Paper and Pulp Sector

A profile of the paper and pulp sub-sector

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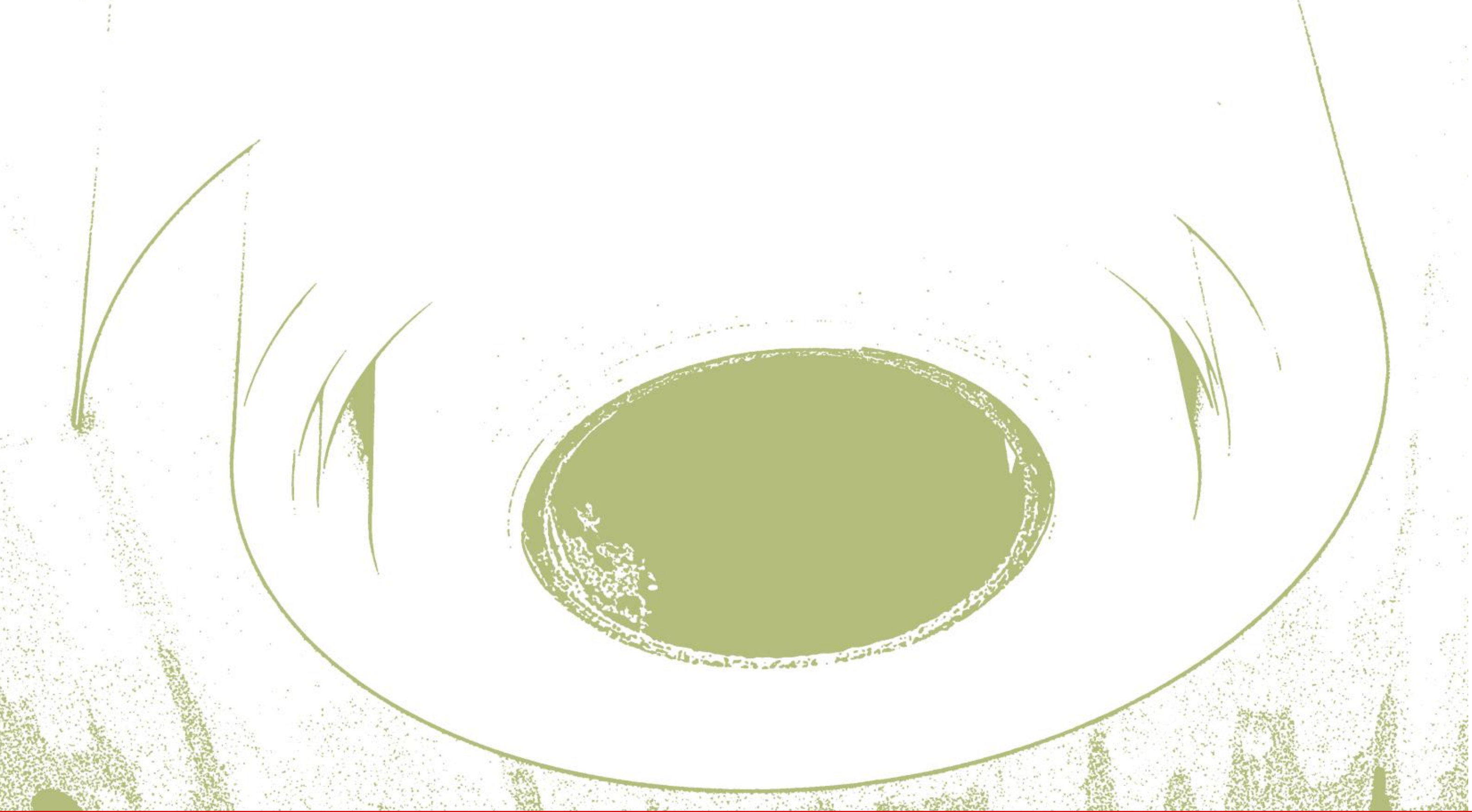
fp&m seta
Fibre Processing & Manufacturing Sector Education and Training Authority



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1. Executive Summary

This sector profile provides a brief overview of the paper and pulp industry. It covers the key trends and challenges, the drivers of change and the key role players in the paper and pulp sector. A profile of FP&M SETA learners in the paper and pulp sector is provided.

