MEMBERSHIP:-

This has once again been one of the more difficult years on record for the sawmilling industry in SA but despite these tough times our membership has remained constant with the exception of one corporate member who resigned during the year. This is quite remarkable if you consider that the total number of sawmillers in the country declined in 2011 from 150 to 144. The majority of the closures were SMME millers and I suspect that the reason for this has more to do with resource than economics. Many of these millers are what can be referred to as “seasonal sawmillers”, those who saw as and when they find logs or market. The official breakdown of the industry is 39 formal mills, 89 informal mills and 16 seasonal mills. Government would still like us to recruit as many of these (s/m) millers as possible as they see SSA as their only means of communicating with them. This means that we need to take a conscious decision as to whether we should and how we would, attract many of these small millers to our membership. The graph below illustrates the ownership of the SA sawmilling industry by intake. SSA membership includes all the corporate players but one, most of the Formal millers and a generous selection of the Informal sector. None of the seasonal miller are members of SSA.

South African Sawmilling Industry
EXEClUTIVE COMMITTEE:-

The Executive Committee met three times through the year to deliberate on matters of a strategic nature that face the industry. The members of the Exco, Messer’s David Ngubane, Erik Soderlund, John Urban and Billy van Zyl need no introduction and I can assure the meeting that they have all served you with dedication and distinction throughout the year. 2011 saw the resignation of Mr Sean Pretorius from the Exco.

FINANCIAL:-

The audited financials of the association are attached to this report for your consideration. From these you will notice that the association is still in a sound financial position but has now after years of cost cutting come to the point where it can no longer provide the service its members expect unless it either dips into reserves or increases the levies. Also attached to this report is the association’s budget for 2012/13. You will note from this that the Exco’s recommendation is that an increase of, 01c/m³ be added to the .29 cents general membership levy thus taking the cost of membership to .30 c/m³. This represents an increase of 3.5%
In addition to this the Forestry Council levy will remain at .04 c/m³ thus bringing total membership fees up to .34 c/m³.

The association has managed to finance the research work at the University of Stellenbosch over the last two years by drawing on the proceeds of investments of the Timber Marketing Bureau (TMB), a fund set up in the 1980’s by the then sawmillers in order to assist with the promotion and research of locally produced pine and which to this day has a well managed capital base which supplies funds for industry based research and promotion.
The TMB has this year been placed under the curatorship of the directors of SSA.

TECHNICAL:-

Projects overseen by the Tech Com this year were the two projects commissioned to the University of Stellenbosch. These were, “The flexural properties and structural grading of SA pine” and “Timber properties and roof truss design”. Both these projects were completed by the end of 2011 and both yielded remarkable results. The summary of each project I include below.

1 "In this study a number of properties of 1833 pieces of SA Pine from six sawmills from different regions in South Africa were measured before they were destructively tested in bending. The objectives of the study were to (1) evaluate the stiffness and bending
strength of a representative sample of SA Pine timber (2) evaluate some of the new structural grading systems from the Italian manufacturer MiCROTEC, and (3) evaluate and compare some testing and calculation methods of the SANS 6122 (2008) standard. The sawmills that provided specimens included MTO’s George and Boskor sawmills, Hans Merensky’s Singisi and Langeni sawmills, Stevens Lumber Mill and White River Sawmill. The density, moisture content, dimensions, and dynamic MOE (using MiCROTEC’s ViSCAN system) were determined for each piece of timber. All the timber was scanned with Stevens Lumber Mill’s GoldenEye scanner which provided detailed density and knot characteristics for each board. Visual grading was performed using the rules in SANS 1783. The timber was separated in two groups for destructive testing in bending. For the first group the test span was randomly selected and for the second group the worst knot was positioned in the maximum moment area of the test span. The stiffness of the tested timber was adequate and the mean MOE edge of the full sample was more than required for Grade S5 timber. These results were much better than those for a previous project where the mean MOE edge from young Pinus patula timber was nearly 30% lower than required for Grade S5 timber. The bending strength of the sample was very good and more than 90% of the specimens had a bending strength higher than the SABS required characteristic value of Grade 7 timber. There was a high level of variation between the MOE edge and MOR results of different sawmills and visual grading proved to be a very poor predictor of strength and stiffness of timber. MOE edge was the limiting factor for grade determination.

