An overview of incentives theory and practice: A focus on the agro-processing industry in South Africa

Compiled by

Danie Jordaan

Directorate: Agro-processing Support

Department of Agriculture, Forestry and Fisheries

March 2012

EXECUTIVE SUMMARY

The South African agro-processing sector has particularly strong linkages both up- and down-stream and is the largest manufacturing sector in the economy. Given the sector's prominence in the government's industrial plans this overview has reviewed the background of incentives and support in general and the theory that underpins such programs.

Incentives are offered either as direct incentives, indirect incentives and non-fiscal, incentives. The common justification for incentives is that there are market failures which justify government intervention. Market failures most often cited include externalities, infant industries, information asymmetries and uncertainty and the political economy.

Despite the lack of evidence to support the efficacy or efficiency of incentives, governments continue to offer them. This is due to the ease with which investment impediments can be addressed compared to issuing specific grants or tax regime concessions to help counterbalance these impediments. Agency problems also exist between government agencies responsible for attracting investment and those responsible for the more generic business environment as well as the NGO and private sector support programs. All incentives have advantages and disadvantages, and it is therefore difficult to determine one set of 'incentives which work' for different contexts. South Africa, through both design and trial and error has avoided many of the worst examples of incentives. An overview of South Africa's incentives, administered by the DTI highlight the country's efforts to offer incentives that promote businesses in general and the agro-processing sector in particular.

When considering the agro-processing sector specifically and the design of incentives and support programs it is noted that studies of domestic and international market prospects for food and agricultural products are essential to guide policies to enable competitiveness and allow enterprises to take advantage of market opportunities. The temptation exists to provide incentives or preferential treatment to specific industries or parts of industries but the sustainability of such policies must be given careful consideration due to disastrous consequences associated with the abrupt removal of such preferential measures.

The most fundamental issues that a government must address in formulating policies in a global economy is to define its own role in fostering economic progress. Government's role, at its most basic level, calls for the provision of laws that define property rights, enforce contracts and resolve disputes. Without state action, markets could not exist. Governments can play an even larger role by fostering an enabling environment within which competitive businesses can thrive. Preference must be given to essential enablers that will make possible the function of markets and enterprises including the rule of law provision of infrastructure and a conducive trade policy. Second-order activities or important enablers that the state can provide include finance, transportation and information. Finally, useful enablers include grades and standards, linking small farmers to formal markets, business development services, incentives and support programs.

Table of Contents

1	. IN	TRODUCTION	1
2	. IN	CENTIVES & SUPPORT	1
	2.1.	Incentives and their rationale	1
	2.1.1	. Defining an incentive	1
	2.1.2	Why offer incentives?	2
3		LITERATURE REVIEW OF INCENTIVES	5
	3.1.	The broad picture	5
	3.2.	The rationale for continued use of incentives	6
	3.3.	Advantages and disadvantages of incentives	7
4		INCENTIVES IN SOUTH AFRICA	9
	4.1.	The South African investment climate	9
	4.2.	Evaluation of South African Incentives	.11
5	. IN	CENTIVES IN THE AGRO-PROCESSING CONTEXT	.18
	5.1.	International aspects of agro processing incentives	.18
	5.2.	South African incentives and support for agro-processing	.21
	5.2.1	. Broad support framework	.21
	5.2.2	State and parastatal support	.21
	5.2.3	Provincial support	.22
6	. SU	IPPORTING AGRO-PROCESSING WITH POLICY	.26
	6.1.	Institutional support and infrastructure for marketing and value adding	.26
	6.2.	The role of cooperatives	.27
	6.3.	Financing the value chain	.27
	6.4.	Enhancing the role of women	.28
	6.5.	Capacity building and information dissemination at all levels	. 29
7	. EN	IABLING ENVIRONMNETS FOR AGRO-INDUSTRIES	.30
8		CONCLUSIONS	.32
R	EFERE	NCES	.34

1. INTRODUCTION

The South African agro-processing sector has particularly strong linkages both up- and downstream. Up-stream, the sector links to agriculture across a wide variety of farming models and products. Down-stream, the sector's products are marketed across both wholesale and retail chains, as well as through a diverse array of restaurants, pubs and fast food franchises. Moreover, the South African food processing sector is now the largest manufacturing sector in the economy. This increases substantially once employment in the upstream (primary agriculture) is included.

In light of the sector's economic significance and prominence in the government's industrial plans this overview aims to highlight the incentives and other support frameworks that are available to the South African agro-processing industry. This overview also reviews the background of incentives and support in general and the theory that underpins such programs to provide context for the evaluation of the initiatives. Finally the document highlights an enabling environment for agro-processing enterprises and those necessary and sufficient conditions that are paramount to developing competitive agro-processing initiatives.

2. INCENTIVES & SUPPORT

2.1. Incentives and their rationale

2.1.1. Defining an incentive

UNCTAD (2003) defines an incentive as 'any measurable advantage accorded to specific enterprises or categories of enterprises by (or at the direction of) government'. Using this definition, an across-the-board reduction in corporate taxation is not an incentive scheme even though it may lead to increased corporate investment. Lowering corporate taxes to firms locating in a specific region, or producing certain goods or services, *is* an incentive scheme. By definition, if preferential tax treatment is applied to foreign direct investment (FDI) over local investments then this is an incentive scheme to attract FDI. Incentives can be fiscal or non-fiscal, direct or indirect. Fiscal incentives include direct 'cash' grants or tax breaks. Non-fiscal incentives may include fast-track approval processes or exemptions from certain regulations. Investment incentives can be categorised in a number of different ways. The following nomenclature is generally used:

• Direct incentives:

- Cash payments
- $\circ~$ Payments-in-kind (such as the provision of land or infrastructure to specific firms)
- Indirect (tax) incentives:

- Reductions in the rate of direct taxation, either permanent or temporary. These can be in the form of tax holidays with reduced Corporate Income Tax (CIT) rates, accelerated depreciation allowances, investment tax credits, investment tax allowances or deductions of qualifying expenses.
- Reductions in indirect taxation either permanently or temporarily (e.g. reduced import tariffs or VAT on inputs or capital equipment). These can either be upfront reductions in import duties, or administered via duty drawbacks.
- Protection against competition from rival firms through tariff increases.

• Other, non-fiscal, incentives include:

- Special deals on input prices from parastatals (e.g. electricity, oil).
- Streamlined administrative procedures or exemptions from certain pieces of legislation.
- Export Processing Zones (EPZs) which offer a combination of fiscal and non-fiscal incentives within a particular geographical area, normally near a port.
- Legislation and/or policies that promote investment into certain sectors, or by certain investors.
- Subsidised financing through parastatal lending or equity.

Barbour (2005) noted that from the standpoint of both the government and the beneficiary, there are arguments in favour of both tax incentives and up-front grants (Kaplan, 2001). Grants have the significant advantage of being 'on-budget', thus allowing for better oversight and monitoring, whereas indirect (tax) incentives hide the level of revenues forgone unless the 'tax expenditure' is calculated ex post. Even though they are less transparent, tax incentives are popular, as they involve no up-front financing cost. Grants are easier to target at specific categories of industry but tend also to be administratively expensive for both governments and businesses. Companies like tax incentives because they are less discretionary and more automatic. They are also less susceptible to budget reductions.

2.1.2. Why offer incentives?

Governments pursue investment incentives as a means to an end. Policy-makers attribute poor economic performance to a lack of investment. Incentives are used as a tool to boost investment and growth, even if the causal links between each of these stages is far from proven. Incentives work by changing the parameters of an investment project. Companies choose to make investments when the Net Present Value (NPV) of a project's cash flows (suitably discounted) is greater than zero. In a world where companies face no rationing of capital at its going user cost, companies undertake every project with a NPV greater than zero. In a world where companies face capital rationing, they choose the mix of projects with the greatest Internal Rate of Return. Incentives bias investors' decision-making positively in favour of investments in certain sectors or regions. By reducing the tax burden or providing cash incentives, there is increased expected profitability of projects in those sectors or regions. Where companies have good access to finance, the introduction of special incentives to certain sectors or regions should in theory lead to an overall increase in investment. The tax code can also influence how an investment is financed. For example, in most countries' tax systems interest payments on debt qualify as a tax-deductible expense, whereas returns to equity do not. This creates an incentive in favour of debt financing. Incentives can also affect the quality of investment (i.e. its performance as well as its quantity) (Barbour, 2005).