2. Overview

Since 1970 the pulp and paper manufacturing industry's annual growth rate has outdone the international average, contributing significantly to South Africa's economy. South Africa is ranked the 15th largest producer of pulp in the world and 24th in paper production. Much of this is invested in local resources, innovation and people power.

Charles Fenerty, from Halifax, began making paper from wood pulp in 1838.

In 2013, the forestry-to-paper value-add to South Africa's economy was R18.2 billion – this equates to 0.6% of the country's gross domestic product (GDP). (The Paper Story, 2014)

The paper and pulp sector effectively spans the value-chain from the renewable resource sector (plantation forestry), to primary processing (pulp milling), and through to secondary beneficiation (paper and paper products) (Department of Labour, 2008). According to Forestry South Africa, a total of 150 000 people are employed in the sector's value chain – from forestry, pulp and paper manufacturing to recycling.

Paper is an integral part of everyday life, even in the digital age. An estimated 95% of all business information is stored on paper and 500 million newspapers are printed and read around the world every day.

Table 1: types of paper

Types of paper, board and tissue	
• **Fine paper**	• Toilet paper
• **Office paper**	• Tissue paper
• **Coated paper**	• Cardboard paper
• **Uncoated paper**	• Facial tissue

The primary pulp and paper manufacturers are predominantly based in Gauteng, KwaZulu-Natal and the Western Cape. Figure 1 below illustrates the location of manufacturing mills by product across the country.

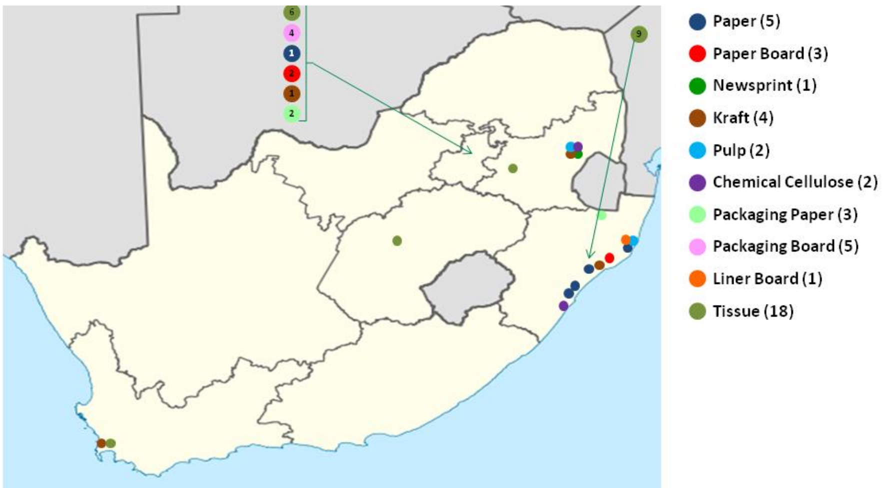


Figure 1: paper, pulp, chemical cellulose and tissue mills in South Africa (Paper Manufacturers' Association of South Africa)

A profile of the major producers in the pulp and paper industry is presented in Table 2 below.

Table 2: Major producers in the pulp and paper sector

Producer	Core business	Factory location(s)
Kimberly-Clark	This company focuses on health and hygiene products. It has a professional and health care division, as well as three consumer products divisions – adult and feminine care, baby and child care, and family care.	Gauteng Western Cape
Mondi South Africa	Established in 1967, Mondi SA includes forestry, pulp, uncoated fine paper (UFP) and containerboard operations.	KwaZulu-Natal Mpumalanga
Mpact	Mpact is one of the largest paper and plastic packaging groups in Southern Africa. It has 24 manufacturing operations across Africa.	Gauteng KwaZulu-Natal Western Cape
Nampak	Africa's largest packaging company formed in 1968, offers a product range which includes paper, glass, metal and plastic. Nampak's paper products include cartons and labels, corrugated paper boxes and trays and paper sacks and trays as well as toilet tissue.	Gauteng KwaZulu-Natal Western Cape
Sappi	Sappi South Africa, established in 1936, provides locally produced fine, office and business papers, container board, newsprint, and many other pulp and paper products.	Gauteng KwaZulu-Natal Western Cape

3. Key features

3.1 Trends

Over the last five years research has shown that there has been a consistent increase in imports of paper products. This trend impacts on the productivity of the sector as a weaker currency reduces opportunities to expand the industry. The steady increase in imports has placed local manufacturers under pressure to rationalise operations as they focus on producing only those grades of paper that are economically viable. (Solomons, 2014)

Overall South Africa's paper consumption per capita has grown, which supports the trend of increased paper imports. This can be attributed to the increased consumption of packaging and tissue owing to the country's improved living standards, which should continue to drive tissue and packaging demand.