The MiCROTEC grading systems that were evaluated were very efficient. The MOE edge could be predicted with an r2 of 0.87 using the ViSCAN optical vibrational method. According to MiCROTEC’s analysis their GoldenEye 706 and 702 systems could predict MOR with an r2 of 0.63 and 0.60 respectively on this SA Pine resource. The difference between random and biased testing was not significant for both the mean MOE edge as well as 5th percentile MOR results. Of the different methods evaluated for determining 5th percentile values, the most appropriate methods, in our view, were AS/NZ 4063.2 methods 2 and 3.

Based on the conclusions it is recommended that the characteristic values of SA Pine should be re-evaluated so that the most important property in terms of our end-products becomes the limiting property in structural grading. Due to the variability in our resource it is also recommended that our regulatory standards should be changed to allow for the following:

a. Individual sawmills should prove that their grading system meet the requirements of individual stress grades in terms of strength and stiffness properties. Any grading method should be allowed (in terms of strength and stiffness grading) as long as it can be shown that its results comply with strength and stiffness requirements of SABS structural grades.

b. Sawmills must have a structural grading control system in place where a small sample of timber is proof graded during each shift.

c. The SANS 6122 in-grade testing standard should change the methods of calculating 5th percentile values and MOE edge values that are currently prescribed."
A large portion of South Africa’s sawn softwood timber is used for the manufacture of residential roof trusses and the roof truss industry is arguably the single most important market for our sawmilling industry. Two recent studies from Stellenbosch University highlighted the variation in strength and stiffness values of SA Pine from the different species, sawmills and regions in South Africa. Based on these results a study was conducted with the following objectives:

1. To determine the most critical design property in typical South African roof truss designs. For structural timber producers it is essential that this most critical design property should also be the limiting property in structural grading as it has a significant influence on the grade recovery and characteristic values. Currently the limiting property in structural grading is the MOE;
2. To determine the relative utilization of the different characteristic strength and stiffness values in typical roof truss designs;
3. To determine the effect of a reduction in MOE values on truss costs and timber usage in typical roof truss designs. This was necessary since it was found that young Pinus patula timber had much lower stiffness than the structural grade requirements of the SABS.

Thirty truss designs consisting of 8758 individual members from 3 different manufacturers were analysed using the Mitek Timber 2020 software suite. It was found that the truss members utilised, on average, less than 50% of the strength and stiffness capacity of the timber. Of all the individual strength properties, bending strength was the most influential in truss design. Local deflection, which is related to the stiffness or MOE of timber, was also influential in truss design. However, a reduction in the mean MOE values used in the software of Grade S5 timber by 30% had a minor effect in terms of the timber usage and cost when the roof trusses were re-designed. In other words if MOE values were to be reduced it will have only a small effect on truss costs. There was significant variation in strength capacity utilisation between members with different dimensions with smaller dimension timber being stressed to a lesser degree. The large differences in widths of our standard structural sizes make it difficult to optimise truss designs. Especially for the two most influential properties viz. bending and local deflection, the width of a piece of timber plays a critical role. With smaller width increments higher strength and stiffness capacity utilisation will be possible.

It is recommended that:

1. The characteristic strength and stiffness values for SA Pine should be changed so that bending strength and not stiffness become the limiting factor in strength grading of structural timber;
2. If a new system of controlling strength grading at sawmills using proof grading is accepted, as proposed in a different study, the properties that should be used for control should be bending strength and stiffness;
3. In-grade bending tests should be conducted at the major sawmills that currently process young pine trees. Based on the results it should be decided whether an extra “low MOE” grade is required or whether the MOE of existing grades are sufficient or should be lowered to accommodate these mills;
4. Various opportunities for improving the efficiency of roof truss design have been
identified in this project. These should be evaluated in a different project in cooperation with the roof truss industry”.

The technical subcommittee has just approved a follow up to these two projects which will involve Mr. Brand Wessels of the university as well as Mr Peter Muller a wood technology consultant. These two gentlemen will draft a proposal entitled “In-grade testing of young SA pine sawn timber resources and development of a structural grading quality control code for the sawmilling industry. This will then be presented to the Exco and once approved will become a document to be presented and discuss with the SABS as well as ITC and other users of structural lumber. Like the two above projects this one will be partly funded by the association through TMB 50% and THRIP 50%.