Neo-classical economic theory argues that providing tax incentives to one group of investors rather than another violates one of the principal tenets of a 'good tax system' – that of horizontal equity. This inequality distorts the price signals faced by potential investors and leads to an inefficient allocation of capital. The justification most often given for special incentives is that there are market failures surrounding the decision to invest in certain sectors and/or locations, which justify government intervention. Market failures result in either too much or too little investment in certain sectors or locations (Barbour, 2005). The key market failures most often cited (but hotly debated) are the following:

- Externalities. Positive externalities (not internalised in the project's rate of return) are higher in certain sectors than in others. A classic example is Research and Development (R&D), where investment yields a higher social than private rate of return (because not all the technological knowledge can be effectively patented) and as such there exists an ex ante justification for subsidising R&D investment (Kaplan, 2001). Without subsidy, the level of R&D investment would be below the optimum. A similar argument can be made for the reverse that investment in sectors with significant negative externalities (such as pollution) should face a higher tax burden.
- Infant industry. Markets often fail to correct for the gains that can accrue over time from declining unit costs and learning by doing. Capital markets are often very riskaverse and therefore avoid financing start-up companies, and equity markets are weak in developing countries. Hence, one argument for incentives is to support the establishment of businesses in the first few years. Subsidies to help potential investors overcome entry barriers in monopolised sectors, bringing about competition and lower prices, can be justified in a similar manner.
- Information asymmetries and uncertainty. Both providers and users of capital suffer from less than perfect information. As a result, some investment opportunities may not be financed or undertaken, even though they are NPVpositive. Financiers face imperfect information about the level of risk in certain sectors of the economy because they lack experience in those sectors. Similarly, there is often a 'first mover disadvantage' for investors in new sectors, as they assume more risk than those that follow. Successful investments in new sectors or

geographic areas have an agglomeration effect' as they provide information on the level of risk involved. For these reasons, it can be argued that incentives are required to counteract these inherent uncertainties and trigger a positive cycle of investment. In addition to market failures, other arguments for investment incentives are the following:

- Equity. Whilst an allocation of capital directed by unfettered market prices might lead to an efficient outcome, it may not lead to an equitable one. For example, economically depressed remote areas are at a competitive disadvantage because it is harder to attract labour and costlier to transport inputs and outputs. The failure of depressed areas to attract investment is sometimes also categorised as a market failure because of the vicious circle created by a lack of investment feeding off and reinforcing itself.
- **Political economy**. Opponents of investment incentives argue that many of them exist to support special (politically connected) interest groups. Politicians representing one region or province might argue for incentives in the region they represent without any economic justification for doing so.

Barbour (2005) points out that there are other purported benefits of incentives, such as symbolic 'signalling' effects and the need to compensate for inadequacies in the investment regime elsewhere. Provision of investment incentives is in the form of either tax relief or cash grants. International experience shows that such incentives play only a minor role in investment decisions. Firms make investment decisions based on many factors including projections of future demand, certainty about future government policy, prevailing interest rates and moves by competitors. In general, they see incentives as 'nice to have' but not deal breaking. Yet incentives remain a popular policy for both developed and developing countries.

A careful review of international best practice provides a useful checklist for what characterizes an effective and efficient investment incentive. Such an incentive stimulates additional investment for a minimum of revenue loss, and includes a cap on expenditure plus a sunset clause. Incentives should be transparent, easy to understand and with low administrative costs for both businesses and government. Incentives can be automatically available or provided on a discretionary basis, but discretionary allocation systems open up avenues for rent-seeking behavior by public servants or politicians. The processes and procedures by which incentives are designed and implemented are therefore important in determining their effectiveness (Barbour, 2005).

3. LITERATURE REVIEW OF INCENTIVES

3.1. The broad picture

By far the majority of the existing literature is extremely skeptical about the role of incentives in the decision to invest and therefore by extension the ability of incentives to affect investment patterns. The International Monetary Fund (Chua, 1995) takes the firm line that tax incentives do not stimulate investment significantly, and that, when they do, the cost often outweighs the benefits. Firms consider a myriad of factors when deciding whether or not to invest, affecting the perceived levels of both risks and return with specific projects. Major factors include confidence in the future, demand projections, interest rates, political and economic stability and the predicted moves of competitors. Firm surveys routinely show that incentives provided by governments are not particularly important in determining the decision to invest. A substantial body of empirical work exists looking specifically at the efficacy of incentives in driving additional FDI – see, for example, Shah and Slemrod (1995), Slemrod (1995), UNCTAD (2003), Wells et al. (2001), Zee et al. (2002). Investor surveys, econometric studies or case studies are the primary tools used to assess the efficacy of FDI incentives. The conclusions of this literature are the following (Barbour, 2005):

Foreign-based firms look at numerous factors when deciding whether and where to invest: namely, size of market, regulatory policies, natural resource endowments, and human capital availability. These fundamentals are examined first. Evidence from both surveys and econometric studies shows that fiscal incentives play an insignificant role in determining whether to invest. Surveys tend to show that tax incentives are 'good to have, but not a deciding factor'. Wells et al. conclude: 'experience strongly suggests that the fiscal investment incentives popular in developing countries have not been effective in making up for fundamental weaknesses in the investment climate. In fact, it seems that multinationals give more importance to simplicity and stability in the tax system than generous tax rebates, especially in an environment with great political and institutional risks (Barbour, 2005).

This general conclusion is qualified when foreign firms are deciding where to invest. When faced with several locations with similar investment climates (in terms of fundamentals such as political/economic stability, infrastructure, skills availability, capital controls, etc.), fiscal incentives can play a significant role in attracting footloose, mobile capital. Thus, for example, tax incentives have played a significant role in determining the location of FDI within the United States and the European Union. But, such 'tax competition' can easily lead to a detrimental Prisoners' Dilemma-type outcome in which competing countries or regions lose tax revenues. The result is often a transfer of resources from the host country government to the home country shareholders or, if there is no double taxation agreement, to the home country government (Barbour, 2005).

The costs of doing business matter more where footloose FDI is seeking a location from which to export, rather than where there is a 'market-seeking' investor. Incentives are therefore more likely to be attractive to export-focused firms rather than market-seeking ones.

There is little evidence that the benefits of tax incentives net of costs (i.e. their efficiency as well as their efficacy) add to the economic welfare of the host country. Existing studies do, however, suffer from severe data problems. Costs include forgone revenue, higher taxes for remaining taxpayers, administrative costs, etc. For a tax incentive to be beneficial to the host country fiscus, the NPV of the costs of the incentive would have to be more than offset by the NPV of the increase in tax revenue resulting from increased investment flows. Because of forecasting errors, incentives are often over-generous (Barbour, 2005).

Where tax incentives do work in attracting FDI, effective marginal and effective average tax rates matter more or less to firms depending on: their home county and its tax regime; the size of firm investing; the industry or service sector; the investing company's age and capital structure; the strategy of the parent company (Barbour, 2005).

Incentives interact with a host of other public policies to increase or decrease their effectiveness. Important considerations are the degree of monopoly power, foreign exchange rationing, credit rationing, home-country tax regimes and the transfer pricing practices of multinational companies (MNCs) (Barbour, 2005).

3.2. The rationale for continued use of incentives

Despite the lack of evidence to support the efficacy or efficiency of fiscal incentives, governments continue to offer them. Why is this? Wells et al. (2001) argue that tax incentives offer an easy way to compensate for other government-created obstacles in the business environment. In other words, fiscal incentives respond to government failure as much as market failure. It is far harder, and takes far longer, to tackle the investment impediments themselves (low skills base, regulatory compliance costs, etc.) than to put in place a grant or tax regime to help counterbalance these impediments. Although it is a second-best solution to provide a subsidy to counteract an existing distortion, this is what often happens in practice (Barbour, 2005).

Agency problems also exist between government agencies responsible for attracting investment and those responsible for the more generic business environment. Whilst investment-promotion agencies can play an important role in coordinating government activity to attract investment, they also often argue for incentives without taking account of the costs borne by the economy as a whole. Wells et al. (2001) point to 'stories' of potential investors locating elsewhere because of better incentive schemes, 'stories' that seldom stand up to rigorous analysis.

It may also be that incentives are the only policy tool available to the government at the time. A less cynical interpretation of the evidence would accept that governments often choose an active industrial policy that requires tools to implement it. The rationale for incentives, as a result of the very real market failures that occur within an economy, has been touched on in some detail. Governments may legitimately feel that strict horizontal equity with government taxation and expenditure does not adequately address policy objectives and inherent market failures in certain sectors. The policy objectives might include (Barbour, 2005):

- Increasing investment to a specific region, which does not receive as much investment as it should (given the economic fundamentals) because of information asymmetries.
- Increasing investment in R&D, an area often under-invested in by businesses because of its 'public-good' nature.
- Enhancing exports. Commentators now broadly accept that the majority of the successful East Asian economies provided incentives to firms to export, resulting in economy-wide benefits (see Wade, 1990).
- Employment promotion because of the economy-wide benefits of greater employment (lower crime, skills transfer, etc.), which are not taken into account by individual firms (this final point is especially pertinent in South Africa, which has extremely high rates of unemployment and underemployment. Part II explores this issue further).

3.3. Advantages and disadvantages of incentives

Every incentive has advantages and disadvantages, and it is therefore extremely difficult to determine *one* set of 'incentives which work' for very different economies with different challenges and circumstances. Much of determining 'what works' will depend on the circumstances of the economy, the competence of the tax administration, the type of investment being courted and the budgetary constraints of the government (Barbour, 2005).

Having said this, a careful reading of the evidence does provide a set of 'best practice guidelines' for policy-makers. The key lessons are necessarily broad and focus on the process and procedures surrounding incentive policy rather than a set of policy prescriptions. An effective and efficient incentive (Barbour, 2005):

- Stimulates investment in the desired sector or location, with minimal revenue leakage, and provides minimal opportunities for tax planning.
- Is transparent and easy to understand, has specific policy goals and is expressed precisely in legislation.

