-repairing facility. By 1996, a combination of factors put the idea of building a port at the mouth of the Coega River back into the public eye. These factors were increased trade volumes world wide, trends towards building bigger cargo-carrying ships, high marginal costs of expanding capacity at Durban harbour, the adoption of an export promotion strategy by central government, a surge of interest in export processing zones (Coastal and Environmental Services, 2000:2), aggressive marketing by local business interests, and an expression of interest by Gencor (the South African company that was transformed into the multi-national mineral and mining multinational Billiton) in building a major new zinc refinery in the Eastern Cape. From and industrial perspective high on the list of the comparative advantages of Coega was its ability to handle post-panamax vessels. The ability was as a result of the depth of a channel in the sea in Algoa Bay leading up to the Coega river mouth.

Driven by the Port Elizabeth Regional Chamber of Commerce and Industry, a Section 21 Company was set up by local business interests in August 1996 to promote the idea of building a new port at the mouth of the Coega River and 10 000 hectares IDZ adjacent to it. Gencor was invited to participate. The Section 21 Company immediately undertook feasibility studies, and by July 1997 these were completed. However, first Kynoch's[4] interest and then later Billiton's waned. By the end of 1999, the components of the project on which the feasibility studies had been based (under a so-called conservative scenario) had in effect been scrapped. Interest from private enterprise waned, leaving employees, consultants and a constituency strongly conditioned by government planners (Hosking & Bond, 1999; Le Quesne, 2000; Bond & Hosking, 2002; Hosking, *et al.* 2002).

Among the economic reasons for the relative lack of private sector involvement was that the profit margins were too low – a problem brought about by unexpected excess supplies developing in the world phosphoric acid and zinc markets and falling prices. In addition, other potential sites for plants being investigated by competitors were gaining momentum (for instance, Anglo American were investigating establishing a plant at Saldanha based on Northern Cape zinc deposits and use of the Sishen-Saldanha rail link)

3. *Financial Mail*, 27 July 2001
4. Kynoch is a chemical and fertiliser conglomerate

(Bond & Hosking, 2002).

Without government support, the Coega initiative might have folded right then. It was at this point that the arms deal entered the Coega equation as a sustaining force. The most likely explanation for government reluctance to end its commitment to the Coega project, in the face of complications which would normally have sunk any other project, was that the Departments of Defence and Trade and Industry needed sites for investment offsets negotiated as part of the deliverables in return for purchases of military hardware (GCIS, 1999; Batchelor & Dunne, 2000). A further consideration was that the Eastern Cape, the second poorest province in South Africa, constitutes in a number of respects the political heartland of the ANC. Despite some provincial factionalism, there appears to be a coherent set of politically-connected brokers for the offset deals, and a confluence of support from local and provincial government (Haines, 2003b).The determination of the state to ensure the success of the Coega IDZ may well have been different had the project not been given a life by being seen as a major potential recipient of offsets, especially from the German submarine and corvette consortia. Government had changed its mind during the procurement process, and had opted for significantly more expensive corvettes and submarines from Germany, as opposed to cheaper comparative craft from other European bidders (Batchelor & Dunne, 2000; Dunne & Haines, 2001; Crawford Browne, 2000).

The Coega initiative was close to the heart of Dr Paul Jourdan, the director of special projects in the DTI during the late 1990s. Among his briefs was to leverage in PPP projects into the SDI and the emerging IDZs. Jourdan was also involved in the second round of negotiations between the South African government and the four international defence obligors (Dunne & Haines, 2001).

The cluster of initiatives was formulated during 1998-2000. Under the arms offset deal, a hub of integrated special steel-producing facilities, with potential downstream manufacturing possibilities, was earmarked for Coega (see discussion above). The dominant investor was GSC (Ferrostaal) with the German Corvette Consortium (Thyssen) and the Helicopter consortium (Augusta). BAE Systems/SAAB was to be linked somewhat later with potential downstream projects in the IDZ. A September 1999 press release provided the following details. Mooted projects included a precision steel mill; a stainless steel fabrication plant and the manufacturing of stainless steel cutlery and sinks (all GSC); a mini steel mill for the production of galvanised autobody steel for export, and later (in the second phase, for local production (GFC/Thyssen); and a speciality steel mini-mill (Augusta/Danielli) (GCIS, 1999; Dunne & Haines, 2001).

The CDC's estimates of the then current and potential investment opportunities in 2000 are listed in Table 1 below. The Corporation calculated the total value of opportunities in the region of R11.4bn, and stressed that R8,4bn of these investments, which are represented by the envisaged steel plants, would be directed to the Eastern Cape only if the Coega Port was built. This, the Corporation stresses, 'emphasizes the strategic importance of the Coega project in the overall development of the Eastern Cape' (CDC, 2000: 3). Table 2 encapsulates the CDC's (problematic) argument that these potential investments would create a 'critical mass', allowing for a leveraging of these investment opportunities to other sectors (ibid.)

Table 1 Investment opportunities as seen in 2000

Container Terminal	Common-user hub container terminal with estimated throughput of 500 000 containers estimated initial investment R0,6 billion
Stainless Steel Mill	Beneficiation of materials, export of stainless steel sheet in rolls and structural elements: estimated initial investment R4,8 billion
Speciality Steel Mill	Beneficiation of materials, export of specialist steel produce, estimated initial investment of R1,8 billion
Galvanising Mill	Galvanising of steel sheet, export of finished product; estimated initial investment of R1,8 billion
E-commerce Park	300 hectare facility for e-commerce and information technology; estimated initial investment of R0,1 billion
Port Common Infrastructure	Breakwaters, quay walls, dredging, *et al*; estimated initial investment of R1.5 billion
Fuel Dept	Storage and handling facilities for liquid fuels; estimaed initial investment of R0,3 billion
Bulk Materials Export	Materials storage and handling facilities for manganese, coal and iron ore; estimaed future investment of R0,4 billion
Cement Plant	New cement plant with potential for export of clinker and/or finished product; estimated future investment of R0,25 billion

Source: CDC 2000

Table 2 Projected employment opportunities as seen in 2000[a]

	DIRECT		INDIRECT	
	Construction	Production	Construction	Production
Port	2 000	250	3 000	375
Infrastructure	300	500	450	300
Ferrostaal	4 000	500	6 000	750
Danielli	4 000	500	6 000	750
Thyssen	2 000	250	3 000	375
Container Terminal	1 000	250	1 500	375
TOTAL	± 14 000	± 2 500	± 20 000	± 3 000

Source: CDC 2000

a. The CDC stressed that '[t]hese figures must be dealt with very cautiously and are only a conservative estimate at this time until confirmation by investors'.

