

ZINCnews

हिन्दुस्तान जिंक का मुख पत्र | THE HOUSE JOURNAL OF HINDUSTAN ZINC



HINDUSTAN ZINC

Zinc & Silver of India

मेरी सुरक्षा मेरी जिम्मेदारी



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हिन्दुस्तान जिंक के लिए 'सुरक्षा सर्वोपरी' है जिसे सुरक्षा कार्यक्रम "आरोहण" द्वारा कम्पनी से जुड़े सभी हितधारकों के सुरक्षित जीवन को सुनिश्चित करते हुए सुरक्षा को संस्कृति के रूप में अपनाने पर बल दिया जाता है।



विरम सिंह

फेब्रिकेशन एण्ड मेन्टेनेन्स,
मील-जावर ग्रुप ऑफ माइन्स,
मैसर्स सिमर

असफाक अहमद

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लक्ष्मण सिंह

फिटर,
मील-जावर ग्रुप ऑफ माइन्स,
मैसर्स सिमर

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मेरी सुरक्षा
मेरी ज़िम्मेदारी



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Steel Your Car
With Zinc Coat
- Mr. Arindam Mukharjee



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Hindustan Zinc tops Metal & Mining
Sector Globally in the 'Environment Category'
in Dow Jones Sustainability Index - 2018



Hindustan Zinc

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Dear Colleagues,

My family joins me in wishing you all a Very Happy New Year - 2019.

In 2018, Our persistent efforts towards care for the environment brought us global recognition. Hindustan Zinc was ranked 1st in 'Environment' and overall 5th globally in Metal & Mining Sector in Dow Jones Sustainability Index 2018. We competed with 58 metals & mining majors including Newmont Mining, Teck Resources, Rio Tinto, Barrick Gold, Anglo Gold Ashanti etc. and emerged as the top ranking company. Hindustan Zinc also became a fully underground mining company. The Open-Pit era came to end in March 2018 as we continued our journey to achieve 1.2 million tonne metal production and eventually achieve 1.5 million tonne in the next 5 years.

Hindustan Zinc is also moving ahead to commission 2 new mills that will give us additional +3 million tonne mill capacities to ramp-up our metal production. Two new shafts at Rampura Agucha and Sindesar Khurd mines are expected to get fully commissioned in the current financial year. After the commissioning of new mills, the ore treatment capacity will increase to 17.5 million tonnes from the current 14.5 million tonnes per annum. Both the new mills are expected to be commissioned in the FY 2019. Three Fumer plants, out of which one is likely to be commissioned soon, will increase metal production through recovery process – particularly Lead and Silver.

We represent India in Zinc and Silver market. We are proud to be recognized as 'Zinc of India'. With increasing contribution of Silver in India's Silver deficit market, we are now also being recognized as 'Silver of India'. Thus, the new logo adds – "Hindustan Zinc - Zinc and Silver of India".

I have always believed that core values of Hindustan Zinc include integration of best global environment friendly technologies in its operations. The concept of safe mining has become larger than volumes and profits. Hindustan Zinc is not far behind in adopting the latest global digitisation technologies. It has certainly changed the dynamics in the mining industry globally.

We do begin each year with the joys, new hope, new passion and new determination. Perhaps the year we just crossed has imprinted some not so good memories that we would like to erase in the New Year. The questions before each of us are, how well have we learned the lessons of the past and how shall we use our failures and mistakes as stepping stones to progress in this New Year. Missed opportunities of the year gone by should not cause you to miss out on opportunities of the present. In our endeavor of growth, every person's job is important, not only to his/her own success, but also to the success of our company. I urge all of you to look at your jobs objectively for opportunities to save resources, cut out waste and improve quality. I welcome your suggestions for improvement, wherever that may be.

If I have to take a resolution for the year 2019, it would be to ensure this year be a year of 'Zero Harm' and 'Zero Fatalities'. Let this resolution be of every employee and all the partners of Hindustan Zinc. Let us declare this New Year as – "Year of Zero Harm".

Once again, my best wishes to you & your family for prosperous 2019.

Best wishes,

Sunil Duggal
CEO, HZL



प्रिय साथियों,

आपको एवं आपके परिवार को नववर्ष 2019 की हार्दिक शुभकामनाएँ।

वर्ष 2018 में, पर्यावरण सजगता के प्रति हमारे निरंतर प्रयासों ने हमें विश्व में एक अलग पहचान दिलाई है। हिन्दुस्तान जिंक को डॉव जोन्स सस्टेनेबिलिटी इंडेक्स 2018 में मेटल एंड माइनिंग सेक्टर के क्षेत्र में पर्यावरण में प्रथम और वैश्विक स्तर पर समग्ररूप से 5वां स्थान मिला है। न्यूमोंट माइनिंग, टेक रिसोर्स, रियो टिटो, बैरिक गोल्ड, एंग्लो गोल्ड आशांति सहित 58 धातुओं एवं खनन की बड़ी कंपनियों के साथ प्रतिस्पर्धा में हिन्दुस्तान जिंक को शीर्ष रैंकिंग मिली है। हिन्दुस्तान जिंक अब पूर्ण रूप से भूमिगत खनन कंपनी बन गई है। मार्च 2018 में ओपन-पिट युग समाप्त हो गया है तथा 1.2 मिलियन टन धातु उत्पादन प्राप्ति के लिए हमारी यात्रा निरन्तर जारी है और आगामी 5 वर्षों में 1.5 मिलियन टन हासिल करना है।

हिन्दुस्तान जिंक 2 नयी मिलों का संचालन करने के लिए भी आगे बढ़ रहा है जो हमें धातु उत्पादन क्षमता को रैंप-अप करने के लिए अतिरिक्त +3 मिलियन टन प्रदान करेगा। रामपुरा अगुचा और सिंदेसर खुर्द खदानों में दो नए शाफ्ट का संचालन चालू वित्त वर्ष में होने की संभावना है। नई मिलों के संचालन से अयस्क ट्रीटमेंट क्षमता वर्तमान में 14.5 मिलियन टन प्रति वर्ष से बढ़कर 17.5 मिलियन टन हो जाएगी। दोनों नई मिलों का संचालन वित्तीय वर्ष 2019 में होने की संभावना है। तीन फ्यूमर प्लांट, जिनमें से एक का शीघ्र ही संचालन होने की संभावना है, रिकवरी प्रक्रिया के माध्यम से धातु उत्पादन में वृद्धि होगी – विशेष रूप से सीसा और चांदी।

हम जस्ता और चांदी के बाजार में भारत का प्रतिनिधित्व करते हैं। हमें गर्व है कि भारत में 'जिंक ऑफ इण्डिया' के रूप में पहचाना जाता है। भारत में घटते चांदी के बाजार में चांदी के बढ़ते योगदान से अब हम 'सिल्वर ऑफ इंडिया' के रूप में भी पहचाने जा रहे हैं। इस प्रकार हमारा नया लोगो – "हिन्दुस्तान जिंक-जिंक एण्ड सिल्वर ऑफ इंडिया" है।

मैंने हमेशा विश्वास किया है कि हिन्दुस्तान जिंक के प्रमुख मूल्यों में इसके संचालन में सर्वश्रेष्ठ वैश्विक पर्यावरण अनुकूल तकनीकों का समावेश है। सुरक्षित खनन की अवधारणा वॉल्यूम और मुनाफे से अधिक है। नवीनतम वैश्विक डिजिटलीकरण तकनीकों को अपनाने में हिन्दुस्तान जिंक अग्रणी है। इसने निश्चित रूप से विश्व स्तर पर खनन उद्योग की गतिशीलता को बदल दिया है।

हर वर्ष नये साल का हम नई आशाओं, खुशियों, उत्साह और दृढ़ संकल्प के साथ शुरुआत करते हैं। वर्ष 2018 हमने अभी पार किया है, उसमें बुरी यादों को भूलकर हमें नए साल में आगे बढ़ना है। हम सभी के सामने प्रश्न है कि हम अतीत की घटनाओं से कितना कुछ सीख पाये हैं तथा हमें नव वर्ष में प्रगति एवं सफलता की सीढ़ियों के लिए अपनी असफलताओं और कठिनाईयों का आंकलन कर कुछ नया करना है। गुजरे वर्ष के दौरान छूटे अवसर वर्तमान में अवसरों से चूकने का कारण नहीं बनना चाहिए। कंपनी के विकास के लिए प्रत्येक व्यक्ति का योगदान महत्वपूर्ण है, न केवल स्वयं की सफलता के लिए बल्कि हमारी कंपनी की सफलता के लिए भी। मेरा आप सभी से अनुरोध है कि संसाधनों का बचाव, वेस्ट में कमी एवं गुणवत्ता में सुधार के लिए जिम्मेदारी से कार्य का निर्वहन करें। मैं सुधार के लिए आपके सुझावों का स्वागत करता हूँ।

साथियों, यदि मुझे वर्ष 2019 के लिए संकल्प लेना है, तो यह सुनिश्चित करना होगा कि यह वर्ष 'जीरो हार्म' और 'जीरो फ़ैटलिटीज' का वर्ष हो। इस संकल्प को हिन्दुस्तान जिंक के सभी कर्मचारी एवं सहयोगी लें। आइए हम सब मिलकर नव वर्ष को 'ईयर ऑफ जीरो हार्म' घोषित करें।

एक बार पुनः मेरी ओर से आप एवं आपके परिवार को वर्ष 2019 खुशहाल एवं समृद्धि की हार्दिक शुभकामनाएँ।

स्नेह सहित।

आपका

सुनील दुग्गल

मुख्य कार्यकारी अधिकारी

मेरी सुरक्षा मेरी जिम्मेदारी

हिन्दुस्तान ज़िंक के लिए 'सुरक्षा सर्वोपरी' है जिसे सुरक्षा कार्यक्रम "आरोहण" द्वारा कम्पनी से जुड़े सभी हितधारकों के सुरक्षित जीवन को सुनिश्चित करते हुए सुरक्षा को संस्कृति के रूप में अपनाने पर बल दिया जाता है।

हिन्दुस्तान ज़िंक में सर्वप्रथम हमारे कर्मचारी या व्यावसायिक साझेदार जो भी प्रत्यक्ष या अप्रत्यक्ष रूप से जुड़ा हुआ है वह स्वस्थ एवं सुरक्षित रहे उसके लिए हमने कार्यस्थल में प्रवेश से लेकर कार्यस्थल के बाहर तक सुरक्षा प्रणाली को अपनाया है। हिन्दुस्तान ज़िंक अपने प्रत्येक कर्मचारी को सुरक्षा के प्रति सशक्त करने के लिए प्रेरित करता है कि वह जोखिम भरे कार्यों के लिए सुरक्षा संबंधी कमियों की जानकारी होने से स्वयं निर्णय लेकर कार्य को बंद कर सकता है एवं स्थिति के सही होने तक कार्य नहीं करने को प्रबंधन को प्रेरित कर सकता है। सुरक्षा बातचीत कम्पनी का एक ऐसा कदम है जिससे दुतरफा वार्तालाप कर सुरक्षा में सकारात्मक परिवर्तन के लिए महत्वपूर्ण साबित हो रहा है। सकारात्मक सुरक्षित व्यवहार को पहचानने और सुदृढ़ करने, जोखिम भरे व्यवहार को पहचानने और उसे सही करने के साथ ही सुरक्षा पहलुओं के बारे में बात करना इस प्रक्रिया का महत्वपूर्ण अंग है।

हिन्दुस्तान ज़िंक के मुख्य कार्यकारी अधिकारी स्वयं एवं शीर्ष प्रबंधन सुरक्षा के प्रति जागरूकता हेतु सुरक्षा चौपाल एवं टाउन हॉल मिटिंग के जरिये कर्मचारियों से रुबरू होकर उन्हें सुरक्षा के प्रति जागरूक कर रहे हैं जिसमें सुरक्षा के प्रति जागरूकता के संदेश एवं सभी द्वारा दिये गये सुझावों को अमल में लाया जाता है। प्रबंधन द्वारा सुरक्षा के प्रति जिम्मेदारी और पूर्ण निष्ठा से सुरक्षित कार्य सुनिश्चित करने वालों को पुरस्कृत कर उनका उत्साहवर्धन किया जाता है।

हिन्दुस्तान ज़िंक में सुरक्षा प्रयासों के तहत किसी भी ठेका कर्मचारी को सुरक्षा के प्रति जागरूकता हेतु पुरे दिन के लिए सुरक्षा अधिकारी नियुक्त किया जाता है जो किसी भी स्थान पर असुरक्षित कार्य को बंद करा सकता है, उसे सही करने हेतु हिदायत दे सकता है, चाहे वो किसी भी स्तर का अधिकारी एवं कर्मचारी हो।

हिन्दुस्तान ज़िंक का प्रत्येक श्रमिक और कर्मचारी सुरक्षा का ब्राण्ड एम्बेसेडर है जो कि अपने साथी को कार्यस्थल एवं कार्यस्थल के बाहर सुरक्षा के प्रति जागरूक करता है। यदि किसी कर्मचारी को कोई भी व्यक्ति सड़क पर बिना हेलमेट या सीटबेल्ट के मिलता है तो वह उसे समझाकर उससे होने वाली दुर्घटना के परिणामों से अवगत कराता है। पिछले एक वर्ष में 12 से अधिक लोगों की जान इससे बचायी जा सकी है जो कि दुर्घटना के समय हेलमेट एवं सीटबेल्ट पहनने से किसी हादसे का शिकार होने से बचे हैं।