A word of thanks must go to the sawmills who participated in the above projects, Merensky, MTO and Stevens Lumber. A special word of thanks must go the Stevens lumber for not only providing lumber as did the others but also for allowing the use of their sophisticated Golden Eye grading equipment. To share your competitive advantage with your industry colleagues is truly an unselfish act and one each sawmiller in the country owes Stevens lumber a debt of gratitude for.

**SKILLS DEVELOPMENT:-**

FIETA continued to serve the industry well during 2011, being one of the most efficient of the 23 SETA’s. This in part was due to the competent leadership of its CEO Mr Simangaliso Mkwanazi and his staff as well as the dedication of its board members representing the forest industry. Despite this good performance the National Skills Authority (NSA) nevertheless announced its intentions to reduce the No of SETA’s from 23 to 21. Included in this proposal was a realignment of the SETA landscape. This proposal saw the split of Forestry to the agricultural SETA and the balance (forest products, pulp & paper and furniture) being hived off to the manufacturing SETA. It is pleasing to report that after considering a submission from the board of FIETA the NSA agreed to keep forestry together with the manufacturing side of the industry and so now we remain one value chain and as from April 2011 moved into the new SETA “Fibre Processing and Manufacturing” (FP&M SETA) along with the printing, packaging & publishing sub-sectors of MAPPP plus the entire Clothing, Textile, Footwear & Leather SETA. This retention of the value chain will at least see that the Forest industry retains a better voice on the new SETA than had it been split.

SSA continues to participate on the faculty advisory boards of both Stellenbosch University and NMMU (Saasveld) and I am pleased to report that both of these institutions value the associations participation and consult us regularly with issues pertaining to the training of their students. Both these institutions have seen an increase in the number of students choosing to study wood science, an encouraging development for the future of the industry.
It was our intention this year to take an in-service saw doctor training course to each region as we did the previous year with the kiln drying course but owing to the tight financial situation and more specifically the inability to find a suitable instructor who could dedicate two weeks of his time towards the service we did not get it off the ground.

**GOVERNMENT:-**

2011 saw a renewed initiative from the association with regard to engagement with various Government departments that play a role and have an influence on our business (DAFF, DTI, DE, NERSA, and IDC). I am pleased to report that we enjoy a healthy relationship on behalf of the industry with all these Departments and institutions and should any members need to engage any of them on an individual basis we are more than able and willing to assist. SSA through the executive director serves on DAFF’s “CEO’s Steering Committee”. This is a forum which meets each quarter and affords the private sector the opportunity to present and discuss its concerns and issues with the various officials of DAFF and any relevant Government department that have issue with the forest industry. It is also a platform that allows access to the Minister.

**OTHER REPRESENTATIVE BODIES:-**

SSA once again enjoyed positive and fruitful relations with the majority of the other associations in the broader forestry industry. None more so than our dealings with Forestry South Africa (FSA). FSA have a particularly productive relationship with government and regularly represent our views in negotiations with the various government institutions. We are constantly lobbying the sawmiller’s case for increased production of sawlogs, a crusade shared by FSA. Relations with the Pulp and Paper Industry (PAMSA) are less frequent but no less productive. They also play a leading role with respect to the general promotion of forestry and the forest products industry, one which we wholeheartily support.

SSA has a special working relationship with the SA Wood Preservers association (SAWPA) as most formal millers are also wood treaters in their own right. SAWPA play an enormous role with regard to the technical aspects of wood preservation and we rely on them for much support in this sphere.

**CHARTER COUNCIL:-**

The Sawmilling Industry is once again represented on the council through the official appointment of the executive director and Mr Lulamile Xate, both men’s appointments being confirmed by the Minister. The council is once again fully functional under the capable guidance of Mr Pasco Dyani.
PROMOTIONS:-

The Wood Foundation initiative is aimed at the entire value chain across all sections of the forest and wood industries and the beauty of the Wood Foundation is that it not only covers the entire value chain but that it also promotes the growing of trees and the use of wood as a preferred material.