Reflecting the growing optimism in government that this new arrangement for Coega was secure, the CDC expanded the IDZ from 10 000 to 14 000 hectares and then later to 17 000 hectares. Government estimates of jobs to be created also grew – from around 40 000 to 240 000 – and the Coega Development Corporation applied for permits to run the

Coega IDZ (Coastal and Environmental Services, 2000:5).

However, as the year 2000 progressed, it became clear that the negotiation and ratification processes associated with arms offset deals were going to take longer than initially thought. Troublesome questions were raised over the integrity of some of the negotiators, and over how the new production capacity at Coega would fit in with South Africa's existing steel industry. The wisdom of locating the steel plant offsets at Coega was being challenged in various quarters, for instance, by Highveld Steel at Witbank. At the time, the steel industry was undergoing a phase of reorganisation and consolidation. A further development was the acquisition of Columbus Steel by Spanish company Acerinox in 2001. There was speculation that Ferrostaal had lost interest in investing in the stainless steel cold-rolling plant in Coega, as it hoped to embark on a joint venture with Columbus as local partner (Bond & Hosking, 2002; Dunne & Haines, 2001, Le Quesne, 2001).

As could be expected with this uncertainty, the Coega project lost some of its momentum, and by 2001, the CDC moved on to the defensive and was focusing more of its time attacking its critics than engineering any new positives for the project (CDC, 2001). The area covered by the IDZ was reduced from 17 000 to 12 000 hectares (CDC, 2001:10) and the CDC began to argue that the government did not after all need an anchor tenant for Coega to be viable – that if the government built the harbour, the tenants would come[5]. The CDC's CEO, Pepi Silinga, had publicly announced during 2001 that 'The philosophy that we needed an anchor tenant before work could begin was fatally flawed' (Richardson, 2001).

For want of a viable anchor tenant, the DTI thus changed strategy substantially in late 2000, to promote a diversified export-oriented industrial park that would combine traditional techniques associated with heavy industrial development with a lighter industrial sector. The strategy had a strong element of faith about it; namely that once the CDC built the infrastructure, the investors would come. The problem with this line of reasoning, however, was that it left unanswered the crucial question of what facilities were to be built at the Coega harbour – what shipping was to be provided for? An apparent solution was found to this dilemma by enticing a private sector shipping partner into the Coega project – P & O Nedlloyd. After negotiations, the latter Company agreed to build and run the container facility and logistics park at the port (together with TCI Infrastructure) and provide a new definition for the Coega project (Hosking, *et al.* 2002).

The CDC then commissioned another cost-benefit analysis of the revised project to be carried out. Once again, the Cost Benefit Analysis gave the right answers (mostly) and in July 2001 the consultants declared that the project was economically desirable (Merit, 2001). However, unlike the first cost-benefit analysis done for the zinc smelter-harbour project, this one was made available to the public, and for this reason the public could determine the basis on which these consultants reached their conclusions. The Environmental Impact Assessment (EIA) left something to be desired, and focused mainly on the P&O Nedlloyd plan for container traffic (Merit, 2001). The positive conclusions were reached on the basis of controversial projections of demand for container shipments through Port Elizabeth, questionable benefit pricing decisions, and simplistic assumptions

5. Personal communication from Ray Hartle to Prof. S. Hosking, 2001.

on the cost of building and maintaining the necessary linking infrastructure with Gauteng. Among other things, the external environmental costs were not taken into consideration (Le Quesne, 2001; Hosking, 2002). This analysis was not the kind that was going to stand up to serious interrogation, including hostile comments. It therefore became clear that some other plan would be needed to justify the volume of government funds channelled into the Coega Project (Hosking, 2002).

In the face of increased public scrutiny of the arms procurement programme during 2001, as well as continued criticism of the flagship NIP project – the Coega IDZ, the government increased its material and symbolic support for the project (e.g. Allan, 2001; Glavovic, 2000). In early 2002, R4.5 bn in infrastructure investment was confirmed by government. This included R1.8 bn by the parastatal Escom for electricity supply to the IDZ, and approximately R2.65 bn by Portnet (later NPA), for the construction of the deep-water port and surrounds. This infrastructure investment by the state would rise during 2003-2005[6].

With the volume of state funds being channelled into Coega, on the basis of a less-than-substantial EIA, coupled with hostile comments from the Durban Chamber of Commerce and Industry and others (Haines, 2003b), there was a need for new investments and projects for the IDZ. Fortuitously for the CDC, the French company Aluminum Pechiney came to their rescue with a proposal to build, invest in and run a new $1,6 billion aluminum smelter in the Coega IDZ. Amongst many other incentives, the DTI offered offset credits acquired through arms purchases, to increase the appeal of the proposed deal (Haines, 2004).