The demand for chemical cellulose (dissolving wood pulp) is expected to increase as supplies of global cotton production flatten and fail to match increasing demand, creating a gap in the textile market which chemical cellulose can fill. Sappi has invested $340-million in its GoCell expansion project at its Ngodwana mill in Mpumalanga to respond to the increased demand for chemical cellulose. (Kotze, 2013)

In its 2013/14 annual report, the Department of Agriculture, Fisheries and Forestry reported that an analysis of the trends in commercial forestry plantings indicates that firstly, there has been a marked decline in both softwood and hardwood plantings (ha planted since the mid-1990s) and secondly, there has been a marked increase in the area for pulpwood purposes as compared to the area for saw logs and mining timber.

PAMSA has reported that the use of renewable biomass-based energy has enabled the industry to avoid the use of 1.4 million tonnes of fossil fuels (coal, oil and gas) annually and therefore the associated carbon emissions. Sappi and Mondi are the largest producers of energy from renewable biomass fuel in South Africa owing to the nature of their sustainable manufacturing processes. Annually this avoids 3.66 million tonnes of fossil carbon dioxide. Energy and carbon efficient operations, along with the carbon sequestration action of plantation forests, enable the pulp and papermaking industry to be a key contributor to reducing South Africa's national greenhouse gas emissions. (The Paper Story, 2014)

The use of biomass-based energy for power generation has the potential to extract between 15% and 20% more value from the available forest area in KwaZulu-Natal and Mpumalanga and could improve the viability of the country's pulp and paper sector through job creation, profitability and growth.

3.2 Challenges

Insufficient planted trees are the biggest constraint to growth faced by the sector. The Department of Agriculture, Fisheries and Forestry claim that the decline of forestry plantings, from which the raw materials come for paper and pulp production, is due to the privatisation of many former state forests and the state's poor upkeep of Category B and C plantations. The former has resulted in private sector lessees favouring shorter-term returns via pulpwood use over longer-term returns from saw logs, whilst the latter has reduced plantation productivity.

A further challenge relates to the administrative burden of applying for water permits to comply with the regulatory framework governing water usage. Forestry is regarded as a water diversion land use and therefore permits are required to expand the area under plantation. However, the process of obtaining a water permit is onerous and time-consuming and also has the unintended consequence of excluding small and medium enterprises in the pulp and paper sector from sustaining profitable operations.

Substantial increases in transport, labour and licence costs have also had a negative impact on the local paper industry's ability to trade competitively in recovering and recycling paper. (Solomons, 2014) Without cost containment measures the industry will not be able to keep up with demand or compete with international paper manufacturers who are able to provide products at competitive rates.

The consumption of newsprint in South Africa has declined by 1.57% each year for the last four years. Although slower than the decline in the rest of the world, this is nevertheless in line with the trend that the market for newsprint is declining as a result of the increased use of digital forms of communication and the growth of electronic tablet device use. (Kotze, 2013)

3.3 Drivers for change

Poverty and unemployment are two of the most forceful drivers for change which impact on any manufacturing industry. The need to drastically reduce poverty and unemployment encourages stakeholders in the paper and pulp sector to make investments in expanding the sector to create jobs and support local economic development.

The scarcity of engineering and technical skills, coupled with inter-sectoral demands for these skills, requires the industry to put mechanisms in place to not only attract workers with these skills, but also retain them to ensure the sustainability of long-term operations. Opportunities for acquiring engineering and technical skills applicable to the paper and pulp sector are increasingly made available through bursaries, learnerships and in-house training programmes.

South Africa's limited electricity capacity makes access to renewable biomass-based energy critical. The pulp and paper industry plays an important role in this regard by not only being able to generate power, but also by contributing to sustainable environmental management.