- Is not frequently changed, and provides investors with certainty over its application and longevity.
- Avoids trying to target cyclical depressions due to the lag effects of intervention.
- Is developed, implemented, administered and monitored by a single agency.
- Has low administrative costs for both governments and firms.
- Co-ordinates national, regional and local governments effectively.
- Includes follow-up and monitoring, both to ensure that the incentive criteria are being met and also to provide a monitoring and evaluation feedback loop.
- Incorporates sunset clauses for both the scheme itself and for the duration of benefits to any one firm.
- Includes a cap on expenditure, or taxes forgone, to the fiscus.
- Is non-discretionary and applied consistently against an open set of transparent criteria.

This last point is debatable. Any benefit (such as an incentive) allocated by public servants or politicians is potentially open to abuse and corruption. There is therefore a strong argument that incentives should be automatically available to all investors who meet a set of open and transparent criteria. However, an alternative argument is that firms should receive just enough incentive to induce them to invest, and no more. Each potential investment therefore needs to receive an incentive specific to its particular situation. Clearly, which of these two alternatives the government chooses depends on the strength of governance within the appropriate institutions. If public servants and politicians retain decision-making power over the allocation of incentives, then the processes and outcomes need to be as transparent as possible (Barbour, 2005).

If these guidelines are followed, government are less likely to enter into some of more gregarious incentive schemes, which have proved so expensive and ineffectual in the past (Boadway & Shah, 1995). Historical experience of the efficacy of incentive schemes also provides, with some caution, the following key policy lessons:

- Incentives need to be carefully designed to achieve a specific policy goal. Poorly targeted tax incentives prove ineffective and expensive. Tax holidays, while being easy to administer, are a good example of a poorly targeted incentive.
- Moderate tax incentives that are targeted to new investment in machinery, equipment and R&D, and that provide up-front incentives, are more likely to be cost effective in stimulating desired investment. These can have powerful signalling effects without significant loss of revenue. Investment tax credits and allowances provide specific and targeted policy tools to achieve this.
- Reducing corporate tax to a level comparable with other countries in the region is a 'sound tax incentive'. However, reductions beyond the level found in capital exporting countries (say, below 20-30%) often bring about greater revenue losses than increases in investment.

- Removing taxes on imported inputs used in the production of exports (not across the board) removes a serious disincentive to export production. Such a move eliminates the distortion in international prices created by import tariffs and provides an incentive for firms to respond to the relative cost advantages of the home economy. Duty drawbacks provide a good example of an incentive which supports exports. Such schemes, however, require a competent tax administration.
- In situations where reducing unemployment is a major policy objective, it is important to bear in mind that many tax incentives (such as accelerated depreciation) can work in the opposite direction by favouring capital-intensive investments. Incentives can be created, however, to explicitly encourage labour intensive production.

Finally, it is worth re-emphasising a few more general policy issues (Barbour, 2005):

- Incentives play only a marginal role in the investment decision for businesses.
- Growth in demand, economic and political stability, the state of the infrastructure, the rule of law, and a skilled labour force are more important in determining investment decisions.
- Special features of developing countries (such as market power, accumulated tax losses by many firms, credit rationing, and exchange controls) can severely constrain the effect of tax incentives in stimulating investment.
- Well-designed but poorly implemented tax incentives are equally ineffective. Clear and transparent application and screening procedures, and an effective tax administration regime with 'bite', are crucially important to the ultimate credibility and success of a tax incentive programme. Governments need to bear in mind the capacity of their tax administration when considering whether to implement incentives, and if so which.
- Armed now with both a theoretical justification for incentives and a wealth of experience on what tends to work and what does not in practice, the discussion now turns to the specific case of South Africa.

4. INCENTIVES IN SOUTH AFRICA

4.1. The South African investment climate

Macro- and microeconomic policies in South Africa have had a mixed impact on the investment climate. Table 1 illustrates how South Africa compares with its peers, using data from the *World Development Report 2005: A Better Investment Climate for Everyone*. On overall investment risk, South Africa performs well in comparison with the rest of the world, other middle-income countries and sub-Saharan Africa. A similar picture emerges with regard to the intensity of local competition; South Africa has fewer entrenched monopolies than its peers. The South African government also scores well in terms of policy

transparency. Only in the category of regional disparities does it not perform well (Barbour, 2005).

	Metric	South Africa	World Average	Middle Income Average	Sub Sahara Africa Average
Investment risk profile	1 – 12 1 = highest risk	10.5	8.8	8.7	7.2
Intensity of local competition	1 – 7 1 = no competition	5.3	4.7	4.6	4.2
Regional disparities in investment climate	1 – 7 1 = no disparities	2.9	3.4	3.1	2.9
Transparency in policy making	1 – 7 1 = zero transparency	4.3	3.9	3.5	3.8

Source : Barbour, 2005

Given this generally favourable report, it is pertinent to ask why South Africa has not performed better in terms of investment and growth. In part, this can be attributed to South Africa's ambitions, which are not to be 'a well performing African economy' but to compete on the global stage. However, there is also a sense that the South African economy has not performed as well as it could, or should, have done, given its widely praised macroeconomic record. There is a heated debate about why this is so, which it is impossible to consider fully within the confines of this paper. One set of analyses, however, highlights the fact that the microeconomic reforms have not matched the progress made with the macro-economy. Distortions have occurred in both the input and output markets, and particularly in the labour market. The mismatch between macroeconomic and microeconomic policy has created an environment where businesses are not investing and growth rates are disappointing (Barbour, 2005)

FDI has also been lacklustre. There has been considerable research into why this is so, given South Africa's stable macroeconomic and political environment (see Chandra et al., 2000 and 2001a, Gelb, 2003, Gelb and Black, 2004a, and Jenkins and Thomas, 2002). Analysts point to the following problems:

- For market-seeking FDI, the southern African economies are too small and are growing too slowly.
- Regional political instability (especially in Zimbabwe) spills over to South Africa, creating uncertainty for potential investors.
- There are high levels of HIV/AIDS and crime in South Africa.
- There is a shortage of skilled labour, not helped by South Africa's bureaucratic and complex immigration policy.
- There is regulatory uncertainty, particularly in the telecommunications, electricity and transport sectors.

This section hints that the positive investment climate in South Africa has failed to deliver the sort of growth rates envisaged and certainly not sufficient to make significant inroads into the depth and extent of poverty (Barbour, 2005).

4.2. Evaluation of South African Incentives

Through both design and trial and error, South Africa has avoided many of the worst examples of incentives. The positive features of the regime are (Barbour, 2005):

- Corporate income tax of 28% is comparable with that in other countries in the region and other emerging market economies. Many argue, however, that the additional 10% tax on dividends paid pushes South Africa into the top tier of income tax countries when compared with its peers (Bolnick, 2004; Fletcher, 2003; PriceWaterhouseCoopers, 2002).
- Apart from a brief period (1996-9), the government has eschewed tax holidays, one of the least effective investment incentives.
- Most incentives are well designed, well targeted and have a specific policy goal. The 40-20-20-20 depreciation schedule effectively targets additional rather than existing investment. The Strategic Industrial Projects (SIP) which is recently replaced by the Industrial Policy Projects (IPP) is a well-designed Investment Credit Allowance scheme, though it is not possible to say yet what the redundancy rate is.
- South African exporting firms can obtain relief on duties paid on products used in the manufacture of exports, even if the inputs are sourced from within the SACU region. Furthermore, in the Industrial Development Zones exporters can also import capital machinery duty free, thus providing effective support for manufacturing exports.
- The DTI and the National Treasury carry out regular assessments of the incentives on offer and which are removed or reformed accordingly. The policy process shows that the government is learning from past experience, and the most recent incentive (the Strategic Investment Programme) contains most of the features of a well designed incentive scheme (Bolnick, 2004).

In sum, the South African investment regime has much to be commended for, and it compares well with that in other countries in the region. However, there is also evidence that the regime is not as much in line with international best practice as might at first appear. Key problems include (Barbour, 2005):

- Poor awareness of existing incentives, especially on the part of small and medium scale enterprises. Only between 7% and 35% of South Africa's small businesses are aware of existing incentives for which they are eligible (UNCTAD, 2003). A separate survey by Business Map (2003) and the World Bank support this point.
- For all but the largest schemes, application and approval processes are excessively bureaucratic and complex, especially for small and medium-sized enterprises.

