

# IZASA 2008 Review



- Zinc Air illuminates rural communities**
- Department of Health announces Zinc Policy**
- Fertilizer industry partnerships strengthened**
- IZASA supports Light Steel Frame building activity**
- 2<sup>nd</sup> General Galvanizing Conference a success**
- Galvanizing shows its mettle with 2010**
- Galvanized piping *Predictor* completed**
- New zinc coated wire standard completed**
- New casting initiative offers development of local industry**
- Regional activities show results**

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## HIGHLIGHTS 2008

2008 has been a busy year with many challenges. Despite power shortages in South Africa at the beginning of the year and the economic melt-down late in the year the local industry performed well. Regional growth continued although the fall in the commodities prices resulted in a sudden halt of new projects and delays in existing ones. Thus the galvanizing industry had a roller coaster year. However, infrastructure spending remains robust in South Africa and regionally and this looks likely to continue. New projects remain a challenge for IZASA but new initiatives may open old industries for revival and offer new markets for existing products. Opportunities abound for zinc air, zinc in fertilizers, zinc in nutrition supplementation and the developed products such as electricity distribution poles, light gauge water pipes and wire products. The successful outreach Trade Visit to Zambia has proved that provided a good local partner can be found, targeted meetings really do bring business.

### *Zinc Air in lighting rural communities.*

With the technology proven, a number of projects have been facilitated whereby zinc air technology is used as the power source for lighting households in rural communities. Portable power units have been developed by AEDC in South Africa. Through partnership with Exxaro, a strategic project has started at Tshikondeni. 112 households have been provided with basic power. Far from the local power grid, the provision of power will be used to develop business opportunities and ensure community sustainability. The project remains a challenge but will be watched by many to see how the development works. If successful, the much larger opportunity at Lapelala will be possible.

The Tutungeni project in Namibia is being expanded. Service centres are already planned to create sustainable employment for at least four people. In turn these Service Centres will form the focal point for small business development in the area.

A project in Malawi, funded by the Southern Africa Energy Development Fund, is currently in the roll-out stage. Zambia is currently evaluating energy systems for the roll-out of telephone *call boxes* based upon satellite technology. Zinc air has been offered as a possible option.

The Common Fund for Commodities project for zinc air in southern Malawi has been approved. Other possible options include a Development Bank of Southern Africa funded project in the Eastern Cape.

According to a study conducted by the International Energy Agency, sub-Saharan Africa accounts for 32% of those without access to electricity out of 1.6 billion people worldwide. Clearly, if successful, zinc air could provide widespread low draw power for these people. AEDC has been awarded various awards, including the 2008 Energy Globe Award, which was endorsed by United Nations former secretary-general Kofi Annan, for “best rural sustainable energy in Namibia” and the 2008 Africa Energy Award for “best renewable energy project in Africa” and “best rural electrification project”.



### ***Zinc Health Policy for South Africa***

In April 2003 a maize meal and wheat flour fortification program was started in South Africa. The fortification program includes vitamins and key micro nutrients (including zinc) added by the millers. In order to set future policy, a study was carried out to determine the anthropometric levels of iron, iodine, folate, zinc and vitamins in young children and women of reproductive age. Additional funding was provided for the study by UNICEF and the IZA funded the zinc in blood study. Zinc intake levels were found to be the lowest in the younger children (where development is greatest) and approach acceptable levels as the children grow older. This indicates the need to address the youngest population where information and diet preferences are compromising zinc uptake.

A national zinc health policy meeting was held in August 2008 which resulted in the development of the first ever national policy. The use of zinc in oral rehydration medicines was recognised and an interim concession, in terms of full Medical Council approval, has been given to provide for rapid implementation into Primary Healthcare Centres. The need for a wider food fortification policy remains elusive.

Other countries in the Southern Africa region that have established a zinc fortification or health policy (which includes zinc) are Zambia, Mozambique and Tanzania. Through ongoing lobbying, it is hoped to expand these programs throughout the region.

### ***Fertilization and the benefits of zinc***

IZASA has been actively supporting zinc in fertilizer initiatives for some time. This year, the FSSA Conference in February focused on Soil Health. Much discussion focused upon the irrelevance of overseas research work as Southern African soils exhibited low organic content levels. The need for ongoing micronutrient additions (including zinc) was highlighted. The current revision of the regulations to Act 36 with respect to heavy metals (including zinc) limitations was discussed with reference to the recent work of Herselmann sponsored by the Water Research Commission. The proposal has been suggested that this study be used to set the new limits. The integration of organic with inorganic (including zinc) fertilization was also discussed. Papers on fertilizers used for bio-fuels production and the use of GM plants in drought conditions were also presented. Some 200 delegates attended the conference.