The EIA for this aluminum smelter project was carried out in 2002, and in the light of this and other factors, Aluminum Pechiney decided to build their next smelter in the Coega IDZ. The criteria used to weigh up Coega against the alternatives (an Australian site) were the availability of cheap energy, suitability of site, tax benefits, transportation costs, environmental impacts, and political risks (CSIR, 2002). During 2003, there were two adverse threats to the project – an escalating foreign exchange value of the Rand (pushing up investment costs) and a hostile take-over of Pechiney by the Canadian company Alcan. Alcan had announced, during the bidding process, that they would review the Coega aluminum smelter proposal, and despite subsequent local press reports on the likelihood of the company proceeding with the project, the prospects for the project proceeding looked far less sanguine. In late 2003, a lobbying campaign was initiated by the Ministry of Trade and Industry. This campaign was accompanied by reports that more incentives would be provided, including the possibility of some offset credits linked to the project. The construction of the aluminum smelter was also important for the possibility of subsequent downstream projects, especially by BAE Systems/SAAB.[7]

The 2003 report by the DTI on the various projects of the National Industrial Participation Programme (DTI, 2003) still listed several speciality steel projects to be launched in the Eastern Cape (not specifically mentioning the Coega IDZ) by the GSC consortium. These comprised a cold rolling mill, reefer cooling containers, and tank containers. The

6. Bolin, L. 2004. Coega gets R7.4 billion in Public Funding. iAfrica.com. 2 February
7. Interview with Ms Allison Meyer, SANIP, Fourways, Gauteng, 15 December 2003.

GSC also reported that a special steel long products plant was under discussion, but that no decision regarding location had been made (DTI, 2003: 34). And the stainless steel precision strip, originally mooted for the Coega IDZ, was said to be scheduled for the Western Cape instead. However, there was growing doubt whether any project would be implemented. For instance, the planned rolling mill which the GSC Submarine consortium was to establish in the Coega IDZ, was effectively cancelled in mid-2003.[8] And there has up to the time of writing been periodic press concern about the secrecy surrounding the projects, especially those associated with the Submarine consortium.[9]

As the implementation phase of the project progressed, the scale of the Coega IDZ was reduced further – from 12 000 to 4 200 hectares (Moosa, 2002) – but not the marketing drive associated with the project. During 2001 and 2002, a massive government-funded advertising campaign was mounted, and in it optimistic claims were made in both newspaper and broadcast media about what the project would achieve, e.g. 'Ultimately, Coega will enable Africa to regain the economic might it enjoyed when Alexandria was the commercial and industrial capital of the world. The African Renaissance is well and truly under way'. The marketing campaign was partly a reaction by government to a growing public debate about the project, and increased awareness of and concern with the planning history and false starts in the Coega project's evolution (CDC, 2001). The PR literature evoked notions of intensive high-tech industrial development projects, amid scenic beauty, with landscaped parks and ornamental bridges.

In late 2004, DTI reported that talks were continuing with Alcan on a 'scaled-down version of the proposed aluminium smelter' which would provide a 'key anchor project to make the industrial park and deep-water port viable'.[10] By early 2005 there was still no progress. Ferrostaal (GSC), which had been the obligor most closely associated with the Coega IDZ, had yet to confirm in contractual form its investment and involvement in the Zone. The GSC had looked to an alternative project in early 2003 – a condom factory in the Eastern Cape – to buy some time. But this factory proved unviable and was closed down before it became fully functioning.[11] A brewery scheduled for the East London IDZ by German Frigate Consortium suffered the same fate. As criticism grew during 2004 regarding the failure of certain of the SDP obligors to meet their offset deadlines, the GSC turned its attention to a proposed project to bail out the crisis-ridden Magwa Tea Estate in the Pondoland region of the Eastern Cape – a project sited within the Wild Coast SDI.[12] This project requires the Eastern Cape government to clear debts of around R12 million before it can proceed.

The Eastern Cape provincial government, battling to find the funds to sustain its ambitious PGDP, was obliged to put on hold its financial support of the IDZ, which had been

8. *Business Day*, 30 July 2003.
9. *Mail and Guardian*, 24 July 2003; *Business Day*, 30 July 2003.
10. Loxton, L. 2004. No title, business report. *www.sapoaonline.co.za/news/article.aspx?idArticle=4619*
11. Khan, F. 2003. Arms Deal Plunges South Africa into its worst Post-Apartheid Crisis. *http://ipsnews.net/interna.asp?idnews=20215*
12. Eastern Cape Business News. 2004. ECDC announces Indian and German Partners for Magwa. *www.ecdc.co.za/media/article.asp?pageid=709* 23 July.

primarily channelled via an ongoing subsidisation of the Coega IDZ.[13] And at the time of writing, the MEC of Finance, Billy Nel, publicly voiced his skepticism with the project.[14] The collapse of a bridge in the infrastructure construction zone, and publicised financial problems of some of the sub-contracted firms involved in construction projects in the IDZ, compounded the situation. As an indication of the desire by the CDC to attract some form of outside investment, the corporation is currently in 2005 considering manufacturing components for pebble-bed nuclear reactors within a nuclear hub in the IDZ.

3.2 Current concerns about the sustainability of the Coega project

3.2.1 Limited scope and interest for foreign private companies to replace the natural capital they destroy

Should the proposed new Alcan (previously Pechiney) aluminum smelter and the P&O Nedlloyd container terminals and TCI logistic park indeed be built, it can be expected that they will all have to function on extremely tight margins. Pechiney's new supply capacity will be created at a time when aluminum markets are so glutted that the world's leading aluminum producer, Alcoa, is cutting back on production and faces a problem of excess capacity. In the face of these gluts, metals protectionism is on the rise. Similarly, P&O Nedlloyd and TCI Infrastructure will face land transport cost disadvantages relative to the ports of Durban, Maputo, and Richards Bay, in the competition for Gauteng, Mpumalanga, Free State, Limpopo, and Zimbabwean container traffic.

As a result of these factors, these companies can be expected to try and reduce their outlays to a minimum, especially ones on which they enjoy some flexibility, e.g. the costs they incur in complying with environmental and social obligations, and their contributions toward replacing the natural capital in the Algoa Bay area which they are likely to destroy through their plants and operations.