- Businesses view the costs of applying as sometimes higher than the benefits provided. By way of illustration, a large international accountancy firm in South Africa has a practice dedicated to assisting clients to apply and qualify for incentives.
- Too many incentives lack sunset clauses, for the scheme itself and for the duration of the benefit provided. Both are needed to stop industries or businesses surviving on incentives, rather than using them simply to get started. The Motor Industry Development Programme, for example, has been extended twice, and may be again, creating uncertainty for investors.
- South Africa has a relatively low tariff structure and is fully compliant with its WTO obligations. Tariff protection in manufacturing decreased from 15.6% in 1997 to 11.8% in 2002, but high rates still apply to certain manufactured products: textiles, clothing and related products remain the most heavily protected, with the ad valorem components of certain tariffs ranging up to 60% (WTO, 2003).
- South Africa also suffers from overlapping government agencies, each with a degree of responsibility for designing, budgeting and implementing incentives. The National Treasury focuses on costs and forgone revenue, whereas the DTI is more focused on 'marketing' South Africa as an investment destination. The revenue service is most concerned with administrative simplicity. Semi-autonomous government agencies, such as Khula, the IDC, the National Research Foundation and the International Trade Administration Commission (ITAC), also play a role in various incentives.
- Too many incentives are applied in a discretionary manner, including requests for adjustments in import tariffs (see below). This complicates and slows down the approval process and adds to the level of uncertainty faced by companies.
- Outside the five IDZs, there is no clear strategy on tariff protection or relief. Firms may seek tariff protection from imports for their sector, and rebates or more general tariff reductions on inputs. Any manufacturing company, exporting or not, may apply to the Board on Tariffs and Trade for tariff adjustments which must then be approved on a discretionary basis by the Minister for Trade and Industry. The process whereby applications for tariff adjustments or rebates are considered, appraised and evaluated is opaque and potentially open to abuse.
- The government tends to introduce grant incentives in response to lobbying by different sectors within both the public and the private sectors without a rigorous *ex ante* assessment of the costs and benefits or a coherent strategic justification.

There are internal reviews of specific programmes, commissioned by the relevant department and usually undertaken by independent outside consultants. While the majority of these do provide a critical evaluation of the incentive scheme under review, they tend to lack a rigorous analysis of the efficacy and the efficiency of the incentive. Instead, the evaluation focuses on whether the incentive has/has not led to a rise in investment, but not the counter-factual (would investment have risen anyway?), or whether the benefits were

worth the costs. South Africa does not yet calculate and report the 'tax expenditures' of revenue forgone through its tax incentives, with the exception of the SIP (Barbour, 2005).

Tables 2 & 3 summarise the current incentives in South Africa including the name of the incentive, the types of enterprises that are eligible and the details of the incentive.

Table 2 : Summary of South Africa's incentives

Black Business Supplier Development Programme The black Business Supplier Development Programme is a cost-sharing grant offered to small black-owned enterprises to assist them to improve their competitiveness and sustainability In order to become part of the mainstream economy and to create employment. BBSDP provides a grant to a maximum of R100 0000 (R800 0000 maximum for tools, machinery and equipment and R200 000 maximum for eligible enterprises to improve their corporate governance, management, marketing, productivity and use of modern technology) Co-operative Incentive Scheme CISD The Co-operative Incentive Scheme as a 90:10 matching cash grant for registered primary co-operatives (a primary co-operative consists of five or more members who are Historically Disadvantaged Individuals). The CIS is an incentive for co-operative enterprises in the emerging economy to acquire competitive business development services, and the maximum grant that can be offered to one co-operation entity under the scheme is R350 000 Industrial-Development-Related Incentives BUSINESS PROCESS SERVICES (BPS) The SA government implemented a Business Process Outsourcing and Offshoring incentive programme as from July 2007. Business Process Outsourcing and Offshoring incentive programme as from July 2007. Business Process Outsourcing and Offshoring incentive programme as from July 2007.	Eligible Enterprises Majority-black-owned enterprises with a predominantly team. Enterprises with a turnover of R250 000 to R35 million per year. The enterprise must have been operating and trading for at least one year. Eligible entities Incorporated and registered in SA in terms of the Co-operatives Act, of 2005 Act no. 14 as amended) Operating or will operate in the emerging sector. Adhere to co-operatives principles. Emerging co-operatives owned by historically disadvantaged individuals. Rural an semi-urban based. Biased towards women, youth and people with disability Eligible enterprises The DTI will determine whether an applicant is eligible to benefit for the incentive, based on the requirements that the applicant (legal entity). Must be preforming BPS activities. May be invelved in the train applicant is entities an existing.	Benefits R800 000 for tools, machinery and equipment on a 50/50 cost-sharing basis (contribution by DTI = 50%; contribution by the enterprise=50%. R200 000 for business development services on an 80:20 cost-sharing basis Eligible Activities Services for business development Business profile development. Feasibility studies/market research. Production efficiency. Technological improvement projects. Plants and machinery. Start-up requirements. Working capital requirements. Working capital requirements. Benefits A base incentive as a tax exempt grant paid over 3 years for each offshore job created an maintained Graduated honux incentive paid ac
Between July 2007 and March 2010, the incentive resulted in the creation of at least 6000 new jobs and attracted R3030 million in direct investments. As part of a process of improving SA's position as an investment destination, a systematic review of the BPO&O incentive programme was undertaken with the private sector, resulting in a revised BPS incentive.	May be involved in starting a new operation or expanding an existing operation in order to perform BPS activities, which may be operated from more than one physical location in SA. Must, by the end of 3 years from the start of operation of the new project or expansion have created at least 50 new off-jobs in SA as defined in BPS. Must commence its commercial operations no later than 6 months from the date on which the BPS incentive grant was approved Failure to reach this target date will lead to cancellation or disqualification of the application, thus requiring the applicant to submit a revised application to reapply for the grant. If in a joint venture arrangement, must have at least one of the parties registered in SA as a legal entity	Graduated bonus incentive paid as follows: 20% bonus for more than 400 but less than 800 off-shore jobs paid once off in the year in which the bonus level is reached 30% bonus for more than 800 offshore jobs paid once off in the year in which the bonus level is reached.
Capital projects feasibility Program (CPFP) The CPFP is a co-sharing programme that contributes to the cost of feasibility studies likely to lead to projects outside SA that will increase local exports and stimulate the market for SA capital goods and services	Eligible enterprises SA enterprises	Benefits The size of the grant must fall within the range of R100 000 to R5 million to a maximum of 55% of the total cost of the feasibility study for projects in Africa and 50% for projects outside Africa
Enterprise Investment Programme (EIP)	Eligible enterprises	<u>Benefits</u>

Manufacturing Investment Programme (MIP) The MIP is a reimbursable cash grant for local en foreign-owned manufacturers who wish to establish a new production facility; expand an existing production facility; or upgrade an existing facility in the clothing textiles sector	Investors in new and expanding projects in the South African manufacturing industry.	Investment grants of 15% to 30% of the investment cost of Qualifying assets (machinery and equipment, buildings and commercial vehicles) for new establishments or expansions.
Foreign Investment Grants (FIG)	Eligible Enterprises	Benefits
The FIG compensates qualifying foreign investors for costs incurred in moving qualifying new machinery and equipment(excluding vehicles) from abroad to SA	Foreign investors that have been approved for Manufacturing Investment programme (MIP)	A cash grant, to a maximum of R10 million, but the lower cost of: 15% of the value of new machinery and equipment: or the actual relocation cost of new machinery and equipment
Tourism Support Programme (TSP)	Eligible Enterprises	Benefits
The TSP is a reimbursable cash grant that aims to support the development of tourism enterprises that will stimulate job creation and increase the geographic spread of tourism investment. The grant is for the establishment or expansion of tourism operations such as: Accommodation services Passenger transport services Tour operators Cultural services, and recreational and entertainment services.	Investors in new and expanding projects in the South African tourism industry	Investment grants of 15% to 30% of the investment cost of qualifying assets (furniture, equipment, buildings and tourism vehicles) for new establishments or expansions.
Production Incentive (PI)	Eligible enterprises	<u>Benefits</u>
Under the PI applicants can use the full benefit as either an upgrade grant facility or an	Clothing manufactures	A benefit equal to 10% for the year
interest subsidy facility, or a combination of both.	Textile manufactures	ending \march201 of a company's
	Cut, make and trim operators	\manufacturing Value Addition (MVA)
	Footwear	
	Leather goods	
	Leather processors (leather goods and foot industries)	

Sector-specific Assistance Scheme(SSAS)	Eligible enterprises	Benefits
The SSSAS is a reimbursable 80:20 cost-sharing grant offering financial support to export councils, joint action groups and industry associations. The scheme comprises two sub- programmes, NAMELY Generic Funding and Project funding for Emerging Exporters. The aim of SSAS is aligned to the dti's overall objectives in several respects, as indicated below.	Non-profit business organisations in sectors and sub-sectors of the industry prioritised by the dti, in respect (i) generic funding and (ii) project funding provided that the purpose of the organisation and/or its proposed project aims to conform to the objectives of Trade and Investment SA(TISA) (a division of the DTI) and the DTI's export strategy. SSAS has three components Generic funding Funding of non-profit business organisations Project Funding Finding new export markets and promoting participation by black SMMEs, woman, youth and people with disabilities in the economy. Project Funding for Emerging Exporters Compensates the cost in respect of activities aimed at development of Sa emerging exporters	Travel and Accommodation, transport of samples and marketing materials, exhibition costs, Maximum allocation per projects is R1,5 million