कार्य को अतिसुरक्षित तरीके से करने की पद्धति को आरोहण यात्रा के तहत मानक संचालन प्रक्रिया की पालना हिन्दुस्तान ज़िंक में होती है ताकि किसी भी प्रकार की दुर्घटना ना हो सकें। कार्यक्षेत्र से बाहर या कॉलोनी के आसपास के क्षेत्र के विद्यालयों में आग एवं सड़क सुरक्षा के प्रति जागरूकता हेतु प्रशिक्षण जिससे वे सुरक्षा के संवाहक बन सकें। गांव की महिलाओं, पुलिस एवं होम गार्ड को प्रशिक्षण दिया जा रहा है ताकि वे सुरक्षा के प्रति जागरूक होकर अधिक से अधिक लोगों को अवगत कराएं। हमारा लक्ष्य शून्य दुर्घटना शून्य हानि है।

श्रमिकों को प्रोत्साहन हेतु सेपटी चौपाल, सुरक्षा ध्वजारोहण जैसी परंपराओं के जरिये सुरक्षा को प्रोत्साहित किया जा रहा है। उन्ही श्रमिकों में से अधिकांश ने हमारे साथ सुरक्षा को अपने जीवन के अनुभवों को हमसे साझा किया है।

हिन्दुस्तान ज़िंक का
प्रत्येक श्रमिक और
कर्मचारी सुरक्षा का
ब्राण्ड एम्बेसेडर है जो
कि अपने साथी को
कार्यस्थल एवं
कार्यस्थल के बाहर
सुरक्षा के प्रति
जागरूक करता है।

विरम सिंह



फेब्रिकेशन एण्ड मेन्टिनेन्स,
मील-जावर ग्रुप ऑफ माइन्स, मैसर्स सिमर

“मेरा मूल मंत्र है कार्य के प्रति सदैव सजग एवं सुरक्षित रह कर जीवन का मूल्य समझें।”

मध्य प्रदेश के अंगाड़ी गाँव के 31 वर्षीय विरम सिंह सुरक्षा के प्रति एक जागरूक कर्मचारी के रूप में पहचाने जाते हैं, जो हमेशा दूसरों को सुरक्षा के प्रति सजग रहने के लिए प्रेरित करते हैं। विरम द्वारा दिये गये महत्वपूर्ण सुझावों के क्रियान्वयन से दुर्घटनाओं के प्रति सजगता आयी है। सिमर कंपनी के विरम, जावर खदान की मोचिया मील में 11 वर्षों से मेन्टिनेन्स विभाग में कार्यरत हैं। 8 वर्षीय नवजीत और 5 वर्षीय यशस्वी के पिता विरम को अपने जीवन के मूल्य को समझते हैं। जानते हैं कि वह अपने बच्चों व अपने परिवार के लिए कितने महत्वपूर्ण हैं। विरम को अपने हैवी जॉब कार्य के लिए हिन्दुस्तान ज़िंक द्वारा पुरस्कृत भी किया जा चुका है। विरम ने वाहनों के लिए मील से प्राप्त स्क्रेप से व्हील चौक बनाया है जिससे ना केवल सुरक्षा बल्कि लागत पर भी सकारात्मक प्रभाव पड़ा है।

विरम अपने कार्यस्थल पर सुरक्षा के प्रति ही जागरूक नहीं बल्कि अपने घर एवं परिवार में भी सभी को सजगता के लिए प्रेरित करते हैं।

असफाक अहमद



वेल्डर, कैप्टिव पावर प्लांट
जावर ग्रुप ऑफ माइन्स, मैसर्स फीडबैक

“मेरा मूल मंत्र है मुझे स्वयं एवं अपने परिवार के लिए सुरक्षित रहना है।”

तीन बेटियों के पिता असफाक अहमद आईबीआर वेल्डर के रूप में जावर के कैप्टिव पावर प्लांट में कार्यरत हैं। मूलतः बिहार के रहने वाले असफाक जब अपनी बेटियों सानिया, ज़िया और आलिया को देखते हैं तो उन्हें यह अहसास होता है कि जैसे मैं मेरे बच्चों के सुनहरे भविष्य के लिए सुरक्षित रह कर कार्य को अंजाम देता हूँ, उसी प्रकार दूसरे कर्मचारियों से भी आशा रखता हूँ कि वे भी एक जागरूक सुरक्षा कर्मचारी बनें। इसी सोच के साथ वह एक सेफ्टी ट्रेनर के रूप में भी नये कर्मचारियों को ट्रेनिंग देते हैं। 40 वर्षीय असफाक यह मानते हैं कि लोगों को ज़्यादा से ज़्यादा जागरूक करने के लिए सिर्फ क्लास रूम ट्रेनिंग की ही नहीं बल्कि मनोरंजन के द्वारा भी सुरक्षा संदेश दिया जा सकता है।

मैसर्स फीडबैक एजेन्सी द्वारा नियुक्त असफाक व उनकी टीम को कई बार सुरक्षा नुककड़ नाटक के लिए पुरस्कृत किया जा चुका है।

हिरेन पटेल



इंजीनियर, बलारिया माइन्स,
ग्रुप ऑफ माइन्स, मैसर्स सिगुल

“पूरी टीम सुरक्षित रहे,
यही मेरा मूल मंत्र है।”

जावर के बलारिया खदान में कार्यरत 26 वर्षीय इंजीनियर हिरेन पटेल का मानना है कि जब पूरी टीम खदान के अंदर जाती है तो हम सब की जिम्मेदारी है कि पूरी टीम सुरक्षित वापस बाहर आये। हिरेन कार्यस्थल पर सुरक्षा से संबंधित सभी ट्रेनिंग में हिस्सा लेते हैं और दूसरों को भी प्रेरित करते हैं कि सुरक्षा से संबंधित जानकारी को अपनायें और पीपीई का सख्ती से अनुपालन करें। पाटन, गुजरात के रहने वाले हिरेन को सीओबी फैन्सिंग अवार्ड से भी सम्मानित किया जा चुका है। यह अवार्ड उन्हें क्रशर के चारों ओर फैंस लगाने के लिए दिया गया है जिससे कर्मचारियों की सुरक्षा ही नहीं बल्कि कार्यक्षमता में सुधार हुआ है। हिरेन एक टीम प्लेयर हैं और वो अपने छोटे-छोटे प्रयासों से स्वयं का और अपनी टीम का सुरक्षा के लिए मनोबल बढ़ाते हैं।

आज उनके पिता श्री पन्ना लाल सेठ जो पेशे से किसान हैं व उनकी माता एक सरकारी स्कूल में अध्यापिका हैं, अपने बेटे पर गौरवान्वित महसूस करते हैं।

लक्ष्मण सिंह



फिटर
मील-जावर ग्रुप ऑफ माइन्स, मैसर्स सिमर

“मेरा मूल मंत्र है कि कार्यस्थल पर
‘सावधानी हटी – दुर्घटना घटी’ कहावत
के अनुरूप कार्य करें।”

जावर मील में कार्यरत 45 वर्षीय लक्ष्मण सिंह का मानना है कि लगन एवं सतर्क रहकर कार्य को अंजाम देना चाहिए। जावर खदान के पास ही थड्डा गाँव के रहने वाले लक्ष्मण सिंह सुरक्षा के प्रति हमेशा कटिबद्ध हैं कि उन्हें पीपीई अनुपालन एवं बाकी कर्मचारियों को सुरक्षा के प्रति जागरूक करने के लिए हिन्दुस्तान ज़िंक ने पुरस्कृत किया है। 12वीं कक्षा में अध्ययनरत पुष्पेन्द्र के पिता श्री लक्ष्मण सिंह अपने परिवार में भी सुरक्षा नियमों का अनुपालन के लिए जोर देते हैं। वह एक सेफ्टी ट्रेनर के रूप में भी नये कर्मचारियों को प्रशिक्षण देते हैं।

उन्होंने सिर्फ सुरक्षा के लिए ही नहीं बल्कि पर्यावरण को ध्यान में रखते हुए उल्लेखनीय कार्य किये हैं जिनमें से स्क्रेप का उपयोग करते हुए पम्प और मोटर गार्ड में काम आने वाले उपकरण बनाये हैं। जिससे ना सिर्फ वेस्ट सामग्री का सदुपयोग हुआ बल्कि सुरक्षा के प्रति भी सजगता आई है।

ACHIEVEMENTS & RECOGNITIONS



Town Hall Meet / Aarohan Birthday was celebrated on 29th October, 2018 at Rampura Agucha Mine where M/s Monomark Engineering (India) Pvt. Ltd. performed skit on theme - "Importance of reporting of Near Miss, Unsafe Acts & Unsafe Conditions". The team Members : Mr. Bhagchand Jat, Mr. Banwari Lal Sen, Mr. Omprakesh Jat, Mr. Hansraj Dohli and Mr. Madhu Lal Gurjar were rewarded as Best Skit team.



Mr. Darren Howard and Mr. Sarkar from M/s Barmenco were rewarded for Promoting Positive Safety Culture - Best Business Partner by Mr. Vinod Kumar - Unit Head and Mr. M.K. Soni - AKMS Union General Secretary during Aarohan Birthday Celebration/Town Hall Meet on 29th October, 2018 at Rampura Agucha Mine .



Mr. Jitendra Nagar, Mr. V. Jog Rao and Mr. Shivraj Bhambi from M/s Monomark Engineering (India) Pvt. Ltd. were rewarded for Promoting Positive Safety Culture - Best Business Partner by Mr. Vinod Kumar - Unit Head and Mr. M.K. Soni - AKMS Union General Secretary during Aarohan Birthday Celebration/Town Hall Meet on 29th October, 2018 at Rampura Agucha Mine.



Mr. Vijay Kumar Sharma & Team - Vehicle and Driving Standard were rewarded for Best Performing Safety Standard Champion by Mr. Vinod Kumar - Unit Head and Mr. M.K. Soni - AKMS Union General Secretary during Aarohan Birthday Celebration/Town Hall Meet on 29th October, 2018 at Rampura Agucha Mine. Score has improved from FY17 as 59 to FY18 as 80.



Mr. B. Shriharilal, Mr. Nakul Maheshwari and Mr. Ripsudan Bhoi - Lifting and Shifting Standard were rewarded for Best Performing Safety Standard Champion by Mr. Vinod Kumar - Unit Head and Mr. M.K. Soni - AKMS Union General Secretary during Aarohan Birthday Celebration/Town Hall Meet on 29th October, 2018 at Rampura Agucha Mine. Score has improved from FY17 as 38 to FY18 as 67.



Best Safe Worker – Mr. Radhakishan from M/s AAC Mining Executors was rewarded by Mr. J. Balasubramanian - Mill Head and Mr. M.K. Soni - AKMS Union General Secretary during 1st All India Mines Safety, Silicosis & Cleanliness Awareness Week conducted on 13th December, 2018 at Rampura Agucha Mine.



Best Safe Worker – Mr. Kailash Sahu from M/s AAC Mining Executors) was rewarded by Mr. J. Balasubramanian - Mill Head and Mr. M.K. Soni - AKMS Union General Secretary during 1st All India Mines Safety, Silicosis & Cleanliness Awareness Week conducted on 13th December, 2018 at Rampura Agucha Mine.



Best Safe Worker – Mr. Sathish Singh from M/s Shaft Sinks Mauritius was rewarded by Mr. J. Balasubramanian - Mill Head and Mr. M.K. Soni - AKMS Union General Secretary during 1st All India Mines Safety, Silicosis & Cleanliness Awareness Week conducted on 13th December, 2018 at Rampura Agucha Mine.



Best Safe Worker – Mr. Manbhajan from M/s AAC Mining Executors was rewarded by Mr. J. Balasubramanian - Mill Head and Mr. M.K. Soni - AKMS Union General Secretary during 1st All India Mines Safety, Silicosis & Cleanliness Awareness Week conducted on 13th December, 2018 at Rampura Agucha Mine.



Best Safe Worker – Mr. Sarath from M/s Tenknomin Construction Limited was rewarded by Mr. J. Balasubramanian - Mill Head and Mr. M.K. Soni - AKMS Union General Secretary during 1st All India Mines Safety, Silicosis & Cleanliness Awareness Week conducted on 13th December, 2018 at Rampura Agucha Mine.



Best Safe Worker – Mr. Kailash Mali from M/s Monomark Engineering India Pvt. Ltd. was rewarded by Mr. J. Balasubramanian - Mill Head and Mr. M.K. Soni - AKMS Union General Secretary during 1st All India Mines Safety, Silicosis & Cleanliness Awareness Week conducted on 13th December, 2018 at Rampura Agucha Mine.