3.2.2 An expensive way of creating jobs

Source: CDC 2000

The new employment anticipated at the Coega port and IDZ will probably be the most expensive, in terms of capital per job, of any major facility in Africa. As time has passed, this ratio has got worse. The project will probably create the same number of jobs created as predicted in Hosking (1999), namely between 850 to 2700, but will use about 7 times the capital input estimated in this paper. Moreover, all the environmental costs raised in this paper remain valid. There will be significant opportunity costs in the mariculture industry (Muller, 1997), the fishing industry (Wooldridge, *et al.*, 1997), the citrus industry (Niven, 1997), and the tourism and recreation industries. In addition there will be significant human capital costs due to negative impacts of the plants on human health (Katsouyanni, *et al.*, 1997). Alternative ways of generating the same numbers of jobs exist following different development strategies for the area, ones which use rather than destroy the natural capital and push up the price of water and electricity in the area (Hosking, 2002). The alternative strategy prioritizes basic-needs infrastructure investment throughout the Eastern Cape and, at Coega, the development of eco-tourism and small-scale agriculture and mariculture. Fur-

13. *http://www.sapaonline.co.za/news/article.aspx/is* Article = 4619.

14. *The Herald*, 5 May 2005.

thermore, at a time when global warming is under the international spotlight – and South Africa is the world's worst contributor to greenhouse gas emissions when corrected for income and population – the proposed aluminum smelter, with its enormous energy demand, smacks of apathy towards the world's environment (Bond & Hosking, 2002).

3.2.3 The IDZ has insufficient economic spin-offs

For the impoverished people of the Eastern Cape, the lack of any credible mechanism by which they may benefit from the seemingly modest spin-offs that the Coega project may generate, is a severe problem. The region has massive unemployment and poverty problems, but this project will do little to alleviate them, despite its huge capital requirements.

The excessively capital-intensive heavy industry targeted for the IDZ would, for example, allow little or no opportunity for the development of Small and Medium Enterprises (SMEs), which are repeatedly identified as the crucial sector in meaningful poverty alleviation. In addition, the capital-intensive nature of the industries means that they will make no contribution to redressing the chasm in the Mandela Metropole's economy, between an affluent few and a vast, dispossessed majority. The Coega project would do little to address structural needs and failings of the bulk of the economic activity in the Eastern Cape. It will contribute to economic empowerment, but on a very selective and limited basis.

Finally, the returns to government in the form of revenue from the Coega project may well be negligible in the end. As discussed earlier, it seems that the IDZ concept has its roots in the EPZ idea, but it is also clear that there have been as many problems experienced with these EPZs as there have been successes. As the world is already heavily populated with EPZs, in order to succeed, internationally competitive incentive packages must be provided, and these come at a cost, one of which is reduced revenue returns to government. Yet if these incentives are not provided, the initiative more often than not flounders (Jauch, 1997; Hosking & Jauch, 1997).

Currently the project is proceeding, being pushed through extensive and expensive marketing and public relations work, and pulled along by substantive taxpayer subsidies offered to corporations who have not been overly eco-sensitive in the past. There are, therefore, numerous reasons to expect the resulting *under*development of the Mandela Metropole and the entire province, as Coega distracts the attention of the state and society from environment and development problems on the one hand, and genuine solutions on the other. The project has consumed enormous time and funding which could have otherwise been utilised more effectively and urgently, for genuinely addressing the developmental needs of the Eastern Cape. There are, it should be stressed, more sanguine assessments of the long-term impact of the Coega IDZ (e.g. Nel, 2003), and it is also possible that there will be some positive unanticipated consequences from the venture.

On a more general and national developmental level, the amount of public money that has been allocated to the project (in the order of R7,5 bn) at the time of writing, has not been matched by any substantive private sector funding to date. Such an investment also adds to the significant hidden costs associated with the SDP offsets. The endurance of the Coega IDZ project in the face of considerable national criticism from business, other provinces, and civil society, can be explained in part by its identification in the early 2000s as the flagship of the NIP programme, and its reciprocal role in helping the private and public justification of the SDP (Dunne & Haines, 2001; Hosking, *et al.*, 2002). In addition, the project is perceived in other coastal provinces and centres as a political rather than an economic decision (e.g. Haines, 2003b). And while the project may be said to have set a precedent for other IDZs in KZN (Kwa Zulu Natal) and elsewhere to request such resources, it nevertheless diminishes the public resources available to them (HSRC, 2002:1).

4. Nelson Mandela Metropole, Local Economic Development and the Coega IDZ

The Nelson Mandela Metropole (NMM) region is the major centre of economic activity within the Eastern Cape and is best placed to benefit from DIP and NIP investments. It has potentially one of the most sophisticated industrial support systems in Africa. In addition, a comprehensive set of local economic development (LED) policies was endorsed by the Port Elizabeth City Council in 1999-2000. A 1999 tactical policy document on LED for the Port Elizabeth Municipality stressed five main project/activity areas, namely, an economic intelligence system; an SME industry support system, an industrial parks system, a strategic partnering system, and a Greater Port Elizabeth Development Section 21 company or equivalent, to coordinate and promote a public-private approach to development investment. A Local Economic Development Unit was established in 2000, and subsequently expanded to incorporate the metropolitan region. There are further signs of continuity in emerging development planning by the NMM, but there is still a lack of coherence in the development vision of the metropole – a situation conditioned by the experience and developments around the mega Coega IDZ project. It is felt, however, that the metropole's political and business leaders have failed to develop a cohesive strategy for attracting coordinated investment and for creating a climate conducive to sustainable investment[15] and the densification of social capital (Haines, 2003a).