Support Programme for Industrial Innovation (SPII)		
The Support Programme for Industrial Innovation is a support programme of the DTI, managed by the ICD The SPII is designed to promote technology development in industry in		
SA trough the provision of financial assistance for the development of innovative products or processes The SPII specifically focuses on the development phase, which begins at the conclusion of basic research and ends when a pre-production prototype has been produced		
Technology programme seda (STP)		
As part of the Government's strategy to consolidate small-enterprise support activities since April 2006, the activities of the Godisa Trust, the National Technology Transfer Centre the tree business incubators of the DTI the TAC Technology Advisory Centre, the Technology for Women in Business programme and the support programmes for small enterprises of South African Quality Institute were merged into a single programme		
Women economic empowerment incentives		
SA women are gifted and talented in designing and crafting products for both the local and international markets, mainly promoting SA culture and heritage. However one of the greatest challenges is to produce quality products that catch the eye of international and local buyers in boutiques and shops. BAVUMILE seeks to ensure the quality production of commercial viable products that are produced by women by imparting relevant skills end expertise. Isivande Women's Fund Is an exclusive women's fund established by the DTI. The fund aims at accelerating women's economic empowerment by providing more affordable, useable and responsive finance. IWC targets formally registered enterprises, 60% of which is owned and/or managed by women. The enterprises must have been existing and operating for 2 or more years and must fall within a loan range of R30 000 to R2 million		
Trade, export an investment incentives (CIP)	Eligible Enterprises	<u>Benefits</u>
The CIP is a cost sharing cash grant for projects to improve critical infrastructure in SA. The grant covers qualifying development costs from a minimum of 10% to a Maximum of 30% towards the total development costs of qualifying infrastructure. It sis made available to approved enterprises upon completion of the infrastructure project. Infrastructure for which funds are required is deemed to be critical: if the investment would take place without the said infrastructure or the said investment would not operate optimally.	Private investors/companies Municipalities	A cash grant to a maximum of 30% capped at R30 million for the development cost for qualifying infrastructure
Export Marketing and Investment Assistance (EMIA)	Eligible Enterprises	Benefits
Nation Pavilions an International Events The DTA assists SA exporters by organising National Pavilions to showcase local products international exhibitions. The EMIA scheme bears costs for space rental, the construction an maintenance of stands, electricity and water charges, as well as freight charges, up to max of 3 cubic meters or 2 tonnes per exhibitor International trade Exhibition Assistance DTI provides financial assistance to export councils, Provincial Trade and Investments Promotion /agencies Joint Action Groups export clubs and chambers of commerce for	SA manufactures an exporters SA export trade houses representing at least 3 SMMEs or businesses owned by Disadvantaged Individuals. SA commissions agents representing at least 3 SMMEs/HDI-owned businesses SA export councils, industry ass. And JAGs representing at 5 SA entities	Individual exhibitions participation Primary marker research and FDI Individual inwards missions
international trade exhibitions where there is no National Pavilion Schedule/approved. The		

EMIA scheme bears costs for rental or exhibition space, stand building, services, freight- forwarding and travel but will excise discretion on the market and sector Group Outwatding-Investment Missions The DTI provides assistance to SA entities that which seek encourage and attract foreign direct investment into SA. Offerings also include assistance for Export/Investment seminars an conferences Market research missions Bidding/Lobbing missions		
Automotive Investment Scheme (AIS) The AIS is an incentive designed to grow and develop the automotive sector through investment in new and/or replacement models and components that will increase plant production volumes, sustain employment and/or strengthen the automotive value chain.	Eligible Enterprises Light motor vehicle manufacturers that have achieved, or can demonstrate that they will achieve, a minimum of R50 000 annual units per plant, within a period of 3 years or Component or deemed component manufactures that are part of the Original Equipment Manufacturer OEM) supply chain and will achieve at lease 25% of the total entity turnover or R10 million by the end of the first full year of commercial production as part of a light motor vehicle manufacture supply chain locally or/or internationally	Benefits The AIS provides for a taxable cash grant of 20% of the value of qualifying investment in productive assets, as approved by the DTI An additional taxable cash grant of 5% to 10% may be made available for projects that significantly contribute to the development of the automotive sector
Tax Allowance Incentive (21i TAI) The 12iTax Incentive is designed to support Greenfield investments well as Brownfield investments. The new incentive offers support for both capital investment and training. Investment in Manufacturing assets to improve productivity and training of personnel to improve productivity and skills.	Targeted Enterprises A Greenfield project New industrial projectsBrownfield project Expansion or upgrade industrial projects	Benefits Upgrade an industry within SA Provide general business linkages within SA Create direct employment in SA Provide skill development in SA The Greenfield project be located within an IDZ
Film an TV Incentive The SA government offers a package of incentives to promote its film production industry. The incentives consists of the Foreign Film and TV production incentive to attract foreign- based film productions to shoot on location in SA and the SA Film an TV production on Co- production incentive , which aims to assist local film producers in the production of local content.	Eligible EnterprisesForeign-owned qualifying productions with Qualifying South AfricanProduction Expenditure (QSAPE) of R12 million and above, provided that at least 50% of the principal photography schedule must be in SA for a minimum of 4 weeks.Applicant must be a Special Purpose Vehicle (SPCV) incorporated in the RSA solely for the purpose of the production of the film or TV project An applicant must be the entity responsible for all activities involved in making the production in SA and must have access or full financial informationFor the whole production worldwide. Only one entity per film production, TV drama or documentary series is eligible for the incentive.	Benefits 15% of QSAPE; the rebate is capped at R20 million

5. INCENTIVES IN THE AGRO-PROCESSING CONTEXT

5.1. International aspects of agro processing incentives

National food and agricultural policies and international trade policies are a major factor determining the international division of labour and the geographical distribution of agricultural and agro-industrial production. Studies of domestic and international market prospects for food and agricultural products are essential to decisions on the set of policies that will enable producers and processors to gain competitiveness and take advantage of market opportunities (Barbour, 2005).

Policies that affect the prices of inputs and outputs to producers, processors and consumers are of critical importance. Therefore, special attention should be given to policies regarding taxation, subsidies, direct price support and tariffs, both in the short and the long term (Barbour, 2005).

The temptation exists for policy-makers to provide incentives or preferential treatment to the industries supplying inputs, or to producers, processors or final consumers of food. These policy interventions are provided in various forms: tax concessions to producers of inputs and products, subsidies on prices of inputs or food, support prices for producers at relatively high levels, protective tariffs or other international trade barriers. The sustainability of such policies must be given careful consideration before adoption, as history is full of examples of the disastrous consequences associated with the abrupt removal of such preferential measures (Barbour, 2005).

It is important that policies applied at all levels of the food production and processing system are compatible and work towards the achievement of the same goal. Whether in the form of a tax, subsidy, support or tariff, policy interventions must generate net benefits for society. In other words, the loss in fiscal revenue from a reduction in taxes must be more than offset by the increase in jobs and benefits associated with the industry; the cost of a subsidy must be more than offset by gains for the direct and indirect recipients of such a subsidy; relatively high prices must ensure the required increase in production and expansion of the industry concerned, with benefits in terms of employment and income; and the subsidy to final consumers must have net benefits in terms of nutrition and productivity (FAO, 1997).

An important aspect of agricultural protection policies is the phenomenon that tariffs on processed agricultural products have generally been higher than those on their primary commodities. This tariff wedge between a processed commodity and its corresponding primary commodity is often referred to as tariff escalation. Developing countries have for many years identified tariff escalation as a major issue concerning market access and an important obstacle to their efforts to establish processing industries. However, most of the empirical studies on this process are by now outdated. A recent study by FAO analyses the

impact of the Uruguay Round on tariff escalation for agricultural products in the EU, Japan and the United States. The study shows that tariff escalation has been reduced as a result of the Uruguay Round, creating some opportunities for developing countries to diversify their exports into higher-value processed commodities. The study concludes, however, that high levels of escalation will still remain after the implementation of the Uruguay Round concessions (FAO, 1997).

In many developing countries, from colonial times at least until the early 1980s, agriculture tended to be directly or indirectly taxed through a combination of measures involving forced procurement at prices below market prices, taxation of inputs, subsidization of manufactures and overvalued exchange rates. However, this phenomenon presented many diversified situations. On the one hand, for tropical beverages, oils, alcohol and tobacco, often against a backdrop of underpaid or taxed agriculture, huge subsidies were paid to the processing industry, which was either organized in the form of parastatals (as in Africa), or controlled by multinationals (as in Central America and Asia), or again characterized by a tight oligopolistic structure (as in much of Latin America) (FAO, 1997).

On the other hand, the rise of a modern food processing sector has often been delayed or even suppressed by the combination of agricultural taxation and consumption subsidies characteristic of traditional food policy in developing countries. Food distribution systems, in particular, have relied on forced procurement and import subsidies, thus lowering simultaneously the supply of local produce and prices of processed food products. Incentives to develop local manufactures for a variety of food products have thus been artificially depressed, especially in sectors such as dairy products, packed meat and wheat derivatives. On the other hand, in several developing countries the rise of a domestic fruit and vegetable processing industry has been indirectly encouraged by the punitive policies adopted against the production of basic food items. A policy of "benign neglect" or, in some cases, of open subsidization in favour of irrigated crops has thus favoured the growth of an agro-industrial complex based on fruits and vegetables in such diverse countries as Morocco, Turkey, Mexico and Chile. Similarly, in the case of tropical fruits, many new industrial enterprises have been successful in producing fruit juices, preserves and products for domestic industries as a result of the relatively high profitability of these products, technological advances in the transformation processes and the need to diversify out of sugar and other plantation crops (FAO, 1997).