Mr. Vijay Kumar Meena - helper-9251 - Hard Rock Manpower, Zawar Mines was rewarded for having good knowledge of LSR, recent incident and the sufficient knowledge of loose dressing



Mr. Dhaneshwar Mining Mate- BGEM, Zawar Mines was rewarded for safe and timely execution of Drop Raising



While a visit to 57mRL for jumbo operation checking, Mr. Pradeep Kumar - Jumbo Operator, Zawar Mines hanged cable on wall. During interaction, face checklist and operator's check list was available and therefore he was rewarded



Bell Man at Zawar Mines was rewarded for being aware about emergency switch and limit switch and what to do in case of some emergency of malfunctioning of telephone



Green Soldiers of Safety were felicitated by Director, Zawar Mines on 13th December, 2018 for showing commitment to Safe working by actively contributing to various pillars of Aarohan journey



Mr. Babu – BGEM LPDT Operator, Zawar Mines was rewarded for Safe Operation of LPDT and having thorough knowledge of VDSS & No Go criteria



Mr. Dinesh from Zawar Mines was rewarded for Best Safety Practices



Mr. Lokesh – BGEM, LPDT Operator, Zawar Mines was rewarded for Safe Operation of LPDT having thorough knowledge of VDSS and No Go criteria

Prize distribution in Mill for Safe Worker



Ms. Lata Kumari was awarded



Mr. Mukesh Kumar of M/s Simar Enterprises from Zawar Mines was awarded for maintaining the Mill by providing machine guard, housekeeping and auditing with closure of the same



Mr. Brijmohan Electrician-BGEM from Zawar Mines was rewarded for providing illumination in Underground Ramp



Mr. N. Lal from M/s Simar was awarded

Reward by Mr. Narayan Rajak - DGMS for Safety play at Zawar Mines



Ms. Apoorva Vyas



Mr. Ashutosh Pathak

Installation of rotating monorail to avoid manual material handling at Zawar Mines



Awarded to Team Members

1. Mr. Bherulal
2. Mr. Vikram Singh
3. Mr. Pannalal

Rigid Fencing over COB to eliminate Man-Material interaction at Zawar Mines



Awarded to Team Members

1. Mr. Hiren
2. Mr. Vikram Singh
3. Mr. Hamid
4. Mr. Manohar
5. Mr. Amarlal
6. Mr. Mohan
7. Mr. Ashok

Arrangement to stop Canopy Fall over to eliminate incident with Boomer Operator at Zawar Mines



Awarded to Team Members

1. Mr. Kushaal Soni
2. Mr. Bishal Mandal

CSC CEO Visit at RDC



- **Achievement: Chute replacement job at -55mRL**
Mr. Ramlal Jat - SMSL and Mr. Mohan Lal Gadri- HZL were rewarded
- **Achievement : Good work for structural safety at Mill**
Mr. Mangal Nath - Monomark was rewarded
- **Achievement : Ensured maximum PPE compliance in project site and also ensured 2 wheeler riders used crash helmet while riding**
Mr. Guddu Kumar - KEC was rewarded
- **Achievement : Modification in exhaust system of MT 4368 machine to enhance operator visibility at the ramp**
Mr. Ashwini Mishra - Epiroc was rewarded



Mr. Ramlal Jat



Mr. Mohanlal Gadri



Mr. Mangal Nath Chouhan



Mr. Ashwini Mishra

Aarohan 5th Birthday was celebrated at Chanderiya Smelting Complex from 28th October - 1st November, 2018. During the celebration week, workmen and contract workers participated in various events and awarded :

Drawing Competition for contract employees

- 1st - Mr. Akbar Mohd CH10001919 (MONOMARK)
- 2nd - Mr. P Sreenivasa Rao CH4000033 (KPS)
- 3rd - Mr. Vijesh Patidar CH50006351(SGB)



UIC (Best Aarohan Pillar Member)

- UIC 4 - Mr. Bhupesh Mod & Mr. Nahar Singh
- UIC 6 - Mr. Shambhu Lal Menaria - CH60000584 & Mr. Tapas Das - CH600002295

Best Safety Conscious Person

- Mr. Devi Lal Rathore (UIC-1)
- Mr. Rajesh Sharma, (UIC-2) CH20000018, Roaster-1
- Mr. Pramod Das (UIC-3) CH30000392 (SS & Co.)
- Mr. S.D. Lal
- Mr. W.S. Bebe
- Mr. Satnam Singh CH00001196



Best Contractor for Safety was given to M/s Kepco

Mitigation of potential risk at CSC

Modification of Tuyere Punching activity

- During Tuyere Punching activity at Pyro ISF plant, Slag particles / sparks & hot blast comes out from Tuyere that has potential to cause burn injury as the person is in front of Tuyere during this manual activity. Although face shield & Balaclava are already being used to protect the person but still probability of interaction with Slag particles / Sparks exists. It was identified as potential risk & a team comprising of Mr. Vijay Nalwaya, Mr. Utkarsh Pandey and Mr. Vineet Jain was formed under the guidance of Mr. Ravish Sharma and Mr. Vivek Yadav to mitigate the risk.
- All fabrication related job was done by Mr. Kamlesh Singh and job supervised by Mr. Suresh Prajapat - M/s MEIPL.



Nukkad Natak - Line of Fire at CSC



Mr. Jamuna Lal - Pyro



Mr. Suresh Bairagi - Pyro



Nukkad Natak - CPP at CSC



Mr. Kartik



Mr. Rahul Paliwal



Mr. Shailesh



Team members of M/s Mahalakshmi Associates - Mr. Mahaveer Gurjar, Mr. Panchulal, Mr. Harful Mali, Mr. Narayanlal Gurjar, Mr. Bholuram Jat and Mr. Vikram Singh and M/s M.M. Engineering - Mr. Vikram Singh, Mr. Trilok Singh & Mr. Naresh Tiwari submitted working models during Lifting and Shifting exhibition-September, 2018 at Rampura Agucha Mine. They were rewarded for their efforts.



The members of Nukkad Natak - Mr. Bhagchand Jat - Fitter, Mr. Madhu Gurjar - Helper, Mr. Hansraj Baret - Helper, Mr. Om Prakash Jat - Helper, Mr. Banwari Sen - Helper, Mr. Dalli Chand - Operator, Mr. Parmeshwar Sharma - Operator and Mr. Laxmi Narayan - Operator from M/s Monomark performed during road safety program that reached out to nine villages and covered more than 4000 students. They submitted models for 'Line of Fire Exhibition' and 'Lifting and Shifting Exhibition' & contributed effectively at Rampura Agucha Mine.

“Awareness is the key to build a galvanized Indian economy. People do not understand the difference between 'steel' and 'galvanized steel'. Galvanized steel increases the life of steel and gives life to not just industrial sectors but also household sector.”

- Sunil Duggal, CEO HZL

Cover Story

SR 2018 **20 Best
CEOs**
of the Year

The Zinc Man of India

Sunil Duggal, CEO-Hindustan Zinc

Published in The Silicon Review Magazine | October-December, 2018

Mr. Sunil Duggal joined the Company in August 2010 and is driving Hindustan Zinc to achieve the metal production capacity of 1.5 million tonnes and 1500 tonnes of silver within a span of 5 years. It is in his tenure that Hindustan Zinc has become a fully underground mining company and has been ranked 1st in Environment and 5th overall in the Dow Jones Sustainability Index amongst mining and metal companies globally.

In addition to being the CEO of Hindustan Zinc, Mr. Sunil Duggal is also President of FIMI (Federation of Indian Mineral Industries), an all-India apex body which promotes the interests of mineral-based industries. Mr. Duggal is also currently serving as the Vice Chairman of International Zinc Association, Co-Chair – FICCI Non-Ferrous Metals Committee 2018 and President – Indian Lead Zinc Development Association. He has also been Co-Chair of CII National Committee on Mining for 2017-18 and Chairman of Skill Council for Mining Sector.

Mr. Duggal also leads Vedanta Base Metals Group along with being the Chairman of the Vedanta Ethics Committee and anchoring Vedanta HSE Council. With an extensive experience of 34 years, he has embedded a strong safety culture in the Company and has adopted best-in-class mining and smelting techniques, state of art environment-friendly technologies, mechanization, digitalization and automation of operational activities into the business.

An electrical engineering graduate, Mr. Duggal is an Alumni of IMD, Lausanne - Switzerland, and IIM Calcutta.



Metal or specifically metals and mining are the silent rivers that run throughout any country's economy. History is an example of how the fortunes of many countries have turned overnight with the discovery of valuable metals and resources.

The significance of metals in our everyday lives is indisputable. Since metals combine performance with affordability, they're found in almost all consumer goods.

Hindustan Zinc: We all have Zinc in our Lives

Hindustan Zinc's various mines and smelting complexes are located in places around Udaipur, such as Zawar, Rajsamand, Bhilwara, Kayad and Chittorgarh. In fact, some of the richest ore bodies are found in the five Zinc-Lead mines owned by Hindustan Zinc spread across Rajasthan. The Company also has its Silver Refinery at Pantnagar in Uttarakhand.



The Alchemist that is Galvanizing the Indian Economy

We use metals in everything from cosmetics to batteries, from wind turbines to diabetes test strips, cancer treatments to car exhaust catalysts. Furthermore, our body needs metals such as Zinc, Iron, Copper and many more to function properly.

Headquartered in the City of Lakes —Udaipur, Rajasthan, Hindustan Zinc is India's only and one of the world's largest integrated producers of Zinc, Lead and Silver.

A subsidiary of Vedanta Group, Hindustan Zinc is the second largest Zinc producer in the world and extraordinarily, it is also one of the lowest cost Zinc producers in the world.

Acclaimed as the 'Zinc of India', the company has provided Zinc sufficiency to India and represents India in the global Zinc, Lead, and Silver market. As a market leader, Hindustan Zinc governs about 85% of growing Zinc market in India and produces almost 100% of India's integrated Silver.

With an ambition to grow and expand, the sky is the limit for the company. Since disinvested in 2002, Hindustan Zinc has invested over USD 3 Billion towards its 4 phases of expansion programs to reach to the current metal production capacity of 1 million tonne per annum and expand the capacity to 1.2 million tonnes by FY 2020 and eventually 1.5 million tonnes in the next 5 years. Hindustan Zinc has a mine life of more than 25 years with reserves & resources of 411.3 million MT base, post-depletion.

Hindustan Zinc mines are also expanding enormously. The company's two shafts, one each at Rampura Agucha and Sindesar Khurd Mines, are all set to be commissioned in FY 2019. The company is also setting-up 2 new mills, at Zawar Mines and Sindesar Khurd Mine, with a joint capacity of 3 million tonnes of ore-treatment.

After the commissioning of new mills, the ore treatment capacity will increase to 17.7 million tonnes from the current 14.7 million tonnes per annum. Both the new mills are expected to start production in FY 2019.

To increase metal production through the recovery process, Hindustan Zinc is also putting-up three Fumer Plants out of which one is likely to be commissioned within the FY 2019. This will help in the recovery of metals - particularly Lead and Silver.

Driven by the Mission to Galvanize Indian Economy

It is estimated that up to 4% of the world's GDP is lost through corrosion each year - a fact that makes lifecycle costs a key consideration in many modern construction projects.

Galvanizing is often considered as the most environmentally-friendly finishing process available to prevent corrosion. Galvanized steel has a strong protective coating of Zinc that has a metallurgical bond to it. This makes galvanizing a corrosion protection solution for steel that is intended to have a long service life which is easily inspected and self-maintaining.

Galvanized products, once constructed or installed, can also be removed, re-galvanized and re-used. They are also easily recycled with steel scrap in the steel production process.

CEO of Hindustan Zinc, Sunil Duggal reveals his thoughts on the importance of galvanization.

"Awareness is the key to build a galvanized Indian economy. People do not understand the difference between 'steel' and 'galvanized steel'. Galvanized steel increases the life of steel and gives life to not just industrial sectors but also household sector. Galvanization is a layer of protection to safeguard steel from rusting. Globally people understand that use of galvanized rebars can increase the life of their houses that can withstand many risks. Infrastructure at coastal areas is at the maximum risk due to humidity and constantly changing climate. Galvanized rebars protect pillars and hold construction. Galvanization of steel used in car body enhances the life of vehicle multi-fold – your recurring expenditure on repairs decreases and your safety increases. The new mega infrastructure development that is happening in India today, with the use of steel, should only use galvanized steel for strength and long life."

Citing Bandra-Worli Sea Link as an example, Sunil Duggal explains, "Infrastructure like bridges are extremely vulnerable to rust and corrosion due to their proximity to marine salts and moisture. One of the rust prevention methods for these structures is to provide a barrier coating by galvanization, galvanization by Zinc."

During the decade-long construction of the bridge, several

countries like Egypt, China, Canada, Switzerland, Britain, Hong Kong, Thailand, Singapore, Philippines, Indonesia, and Serbia lent their valuable advice to our country and stressed on the magnitude of using galvanized steel.

Zinc, through galvanization process, protects steel from rusting that enhances the lives of buildings, houses, bridges, railways, ships, defense equipment, highways, and airstrips to name prominently, though there are a number of other usages of Zinc that protect steel from rusting.

"Coastal salts can create a corrosive environment for any infrastructure across the world, the reason being humid and saline climate. When steel reinforcement corrodes, the corroded product occupies more than three times the volume of the original steel, exerting great disruptive tensile stress on the surrounding concrete, leading to further cracking, more weather access and further corrosion. According to the American Institute of Architects, it is essential to use hot dip galvanized steel, to make such coastal infrastructure decay resistant," he further elaborates.

At Hindustan Zinc, Environmental Sustainability Takes Centre Stage

Global climate change is one of the most important concerns for world governments and is a major research subject for the scientific international community with the participation of multi and interdisciplinary groups. Two fundamental reports – the United Nations Intergovernmental Panel on Climate Change (IPCC) and N. Stern, *The Economics of Climate Change*, 2007 Cambridge University Press, UK, outlines parameters that will affect infrastructure, temperature change, atmospheric moisture change, sea level rise, wind, desertification, pollution and inclusive biological infestation.

Temperature change is gradually resulting in an extreme climate, changing the periodicity of climate cycles. Such extreme climate events are bringing detrimental effect by way of corrosion and also bio-deterioration. This is also damaging both metallic and non-metallic materials used in infrastructure construction.

Many studies have elaborated the impact on structures due to global warming and their exposure to corrosion.

In India, there are various environmental laws for environment protection. Many Acts have been passed in Parliament. However, what about the damage to the environment and economy through rusting and corrosion?

With a heavy heart, Sunil Duggal recalls the massive cloudburst that happened in Uttarakhand in 2013. "I remember in the year 2013, due to cloudbursts in the state of Uttarakhand, the flash floods in river Ganga and landslides washed away thousands of lives. The Kedarnath Bridge at Sonprayag was also washed out due to heavy floods. The death toll and destruction was so massive that it left the region devastated. Subsequently, a Bailey bridge (a portable, pre-fabricated, truss bridge) was built by the Border Roads Organisation, limiting the traffic to one way and a maximum load of 12 tonnes at the most. But June

2015 saw more floods and this bridge was also washed away.”