Apart from the proposed hierarchy of industrial parks envisaged in official policy, there has been the development of a private-public partnership that aims to establish a high-end science or 'knowledge' park in the metropole with a substantive input from the local universities. This initiative was mandated by the outgoing Port Elizabeth city council, which saw the need to create a distinct high-tech entrepreneurial culture in the metropole. The actual science park is conceived of in terms of an innovation hub, with state-of-the-art telecommunications networks, a massive e-port and 'virtual' stock exchange facilities, and substantive software manufacturing capabilities synergistically linked with specialist degree programmes.[16] To leverage the private sector support for such an initiative, a long-term development strategy that places a premium on quality of life and environment is required from the NMM. Interestingly, certain private investors in the initial discussions around a science park were reluctant to commit themselves to a thoroughgoing development until they were satisfied that the neighbouring heavy industry in the Coega IDZ would not

15. Interview with Mr Neven Hendricks, Nedcor Investment Bank, November 1999. Neil Bruton, director of the Port Elizabeth Business Confidence Index, warns that the NMM region 'risks missing out on numerous economic and business opportunities due to a lack of economic vision and strategic marketing' (*Eastern Province Herald*, 23 May 2001.
16. Provisional Business Plan of Port Elizabeth Science Park Working Group, 2000.

degrade the natural and built environment (Haines, 2003a).

The challenge, then, for the parties conceptualising and/or implementing Industrial Participation offsets, would be to achieve functional linkages within the NMM and between the Coega IDZ and other economic activities in the wider NMM region.

5. The defence offsets and the IDZs and SDIs in the Eastern Cape

5.1 Offsets in the NMM

One local company that has benefited from the DIP side of the offsets is Comau Aims Corporation. A member of the Denel group, this Uitenhage-based company is probably the leading specialist engineering group in the NMM economy, with advanced capacity in Articulate Intelligent Manufacturing Systems. Its defence-related business is growing because of the offsets. The R22 million deal concluded in 1999 with BAE Systems for the manufacture of missile pylons for the Gripen fighter has been completed successfully, and follow-up orders for Grippen pylons have been processed.[17] The pylons are, however, semi-manufactured, and returned to BAE Systems for wiring and final machining. The work is essentially out-sourced component production, with little or no technology transfer (Dunne & Haines, 2001, 2002). DIP work is also being carried out for Agusta in terms of fixturing work for the rear fuselage of the Agusta helicopter (Haines, 2004).

Although there are possibilities of additional DIP sub-contracted orders, the bulk of Comau/Aims's work is derived from export orders of the large Port Elizabeth-based motor and tyre companies, who are looking for cost-effective local alternatives in terms of outsourcing and speciality manufacturing. Comau/Aims had for several years attempted to forge links with the Coega IDZ, but to no avail. They were keen, inter alia, to offer their particular high-end logistical expertise to the CDC's planning and logistical exercises. Rather surprisingly, they were excluded from the Corporation's extensive list of potential contractors, sub-contractors, and consultants, despite explicit correspondence and communication regarding their inclusion.[18] The fact that the Coega Development Corporation has failed to utilise this expertise adequately is indicative, at a micro-level, of the broader problems the Coega IDZ has had in linking with the local economy.

There is little in the way of linked and targeted sets of investments in either the NMM local economy or the Eastern Cape more generally – a pattern echoed elsewhere in South Africa (Dunne & Lamb, 2004; Haines, 2004, 2005). The original idea that the Coega IDZ would link directly with the motor manufacturers in the province through attracting them to the zone, providing galvanised and specialty auto steel at competitive prices, and exploring other linkages in the motor industry cluster, seems to have dissipated somewhat. The CDC has not fully engaged with the relevant firms in the motor industry (Haines, 2004). On a broader basis, it has used its generous state subsidies to develop potential outsourcing and procurement networks, rather than looking to participate in a more interactive fashion with relevant industry clusters and sub-clusters in the LED (Hosking, *et al.*, 2002; Haines, 2003a).

The bulk of the NIP offsets in the NMM region were conceived originally with the

17. Interview (telephonic) with Mr Peter Wolfaardt, Comau/Aims, 23 September 2002.

18. Ibid.

Coega IDZ in mind. There are several offsets currently allocated to Port Elizabeth, primarily from the BAE/Saab consortium, and located primarily in the motor component sector. These include taking strategic positions in a catalytic converter firm, dye-a casting engineering works, and component production of air fuel systems (DTI, 2002; 2003). BAE/SAAB has also invested in a pharmaceutical firm. On paper, these appear to be relatively substantive investments, but the question remains, especially in regard to the catalytic converter sector in Port Elizabeth, whether these would have occurred independently of the IP process. Also, as indicated in local and international press reports[19] and a separate case study of the Cape Mohair offset (see Haines, 2004), there has been something of a conflation of estimated returns on a particular investment, with gross export earnings of the firm or venture concerned. In other words, with a small investment in an export-oriented firm, obligors are able to claim credits based on all the related export sales of the firm or venture in question. The Cape Mohair example also points to the shortcoming of ad hoc as opposed to targeted and concentrated investments by obligors (see Brauer & Dunne, 2004; Haines, 2004). While investment in improving the value-added component of the mohair industry in the Eastern Cape is useful, this smallish investment does not form part of a broader investment strategy in improving R&D (research and development) spending, manufacturing capacity, and export promotion of Eastern Cape and South African mohair products generally.

There are two softer offset initiatives in Port Elizabeth involving the BAE/Saab grouping. By facilitating a charter tourist package to the city, US $47 million is claimed in export credits. The second case is a BAE/SAAB investment in the upgrading of the public swimming bath on the Humewood beachfront. This is essentially a donation to a non-profit agency, and begs the question whether more traditional donor funding should have been accessed for this project. It is not a meaningful counter trade or investment, and suggests a failing in the Local Economic Development Unit in not establishing a list of relevant R&D or manufacturing ventures for investment and/or technology transfer.