An interesting example of a development of the latter type is Brazil, where the production of juices from tropical fruits has increased more than twentyfold in the past ten years. These fruits, produced mostly in the northern and north-eastern areas of the country, used to be consumed in processed form only in local markets, mainly because the technology did not allow the production of juices with the amount of chemicophysical stability necessary to maintain the organoleptic characteristics of the product at a commercially acceptable level. This technological barrier has been completely overcome in the course of the 1980s. As a

consequence, the Brazilian industry that processes tropical fruits, together with the production of fruits themselves, has greatly expanded and acquired a large share of the export market where, for certain products it almost has a monopoly.

A special problem of change that concerns both food price policies and the processing industry is the transition to market economies of the former centrally planned economies of Eastern Europe and the CIS. Here the pricing system prior to transition was characterized by extreme subsidies to both food producers and consumers. While roughly two-thirds of agricultural land was in the hands of state or collective farms, virtually all agro-industries were state-owned monopolies. These paid little attention to quality and technological development, even for products that were high-value sources of foreign exchange (such as caviar). The transition process has changed the economic environment by removing or substantially reducing food subsidies, by privatizing agriculture and industry and by deregulating local markets. In the absence of a comprehensive liberalization programme, however, new disequilibria have been created. Higher retail prices for food are often not transmitted to farmers because the processing industry is free to use market power to appropriate monopolistic rents. At the same time local producers are faced with strong competition from imports of higher-quality, Western processed food (FAO, 1997).

The current trend towards liberalization and increased market-orientation of agricultural policies opens a series of interesting perspectives for agricultural and agro-industrial producers. In an international macroeconomic framework characterized by low inflation and low interest rates in the industrialized countries, international trade should receive a significant impulse, especially in liberalizing agricultural markets. Growth prospects appear favourable, particularly because of the increasing diversity of food consumption, the switch to high income-elasticity goods and the increasing importance of marketing and processing. These phenomena could result in a massive reallocation of agricultural products along new lines of comparative advantage, following both the new market perspectives and the possibilities disclosed by technology and the evolution of tastes (FAO, 1997).

Moreover, in many developing countries, from the mid-1980s onwards and in the wake of the general move towards increased liberalization and market orientation, there seems to have emerged a new consciousness of the importance of agriculture and related sectors. In many cases this new awareness has coincided with important policy changes such as the privatization of government-owned marketing and processing companies and with the end of the willingness to subsidize private oligopolies in the commodity sector. The stage appears to have been set, therefore, for an endogenous growth of the domestic food industry wherever a comparative advantage can be exploited. Nevertheless, it must be emphasized that, in many cases, discrimination against domestic agrifood industrial activities in developing countries continues, as the discriminatory policies have only attenuated rather than disappeared (FAO, 1997).

5.2. South African incentives and support for agro-processing

In the South African context support for the agro-processing sector and enterprises in the sector are seated with a range of state, parastatal, private sector and NGO institutions. This support ranges from government programs directed by government priorities, NGO's operating in the agro-processing space to the private sector involved in the sector. Support in the context of this overview is considered to include incentives, government programs targeted at the achievement of government goals, development finance, private sector products and services and NGO programs.

5.2.1. Broad support framework

In the South African context support for the agro-processing sector and enterprises in the sector are seated across a broad range of institutions and at different levels. Figure 1 summarizes the range of support available to the South African agro-processing sector. This support is categorized according the incentives, public support through government programs, public and private development finance, private support programs, private sector funding, and NGO programs. The broad range of support available to agro-processing enterprises as summarized provides only a broad overview of the type support that is available. Evidently each of these categories is significantly nuanced each with more specific programs driven by the mandates of these institutions.

5.2.2. State and parastatal support

Bearing the broad framework of support available in mind Figure 2 more specifically summarizes the state and parastatal role and support to South African agro-processing enterprises. The Constitution of South Africa steers parliament, the cabinet and national departments of the country which ultimately determine implementation of the programs targeted at the achievement of government goals. Broadly speaking and at a national level eight national department play some role in providing some support assistance to the agro-processing sector direct or indirectly. These include Agriculture, Forestry and Fisheries, Trade and Industry, Economic Development, Science & Technology, Public Works, Rural Development and Land Reform, Transport and Public Enterprises to a greater or lesser extent. However, the Department of Trade and Industry have the primary mandate with regards to support of the agro-processing sector while the remaining departments have a supportive or facilitating role. The Department of Economic Development Corporation (IDC) which has a dedicated agro-industries division.

In terms of incentives to agro-processing enterprises the primary mandate for the administration and disbursement of such incentives in South Africa is seated with the

Department of Trade and Industry. In the case of the agro-processing sector responsibility rests with the Agro-processing unit in the Industrial Development Division of the DTI.

5.2.3. Provincial support

While much support to agro-processing enterprises is driven from a national level with institutions that have a national approach provincial governments also play a significant role in the support to the agro-processing sector. These provincial government departments are also either directly or indirectly involved in support of agro-processing enterprises in their respective provinces and the various programs and the specific support is driven by the mandates of these departments. In broad terms the provincial agriculture departments tasked with agriculture, rural development and economic development are the most active in the respective provincial agro-processing sectors.

Provincial support to agro-processing enterprises also includes programs from the provincial economic development agencies which are broadly mandated to promote investments and provide development finance to businesses in the particular provinces, including agro-processing businesses. Some of the provincial development agencies that have specific focus areas dedicated to agribusiness/agro-processing include Eastern Cape Development Corporation, Wesgro, Kwazulu-Natal Agribusiness Development Agency, Mpumalanga Economic Growth Agency.

Selected success stories of these agencies and their support to agriculture and agroprocessing are well recorded. The Mpumalanga Economic Growth Agency and other partners have, for example, been successful in their involvement in the establishment of the Timbali Technology Incubator in Mpumalanga. This incubator has proven to be successful in establishing a range of small scale agri-based enterprises in Mpumalanga.

Moreover, the IDC, also hosts regional offices in eight provinces including Bloemfontein, Polokwane, Rustenburg, Kimberley, Cape Town, Durban, East London and Nelspruit.



Figure 1 – Broad framework of support to agro-processing sector



Figure 2 – State & parastatal support to the agro-processing sector DAPS: Directorate: Agro-processing Support at DAFF



Figure 3 – State & parastatal support to the agro-processing sector

6. SUPPORTING AGRO-PROCESSING WITH POLICY

Ohiokpehai, Opara, Kinyua, Kamau and Wasilwa (2009) highlight specific factors that may contribute to successful agro-industrialization in the Sub Sahara Africa context. In principle these refer to the development and implementation of enabling policies including marketing and market infrastructure development, finance and access to micro-credit, enhancing the role of women, and sustainable capacity building. In the South African agro-processing context such policy recommendations may be applicable and serve as reference for developing tailor made policies and programs from a smallholder perspective. Each of these recommendations aimed at supporting agro-processing through policy are overviewed in this section.

6.1. Institutional support and infrastructure for marketing and value adding Marketing is the management process responsible for identifying, anticipating and satisfying customer requirements profitably. This definition assumes the creation of products and value with defined customers. Where marketing is applied to enterprises in rural areas, the starting point is to assess the terrain of the enterprise in general then evolve the mechanism within which marketing can be applied. In seeking to intervene from a marketing perspective, it is noted that agro-enterprises are created with a view to eliminating poverty and improving food and nutrition security (Ohiokpehai, Opara, Kinyua, Kamau & Wasilwa, 2009).

Efforts that seek to realize value adding and marketing of food and horticultural crops in Sub-Saharan Africa also need to take cognizance of the individualized nature of smallholder farming. This can be addressed through produce aggregation and institutional formation in order to tap potential market opportunities. Indeed, the efficiency of conversion of the agricultural produce directly to cash or to processed products, then to branded products that are presented for sale in the marketplace, and finally to cash is very important (Ohiokpehai, Opara, Kinyua, Kamau & Wasilwa, 2009).

Activities involved in the continuum – from production to the market, or the value chain – present the opportunities that must be tapped within an institutional formation. All marketing efforts need to start with the identification of crops, or produce-based services, that when aggregated create the basis of attracting buyers. With value addition being the key focus in most development efforts in Sub-Saharan Africa today, the need to create institutions that revolve around agricultural produce is high. In order to promote access to markets and well-defined customer segments, marketing efforts need to be centred on the formation of value-adding Common Interest Groups (CIGs). These groups are created around what farmers produce and, with support, graduate into formal institutions that pool investment resources to procure processing equipment for value addition. It is proposed

that the institution creation process runs parallel to the capacity building efforts in entrepreneurship and nutrition so that after the capacity building efforts, the enterprises have branded value-added products for the marketplace (Figure 3). However, in seeking to address the foregoing it is necessary to take note of the institutional and operational constraints that this effort may encounter (Ohiokpehai, Opara, Kinyua, Kamau & Wasilwa, 2009).