Since the Temple is 3500 feet above sea level and is situated in a challenging topography, the construction of a stronger flawless bridge required more than 3 years to build. Further, since the bridge was to be built in such difficult conditions, it would have been impossible to regularly protect or maintain. It was finally decided that the new bridge has to be made of galvanized steel to ensure that it does not collapse.

The galvanized bridge was shipped in containers from the USA, completed and became operational in an incredible 45 days. In the new bridge, all the panel chords, diagonals, verticals, raker, reinforcing cords along with all the structural beam members and flooring were hot dip galvanized. This bridge could have been 'Made in India.'

Hindustan Zinc has been consistently working towards safety, protection of the environment, conservation of energy and water, and building infrastructure. It was the only Indian mining company to appear in Global Sustainability Yearbook 2018.

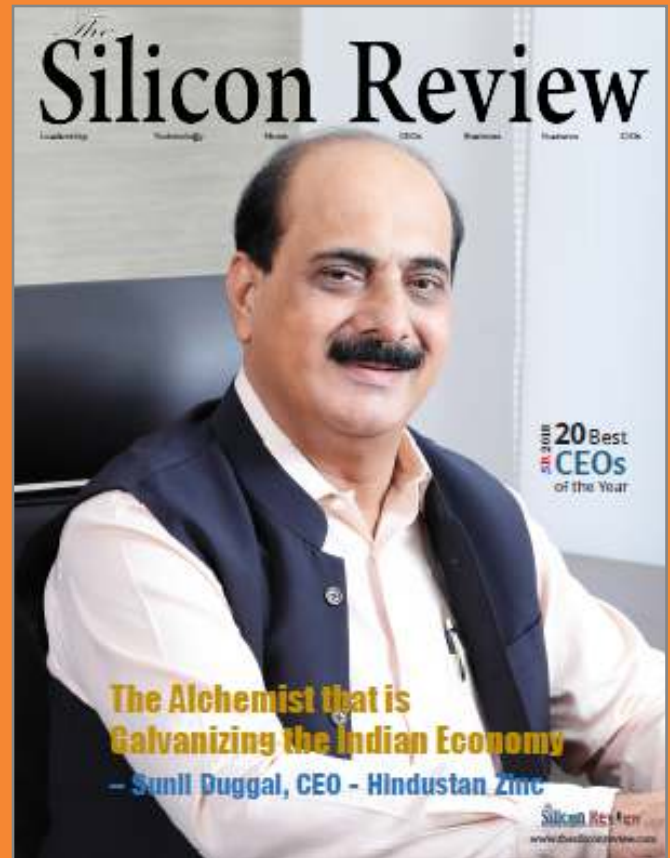
Hindustan Zinc recently topped the Metal & Mining sector globally in the Environment category in Dow Jones Sustainability Index. The Company was ranked overall 5th globally by Dow Jones Sustainability Index in the metals and mining sector. Hindustan Zinc competed with 58 metals & mining majors including Teck Resources, Rio Tinto, Barrick Gold, Anglo Gold Ashanti etc.

On being awarded the Dow Jones Sustainability Ranking, the CEO of Hindustan Zinc Sunil Duggal said, “Sustainability has always been a core value of Hindustan Zinc which is why the Company has integrated the best global environment friendly technologies in its operations. We are very glad to be awarded with this ranking in Dow Jones Sustainability Index, which strengthens our commitment towards zero harm to the environment.”

The Company has a strong focus on sustainability as well as on conservation of water and energy and all the plants operate on zero-discharge and moving steadily to zero-waste. The most friendly global environment technology has helped Hindustan Zinc to become one of the most admired Zinc Company in the world.

Ask and You Shall Receive: Sunil Duggal Urges Indian Consumers to Demand Galvanized Steel

Throwing some light on the market scenario, Sunil Duggal said, “Globally the top brands in cars started galvanizing various parts of the cars including the body to fight corrosion issues. This brought safety to the cars and protection to the environment and strengthened the economy. By 1987, what became standard was a 10-year perforation and five-year cosmetic warranty from all the North American, European and Japanese automakers for vehicles sold in the North American market. Indian car manufacturers use about 30% galvanized steel for the domestic market. However, the same Indian car manufacturers use over 70% galvanized steel for the same



models which they export to markets in Europe, Asia, and Africa, produced from the same stamping and assembly facilities.”

Mr. Duggal believes that “Indian consumers are not getting it, because they are not demanding for it. It is their direct loss.”

The global galvanized steel market for the industrial sector was valued at around 56 million tonnes in 2015 and is estimated to grow at a CAGR of about 5% by 2020.

The irony is that India is producing about 100 million tonnes of steel but surprisingly less than 10% is galvanized, which is just about 8 million tonnes. On the other hand, we are importing 1.44 million tonnes of galvanized steel from China, Korea, and Japan. Meaning, we import galvanized steel from other countries instead of increasing the production of galvanized steel within our country.

He finally says, “Galvanization of steel will add to Make in India and Sustain in India.”

“We might be making over-bridges, railways bridges, roads, high-rise buildings, railway tracks, fish plates, metros, electricity networks, ships, and automobiles, and using millions of tonnes of steel. But for how many years are we making them sustain is a point of contention. If our vision is long term, then the infrastructure also needs to sustain even longer.”

“It is not about the cost of galvanization that the country and the people have to bear, it is the investment for our safety and growth, as an individual and as a nation. It is about galvanization of the economy for future growth and prosperity,” Mr. Duggal concludes.

Steel Your Car With Zinc Coat

Centre drives plan to make galvanised steel mandatory in Indian automobile production



Published in Outlook Magazine | By Arindam Mukherjee | 31st December, 2018

“Galvanised steel, a must abroad, will shield cars from rust, corrosion. Make them last longer.”

You could soon be saved from a major problem that blights your automobile—corrosion and rust. This is more evident if you live in a region that gets heavy rainfall such as the Northeast or if you are from the coastal areas buffeted by salty sea winds. The salt-laden moisture blown from the sea is a catalyst that accelerates the corrosion process, thereby reducing your car's life and depreciating its value. Is there a solution to stop the decay or shield the cars from the elements? The answer is galvanised steel, the one with an anti-rust, protective zinc coating. Problem is all domestic production cars are made currently with non-galvanised steel. That's what the government is intending to change; and throw a lifeline to millions of automobile owners in the country.

The Union road transport ministry is considering a proposal to make it mandatory for the automobile industry to use only galvanised steel. The government has asked leading automobile safety and engineering institutions such as the International Centre for Automotive Technology (ICAT), Manesar, and the Automotive Research Association of India (ARAI) in Pune to send inputs and recommendations for the plan. The proposal will then go to a standing committee of Parliament before a final call is taken.

“Although there are 150 steel standards, vehicle steel has no standards in India. We adopt European standards. Cars with a value of less than Rs 10 lakh have the minimum galvanisation. This proposal was submitted to the government on the premise that galvanisation will increase life of a vehicle against corrosion and rust. I have advised the ministry to improve standards to reduce fatalities in road accidents through this. The technical standing committee will eventually set standards on galvanisation and make it compulsory,” says Veerendra Singh Rathore, technical advisor, road safety, ministry of road transport, and the person behind the proposal. Once this is done, this will become the automobile industry standard.

The ministry has also written to the Society of Indian Automobile Manufacturers (SIAM), the holding union of car manufacturers in India, this December and sought their views on the subject. SIAM's response is awaited.

At present, less than 30 per cent of the steel used in cars is galvanised and that too is not on a regular basis across car manufacturers. In export models, the amount of galvanisation is often around 70 per cent. This is primarily because Europe and the US have stringent rules mandating galvanisation of automotive steel. Flat products, such as hot rolled, cold rolled and coated steel sheets, account for about 80 per cent of steel products consumed by the auto makers. Steel is used for roof, chassis, wheels, brakes, exhaust and engine.

Galvanised steel, a must abroad, will shield cars from rust, corrosion. Make them last longer.

In 2015, IIT Bombay carried out an extensive study of automotive body corrosion in Mumbai and adjoining areas to track corrosion performance of currently used materials in India-made cars valued at less than Rs 10 lakh. The study adopted methodology similar to the one used in North America to check for visible perforations, paint blisters, and surface red rust. The survey was conducted in coastal and other humid regions of Mumbai. The results were surprisingly similar to those seen in a Detroit survey despite the fact that no road de-icing salts are used in Mumbai. The IIT report proved there is a corrosion problem affecting the durability and the eventual safety of cars in India. This is particularly visible in all coastal and high-humidity areas.

"In India, regulations are weak and carmakers are taking advantage of that. Cold-rolled sheets have to go through a seven-round cleaning process which can be totally avoided if galvanised steel is used. This can neutralise any costs that accrue because of galvanisation. There is also no impact on the weight of the car as the total thickness (of the zinc layer) is of 40 micron, which will add only around a couple of kilograms to the weight of the car," says Prof Anand Khanna of IIT Bombay who headed the Mumbai study.

Also in India, most car owners get an underbody and body coating done to prevent corrosion at a cost of anything between Rs 4,000 and Rs 8,000. According to experts, this can be avoided if galvanised steel is used by carmakers. What's more, the net cost burden on consumers would be under Rs 10,000 if steel in a car was to be galvanised and the results are far better than the coating that lasts only two to three years. Galvanisation lasts a vehicle's life.

There are many advantages for carmakers as well, apart from the savings on cleaning the CR sheets. Rahul Sharma, director, India, International Zinc Association, says: "Paintability in galvanised steel is much better than plain cold-rolled steel. It can be taken straight to the paint shop instead of going through a cleaning process." Galvanisation is required in a car chassis, wide body and nuts and bolts. But just 30 per cent galvanisation is there in the chassis of Indian cars, he adds.

It is also a fact that India has abundance of zinc. "India produces sufficient zinc. Its availability will never be a problem for either the steel industry or auto industry. Galvanisation of steel used in car body enhances the life of a vehicle multifold...your recurring expenditure on repairs decreases and your safety increases. Use of galvanised steel in cars will definitely add to the safety of passengers and bring enhanced value to the cars. The new mega infrastructure development that is happening

What's Missing?

Less than 30 per cent of steel used in Indian cars is galvanised.

THE THIN BUT TOUGH SHIELD

- ◆ Government considering proposal to make galvanisation mandatory for automobile steel
- ◆ Galvanisation already mandatory in Europe and the US
- ◆ India has no standards for steel to be used in automobiles
- ◆ Galvanisation can prevent corrosion and rust in vehicles and prolong their life. It can also reduce fatalities in road accidents
- ◆ Coastal and high-humidity areas are prone to corrosion in automotive steel, thereby reducing a car's life and value
- ◆ Government has sought views of ICAT, ARAI and also SIAM on using galvanised automotive steel.

in India today, with the use of steel, should only use galvanised steel for strength and long life," says Sunil Duggal, CEO of Hindustan Zinc Limited, one of the world's largest zinc manufacturers.

While a lot of thought is going towards various aspects of road safety, it is surprising that India still follows old and archaic rules when it comes to automotive steel. Perhaps the government and its committees will act on this soon and mandate zinc coating of vehicles to make them stronger and reduce fatalities in road accidents.

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Hindustan Zinc tops Metal & Mining Sector Globally in the 'Environment Category' in Dow Jones Sustainability Index - 2018

Hindustan Zinc tops Metal & Mining sector globally in the Environment category in Dow Jones Sustainability Index. The Company has also been ranked overall 5th globally by Dow Jones Sustainability Index in the metals and mining sector. Hindustan Zinc has improved its position from the last year when it was ranked 11th globally.

The Indian Company, popularly known as Zinc of India competed with 58 metals & mining majors including Newmont Mining, Teck Resources, Rio Tinto, Barrick Gold, Anglo Gold Ashanti etc.

Dow Jones Sustainability assessment is a globally renowned initiative organised by Robecosam, which assess & benchmarks the companies on various paradigms of sustainability.

Hindustan Zinc setting up Udaipur's first Sewage Treatment Plant with a capacity to treat 60 million litres of Sewage per day, which is almost 100% treatment of Udaipur's domestic Sewage. This is first of its kind STP built under the public-private-partnership model. As a benchmark, even the company's Head Office in Udaipur - Yashad Bhawan has been recognized as Rajasthan's first platinum-rated green building by CII-IGBC. Hindustan Zinc is a Vedanta Group Company and is India's only and the world's leading integrated Zinc-Lead-Silver producer.



Hindustan Zinc ranked 9th under Responsible Business Rankings-2018 by IIM Udaipur



Hindustan Zinc is now amongst India's Top-10 companies for its sustainable and welfare activities. In the recent survey conducted by IIM, Udaipur on Sustainability & CSR for Responsible Business Ranking for the year 2016-17, Hindustan Zinc has been ranked 9th across India in all companies sector.

The Company has always believed as the business grows, responsibility towards the society also grows. Care for Environment, Safety, Water & Sanitation, Child Care, Education, Nutrition, Sustainable Livelihood, Women Empowerment, Health, Sports & Culture and Community Development including community assets creation have always been the key focus areas for the organization.

The IIM Udaipur Responsible Business Ranking 2018 study looked at the top 218 public (47) and private (171) sector companies to arrive at these ranking. Of the total, it covers 135 companies from the manufacturing sector and 83 from the service sector with a diverse portfolio of industries such as

automobiles, banks, FMCG, infrastructure, information technology, metals and mining, oil, power, steel, pharmaceuticals, telecommunications and others.