5.2 Offsets in the Eastern Cape

With the attraction of defence and other IP offsets into the Coega IDZ seemingly far more problematic than in the late 1990s, certain of the IP investments from the obligors have been directed to other projects in the Eastern Cape. The two projects assigned to the East London IDZ – a condom factory (GSC) and brewery (GFC) – were stillborn. However, at the time, these and other possible projects raised hopes of a substantial take-off of the East London IDZ, the misgivings of local critics notwithstanding. The enthusiasm for new industrial projects may well have contributed to the seeming lack of interest by provincial government and the Eastern Cape Development Corporation (ECDC) in the erosion of industrial production in clothing, textiles and footware in the East London-Bisho corridor, and the concomitant increase in unemployment and casualisation of labour (Bank & Minkley, 2002).

At present, the main offset project outside of the NMM local economy has been the GSC's (German Submarine Consortium) envisaged initiative to refurbish the crisis-ridden

19. Interview with *Mail and Guardian* senior reporter, Mr Sam Sole, Durban, 20 September 2002.

Magwa Tea Estate through the employment of an Indian company which has had experience of working on the tea-industry in Uganda. There are a number of obstacles in the way of this project, including demands from the ex-workers who had taken ownership of the estate, and around $2 million in debts which have to be paid by the Eastern Cape government before the venture can proceed. There is a distinct irony in this becoming the flagship of the GSC, as its attractiveness as a bidder was based on its steel and metal-producing links and expertise.

The stated aim of the provincial government in its PGDP to create substantive linkages between the Coega and East London IDZs, the respective metropoles (NMM and Buffalo City), has not been discernibly promoted by the IP investments to date.

Conclusion

The defence offsets in the Eastern Cape were initially directed largely to the Coega IDZ project, and to a lesser extent the East London IDZ, as well as the motor industry in the NMM and East London. The offsets are less substantial and more ad hoc than those originally envisaged. Any multiplier effects at this stage are modest, and linkages with the local and regional economy are tenuous. And the Comau/Aims experience suggests that the degree of technology transfer for defence-oriented local firms might be more limited than expected. Neither of the two IDZs has benefited so far. The failed condom factory and brewery in the East London IDZ may not have been that costly for the local and national taxpayers, but do suggest the fragility of this IDZ as an investment destination. In the case of the Coega IDZ, the failure to attract and implement a range of promised offsets is of far more significance.

In bare-boned fiscal analysis, Coega has been underwritten by massive public funds from provincial and national agencies and parastatals. The IDZ has gone through a range of re-imaging during the late 1990s and early and mid-2000s The port, transport and rail infrastructure look likely to contribute in turn to further cost externalities. Crucially, when the project seemed likely to be placed on the back burner, the promise of IP offsets (especially those related to the SDP) helped sustain the project. Ironically, offset obligations have not been forthcoming to date, and belated efforts from the obligors (the German sub consortium in particular) have been directed to further questionable investments in the Eastern Cape, such as the proposed investment in the crisis-ridden Magwa Tea Estate.

Efforts have continued to woo international and local investors with a continued emphasis on a ferro/metal processing cluster within the zone. With over 8 years in operation, an anchor tenant has still to be confirmed, and no substantive private investment has been attracted at the time of writing. The CDC has continued to express optimism that an aluminum smelter will be built in the IDZ, even if not at the scale originally envisaged. One presumes their optimism is based on knowledge of the willingness on the part of the central government to subsidise the proposed industrial plants with sufficient incentives. The Eastern Cape Provincial Government, has scaled back on previous levels of funding to the CDC. It has also begun to voice it unease regarding the lack of progress with the venture. As an indication of the desire to attract some form of outside investment, the Corporation is now considering manufacturing components for pebble-bed nuclear reactors within a nuclear hub in the IDZ.

State investment is now around R7.5bn (a sizeable portion of the costs of the SDP). In addition, the development planning approach to the Coega IDZ has crowded out, in material and symbolic terms, alternative development scenarios, although the PGDP may provide a herald a somewhat more incremental and reflexive approach to development policy in the province. The Coega IDZ case suggests that potential and actual IP investments and projects can have an impact well beyond their projected costs and results, and can condition macro-level development policy decisions.

The Coega IDZ, however, need not be seen as a white elephant. The experience of Mossgas suggests that unanticipated benefits might in time flow from the project. For instance, the mooted commercial international airport would be a welcome move for the NMM and the province generally. NMM export-oriented enterprises and tourism have been hamstrung by the reluctance of Airports Company of South Africa to extend the runways of the Port Elizabeth airport. In addition, if one can look to creating linked export-oriented enterprises and related transport links, then some form of multi-modal hub may be the way forward. There are possibilities, too, of constructing and expanding fledgling boat building and ship repair facilities, and re-establishing a naval base or yard in the NMM region. However, such planning decisions need to be conducted in a more interactive and transparent manner, and embody more cost-effective project planning and implementation.

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References

Allan, C. 2001. Coega and accountability: Private policy implementation with public funds. Analysis done for the Public Service Accountability Monitor, Rhodes University, 16 July.

Auditor-General (South Africa). 2001. *Joint report on strategic defence packages*. Pretoria: Government Printer. Also available on AGs website: *http://www.agasa.co.za*.

Baissac, C. 2003. Maximising the development impact of EPZs: A comparative perspective in the African context of needed accelerated growth. Presentation to the Johannesburg EPZ symposium, October 15-16. *http://www.wepza.org/article7.html*

Bank, L. & G. Minkley. 2002. Unravelling textiles and jobs: Women pay the prince in East London. East London, ISER mimeo.

Batchelor, P. 2002. Defence industry globalization: The case of South Africa. Paper presented to 6th Annual Middlesex Conference on Economics and Security, Middlesex University Business School, 22-25 June.

Batchelor, P. & Dunne, P. 2000. Industrial participation, investment and growth: The case of South Africa's defence related industry. *Development Southern Africa*, 17(3):417-435.

Bjorn, E.H. 2004. Nordic offset policies: Experiences and expectations. Eighth annual conference on economics and security, June, University of West England, Bristol.

Bloch, R. 1999. Subnational economic development in South Africa: Towards a strategy for the Department of Trade and Industry. Paper presented at Annual Forum of Trade and Industrial

Policy Secretariate, Muldersdrift, South Africa, 19-22 September.