Agri-food markets, and more specifically horticultural markets, exhibit specific characteristics that vary from one category to the other. The markets can be divided into four categories based on size, players and the produce on offer – local, national, regional and international. As one moves from the local category to other categories, the level of sophistication increases in terms of products, transactions, infrastructure, business management and logistics. This increases the costs of doing business and forces non-complying players to drop off and thus the numbers decrease from one category to the next (Ohiokpehai, Opara, Kinyua, Kamau & Wasilwa, 2009).

6.2. The role of cooperatives

The creation of a cooperative as the institutional vehicle for share-based marketing and investment provides a vital marketing channel for small-scale farmers. The benefit of the produce aggregation through this collective action achieves the desired economies of scale and promotes the convenience for processors to collect the produce and deliver to their factory from a centralized location. The collective action promotes the realization of better prices from the raw produce marketing. The successful development of the Kenya dairy industry provides a very good illustration of the potential role of cooperatives in agro-industry development in sub-Saharan Africa. The Kenya dairy industry is perhaps one of the most developed in the region and ranks second after South Africa in terms of revenue (Ohiokpehai, Opara, Kinyua, Kamau & Wasilwa, 2009).

6.3. Financing the value chain

Agriculture has suffered from lack of investment or products that are suited to attract investment. Value addition calls for capacity building at the various levels of the value chain, and therefore there is a need for financial tools to pay for the services that add value to the chain. The arrangement that needs to be put in place to ensure that farmers demand extension can follow the model implemented by the Kenya Agricultural Productivity Programme, where service providers flag opportunities and then get the community to pay for the services based on a framework created between the programme and community institutions. Financing value addition investments is similarly supported and this model has proved Financing value addition investments is similarly supported and this model has proved successful for adoption. Microfinance institutions also need to be supported to identify the opportunities along the value chain so that there is certainty for lending in agriculture. With organized markets, financial institutions such as banks (e.g., K-Rep, Equity, etc.) can be co-opted as partners/collaborators and important stakeholders, thereby enabling them to provide finance to farmers, entrepreneurs and other players along the value chain.

6.4. Enhancing the role of women

In sub-Saharan Africa, women contribute 60-80% of the labour in food production activities for household consumption and for sale. A survey of national sectoral reports for Benin, Burkina Faso, the Congo, Mauritania, Morocco, Namibia, Sudan, Tanzania and Zimbabwe found that women's contribution to household food production ranges from 30% in Sudan to 80% in the Congo, while the proportion of women in the economically active labour force in agriculture ranges from 48% in Burkina Faso to 73% in the Congo (FAO, 1994).

Many studies in Africa show that the poor achievement of the agricultural goals on the continent in terms of efficiency, sustainability and equity is due to the predominant practice of directing training and resources to men only (FAO, 1994). This realization has brought about a growing concern about gender issues. The focus of many African governments now is to increase the productivity of the agricultural sector by improving the condition of women, especially those in the rural and semi-urban areas. In Ghana's Medium Term Agricultural Development Strategy (MTADS) and the country's Vision 2020 Development Plan, the strategies are to: i) bring services physically closer to women; ii) involve women in the formation and management of programs affecting them; and iii) make women (individually or as groups) the contact point in the delivery of services directly to the beneficiaries and to receive feedback.

Food processing contributes to food and nutrition security through reducing food losses, contributing to more diverse diets, and supplying important vitamins and minerals. In addition to the time-consuming tasks of grinding and pounding staple grains, and smoking fish and meats, women process and preserve the fruit and vegetable produce from their home gardens and from the forests. Moreover, women are almost universally responsible for preparing food for their households and thus for the nutritional well being of household members. It is the belief of many that if women in Africa are given the opportunity, they will contribute substantially in the development of the food processing industry and solve the persistent problem of malnutrition and poverty in the rural and semi-urban communities (Ohiokpehai, Opara, Kinyua, Kamau & Wasilwa, 2009).

6.5. Capacity building and information dissemination at all levels

The manufacturing industry in Africa is mainly for the domestic and to a certain extent the regional markets. Its participation in global trade remains limited, mainly due to its inability (lack of technology and know-how) to meet market demands and requirements in terms of quantity and quality (supply side constraints) and overcome non-tariff barriers for trade.

To effectively compete in these markets, African countries have to strengthen the present limited supply capacity (build competitive suppliers) and develop a reliable food safety and quality assurance system based on a food chain approach, risk analysis and traceability, especially for large-scale businesses.

The improvement of agro-processing in Sub-Saharan Africa hinges on the fact that capacity building at all levels and the development of incubator (hub) model processing and marketing centers must be placed as an integral part of the strategy to promote agro-processing. A training analysis of the post-harvest horticulture sector in Tanzania, for example, highlighted the need to build awareness and sensitize all key stakeholders on the problems (and opportunities) facing the sector vis-à-vis its growing importance in supporting the government's on-going efforts to improve food security in the country, as well as to create new employment opportunities, particularly in the rural sector. Successful examples of such centres are Clayuca at CIAT headquarters, Cali, Colombia, and Agri-Business Incubation at ICRISAT headquarters in India.

The approach has been used extensively and forms the basis of capacity building programs. Attention was given to radio as a cheap means of information dissemination to communicate with farmers about the goodness of soybeans. The aim was to reach all key stakeholders through the best and cheapest possible means of communication and to ensure multiple-way communication. Also, community learning was evolved through the use of monthly or bimonthly school nutrition and hygiene talks in the local languages. In addition, documentation and publication of easy-to-read junior journals was facilitated and dissemination of scientific and extension materials at national, regional and international levels, especially to primary schools. The most important means of national and regional level communication is through books, manuals, technical handouts, flyers, brochures, posters and leaflets for use by farmers and extension staff, and dissemination materials were done in English and local languages. It has been reported that the inappropriateness of training material was one of the constraints faced by small-scale agro-processors. In the case of Tanzania, hands-on training programs on techniques and procedures for improved post-harvest handling were carried out in Dar es Salaam, Morogoro and Lushoto.

These cities represented important horticultural production and marketing areas in Tanzania. Prior to implementing the training sessions, a series of consultations and study visits were carried out to identify critical technical and marketing issues facing growers and marketers and other stakeholders in the horticultural industry. Trainees included fruit and vegetable growers, wholesalers and retailers, trainers (mainly research and extension

personnel) and representatives of other stakeholders in the horticultural industry. Topics covered in the training included assessing crop readiness to harvest, cool chain management, reducing physical damage, quality control, packaging, storage, and transportation. Based on surveys conducted prior to and after the training programs, trainees reported significant improvements in their understanding of the principles and practice of improved post-harvest handling (Ohiokpehai, Opara, Kinyua, Kamau & Wasilwa, 2009).

7. ENABLING ENVIRONMNETS FOR AGRO-INDUSTRIES

Christy, Mabaya, Wilson, Mutambatsere and Mhlanga (2009) reviewed the enabling environments for competitive agro-industries. They point out that one of the most fundamental issues that a government must address in formulating policies in a global economy is to define its own role in fostering economic progress. The role of the state, at its most basic level, calls for the provision of laws that define property rights, enforce contracts and resolve disputes. In this sense, without state action, markets could not exist. Governments can play an even larger role by investing in infrastructure that contributes to the efficient functioning of markets. In Figure 4, they identify a hierarchy of enabling needs that a government can consider in addressing its role in advancing economic progress. The proposed hierarchy divides state actions into three levels of activities that characterize and assess enabling environments for agro-industrial enterprises. At the base of the pyramid, the state must provide essential enablers that will make possible the function of markets and enterprises. In this category they place items such as rule of law (e.g. contract enforcement, property rights), provision of infrastructure and a conducive trade policy. So-called important enablers are second-order activities that the state can and often does provide, such as finance, transportation and information. Finally, they define useful enablers as sufficient but not necessary conditions to include grades and standards, linking small farmers to formal markets and business development services.



Figure 4 – Enablers for agro-industrialization

More specifically it is noted that the range of enablers for agro-industrialization include: Essential enablers

- Land tenure and property rights
- Infrastructure
- Policies, tariffs and quotas for imported products

Important enablers

- Norms, standards, regulations and services related to production
- Research and development
- Financial services for agro-industries

Useful enablers

- Ease of Doing Business
- Business development services
- Business linkages

In developing a strategy to support agro-processing enterprises in South Africa it may be prudent to assess such strategies based on their contribution to the essential, important and useful enablers for agro-industrialization.

8. CONCLUSIONS

The South African agro-processing sector has particularly strong linkages both up- and down-stream and is the largest manufacturing sector in the economy. In light of the sector's economic significance and prominence in the government's industrial plans this overview has reviewed the background of incentives and support in general and the theory that underpins such programs. The analysis has also highlighted the incentives and other support frameworks that are available to the South African agro-processing industry to provide context for the evaluation of South African incentives. Finally the document has highlighted what constitutes an enabling environment for agro-processing enterprises and which conditions are necessary and sufficient conditions for developing competitive agro-processing initiatives.

Incentives, generally, are offered either as direct incentives, indirect (tax) incentives and non-fiscal, incentives. Governments pursue investment incentives as a means to an end. Policy-makers attribute poor economic performance to a lack of investment and incentives are used as a tool to boost investment and growth, even if the causal links between each of these stages is far from proven. The justification most often given for special incentives is that there are market failures surrounding the decision to invest in certain sectors and/or locations, which justify government intervention. The key market failures most often cited include externalities, infant industries, information asymmetries and uncertainty and the political economy.