In June the FSSA annual conference resulted in direct contact with the International Fertilizer Development Council. The IFDC is active in Africa and is supporting the Nepad Millennium Goals of raising fertilizer use in sub-Saharan Africa from 8 to 50 kg/h by 2015. The deficiency of zinc in sub-Saharan soils is well known. However, without policy changes zinc additions are unlikely. Indeed, even in South Africa, where the need for zinc additions to fertilizers has been known for years, one manufacturer has stopped zinc addition. The initial reason given was the high price of zinc but, with the fall in commodity prices, this seems an unfortunate policy.

However, one IZASA member (Zinchem) has been able to take advantage of the situation and is promoting zinc sulphate directly to the farming community. This has proven successful and has also resulted in a better practical knowledge set being developed which is easily communicated to the farmers.



Through the new IZA Global Fertilizer Program and further IFDC contact, IZASA was able to make effective contact with Kenya and Zambia. In Zambia a seminar to key agricultural members has resulted in interest in zinc addition. Zinc enrichment of seeds was particularly well received. This will be followed up directly.

The FSSA Conference in 2009 will have a focus on zinc and IZASA will sponsor the key speaker – Prof Ismail Cakmak from Turkey. In March 2009 a conference on zinc in fertilizers and nutrition will be organised in Kenya.

### ***Bio-fuels***

The SA government finally released the Bio-fuels Industry Strategy in 2008. With a changing landscape, it seeks to secure food availability and as such has some impact upon the possible implications on the use of zinc micro-nutrients in fertilizers used for bio-fuels. The focus is upon securing in the short-term (5 years) a 2% penetration level of bio-fuels in the national liquid fuels supply. This is down from the drafted target of 4.5%.

Of real importance is the restriction on crops supported for the production of bio-fuels to sugar cane and beet for bio-ethanol and canola and soya beans for bio-diesel. Maize is specifically excluded from the strategy. Of relevance to the zinc industry is that the sugar industry currently employs zinc additions extensively and has promoted zinc use since the 1960s. Thus, it is likely that there will be an opportunity to provide additional zinc chemicals into this industry. The ongoing liaison between the fertilizer industry, through the FSSA and the SA Sugar Association, will ensure that channels are kept open to determine through what interventions, if any, the zinc industry can manage to develop increased use of zinc.

### ***The use of light-gauge galvanized steel in residential construction***

Through the Southern African Light Steel Frame Building Association (SASFA) three workshops were given in Johannesburg, Durban and Cape Town to architects and structural engineers on designing with light gauge galvanized steel for residential dwellings. Some 400 people attended the courses. IZASA was a sponsor of the events and presentations were given covering the role of zinc in protecting steel. Literature packs were provided to all delegates.

The Sasfa Code of Practice (low rise Light Steel Frame Buildings) is being adopted as a national standard (SANS 517). The Technical Committee identified the vague recommendations given for the corrosion resistance required of the fasteners for joining the light gauge members as a cause for concern. As a result, a sub-committee was established under the chairmanship of IZASA to write an addendum to be incorporated into the code and, therefore, national standard. This work has been completed and it is felt that practical recommendations have been given that are sufficiently comprehensive to ensure adoption within the industry.

### ***General Galvanizing Conference***

The 2<sup>nd</sup> General Galvanizing Conference was successfully held at the Birchwood Conference centre in Johannesburg. Over 75 delegates attended the conference with 16 presentations given and a plant tour provided on day one. The conference highlighted the need to look at life extension strategies for HDG installations such as transmission towers. The HDGASA partnered IZASA in hosting the conference.



### ***2010 Soccer World Cup***

Discussions were held with key decision makers in Johannesburg, Durban, Port Elizabeth, Nelspruit and Cape Town during the year. A significant amount of galvanized steel will be used by the stadiums. Most of this may be for crowd control but some interesting applications have been identified – such as roofing members and cantilever supports. Ongoing activity has been maintained to ensure that the specified galvanized products are secured.

Working closely with the Hot Dip Galvanizers Association of Southern Africa (HDGASA), a series of articles have been published on the 2010 opportunities.

### ***Promotion of the use of galvanized water piping***

The *Galvanized Piping Performance Predictor* was completed this year and is currently being formatted for on-line use. Significant interest in the use of thin wall piping remains and markets are buoyant.

### ***Promotion of use of zinc coated wire***

The revised standard for galvanized wire (SANS 675) has finally been printed. This work completes the revision of the wire standards started some years ago. Focus on Galfan applications continues.

### ***New government initiative to support casting industry***

Called the NFTN, some R38m has been pledged by government to support the re-development of the industry in South Africa. Some 4 Road Shows were carried out in the major centres in South Africa to promote the Network and enable industry to develop a wish list to be used for strategy development for the NFTN. IZASA was able to participate through provision of literature and a banner. At this stage it is difficult to see where benefits to zinc will accrue. However, with the new framework developed by government to assist with restricting scrap exports, possible die-casting industry support may be forthcoming.