Bond, P. & Hosking, S.G. 2002. The development of underdevelopment in Nelson Mandela Metropole: Coega's economic, social and environmental subsidies. In Bond, P. (ed.). *Unsustainable South Africa: Environment, development and social protest.* Pietermaritzburg: University of Natal Press.

Botha, S. & Olbrich, K. 1997. The potential effects of air pollution on vegetation, with special reference to the Sundays River Valley Farming Area. Coega IDZ assessment.

Brauer, J. & Dunne, J.P. (eds.) 2004. *Arms trade and economic development: Theory, policy and cases in arms trade offsets.* London: Routledge.

Brauer, J. & Dunne, J.P. 2005. Arms Trade Offsets and Development. *Africanus*, 35 (Forthcoming)

Bruton, H.J. 1998. A reconsideration of import substitution. *Journal of Economic Literature*. 36.

CAAT. (Campaign Against Arms Trade) 2003. *The South African deal: A case study in the arms trade.* London: CAAT.

Coastal and Environmental Services. 2000. Coega industrial *development zone: Integrated envircnmental summary report*. Grahamstown: Coega Development Corporation.

CDC (Coega Development Corporation). 2000. Fact sheet on SMME opportunities. A publication published and distributed by the Coega Development Corporation.

CDC (Coega Development Corporation). 2001. The Coega project: The facts. A publication published and distributed by the Coega Development Corporation. August.

Comau Aims Corporation. c1999. Coega empowerment strategy. Mimeo.

Crawford Browne, T. 2000. South Africa's R30 billion weapons procurement programme; offsets: An invitation to corruption, in a country desperate for socio-economic development. Paper delivered to 4th International Conference on Security, Conflict and Development, Middlesex University Business School, London, 16–17 June.

CSIR 2002. Question and answer booklet. CSIR publication. May.

CSS (Central Statistical Services). 1995. 1994 October household survey. Statistical release PO317.2 and PO401. Pretoria: CSS.

CSS (Central Statistical Services). 1995. Provincial statistics: Part two: Eastern Cape. Pretoria: CSS.

CSS (Central Statistical Services). 1996. Provincial statistics. 1995. Part 2: Eastern Cape. Pretoria: CSS.

Cunningham, P.W. & Haines, R.J. 2002. Economic globalization, industrial restructuring and development in the Eastern Cape: An examination of selected issues. *Africanus*, 32(1):56-77.

Department of Provincial and Local Government. 2001. Local economic development policy paper: Refocussing development on the poor. Draft document. June.

De Soto, H. 2000. *The mystery of capital: Why capitalism triumphs in the west and fails everywhere else.* London: Bantam.

Driver, A. 1998. The Fish River SDI: New hope for industrial regeneration in the Eastern Cape? *Development Southern Africa*, 15(5):787-808.

DTI (Department of Trade and Industry), 1997. National industrial participation policy for South Africa. Pretoria: Government Printer.

DTI (Department of Trade and Industry), 2001. Driving competitiveness in South Africa: The integrated industrial strategy. Pretoria: Government Printer.

DTI (Department of Trade and Industry). 2002a. Leveraging growth in the South African economy: The national industrial participation programme in review: 2002. Pretoria: Government Printer.

DTI (Department of Trade and Industry). 2002b. Accelerating growth and development: The contribution of the integrated manufacturing strategy. Pretoria: Government Printer.

DTI (Department of Trade and Industry). 2003. Report on projects of the national industrial participation programme. Pretoria: Government Printer.

Dunne, P. & Haines, R.J. 2001. Defence procurement and regional industrial development in South Africa: A case study of the Eastern Cape. Middlesex University Business School: Economics Group Working Papers, No. 98, August.

Dunne, J.P. & Haines, R.J. 2002. Defence restructuring and economic growth in South Africa. TIPS Working Paper, No.3. Johannesburg: Trade and Industrial Policy Secretariat.

Dunne, J.P. & Lamb, G. 2004. Defense industrial participation: The South African experience. In Brauer, J. & Dunne, J.P. (eds.). *Arms trade and economic development: Theory, policy and cases in arms trade offsets.* London: Routledge.

Duze, S., Haines, R.J. & Hosking, S. 1997. Assessment of labour, migrancy, infrastructural levels and social capital in the Port-Elizabeth-Uitenhage Metropole as a result of the Coega project. Report for Institute for Development Planning and Research/Coega IDZ Initiative. University of Port Elizabeth.

Eastern Cape Provincial Government. 2003. Strategy framework for growth and development 2004–2014. Bisho: Province of the Eastern Cape, 4 June.

Eastern Cape Provincial Government, 2004. Building the platform for long term growth and development: An outline of proposed short-to-medium PGDP programmes. Bisho: Province of the Eastern Cape, 2 January.

Fuggle, R. 1997. Review of documentation pertaining to Coega IDZ initiative. Commissioned by Eastern Cape Citrus Forum.

GCIS 1999. Defence Summary September 1999, *http://www.gov.za/projects/procurement/nip.htm.*

Glavovic, B C 2000. An independent review of one public participation process associated with the Coega IDZ and Port draft environmental impact reports and EMPR. Appendix 10 in Sandi & Mazizi Consulting. Final public participation report for the Coega IDZ and Port draft environmental impact reports including EMPR prepared for the Coega Development Corporation (Pty) Ltd., Port Elizabeth, December 2001.

Haines, R.J. 2003a. A development profile of the Nelson Mandela metropole. *Africanus*, 33(1).

Haines, R.J. 2003b. The politics of the strategic defence procurement programme in South Africa: The Kwa-Zulu Natal case. Paper presented to Seventh Annual Middlesex Conference on Economics and Security, 26-28 June 2003, University of West England, Bristol.

Haines, R.J. 2004. Defence offsets and regional development in South Africa. In Brauer, J. & Dunne, J.P. (eds.). *Arms trade and economic development: Theory, policy and cases in arms trade offsets.* London: Routledge.