The ranking is based on a weighted average of following four criteria: 20% weight to Governance, 15% to Disclosure, 30% to Stakeholders and 35% to Sustainability. The highest score that a company can get was 100.

Hindustan Zinc is proud to be known as Zinc and Silver of India. Hindustan Zinc, since its privatisation 15 years ago, has ramped up production of silver from 41 tonne to 600 tonne, all thanks to exploration success and aggressive expansion. In the pecking order for integrated silver producers, Hindustan Zinc ranks as the 10th largest producer in the world as of 2018.

The planning for the next phase of expansion from 1.2 to 1.35 mtpa mined metal capacity announced in April 2018 is underway. This means, 1000 MT Silver production in near future is reality, with SK Mine ramping up beyond 6 mtpa production.

Hindustan Zinc's (HZL) silver refinery located at Pantnagar in Uttarakhand has been added to London Bullion Market Association's (LBMA) "London Good Delivery" list for Silver with effect from April 16, 2018. This certifies Hindustan Zinc's silver bars are of international quality that match global trade acceptability. The capacity expansion of this refinery from current 600 MT to 800 MT is underway. In refinery, company added a 9th cell in Cell house to utilise peak load opportunity enabling plant to produce 2 MT plus per day consistently. Also, installing in January 2018 - a state of art technology – Emew Cell which works on principle of electro winning to improve recovery and purify electrolyte in cell house. A completely enclosed system, Emew eliminates acid mist and promotes a safer environment for operators and management. The Emew silver refining system is low maintenance, worry-free, and fully automatic with minimal labour requirements. The high purity silver powder is automatically harvested using a flush through technology to a single collection point ensuring the utmost security, with no losses and simplified metallurgical accounting. The proprietary emew silver process can produce up to 999.99 silver

Hindustan Zinc is all set to commission its first Zinc Fumer Plant to extract metals from the waste. Due to generation of Jarosite waste as part of the process, there has been a significant loss of metals like zinc, lead, copper, silver and other minor metals in the waste. The major recovery from Zinc Fumer Plant would be in Lead and Silver, an increase of Lead production by about 4700 tonnes and Silver by 33 tonnes per annum.

The company has also expanded the product portfolio in recent years. We continue to supply 30 kg Silver bars as our main product. HZL supplied 4.6 tonnes of mini bars in the FY 18. 52% of the sale was made to end users. HZL supplied 2.1 tonnes of Silver powder in FY 18 . 100% to End Users. First supply of Silver Nitrate was made in December, 2017.

In conclusion, Hindustan Zinc is all set to make best advantage of not only exploration success, but from efforts related to new technical innovation, to become top 5 silver producers globally.



SILVER

Tarun Arora

Head Business - Silver

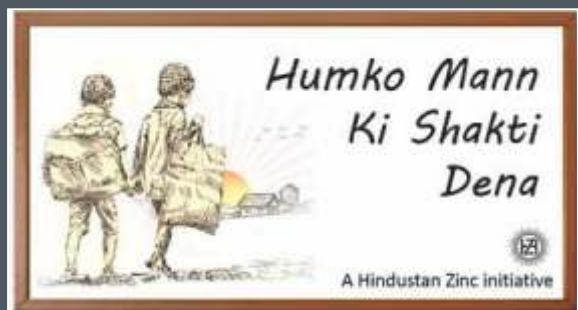
In the pecking order for integrated silver producers, Hindustan Zinc ranks as the 10th largest producer in the world as of 2018.

“Those who are acquainted with the literature of India will remember a beautiful old story about this extreme charity, how a whole family, as related in the Mahabharata, starved themselves to death and gave their last meal to a beggar. This is not an exaggeration, for such things still happen. Love and charity for the whole human race, that is the test of true religiousness. Give the last bit of bread you have even if you are starving. You will be free in a moment if you starve yourself to death by giving to another. Immediately you will be perfect, you will become God...”

- Swami Vivekananda, Hindu Monk, Spiritual Leader & Prolific Thinker

Voice on Kindness





'C' For 'Character' in Social Responsibility...

I was working in Rural Development Ministry way back in 1988. My job was that of Exhibition Officer.



Introducing new technology to rural people and showcasing how agriculture yield can be improved was Government's utmost priority. Save water, save electricity, child care, family planning, early marriage, adult education were few of the many areas that Government was keen to disseminate knowledge. Simple technology, simple language and simple clothes always worked. My key take away during my stint in Rural Development Ministry was that of understanding needs and psychology of rural people. How they see things and how they understand was quite different from what we do and what they want. At the very first instance, having someone approachable - who they can trust, discuss and talk about their small-small problems - carried great importance. Some issues would have solutions and some did not – but this was also quite understood by them. But, anyone who showed concern for them became a messiah for them, rather one of them. He/she became a permanent guest of the entire village.

20 years later when I joined Hindustan Zinc, the spirit to help rural poor residing near our business locations again got strengthened. Meeting 1000s of rural people, along with the then CSR Head, connected me instantly with them. This helps in communication even now. The way Government operates to align rural schemes in rural areas is quite interesting. The role of village leaders and opinion makers, besides Sarpanch, has always been a key to success. Another thing that Government taught me was the spirit behind social responsibility – the word CSR was not coined at that time. Actually, the letter 'C' in CSR means the 'Character' – the 'Character' (spirit) in Social Responsibility. The 'Character' that is 'self-less', that is 'passionate', that is 'emotional' and that is 'dedicated' is what makes the difference. Ultimately, this 'Character' drives and delivers the Connect with Community. Our group has pioneered in social responsibility and has one of the largest presence in this space across India in other countries - driven by the top management. It feels good when some of our beneficiaries call up on special occasions to wish 'Happy Diwali' or 'Happy New Year' and we acknowledge them by their 'name'. They are surprised and also happy to know that we have saved their mobile numbers up till now and the mutual admiration and connect is still alive and will stay.

“To create a sense of global responsibility, it is extremely important to develop the concept of oneness of humanity. If seven billion people are happy, and the environment is positive, then everyone gets benefit”, Dalai Lama.

Humko Mann Ki Shakti Dena – that we work towards greater good of the society.

Buckets of Newspapers...



We all have seen many products being produced out of waste. Many NGOs work on creating value out of waste and are successful too. But if we exclude the machines that convert waste into value, the hands that bring value would be that of rural India. The patience and dedication of India's rural population is an example to the world in terms of skills and creativity.

In 2014, Debari Smelters had developed a cluster of making beautiful baskets out of newspaper waste. From thought process to creativity to execution – everything was being done by these rural women. But their issue was creating market for these baskets. They had inventory and it was growing. These baskets were so adorable that we decided to expand this cluster under Sakhi Project and market these baskets in prominent hotels, corporate events and get-togethers for placing flowers and other gift items. The newspaper that we sold were gainfully utilized under this project and was now bringing some economic empowerment for these women. These baskets were not multi-usable,

but yes, we could use them at a single location for 7-8 days. They were to be protected from water. The colours remained as beautiful as they were painted. The smaller basket could carry a weight of about 2 kgs and the large basket up to 5 kgs.

We were students here and they were our teachers. Honestly, we could teach them nothing, rather they taught us how to make these baskets. The only effort that we did was market them and promote these baskets on social media. And we did. We also used these baskets during our event in Jaipur. Particularly, Aruna Cheeta was the resource to place all such baskets across the exhibition area, decorated with flowers and Sakhi made candles, and Dalpat Chauhan and his team were the source behind aligning these women for this project.

Humko Mann Ki Shakti Dena – that we work towards greater good of the society.

Hindustan Zinc's Zinc in the Statue of Unity - Sardar Vallabhbhai Patel



Hindustan Zinc is also proud to be a part of Statue of Unity - Sardar Vallabhbhai Patel. Three parties have together supplied about 3300 tonnes of galvanised structural steel to give everlasting strength to this tallest statue in the world and have used about 200 tonnes of Zinc produced by Hindustan Zinc for Galvanisation. Statue of Unity is the world's tallest statue of 182 meters that represents the statue of Sardar Patel – the Architect of Independent India who played major role in India's freedom struggle.

Truly, Zinc of India,
for the symbol of Unity...



**We believe in
excellence –
it comes
naturally**

A Corporate Communication Initiative...

“the SHEEN” is an effort to strengthen internal communication and build a ready reckoner on the activities by Hindustan Zinc’s various departments during the month

TEAM “the SHEEN” :

■ Technology & Innovation – Topendra Nayak and Praveen Singh ■ Sustainability – Shama Jain and Hansa Vyas ■ Mining – BHRS Reddy ■ Smelting – Nikita Bhakta ■ Silver – Tarun Arora ■ Exploration – Rupal Malik ■ Projects - Abhishek Somani ■ CRDL – Sheeba Mashruwala ■ Corporate Affairs – Hemant Nagda ■ Marketing – Aakriti Singal ■ Power – Prashant Choudhary ■ Information Technology – Aslam Ahmed ■ Corporate Communication – Devika Gupta ■ Finance – Alpana Kumari ■ Commercial – Atul Agarwal ■ CSR – Rupal Bhargava ■ Human Resource – Akshaya Swaminathan

BE SAFE *Zindagi*

"BE SAFE ZINDAGI" is an effort to make all of us understand that it is not necessary that we have to pass through a process of incidents to learn the essence of safety, we can absorb learning from the experiences of others as well. And we should.

"BE SAFE ZINDAGI" presents stories of our employees, including senior management - about their personal experiences on road safety, industrial safety and personal safety. These stories will be a learning for all HZL employees and their families.

If I could Donate a Breath to Save a Life ?

A Saint and his many disciples were travelling together in search of knowledge. Passing through villages they met many people, some children, some young and some old. Everyone welcomed the Saint and his disciples. Many villagers came forward to provide food and water to them and tried giving some gifts like new clothes, blankets etc. Saint and his disciples had food but refused every other donation.

Suddenly, one disciple asked the Saint – Param, these villagers were so kind to offer donation of every kind, but we refused. We want to know what all one can donate and receive in life. The Saint smiled and said, you can donate everything – your land, property, clothes, gold, ornaments etc. instances are that some people have even donated their loved ones. The disciples were very satisfied with the reply of the Saint.

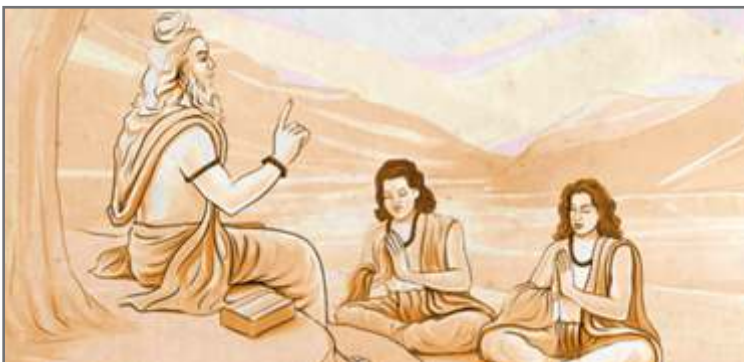
Just few yards away Saint saw a man struggling for his life. The Saint stopped and asked his disciple to donate everything that you can think of and save his life. The disciple offered this man everything, even got ready to donate his own organs. But the man pleaded the Saint if he could give him blessing to live a few hours longer to once see his family and children, as he knew his breaths are numbered.

The disciple had no answer. How could he lend his breath, if that was the only way to save him? Is there any way I could donate my breath to save him and let him live longer, he asked the Saint.

The Saint said, you asked me a question - What all one can donate and receive in life? The reply is – even if you want, you cannot lend or donate your breath to save a life, and even if the other person is willing, he cannot accept it. Ultimately, it is your life and you have to look after it well – for yourself and for your family. It is not about life or death, it is about why are you in this world - you have some responsibilities.

Do not take unnecessary risks as not every risk is worth taking.

True, if donations of breaths could save a life, everyone in this world would be willing to donate some, to save few.



We all have pledged to bring a change in Hindustan Zinc by transforming it into a ZERO HARM organization. "BE SAFE ZINDAGI" will focus on emphasizing the essence of safety within the premises and outside the premises and to ensure that the concept of safety is not just preached but practiced as well, after all, our safety is our responsibility...

Be Safe Zindagi is one step towards achieving the vision of ZERO HARM.

"BE SAFE ZINDAGI" you get to live only once....

The Selfie

Fateh Sagar is a place everyone wants to be in the evening. It is also refreshing to be around a lake in Udaipur that has its name in the world's most sought after destinations. Anyone visiting Udaipur, if does not take a round of Fateh Sagar, the visit to this beautiful city seems to be incomplete.

But with this, there is also a matter of concern. And the concern is - irresponsible driving by some people who feel 'kick' in taking all kind of risks and posing a threat to pedestrians and vehicles moving around.

While we were also taking round of Fateh Sagar, our eyes stopped at a gentleman who was driving motorcycle in front of us. Suddenly we saw him taking out his mobile from his pocket and started clicking pictures. Initially we could not believe this daring act and that also in the middle of the road.

We realised, it was not just pictures that he was clicking while driving, he was making a video of his in the Selfie mode. His eyes were on the mobile and one hand on the motorcycle, it was quite an annoying moment.

It was sheer luck of few vehicles and people that they were not hit. And perhaps it was his good luck too that he escaped a certain accident - though his invitation was quite confirmed.

God forbid, if something had happened to him, there would have been many running to click Selfie with him for uploading on Facebook page, Instagram or other social media handles, only to increase their followers.

We decided to drive behind this gentleman. He was on two-wheeler and we were on four-wheeler. For sure, two-wheelers are more prone to disbalance.