### ***Regional market opportunities***

After the successful seminars in Namibia last year, a Trade Visit to Zambia was carried out during the week 9 – 13 November. As reported already, a successful seminar was held with various agricultural industry participants. It appears as if zinc additions to fertilizers has been tried at three test sites around the country (all using maize) and the results were positive. The commercial farmers are technically sound but the 800 000+ small scale farmers are cash strapped and fertilize only when yields reach subsistence levels. A series of interventions have been identified.

Meetings were held with personnel from departments of Energy, Water and Public Works. Various possibilities have been identified which will be reported as and when they develop.

It is hoped to visit Kenya and Mozambique during 2009.

## COMING SOON 2009

### **South Africa Conference**

A conference entitled – Efficient use of Fertilizers is to be held at the CSIR Conference Centre on February 10<sup>th</sup>.

### **Kenya Conference**

A conference entitled - Fertiliser use: the effect of zinc fertilisation on nutrition and food quality is planned for Nairobi in March. The conference will be held on the 26<sup>th</sup> to 27<sup>th</sup> March at the Windsor Hotel, Nairobi.

### **Industry Feedback Meeting**

An Industry Feedback meeting will be held in March on the state of the industry in Southern Africa and Global Trends. Mr Stephen Wilkinson of the International Zinc Association will brief the attendees on the challenges facing the industry.

### **Environmental Workshop**

It is hoped to have a seminar on the environmental aspects concerning zinc usage to local industry. A date has still to be decided.

### **Zinc Air for Sustainable Rural Development**

A one day seminar is to be organised targeting municipalities, NGOs, development agencies, development banks and aid organisations to promote the use of zinc air technology in sustainable community development on Africa. The seminar will be held during the last quarter of 2009.

*For further details on these events and to keep abreast of news and further events please refer to our web site [www.izasa.org](http://www.izasa.org) .*

## WHAT IS IZASA?

*IZASA was established in 2002 as the body representing the International Zinc Association in Southern Africa. Initial activities focused upon analysis of constraints and opportunities within the zinc industry. This program was called the South African Zinc Initiative. Supported by the international zinc industry, the IZA has established itself as the industry forum on matters as diverse as international marketing to the management of the sustainability of the industry over the long term through being the voice piece of the industry in its dealings with regulators and governmental agencies.*

*The guiding principles adopted by the IZA in establishing regional operations, is that fast track market penetration can be effected in markets where successful interventions have worked elsewhere. This is particularly important in regional activities where leverage is not just related to funding but also to people. Regional operations tend to be staffed by a single person or a person and an assistant. In the operational strategies of IZA Southern Africa (or IZASA), partnership and leverage principles are applied through identified champions.*

*In 2000, as a region, the intensity of zinc use in southern Africa, was about 40% lower - when measured in respect to steel consumption - than in the U.S. and Europe. Devastated by isolation, war, political, turmoil and drought, the region offers opportunities for sustainable growth off a low base. The establishment of IZASA was born out of a South African initiative to develop the market for zinc locally. Working with government agencies; three parties, namely Exxarro (formerly Kumba Resources), Anglo American and ArcelorMittal Steel SA (formerly Iscor) set up a study group – the South African Zinc Initiative. Tasked with analyzing the opportunities and constraints present in the South African zinc market, an analysis was carried out which showed key areas for growth. Specific intervention strategies have been developed in the galvanizing, alloy and chemicals sectors.*

*IZASA is empowered to*

- 1) Grow the market and grow our market share.*
- 2) Increase local sales by 40 000 measurable tonnes over a 5 year period (this has now been achieved).*
- 3) Focus on market development projects*
- 4) Educate the market with respect to the optimal use of zinc.*
- 5) Build customer knowledge base and increase one-on-one marketing.*
- 6) Educate sales forces and merchants with respect to technical aspects and services available.*
- 7) Increase visibility in the specifiers market as the information experts*
- 8) Market the benefits of zinc.*



## MEMBERSHIP

IZASA is continually looking for members. By becoming an Affiliate member of IZASA, companies become automatic members of the International Zinc Association based in Europe. Representing over 75% of the world's zinc producers this body acts as the voice for the industry on all issues facing the industry. The IZA has established regional bodies globally and through the IZASA members become part of the global industry. The benefits of membership are:

- participation in group to benefit the industry and YOUR company
- the leverage of global network to assist with industry development
- receipt of alerts and analysis from IZASA and IZA
- communication on commercial leads
- a greater lobbying voice to assist with developing appropriate government frameworks
- opportunity to shape regional market development programmes to further local industry development
- information and assistance on resolving issues impacting upon the industry
- participation in IZA committees and shape the industry
- receiving the Zinc Network
- entitled to send delegates to Zinc College
- receiving IZA publications, free of charge
- receiving a free Zinc Logo license

In return IZASA expects from its members:

- a commitment to industry development and growth
- political support for industry positions
- active participation in IZASA programmes

For further information please contact IZASA on 083 456 4989 or [izasa@icon.co.za](mailto:izasa@icon.co.za) or visit our web site [www.izasa.org](http://www.izasa.org)