Haines, R.J & Wellman, G. 2005.Value chains and institutional imperatives in regional industrial development: A consideration of the implementation and impact of defence offsets in the Western Cape. Africanus (Forthcoming).

Haywood, R. 2004. *Overview of globalization and the impact of free trade zones.* Booklet No.3, Ver. I of World Economic Processing Zones Association, Evergreen, Colorado, WEPZA.

Hirsch, A. 2000. Government incentives for private economic development: A context for the introduction of a new suite of investment incentives. DTI Position Paper.

Hirschowitz, R. 2000. Measuring poverty in South Africa. Pretoria: Statistics South Africa.

Hosking, S. 1998. Exploring the economies of an alternative to the Coega IDZ and Harbour Project, *Iliso* 2(1):2-21.

Hosking, S.G. 1999. Comparing heavy industry and agro-aquaculture options in the Coega River Mouth area. *SA Journal of Agricultural Economics*, 38(1):53-77.

Hosking, S.G. 2002. Coega, an investment in ministerial ego? *Eastern Province Herald*, 15 February.

Hosking S.G. & Bond, P. 1999. Infrastructure for spatial development initiatives or for basic needs? Port Elizabeth's prioritisation of Coega Port/IDZ over municipal services. In Khosa, M. (ed.). *Empowerment through service delivery.* Pretoria: HSRC, pp.35-85.

Hosking, S.G. & Haines, R.J. 2003. The arms deal and the Coega IDZ. Conference on the Eastern Cape: Historical legacies and new Challenges, University of Fort Hare East London Campus, 27-30 August 2003.

Hosking, S.G. & Jauch, H. 1997. Spatial development initiatives and industrial Development zones in the Eastern Cape, Unpublished report for Eastern Cape Socio-Economic Consultative Council, November.

Hosking, S., Haines, R.J. & Bank, L. 2002. The defence offsets and economic development in the Eastern Cape. Paper delivered to the NRF-ECAAR International Conference on Defence Offsets and Economic Development, Breakwater Lodge Conference Centre, 25-27 September.

HSRC. 2002. KZN economic review. Final report. Pretoria: Human Sciences Research Council.

ILO. (International Labour Organization). 1998. Labour and social issues relating to export processing zones. Geneva: ILO.

Jauch, H. 1997. Hidden EPZs? Industrial development zones. *SA Labour Bulletin*, 21(5):21-23.

Jauch, H. 2002. Export processing zones and the quest for sustainable development: A Southern African perspective. *Environment and Urbanization*, 14(1):100-113.

Katsouyanni, K., Touloumi, G., Spix, C., Schwartz, J., Balducci, F., Medina, S., Rossi, G., Wojtyniak, B., Sunyer,J., Bacharova, L., Schouten, J.P., Ponka, A. & Anderson, H.R. 1997. Short term effects of ambient sulphur dioxide and particulate matter on mortality in 12 European cities: results from time series data from the APHEA project, *British Medical Journal*, 314:1658-1663.

Le Quesne, T. 2000. The development of a South African environmental policy agenda and economic and development policy under the first ANC government. Mimeo. University of Cambridge

Le Quesne, T. 2001. The container economics of Ngqura: A note on MERITS May 2001 economic evaluation of the proposed port of Ngqura and development of a container terminal. Critique presented to members of the Mandela Metropole Sustainable Coalition. University of Cambridge.

Lewis, D. & Bloch, R. 1998. SDIs: Infrastructure, Agglomeration and the Region in Industrial Policy. *Development Southern Africa*, 15(5):727 -755.

Matthews, R. 2000. Defence offsets and development: The case of Saudi Arabia. Unpublished Paper, Cranfield University.

MERIT. 2001. Economic evaluation of the proposed port of Ngqura and development of a container terminal. Critique presented to members of the Mandela Metropole Sustainable Coalition.

Moosa, V. 2001. Record of decision on Coega project. Department of Environment and Tourism.

Muller, C. 1997. Managing Director of Marine Growers. Personal communication, 29 July.

Nel, H. 2003. The Coega development zone: Its economic fundamentals and further planning challenges. Unpublished paper. Rhodes University.

Newman, N. 1998. SDIs and IDZs: Challenges facing South Africa. *South African Labour Bulletin*, 22(4):42-45.

Niven, C. 1997. Director Amanzi Estates (Pty) Ltd. Personal Communication – July.

NMMM (Nelson Mandela Metropolitan Municipality) Economic Development Unit. 2001. Overview Economic Assessment: Consultants Brief.

Pakes, T. & Nel, H. 1997. Proposed Coega Industrial Development Zone (IDZ): Preliminary economic assessment. Report commissioned by the Coega IDZ Section 21 Company.

Province of the Eastern Cape: Department of Economic Affairs, Environment and Tourism. 2000. Towards a provincial economic policy. Discussion Paper.

Richardson, E. 2001. Making the leap, *Leadership*, April.

RSA Government. 23 May 1996. Growth, employment and redistribution: A macroeconomic strategy. Pretoria: Government Printer.

RSA Government. 1998. *Defence in a democracy: Incorporating South African white paper on defence 1996, and the South African Defence Review.* Pretoria: Government Printer.

SSA. 2003. Statistics South Africa statistical release PO441, GDP. Pretoria: Government Printers.

Warwar, Z. (ed) 2004. Panorama da pratica do Offset no Brasil. Brasilia: Minsterio das Relacoes Exteriores. [add Spanish accents]

Western District Municipality (WDM). 2001. Minutes of a Meeting of the Regional Economic Development Forum, held on 24 July 2001 in Port Elizabeth.

Wooldridge, T.H., Klages, N.T. & Smale, M.J. 1997. Proposed harbour development at Coega (Feasibility Phase): Specialist report on the near-shore environment. Report commissioned by the Coega IDZ Section 21 Company.