Accidents do not always happen because of fault of ours, they also happen because of people like these who seems to be enjoying the Selfie.



Hindustan Zinc wins three accolades at CII-ITC Sustainability Awards 2018

Hindustan Zinc is the proud recipient of the prestigious CII-ITC Sustainability Awards 2018 for Corporate Excellence – Outstanding Accomplishment Award, Commendation for Significant Achievement in CSR and Excellence in Environment Management Award.

The awards were presented at a glittering ceremony held at Pravasi Bharatiya Kendra, New Delhi, on 12th December 2018. The Chief Guest of the evening was Mr. Amitabh Kant - CEO-NITI Aayog who gave away the awards. On behalf of Hindustan Zinc, Mr. R.S. Ahuja - Chief HSE Officer and Ms. Shama Jain – AM, Environment received the Corporate Excellence – Outstanding Accomplishment Award; Ms. Monika Jain – AM, CSR received the Commendation for Significant Achievement in CSR domain and Mr. A.A. Gaharwar - Head Technological Cell and Mr. Sanjeev Raju – Head Mechanical received the Excellence in Environment Management Award for Dariba Smelter Complex.

The CII-ITC Sustainability Award recognizes the companies that have demonstrated outstanding policy, practice and results by successfully incorporating sustainability in their core business. More than recognition, the Awards measure performance and provide detailed feedback for opportunities to excel. The companies are evaluated and selected every year through a systematic corporate sustainability assessment by independent and CII certified sustainability assessors over a period of six months and identify leaders based on a variety of criteria including climate change strategies, natural resource consumption, human resources development, social performance, stakeholder relations and corporate governance. This year, a total of 77 companies applied across the country for various categories - (Corporate Excellence - 17, CSR - 29, Environment - 25, Biodiversity - 6).



Hindustan Zinc wins National Award for Excellence in Water Management 2018

Hindustan Zinc's Captive Power Plant at Zawar Mines and Dariba Smelting Complex won the 'National Award for Excellence in Water Management 2018' at the 4th Water Innovation Summit 2018 by CII – Triveni Water Institute, held on 4th & 5th October, 2018 at a glittering ceremony in New Delhi.

Dariba Smelting Complex received the 12th 'National Award for Excellence in Water Management' under 'Within the Fence' Category. The Captive Power Plant at Zawar was certified and recognized by CII - Triveni Water Institute as a 'Water Efficient Unit', under 'Within the Fence' category. On behalf of Hindustan Zinc, Mr. Ananta

Ghui - Head Engineering, DSC, Mr. Hemendra Sharma - Head, Utility, DSC, Mr. Ankit Mishra - Environment, Head-DSC, Mr. Abhay Pratap Singh - Head Operations, CPP Zawar and Mr. Rohitash Sharma - Engineer, CPP Zawar received the certificate and award from Mr. U.P. Singh - Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India and Mr. Rajiv Ranjan Mishra - Director General National Mission for Clean Ganga, Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India.



Hindustan Zinc awarded with 5-S JUSE (Union of Japanese Scientists and Engineers) Certificate during 32nd National Convention on Quality Concepts - 2018



Hindustan Zinc's Central Research & Development Laboratory, Kayad Mine and Chanderiya Smelting Complex are awarded with 5-S JUSE (Union of Japanese Scientists and Engineers) Certificate during 32nd National Convention on Quality Concepts - 2018 (NCQC). The event was hosted by Gwalior Chapter from 21st - 24th December, 2018 at ABV-IIITM, Quality Circle Forum of India in association with Union of Japanese Scientists and Engineers (JUSE). Hindustan Zinc has been awarded with the certificate on 21st December, 2018 by Chief Guest & Chairman of Central Board for Workers Education (CBWE), Western Division - Mr. H.J. Pandya and Mr. S.J. Kalokhe - President of QCFCI for successful implantation of required standards of 5S in organization. JUSE brought leaders and experts from all of Japan's major industries together to share the best practices. On behalf of Hindustan



Zinc, Mr. Harish Trivedi - Analyst & Mr. Suman Kumar – GET from CRDL Department, Mr. Mansingh Gehlot – Head Environment, Kayad Mine and Mr. Mohan Fartade, Mr. S.N. Somani, Ms. Neelam Soni & Ms. Neelam Sharma from CSC received the award.



Hindustan Zinc Included in FTSE4Good Emerging Index Series

Hindustan Zinc has been selected as an index constituent of the FTSE4Good Emerging Index in its annual review. The selection into FTSE4Good highlights HZL's sectoral leadership in Environmental, Social and Governance (ESG) performance. The Emerging Index comprises of companies selected through an assessment on over 161 data points that include Environmental Pillar, Social Pillar and Governance Pillar. Hindustan Zinc scored an overall rating of 3.8, compared to 2.8 achieved last year, out of maximum achievable score of 5. We scored 4.0 for environment performance, 3.7 in social performance and 4.0 in governance performance.

Hindustan Zinc received India Sustainability Leadership Award



Hindustan Zinc received India Sustainability Leadership Award 2018 in two categories - Sustainable Business of the Year Award & Sustainability Disclosure Leadership Award. The award was presented by World Sustainability Congress, a renowned non-profit organization advocating sustainable leadership on 26th November, 2018 at Taj Lands End, Mumbai. The award was adjudged by an eminent jury comprising sustainability professionals, practitioners and presented the award to Hindustan Zinc for the unique initiatives taken by company on social and environmental fronts, benchmarking in sustainable development, transparent reporting to stakeholders and its performance

during 2017-18. The award ceremony saw participation of over 50 corporates in different categories. On behalf of Hindustan Zinc, Ms. Shubhi Gupta received the award.

Hindustan Zinc received Indian Institute of Metals - Non-Ferrous Best Performance Award 2018

Hindustan Zinc received the 'Non-Ferrous Best Performance Award 2018' by the Indian Institute of Metals, under the category of Non-Ferrous Large Integrated Manufacturing Plants. The award was presented by Secretary of Ministry of Steel - Mr. Binay Kumar in the 56th National Metallurgists Day Celebrations & 72nd Indian Institute of Metals Annual Technical Meeting at Kolkata held from 14th-16th November 2018.

The award was adjudged by an eminent jury comprising academia from Indian Institute of Metals and presented the award to Hindustan Zinc for the best quality, registering highest product development and environmental performance during 2017-18. Hindustan Zinc

presented the R&D initiatives for development of products like Antimony Tri-Oxide, Bismuth Oxy Chloride, Copper Sulphate, Sodium Sulphate and Paver Blocks from the residues & wastes of the Company. On behalf of Hindustan Zinc, Mr. Manoj Nashine and Ms. Sheeba Mashruwala received the award.



Hindustan Zinc awarded at Indywood Built in India Excellence Awards 2018



Hindustan Zinc was awarded at Indywood Built in India Excellence Awards 2018 under the Metals and Minerals category. The Indywood Built In India Excellence Awards was organized on 4th December, 2018 at Hyderabad to recognize and facilitate the efforts made by organizations to boost the concept of 'Make in India' and make the country proud on the international front.

The award was presented by His Excellency from Saudi Arabia - Mohammed Ibrahim Al-Qahthani. On behalf of Hindustan Zinc, Mr. B.H.R.S. Reddy - AVP, Central Design Cell received the award.

The Indywood Built in India Excellence Awards 2018 was organized by Indywood and Govt. of Telangana State as part of Project Indywood.

HZL secures 1st position in 49th All India Mines Rescue Competition 2018

Hindustan Zinc has secured 1st position in 49th All India Mines Rescue competition 2018 (metal mines category) in the Sitarampur Mines rescue station at Dhimen main mine of Eastern Coal Field Limited. The function was organized from 9th - 13th December, 2018 and 23 different teams from all over India participated. This competition is being organized by Director General Mines Safety (DGMS). The company also secured 1st position in First Aid Drill, 2nd position in Rescue and Recovery Drill and Mr. Kailash Chandra Jat was declared as Best Team Member.





SUNIL DUGGAL

CEO of Hindustan Zinc & President of FIMI

Mining Data for Mining

CEO - Authored Article | Published in Financial Chronicle | 3rd October, 2018

The development of natural resources dates back to about 50,000 years – in the Middle Paleolithic Chert mines of Nazlet Sabaha (or Safaha), a site on the western banks of the Nile River in Egypt. In India, zinc mining dates back to over 3,000 years in Rajasthan at Zawar.

Mining was important in the ancient times and it is important today for the survival of mankind. Development of natural resources is essential for sustaining economies. But this is one of the most misunderstood sectors in terms of care for the environment and sustainability. But one needs to understand that you need metals for the growth and prosperity of nation and also for the benefit of mankind.

Above the earth is agriculture and below the earth are minerals. Only if minerals could be sown, mining would not have been needed. The development in technology, innovation and sophisticated machines has given new definition to the mining industry. It's not just mining today, it is mining with data mining.

The concept of safe mining has become larger than volumes and profits. Mining firms are more inclined towards developing green belts, create jobs and make operations more sustainable. Mine digitisation has developed intelligent mines that are smart, connected, wired and analytical. Digitisation also helps in making data-driven decisions. The

value derived from existing assets gets maximised with greater precision and transparency. It is ultimately making mining better, faster and safer along with other benefits. Technologies like real time monitoring, advanced sensor and analytics are helping in optimisation, cost reduction and increase in efficiency.

With digitisation, it's possible to build algorithms all the way from exploration to metal production. Predictive algorithms enhance precision, speed of maintenance and metallurgy. It has also improved management of energy and water resources and emissions. With ease of predictability, there is better preparedness and cost optimisation. Digitisation has also helped integration of processes to create one ultimate platform where different departments like sustainability, safety, production, cost and HR are visible. It has certainly changed the dynamics in the mining industry.

With digitalisation-enabled systems, many global firms have a 'life of mine' concept. Few have started driverless haulage that are equipped with a GPS, an obstacle detection system and vehicle controllers. These unmanned trucks increase mine safety, lower the

SUNIL DUGGAL
CEO of Hindustan Zinc & President of FIMI

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With digitalisation-enabled systems, many global firms have a 'life of mine' concept. Few have started driverless haulage that are equipped with a GPS, an obstacle detection system and vehicle controllers. These unmanned trucks increase mine safety, lower the

operating costs and reduce wear & tear on tyres. The world is exploring the movement of vehicles through remotes – the objective is to avoid man and machine collusion.

Indian mining firms are not far behind. Besides adopting the latest technology, there are many startups that are developing innovative technology to raise efficiency bringing minimum harm to the environment. When HZL, the only Indian firm that produces integrated zinc-led-silver, carried out its first aerial survey over a decade ago to locate mineral resources in Rajasthan, it attracted hundreds of villagers.

The company is developing intelligent mines that would be smart, connected, safer and more productive. In exploration, it is using remote sensing technologies. The experts are now moving on to implement an automated core scanning technology. A highly sensitive technology, this can also project the rock and terrain properties along with the content of the ore.

Other technologies that are being integrated by it include adopting augmented and virtual reality wearables and ore body intelligence that will help in higher predictability. Ore body intelligence enables geo-metallurgical characterisation faster, cheaper and in a more integrated manner. As soon as drilling is done, minerals present will be known, without waiting for 3-6 months.

3D laser scanning is another such technique being adopted by Hindustan Zinc, which will eliminate the need for experts to physically visit the mine. It would save time and money. This technology can map the shape, position and location of objects with high precision, allowing mining firms to accurately plan and prepare for exploration and drilling.

The transport management system, comprising processes like sequencing, route defining, geo-fencing, weighing and billing are also being automated. The introduction of high speed Wi-Fi networks in underground mines, high bandwidth optical fibre, voice over internet protocol (VoIP) and other IP-based devices will enable surface control of man, machine and materials at each level of the mine and improve stope enhancing productivity, underground traffic management and safety, along with ease in asset tracking, data transfer, real time equipment health monitoring.

HZL is also aiming to develop an integrated analytics & operations collaboration centre in Udaipur in 2-3 years. Thus, all data on output from mines, mills, smelters, power plants will be analysed at one place and results and feedback will be sent to the operations department, which will plan future actions to optimise operations.

Further, with digitisation, the entire value chain will be enhanced right from beneficiation to smelting to green power to waste management. HZL's silver-rich Sindesar Khurd mine in Rajasthan has turned out to be one of the most mechanised and digitised mines in the world. The firm is looking to convert 80 per cent of the fleet of vehicles in Sindesar Khurd mine into autonomous in 3 years and conduct operations like autonomous drilling and haulage, remote controlled operations, real-time asset tracking and monitoring.

With technology adoption and innovations, HZL has been successful in enhancing exploration. Latest 3D modelling software has been enabled for better visualisation of ore bodies, which has helped in identifying drilling gaps and the hidden ore. It has also been conducting trials of 'big data' machine to identify new target areas at its Rajpura Dariba mine in Rajasthan. It would help in exploration and extending mine life. Technology is extensively used for ore fragmentation, sorting and slurry pumping which has helped in improving recovery from tailings. It has also introduced technologies like cavity monitoring systems, mobile carrier rigs, V30 slot machines and refuge chambers for the first time in India.

India produces 87 minerals, which include 4 fuel minerals, 10 metallic minerals, 47 non-metallic minerals, 3 atomic minerals and 23 minor minerals. Why be an importer of a mineral that can be exported in abundance. Why create jobs in other countries, when our own youth are unemployed. Why pay hefty import bills, when India has the strength and resources to gain tremendously through exports.

There are some nations that are blessed with mineral resources and there some who would always want to be in leadership position towards mineral production. India is one such country that has been blessed with both.