The chairmanship of the Wood Foundation currently sits with us sawmillers in the form of your Executive Director and so for the next period the sawmilling industry will remain an influential contributor to the direction of the foundation. A positive move this year saw the appointment of Mr Keith Rudd as the interim executive director and it is hoped that Keith’s appointment will add extra impetus to the momentum already created. Positive feedback about the foundations work thus far is, that it is refreshing to see that all segments of the industry are working together to spread the good story about wood and its many applications.

The current economic climate and SSA’s tight budget make it difficult to allocate resources to the promotion of sawn lumber outside of the work we are doing with the foundation, this is a position shared by all the other industry associations and so now more than ever it is important that the entire value chain stands together and ensures the best bang for its buck.

FUTURE:-

Looking at the future and what it holds for sawmillers and the association is a lot like looking into a crystal ball and is the motivation behind asking a personality like Mr Mike Schussler to address us today.

We need to consider the advice of others and It is only by meeting regularly and discussing our concerns, problems and aspirations as an industry that we will create a viable future for our industry. We cannot rest on our laurels, draw a laager and expect that some outside agency, be it Government or private will come along and create a viable environment for us. We have to get involved, confront the challenges and make it work for ourselves.

The following are perhaps some of the areas which we as an industry need to focus on;

International Networking: No organisation or industry can survive in seclusion in today’s fast paced technological world. The simple fact that the world is experiencing challenges such as a shrinking forest resource (yes, not only South Africa), climate change, global marketing developments and worldwide knowledge transfer, means that unless our industry remains vigilant and connected to the rest of the world it will be left behind. Your association needs to lead its members in this respect and ensure that South African sawmillers take advantage of developments in similar industries around the world. This can be done through study groups, tours, student exchanges and industry co-operation agreements.

Research: For a number of years the sawmilling industry ignored this aspect and is today trying to catch up with the very basic research requirements needed to support our primary
product, structural lumber. If one looks at the work done and the inroads made by light structural steel to our traditional markets one will soon realise that the timber industry has been resting on its laurels for too long now and there has been no development towards lighter sections or more "log" friendly sawing patterns, we are still living in a world of 38X114, 2,7 to 6,6. If we do not initiate or get involved in product R & D we are bound to find ourselves on the scrap heap. Research does not come cheap and it's only a combined industry led effort that will succeed.

CPD's; It is through discussion with architects and structural engineers that you realise the very limited or total lack of participation by the timber industry to these two professional institutes. Structural Engineers for example require a minimum of six CPD points per year in order to remain accredited with the engineering council. Many other industries provide experts in their fields and products, to lecture at these CPD sessions and courses. This is an enormous opportunity especially for the Wood Foundation to promote the use and application of our products and could lead to timber being offered as an automatic alternative in domestic building.

BEE Development; This aspect is starting to sound like a stuck record but believe it or not is a daily necessity of doing business in this country and is a non negotiable. For the future development of the sawmilling industry in South Africa we have got to be introducing, educating, assisting, developing and encouraging young black people into becoming the future operators and owners of sawmills. An industry supported program of bursaries, training and mentorship is the only way to achieve this objective.

Legislation; We are living not only in an increasing legislative South Africa but also a world that, as a result of globalisation is finding an ever increasing and controlled workspace with regard to environmental, human rights and basic conditions of employment. These are proving challenging to a lot of South African sawmillers and the industry needs to stand up and debate these and were necessary prepare our members for the impact.

Information; In order to stay ahead and keep pace with the future the industry needs to constantly improve its statistical information & intelligence gathering. This it needs to do in partnership with other industry bodies and players as well as its consultants. The sawmilling industry was once well supported by a host of expert consultants both technical and management and these alliances need to be reignited.

APPRECIATION;

Despite trading conditions that showed great challenge, the bulk of sawmillers' hung in to see the light of day. To this end we say congratulations and thank you to all our members.
A special thank you must go to our executive management committee who continued to remain active and steer the association in a positive direction. A vote of thanks must also go to our bookkeepers Mazars who did a sterling job of keeping us in the money. It has been a privilege to serve this industry for another year and we look forward with confidence to the challenge of 2012/13.

R D Southey
May 2012