Despite the lack of evidence to support the efficacy or efficiency of fiscal incentives, governments continue to offer them. This can be ascribed to the ease with which the investment impediments can be addressed compared to issuing specific grants or tax regime concessions to help counterbalance these impediments. Agency problems also exist between government agencies responsible for attracting investment and those responsible for the more generic business environment.

A review of international best practice provides a checklist for what characterizes an effective and efficient investment incentive. Such an incentive stimulates additional investment for a minimum of revenue loss, and includes a cap on expenditure plus a sunset clause. Incentives should be transparent, easy to understand and with low administrative costs for both businesses and government.

It is also noted that every incentive has advantages and disadvantages, and it is therefore extremely difficult to determine one set of 'incentives which work' for very different economies with different challenges and circumstances. Much of determining 'what works' will depend on the circumstances of the economy, the competence of the tax administration, the type of investment being courted and the budgetary constraints of the government. In the South African context it is incomprehensible why South Africa has not performed better in terms of investment and growth. In part, this can be attributed to South Africa's ambitions, which are not to be 'a well performing African economy' but to compete on the global stage. However, there is also a sense that the South African economy has not performed as well as it could, or should, have done, given its widely praised macroeconomic record. At the same time through both design and trial and error, South Africa has avoided many of the worst examples of incentives. An overview of South Africa's incentives, administered by the DTI highlight the country's efforts to offer investment incentives to promote businesses.

When considering the agro-processing sector specifically and the design of incentives for this industry it is noted that studies of domestic and international market prospects for food and agricultural products are essential to decisions on the set of policies that will enable producers and processors to gain competitiveness and take advantage of market opportunities. The temptation exists for policy-makers to provide incentives or preferential treatment to the industries supplying inputs, or to producers, processors or final consumers of food. However, the sustainability of such policies must be given careful consideration before adoption, as history is full of examples of the disastrous consequences associated with the abrupt removal of such preferential measures.

In terms of incentives to agro-processing enterprises the primary mandate for the administration and disbursement of such incentives in South Africa is seated with the Department of Trade and Industry through the Agro-processing unit in the Industrial Development Division. However, support for the agro-processing sector and enterprises in the sector reaches further than incentives and is located in a range of other state, parastatal, private sector and NGO institutions. This support ranges from government programs directed by government priorities, NGO's operating in the agro-processing space to the private sector involved in the sector. As a consequence agency problems will inadvertently exist between government agencies and other programs in part due to uncoordinated efforts in supporting and incentivizing these businesses.

Research in Sub Sahara Africa proposes that the development and implementation of enabling policies is a pathway to developing value adding enterprises. Such policies include marketing and market infrastructure development, finance and access to micro-credit, enhancing the role of women and sustainable capacity building. In the South African agroprocessing context such policy recommendations may be applicable and serve as reference for developing tailor made policies and programs from a smallholder perspective.

Lastly it is noted that one of the most fundamental issues that a government must address in formulating policies in a global economy is to define its own role in fostering economic progress. The role of the state, at its most basic level, calls for the provision of laws that define property rights, enforce contracts and resolve disputes. In this sense, without state action, markets could not exist. Governments can play an even larger role by developing an

enabling environment within which competitive businesses in general and agro-processing enterprises specifically can thrive. Before considering programs such as incentives consideration must first be given to essential enablers that will make possible the function of markets and enterprises including the rule of law provision of infrastructure and a conducive trade policy. Second-order activities or important enablers that the state can provide include finance, transportation and information. Finally, useful enablers include grades and standards, linking small farmers to formal markets, business development services, incentives and support programs.

REFERENCES

BARBOUR, P. (2005), "An Assessment of South Africa"s Investment Incentive Regime with a Focus on the Manufacturing Sector", ESAU Working Paper 14, Overseas Development Institute, London.

BOADWAY, R. & SHAH, A. (1995) Perspectives on the Role of Investment Incentives, in A. Shah (ed.), Fiscal Incentives for Investment and Innovation, Washington, DC: World Bank.

BOLNICK, B. (2004) Effectiveness and Economic Impact of Tax Incentives in the Southern Africa Development Community (SADC) Region, report by Nathan-MSI Group to the SADC Tax Subcommittee. Gaborone, Botswana: SADC.

BUSINESS MAP (2003) Investment 2002: Challenges and Opportunities, Johannesburg: The Business Map Foundation. www.businessmap.co.za.

CHANDRA, V., MOORTY, L., RAJARATNAM, B., & SCHAEFER, K. (2000) Constraints to Growth and Employment in South Africa: Report No. 1, Statistics from the Large Manufacturing Firm Survey, Informal Discussion Paper No. 14, Washington, DC: World Bank. CHANDRA, V., MOORTY, L., RAJARATNAM, B., & SCHAEFER, K. (2001) Constraints to Growth and Employment in South Africa: Report No. 2, Evidence from the Small Medium and Micro Enterprise Survey, Informal Discussion Paper No. 15, Washington, DC: World Bank.

CHRISTY, R., MABAYA, E., WILSON, N., MUTAMBATSERE, E., MHLANGA, N. (2009) Enabling Environments for Competitive Agro-industries : Chapter 6 of Agro-industries for Development. Edited by C A da Silva, D Baker, A W Shepherd, S M da Cruz, C Jenane, CABI, August 2009.

CHUA, D. (1995) Tax Incentives, in P. Shome (ed.), Tax Policy Handbook, International Monetary Fund, Fiscal Affairs Department, Washington, DC: World Bank.

FLETCHER, K. (2003) An Evaluation of Marginal Effective Tax Rates on Domestic Investment in South Africa between 1994 and 2002, MA thesis, University of Witwatersrand.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO). (1997) The State of Food and Agriculture 1997. FAO Agriculture Series No. 30. ISSN 0081-4539, Food and Agriculture Organization of the United Nations, Rome, 1997

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO). (1994). Women, Agriculture and Rural Development: A Synthesis Report of the Africa Region. Rome.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO). (1995). Gender Food Security Synthesis Report of Regional Documents: Africa, Asia and Pacific; Europe; Near East; Latin America. Rome

GELB, S. (2003) Foreign Companies in South Africa: Entry, Performance and Impact, Johannesburg: EDGE Institute. www.the-edge.org.za.

GELB, S. & BLACK, A. (2004a) Foreign Direct Investment in South Africa in S. Estrin and K. E. Meyer (eds), Investment Strategies in Emerging Markets, London Business School Centre for New and Emerging Markets (CNEM), Cheltenham: Edward Elgar Press.

JENKINS, C. & THOMAS, L. (2002) Foreign Direct Investment in Southern Africa: Determinants, Characteristics and Implications for Economic Growth and Poverty Alleviation, Oxford: Centre for the Study of African Economies (CSAE), University of Oxford and London: Centre for Research into Economics and Finance in Southern Africa (CREFSA), London School of Economics.

KAPLAN, D. (2001) Rethinking Government Support for Business Sector R&D in South Africa: The Case for Tax Incentives, The South African Journal of Economics, Vol. 69, No 1, pp. 72-91.

OHIOKPEHAI, O., OPARA, L., KINYUA, H., KAMAU, K. & WASILWA, L.A. (2009) Value-adding and marketing food and horticultural crops in sub Saharan Africa: Importance, challenges and opportunities. Proceedings of 'Towards Priority Actions for Market Development for African Farmers', Nairobi, Kenya 13-15May 2009. [Web:] http://mahider.ilri.org/bitstream/handle/10568/16491/AGRA-ILRI-Section4.pdf?sequence=8 [Accessed: 24 March 2012].

PRICEWATERHOUSECOOPERS (2002) Income Tax Guide 2002-2003, Durban: LexisNexis Butterworths.

SHAH, A. (1995) Overview, in A. Shah (ed.), Fiscal Incentives for Investment and Innovation, Washington, DC: Oxford University Press for the World Bank.

SHAH, A. & SLEMROD, J. (1995) Do Taxes Matter for Foreign Direct Investment?, in A. Shah (ed.), Fiscal Incentives for Investment and Innovation, Washington, DC: Oxford University Press for the World Bank.

SLEMROD, J. (1995) Tax Policy Toward Foreign Direct Investment in Developing Countries in Light of Recent International Tax Changes, in A. Shah (ed.), Fiscal Incentives for Investment and Innovation, Washington, DC: Oxford University Press for the World Bank.

UNCTAD (2003) FDI and Performance Requirements: Evidence from Selected Countries, Geneva: UNCTAD, based on a background paper by Gostner.

WADE, R. (1990) Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization, Princeton, NJ: Princeton University Press.

WELLS, L., ALLEN, N., MORISSET, J. & PIRNIA, N. (2001) Tax Incentives to Compete for Foreign Investment: Are They Worth the Costs?, Foreign Investment Advisory Service Occasional Paper No. 15, Washington, DC: FIAS.

ZEE, H. H., STOTSKY, J. G., & LEY, E. (2002) Tax Incentives for Business Investment: A Primer for Policy Makers in Developing Countries, World Development, Vol. 30, No. 9, pp. 1497-1516.