Published in Economic Times | By Ketan Thakkar | 17th November, 2018

Mumbai: Car makers are likely to cease production of some of India's best-known models as safety and BS-VI emission norms kick in over the next two years as the country seeks to lower casualties and bring down emission levels of carbon dioxide, nitrogen oxides and particulate matter by more than half.

They will include Maruti Suzuki's Omni, the best-selling van that India's biggest carmaker has been selling since 1984, and the Gypsy, which for decades was the SUV of choice for India's military and the security services.

Also up for the chop is likely to be the Tata Nano, once celebrated as the cheapest car in the world, said people with knowledge of the matter. Joining them probably are the Mahindra E2O, India's only electric small car, and the Fiat Punto, they said. Production of the Hyundai Eon and the Honda Brio, the smallest cars from those companies, has already stopped, they added.

Except for the Omni and the Hyundai Eon, to a certain extent, sales have largely dwindled for most of the other models.

The Nano and E20 are expected to cease production by April 2019, while the Omni and the Punto won't get BS VI engines and hence will see their end by April 2020, which is when the emission norms take effect. The Nissan Terrano, Fiat Linea and Volkswagen Ameo are other notable models that are likely to halt production unless they are reborn with new engines and extensive structural changes, experts said.

The Indian car market is seeking to rapidly align itself with global standards on safety and emission fronts.

Stringent safety rules
and BS-VI emission
norms will kick in over
the next 2 years

Stringent new crash norms will be put in place by April 2019. As part of improved frontal and side impact protection, car makers will have to offer airbags and antilock braking systems as standard equipment.

India is among the most polluted countries in the world, being home to 11 of the 12 cities that are worst off in this respect. India also had the most road deaths in 2017 at 146,000.

The changes of April 2020 will be preceded by the Automotive Industry Standard (AIS) 140 standard applicable to commercial taxis. This mandates a tracking device and one or more emergency buttons in all existing or new public service vehicles.

Maruti Suzuki chairman RC Bhargava recently confirmed the Omni's end.

Tata Motors said any decision about production halts would be announced by the company.

“The production planning of a car is a conscious management of demand,

system inventory and planned efficiencies,” a spokesperson said in an email to ET.

Fiat Chrysler Automobiles (FCA) also declined to say which models would cease output.

"The company fully recognises the importance of the BS VI legislation being put in place to ensure cleaner emissions and it is clear that this will demand technical enhancement to FCA powertrains, which as one would expect, the company has already been working on for some time," said FCA India president and managing director Kevin Flynn. "At the moment, we have no further comment to offer on specific models that are part of our existing range of vehicles."

M&M didn't confirm ending the E2O but said as new regulations on safety and emission come into effect, the company will be rationalising its portfolio and some models will be phased out.

"However, we cannot give details on any specific model. We would like to state that all high-volume models will continue production," said a spokesperson.

Hyundai and Honda didn't respond to queries.

The Economic Times, Singapore, Saturday, 17 November 2018

New Norms to Turn Popular Cars Vintage

Stringent safety rules and BS-VI emission norms will kick in over the next 2 years.

Wetan.Thailand@thengroup.com

Steadfast: Car makers are likely to raise production of some of Toyota's best-known traditional sedans and ES-VT minivan, which will be over the next two years as the company shifts to focus exclusively

They will include Maruti Suzuki's Omni, the best-selling van that India's biggest carmaker has been selling since 1984, and the Gyron, which its executives say is the SUV of choice for India's military and the security services.

Also up for Thursday is India's role in the Thai crisis, once considered a

people with knowledge of the model. Jobbing them probably to the Madison's East, India's only electric small car, and the Fiat Panda, they said, *Production of the Hyundai Kona and the Honda Ario, the smallest cars from these companies, has already stopped*, they added.

Except for the Omni and the Hyundai Ario, to a certain extent, new cars largely do not reflect the mood of the other models.

The Indian and Ken are expected to increase production by April 2003 while the Omni and the Pune won't begin its longrun and hence will see drop in sales by April 2003. The effect is when the explosion in sales takes effect. The Nissan Terrano, Fiat Liana and Volkswagen Amro are other notable models that are likely to shift production unless they are reborn with new engines and extensive structural changes, experts said.

The Indian car market is seeking to rapidly align itself with global standards on safety and emission rates.

With new crash norms set

End of The Road for Some Indian Vehicles

Hyundai Motor India and Honda Cars India have already stopped production of small cars like the Brio.

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| THE NUMBER OF NEW AND REBUILT HOMES ARE CASE PROBABLY | REBUILT HOMES ARE CASE PROBABLY |
|--|--|

part of improved financial and labor impact protection, our members will have no offer of rings and neck-line breaking systems as standard equipment.

India is among the more polluted countries in the world, being home to 11 of the 21 cities that are worst-off in this respect. India also had the most road deaths in 2012 at 168,000.

The changes of April 2013 will be provided by the Automotive Industry Standards (AIS 141) and

The paper credit cards will be grandfathered in by April 2010 and the full transition to electronic credit cards is expected to be complete by 2012.



tests. This assumes a tracking device and one or more emergency beacons in all existing or new public service vehicles.

Mutual Sexual Chairman (C) (Chicago recently confirmed the City's plan.)

Two Motors said any decision about production hubs would be announced by the company.

"The production planning of a car is a complex task that requires a lot of time, money and human resources," a spokesman said.

...and connecting the world
of countries. In the world
of 17 most populous
and economic nations.



Fast Chrysler Automobiles (FCA) also declined to say which models would come on-stream.

"The company fully recognizes the importance of the US V10 platform being used to place tomorrow's new engines and it is clear that this will demand technical advancement to FCA powertrains, which as we would expect, the company has already been working on for some time," said FCA V10s president and managing director Kevin Flynn. "At the moment, we have no

SAFETY FIRST
The changes of April 2020 will be preceded by the AIS 140 standard, mandating a tracking device and one or more emergency buttons in all existing or new public service vehicles.

"However, we cannot give details on any specific model. We would like to state that all high-mile models will continue production," said a spokesman.

Ayuda and Honda didn't re-

Mine Environment and Mineral Conservation Week - 2018 celebrated at HZL

Mine Environment and Mineral Conservation Week- 2018 was celebrated at all Mines of Hindustan Zinc from 18th - 24th November, 2018. During the week, various activities - prize distribution, plantation drive, mine inspection, to name a few were organized with an objective to promote environment protection and conservation of minerals. There were sessions organized to discuss on mine environment and mineral conservation during the event. An inspection team was set-up by IBM during the celebration, comprising members from different mines who inspected several mines and evaluated the performance on afforestation, waste dump management, reclamation, top soil management, conservation of minerals, air & water quality management and aesthetic beauty of mines. The awards were presented to winning teams on 1st December, 2018.

Rampura Agucha Mine

- ◆ 1st prize in overall performance, afforestation, sustainable development and waste dump management categories
- ◆ 2nd prize in reclamation and rehabilitation category

Sindesar Khurd Mine got second prize in overall performance category

Kayad Mine :

- ◆ 3rd prize in overall performance category,
- ◆ 1st prize in Reclamation & Rehabilitation and
- ◆ 2nd prize in Systematic & Scientific Development and Sustainable Development

Rajpura Dariba Mine:

- ◆ 1st prize in mineral beneficiation category
- ◆ 3rd prize in waste dump management category

Zawar Mines:

- ◆ Mochia received 3rd prize in Sustainable Development and Systematic & Scientific Development categories
- ◆ Balaria received 2nd prize Mineral beneficiation and 3rd prize Environmental monitoring categories
- ◆ Baroi received 2nd prize in Publicity propaganda and 3rd in Mineral beneficiation categories
- ◆ Zawarmala received 2nd prize in Environmental Monitoring and 3rd in Mineral Conservation categories.

Maton Mine :

- ◆ 3rd prize in reclamation and rehabilitation category
- ◆ 3rd prize in Publicity propaganda category



राजपुरा दरीबा कॉम्प्लेक्स में सुरक्षा टाउन हॉल का आयोजन



हिन्दुस्तान जिंक के मुख्य कार्यकारी अधिकारी – श्री सुनील दुग्गल ने राजपुरा दरीबा कॉम्प्लेक्स में 28 दिसम्बर, 2018 को टाउन हॉल मीटिंग के अंतर्गत श्रमिकों, कर्मचारियों से सुरक्षा पर बातचीत की। उन्होंने कहा कि हमारी मानसिकता सुरक्षा को निभाने में महत्वपूर्ण भूमिका है, देश, प्रदेश, समाज और परिवार को सुरक्षित रखने के लिए ईमानदारी से प्रयास आवश्यक हैं। सुरक्षा को अगले स्तर तक ले जाने के लिए अनुशासन की महत्ती आवश्यकता है।

कार्यक्रम में राजपुरा दरीबा कॉम्प्लेक्स के सुरक्षा के क्षेत्र में उत्कृष्ट कार्य करने वाले कर्मचारियों को अतिथियों द्वारा सम्मानित किया गया। प्रश्नोत्तर सत्र में कर्मचारी साथियों द्वारा विविध विचार प्रस्तुत किये जिन्हें कम्पनी प्रबंधन ने यथोचित समाधान करने हेतु अपनी प्रतिबद्धता

व्यक्त की। इस अवसर पर हिन्दुस्तान जिंक के मुख्य वित्त अधिकारी – श्री अमिताभ गुप्ता, मुख्य कार्यकारी अधिकारी स्मेल्टर श्री पंकज कुमार, चीफ पीपल ऑफिसर सुश्री कविता सिंह, राजपुरा दरीबा के साईट प्रेसीडेंट – श्री के.सी. मीणा सहित कर्मचारी एवं अधिकारी उपस्थित थे।

Aarohan 5th Birthday Celebration at HZL

Celebration for successful completion of 5 years of Aarohan Journey was organized across units of Hindustan Zinc. This journey was initiated on 29th October, 2013. Several activities like cake cutting, skit, poster making, selfie with aarohan, video making, safety marching, cultural program, quiz, message from senior management and site leadership on highlighting the achievements of 5 years conducted during the celebration. All employees and contract workers participated.



Vehicle and Driving Safety Initiatives at RDC

There were repetitive damage of the side mirror during operation of machines in underground. Therefore, metal cover has been fabricated and welded over the side mirror to prevent its damage at Sindesar Khurd Mine. This has reduced the damage of side mirrors in the machines. Also, new parking area of North Ramp has been commissioned and High Beam Torches have also been provided to all mining engineers and mining mate for better visibility in critical jobs.

Expert Engagement for Safety Improvement at HZL

To improve safety performance and to strengthen the safety systems, Hindustan Zinc team has engaged M/s DuPont for Safety Maturity Assessment across sites from 16th December, 2018. It focuses on assessing maturity level of employees, safety system implementation and also it identifies the support program as outcome to improve further on safety. Senior Consultant - Mr. R.K. Mishra has been engaged at Zawar Mines site for safety improvement and handholding.

Butterfly cum Rose Garden at CSC

Protecting and enhancing biodiversity is an integral part of HZL's commitment to sustainable development. There is a separate policy on Biodiversity and the company stays committed to prevent risk on biodiversity throughout business locations. To comply the policy, a Butterfly cum Rose Garden has been developed in CPP Unit at Chanderiya Smelting Complex as implementation of Biodiversity Management Plan.

Man Machine Interaction at HZL

Campaigning was done on Man Machine Interaction as per safety theme in November, 2018 at all units of Hindustan Zinc under the leadership of Unit Heads.

Various activities were conducted to raise awareness and increase understanding of employees on Line of Fire.



Chetna - Ek Kudum Swachta Ki Aur at PMP

An initiative - Chetna has been taken at Pantnagar Metal Plant where employees participate in cleanliness drive in plant. During each session, one area is identified and all the employees make sure that no debris are left behind. The session ends with a meeting in where root cause are identified for waste generation and all observations are shared.

Hindustan Zinc Jyotish Vatika at ZSD

Hindustan Zinc Jyotish Vatika was established at Zinc Smelter Debari in quarter 3. It comprises of 27 nakshtra, 12 rashis and 9 grih. This initiative is taken in line with Biodiversity management policy to conserve medicinal plants & its importance. Vatika labelled with a board showing colour, plant and planet of each nakshtra and rashi. Use of plants as per nakshtra and rashi helps to energize your own premises and to energize the nearby area too.

LOF & Blind Spot Safety talk at PMP

For creating awareness among working team regarding blind spot behind trucks, lifters during loading, unloading & parking, Pantnagar Metal Plant team conducted two Safety - talk sessions on 11th December, 2018. Drivers & Loading crew got benefitted from the training. The training covered all aspects of Line of Fire & Blind Spot - Hazards & Risk involved while moving vehicles and safe driving techniques.

Safety Week at Zawar Mines

All India Mines Safety, Cleanliness & Silicosis Awareness Week-2018, Trade test & first competition was conducted at DAV school, Zawar Mines on 15th December, 2018. The event started with Flag hoisting by Mr. Narayan Rajak - Deputy DG.

Top participants from their respective Zones of 26 different trades like driller, blaster, operator, electrician, mining mate, etc. have participated in the program. More than 230 participants in this competition including companies - MOIL, Hutti Gold Mines, UCIL, HCL, IMFA, etc. participated. After written & oral examinations of all trades, results were declared & winners were given silver medals and consolation prizes. Mr. A.K. Porwal - DMS, Mr. P.K. Kundu - DMS, Mr. Rajesh Kundu - Site President, Mr. Sanjay Khator - Head Operations Cluster A and Mr. Lalu Ramji – General Secretary Zawar Mines Majdoor Sangh were present during the program.