In 2013, 1 169 296 tonnes of paper were collected for recycling, equivalent to 3.5 million cubic metres of landfill space. That's enough to fill 1 403 olympic-sized swimming pools!

Paper recycling centres can provide employment for at least 100 people in the informal sector. (PRASA, 2014) This area of the market is under-developed and has the potential to increase labour productivity, provide jobs and improve living conditions at a grassroots level, not to mention the environmental benefits of recycling.

3.4 Standard industrial classification code

SIC code	Description	Category
32310	Manufacture of pulp, paper and paperboard	Pulp, paper and paperboard
32321	Manufacture of corrugated paper and paperboard	Corrugated paper and paperboard and containers of paper and paperboard
32322	Manufacture of containers of paper and paperboard	
32391	Stationery	Other articles of paper and paperboard
32399	Other paper products	

3.5 Trade unions active in the sector

The predominant trade union in the paper and pulp sector is the Chemical Energy Paper Printing Wood and Allied Workers' Union (CEPPWAWU). The union was formed in February 1999 as a result of a merger between the Chemical Workers Industrial Union (CWIU) and the Paper Printing and Allied Workers Union (PPWAWU) (CEPPWAWU, 2014). The union has a membership of 68 000 and a staff of 106. The aim of the union are to recruit and unite workers in order to share their economic and social welfare; to protect the job security of members, to advance their employment prospects, and to serve their individual and collective interests. CEPPWAW is affiliated with the Congress of South African Trade Unions (Cosatu).

3.6 Professional associations

Professional associations in this sector are active in their contribution to the development of the paper and pulp industry. Key role-players are briefly discussed in the sections to follow.

The Paper Manufacturers Association of South Africa (PAMSA) was established in 1992 to promote the interests and efforts of the South African pulp and paper industry. It provides a forum for the development and presentation of common views on pre-competitive industry issues, and engages stakeholders on matters of legislation, skills upliftment, education, research, environment, sustainability, and recycling. PAMSA currently represents more than 90% of the paper manufacturers in South Africa (The Paper Story, 2014).

The South African Tissue Manufacturers Association (SATMA) is a sub association of PAMSA for local tissue manufacturers and converters. SATMA seeks to contribute to the industry by encouraging manufacturers to maintain legally required standards. SATMA also concerns itself with creating greater consumer awareness about the legal requirements in relation to tissue and toilet paper products. In this way, it encourages a good business ethic among manufacturers and protects the consumer against poor quality products (The Paper Story, 2014).

The Paper Recycling Association of South Africa (PRASA), allied to the Paper Manufacturers Association of South Africa, seeks to promote a culture of recycling in South Africa. PRASA implements education and awareness campaigns aimed at educating the public about the benefits of and need to recycle. The association also promotes sustainable recycling opportunities and engagements in order to grow and develop the paper recovery industry (PRASA, 2014).

Forestry South Africa (FSA) is South Africa's premier and largest forestry organisation representing growers of timber in South Africa. The Association's membership includes all 11 corporate forestry companies active in the industry, approximately 1 300 commercial timber farmers and some 20 000 emergent small scale growers who between them own or control no less than 93% of the total plantation area in the country (Forestry SA, 2014).

4. Learner Profile

IQ Business received MIS data from FP&M SETA regarding all learners the SETA has interacted with. The learner profile provides an overview of the FP&M SETA's learner who entered in financial years 2011/12, 2012/13 and 2013/14.

Fields of interest are the learners':

- **Equity distribution**: ethnic group of the learner.
- **Socio-economic status**: employed or unemployed.
- **Disability status**: being disabled, this includes sight, even with glasses.
- **Age at time of enrolment:** age was calculated off of the learner's ID number and worked back to reflect his/her age at the time they entered the course.
- **Home language.**
- **Gender.**
- **Geographical distribution.**
- **Intervention.**
- **Sub-sector.**

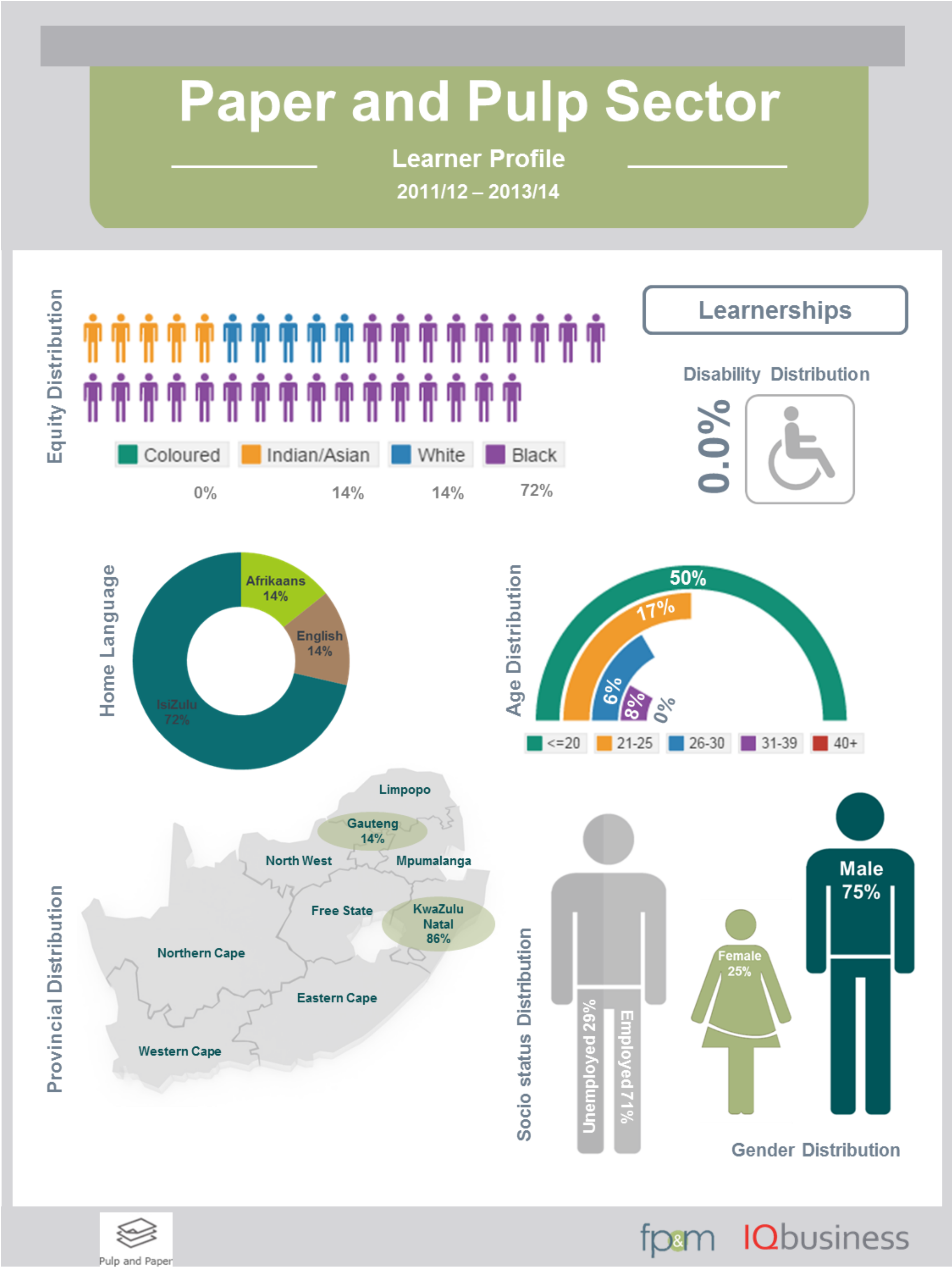
In this section a focus was placed on the sub-sector, namely paper and pulp. Data[1] is reported in the infographic[2] below per sub-sector.

The FP&M SETAs courses in this sector are learnerships and learners in these sectors are mainly black South Africans. It can be seen that 100% of learners in the paper and pulp sector are under the age of 40 and no learners are disabled.

The paper and pulp sector has a gender distribution of 75% male and 25% female learners and is skewed toward employed learners with 29% of learners being unemployed in learnerships. Learnerships for paper and pulp occur mostly in Kwa-Zulu Natal with a small percentage in Gauteng.

[1] The data excludes missing data within the variables.
[2] A visual representation of information or data, e.g. as a chart or diagram.

4.1 Paper and Pulp Sector



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