“Education is free. Freedom of education shall be enjoyed under the condition fixed by law and under the supreme control of the state. The education of all children, from the moment that they can get along without a mother's care, shall be in state institutions and free education for all children in public schools. There should be abolition of children's factory labour in its present form...”
- Karl Marx, Historian, Economist & Philosopher Revolutionary Socialist



Training Session on POSH at PMP, CSC, RDC & Zawar Mines

A training session by Dr. Aparna Sethi was organized at Pantnagar Metal Plant on 6th December, 2018. Over 50 employees and contract workers attended the program.

In line with this POSH (Prevention of Sexual Harassment at Workplace), awareness sessions were organized on 21st November, 2018 at Chanderiya Smelting Complex by a faculty and consultant of POSH - Dr. Aparna Sethi. 290 employees and contract workers attended all three sessions.

In order to spread awareness amongst employees, Prevention of Sexual Harassment (POSH) was organized on 30th October, 2018. Detailed sessions on Prevention of Sexual Harassment were conducted in Dariba Smelting Complex.

A training session on Prevention of Sexual Harassment at Workplace (POSH) was organized to sensitize the employees about the finer aspects of sexual harassment and its prevention on 29th October, 2018 at Zawar Mines. The program was attended by about 200

employees. The session was taken up by Dr. Aparna Sethi - Motivational Speaker & POSH Consultant.

Awareness Session on basics of Fire Fighting at PMP

An awareness session on how to react and save oneself in a fire incident was organized at Pantnagar Metal Plant for contract workers and truck drivers.

Nukkad Natak on Line of Fire at CSC

Nukkad Natak focusing on how to identify and prevent line of fire hazard and risk was conducted at Fumer project, Chanderiya Smelting Complex in quarter 3. The Nukkad Natak was based on paying close attention to personnel and objects above, below and in the immediate work area during any job evaluation.

Ergonomics Study at Zawar Mines

Ergonomics study of HEMM operators was conducted by M/s Sure Safety to assess the hazards associated with HEMM operators and its long lasting effects. Suggestions and changes in positions & postures were also suggested.

Safety Awareness Campaign at CSC

Safety Awareness Campaign has been started by logistics team in quarter 3 for drivers at different locations of Chanderiya Smelting Complex. Awareness training program was organized on weekly basis as per schedule and topics covered were awareness on road traffic sign & rules, information about TREM card, information & benefit of fatigue management safe uses of PPEs, etc.

Training on Hand Safety at PMP

A training session on how to be alert and safe while working and keeping in mind the injuries that can incur to hands while working was organized for employees and contract workers by Pantnagar Metal Plant team.

Safety Chaupal at CSC

Safety Chaupal was conducted at Captive Power Plant of Chanderiya Smelting Complex on 14th November, 2018 on Work at Height. The objective of the Chaupal was to share common mistakes/wrong practices/case studies of Work at Height and learning from them.

Commissioning of Solar Power Plant at RAM

Rampura Agucha Mine team have commissioned 20 MW Solar Power Plant for captive use of generated green energy. The solar power projects are commissioned on the available land at locations towards gainful utilization of wasteland.

Modern Safety Display Van at Zawar Mines

A customized state-of-art Modern Safety Display Van has been deployed at Zawar Mines since November, 2018. It is a highly advanced vehicle which displays all the safety awareness and safety standard videos to spread awareness across the Zawar Location.



National Energy Conservation Day at CSC

Plantation Activity was carried out on National Energy Conservation Day i.e., 14th December, 2018 at Chanderiya Smelting Complex-Hydro-1 Unit.

Introducing First ever Microsite for HZL Sustainability Report

New microsite for Sustainability Report 2017-18 has gone live and is accessible through- <http://sustainability.hzlindia.com>

As a responsible corporate citizen, sustainable development has been integrated into Hindustan Zinc's strategic objectives as the company constantly aims for new benchmarks in sustainable business, presented through sustainability reports. This year, 3rd Sustainability Report has been released with the theme 'TechTatva' which emanates from technology being the key element across all pillars of sustainability at HZL, and the binding force of the interventions across three bottom lines.

SD report and microsite show the strategic link between organizational goals and sustainability performance takes the reader through an exhilarating journey of present and gives an exciting glimpse into future.

Massive Plantation Drive at CSC

Chanderiya Smelting Complex team has developed Green Area by acquiring new land and by planting around 60,000 saplings. This initiative received a prestigious award 'Van Wordhak Prohatsan' through District Forest Department, Chittorgarh.

Townhall Meeting at Zawar Mines

A Townhall meeting was organized by Zawar Mines team on 25th October, 2018. Mr. Amitabh Gupta - CFO, Mr. L.S. Shekhawat - COO Mines, Mr. Pankaj Kumar - COO Smelters, Mr. Rajesh Kundu - Site President, Zawar Mines and Mr. Lalu Ram Meena - General Secretary, Zawar Mines Majdoor Sangh presided the meeting. It saw a participation of around 1500 stakeholders including contractor workers, employees, families and villagers.

Employees also presented a Nukkad Natak on the theme 'Actions Employee Can Take' and 'Line of Fire' emphasising on actions for safety.



News Digest...

- ◆ M/s Mynesight was engaged for mining mate competency assessment and improvement, initiated mining mate competency building programs across mines.
- ◆ Zawar -BBS training and motivational program was conducted by CBRE/HZL with Udyogi & MBECL in quarter 3.
- ◆ Monthly Safety Gate Meeting Concept has been initiated at Chanderiya Smelting Complex with an objective to bring more focus on safety and sustainability at the Location.

DMG-AP delegation with COO-HZL



A delegation of 5 Senior Officials from DMG-Andhra Pradesh lead by Mr. K.C.L. Narasimha Reddy – Jt. Director, besides Mr. E. Hanumantha Rao - CEO, Mineral Exploration, Research & Innovation Trust (MERIT-AP) visited HZL's Exploration, Mining Operations, Beneficiation, Smelting & Ancient Heritage sites covering Zawar Mines and Rajpura Dariba Complex. They visited to have first-hand feel of world class facilities across key locations from 20th-22nd November, 2018 to understand existing capacities, ambitious expansion plan & world class operations.

On the concluding day, Mr. L.S. Shekhawat - COO, Mines, Mr. Amitabh Gupta - CFO and Mr. J.K. Upadhyay - IAS & Director DMG, Rajasthan were part of interactive session with delegation of DMG Andhra with senior officials from Mining & Geology streams of DMG-Rajasthan on the matters of mutual concern at large like auctioning of potential block in Rajasthan & Andhra while HZL shared its views & experience in driving block auctioning processes across India citing Baghmara example as key concerns, issues & way forward for successful conversion of auction blocks into operational success. From HZL, Mr. S.K. Vashisth - AGM, Business Development coordinated the entire trip to location sites and key interactions with leading authorities from both the states.

Project Genesis at RDC

Project Genesis commenced at Rajpura Dariba Complex on 15th October, 2018 where a competency framework has been developed in partnership with M/s Mettl, for employees of Business Partners. It is a comprehensive exercise, that segregates the skills and knowledge of employees in the first phase.



Training at IBM Nagpur by HZL team

Two training programs were attended by CRDL GETs – Beneficiation of Leanores/ Rejects/ Dumps & Recovery of a) Associated minerals, b) Characterization of ores and minerals and chemical analysis in view of mineral processing.

The objective of training was to provide exposure to GETs about latest process technologies in the field of Mineral Processing & Ore Microscopy.

Rail Metallization at Aligarh Railway Station

Re-development of Aligarh Railway Station is being taken up by the Lucknow Railway Division Office in November, 2018. To discuss the proposal of Zinc metallization of rail tracks, IZA and HZL gave presentation to the DRM of Lucknow division. The proposal has been well received and railway is positive about the project.

Motivational Workshop at HZL

Mr. Vijay Batra - Motivational Speaker was invited to carry out a workshop at all business locations of Hindustan Zinc in November, 2018. He instilled the behavior of self-confidence by making people start believing in themselves through his session.

During his session, he spread the message of positive thinking and work ethics through his talks and training seminars.

These sessions were attended by employees and their families.



Drosrite Technology at PMP

Drosrite Technology developed and patented by PyroGenesis, Canada was tested at Pantnagar Metal Plant with CRDL team. The Drosrite furnace pilot skid was installed and 30 batches were operated from 14th - 30th November, 2018. The Red Hot Zinc dross from melting furnace is introduced into nitrogen filled rotary tilting furnace and controlled amount of oxygen is purged for heating. Two products were obtained i.e., Zn molten metal directly to be charged in melting furnace and Zinc Oxide dust that is suitable for leaching section. The benefits from the process are improvement in first pass metal recovery by 0.5-1% and reduced COP & material handling.

Data Mining Training at Zawar Mines

A 4-day training on Data Mining was organized at Zawar Mines from 3rd – 6th October, 2018. The faculty of the training program was Mr. Manish Tomar – Exploration Department covering all the basics of Data Mining as well as helping the newcomers to understand data mining software.

Stress Management Session at RDC

A session on Stress Management was conducted at Rajpura Dariba Complex on 13th October, 2018 by trainer from M/s Regional Training Centre, Nimbahera where the participants learnt about good stress, bad stress and ways to control them.

Antimony Slag at CSC

Antimony Slag ~800 MT is generated annually at Pyro Chanderiya Smelting Complex, the slag which consists of 60% Pb and 20% Sb is presently sold at low values. CRDL has developed a hydrometallurgical route for recovery of Antimony and Lead from Antimony Slag.

Antimony recovered as Antimony Tri-oxide of purity more than 96%, has a huge market due to its usage in flame retardants. Lead is recovered as enriched Pb cake which is recycled in Lead plant. To validate the treatment process, 9 MT Antimony Slag has been treated at CRDL pilot plant in October, 2018 and about 1.5 MT Antimony Trioxide & 7.6 MT enriched lead cake has been generated.

Train the Trainer at Zawar Mines

Zawar Mines team has selected employees who are trainers for different subjects and under Train the Trainer program, they were given training on 19th November, 2018 for Incident Management to develop the people as trainers focusing on communication, delivery, acquiring subject expertise, evaluation of participants, etc. The faculties of program were Mr. A.K. Ghui and Mr. A. Kothari.

Six Sigma Black Belt Training at RDC

A 5-day training for all the HiPos, Stars and Heads was conducted from 15th – 19th October, 2018 at Rajpura Dariba Complex on Six Sigma Black belt where the participants learnt about Six Sigma business strategy and its importance to the organization, different phases of the six sigma methodology and some of their related tools and application & management-enabled factors required for success, amongst many other aspects.

Pride & Sarahana launched in RDC



Pride initiative was launched at Rajpura Dariba Mine in November, 2018. The objective is to appreciate the employees instantly, independently and personally by the Head of Department, whenever they perform something incredible. The instant, independent and direct nature of this scheme helps building better teams at department level under the Head of Departments, instilling a positive culture of 'I Appreciate'.

Sarahana initiative aims on appreciating the contract workers instantly, independently and personally by the Head, for actions that contributes to

the performance of plant operations, which requires immediate appreciation, reciprocation by the Head to reinforce the motivation for future similar action. The independent and direct nature of this Scheme helps in building better teams at department level and a positive culture of 'We Appreciate'.

Meeting with TSL/BMW & Tata Blue scope by HZL

A meeting was held in Jamshedpur for the discussion to explore the possibility of using VAP and to develop the bar code based tagging system for each jumbo ingot on 19th & 20th November, 2018. Bar code tag would contain information in terms of weight, chemistry, ingot type, grade and dimensions for the Jumbo Ingots. This will facilitate capturing the relevant information on line and CRM can use this for proper identification, storage and use of zinc ingots in the zinc bath.

Waste to Wealth at CSC

Jarosite and jarofix is a hydrological process waste generated in a large quantity. After study through governmental organizations, it has been identified as a commercially viable product and it can be used in cement industry and also in road construction. So as an initiative of waste utilization, presently, 10000 MT of Jarosite is being utilized in cement industry and also Jarofix use has been initiated in road construction project.

MIQA Training at Zawar Mines

Quality Assurance training was organized from 26th – 28th November, 2018 by M/s Du Pont professionals - Mr. Jaypal Iyengar and Mr. John Aron at Zawar Mines focusing on bringing in excellence in Maintenance. Both mechanical and electrical engineers attended the program.

Driver Choupal at RDC

A safety awareness program - Driver Choupal was arranged at Dariba Smelting Complex to spread the safety message among the external drivers on 16th November, 2018. During the session, a new safety slogan - we care about you, you care about Safety and Defensive Driving tips sticker was also released by Mr. Deepak Sopori – Head DSC.

GET Program at Zawar Mines

Graduate Engineer Trainees (GETs) after completing their projects at Zawar Mines, were reviewed and evaluated by a panel of senior management and experts. Around 40 GETs who are on rotation across different sites of Hindustan Zinc were given a farewell dinner on 24th November, 2018 along with their guides and mentors. The GETs were allocated projects not only in mining but also in community development as well as in Health Safety & Environment domain. The GETs also shared their experience of their stint at Zawar.

“It was time for a nutrition revolution in India and it is important to work to achieve that to end malnutrition. India was a country with the largest number of people with malnutrition in the world, this is despite adequate food production and availability of cereals. This is a nutrition enigma and this calls for a multi-sectoral approach involving areas, including agriculture, health and rural development to ensure nutrition for people across the social spectrum...”
- M.S. Swaminathan, Indian Father of Green Revolution, Indian Geneticist ”



Managerial Effectiveness Training Session at RDC

Mr. Suresh - Motivational Speaker & Corporate Trainer with 26 years of experience took session on Managerial Effectiveness training with managers and leaders at Rajpura Dariba Complex on 3rd November, 2018.

Pravega - Digitalizing CSC

With the objective to save time, no dependency of planning person and to have all relevant data - norms, KPI, stocks, production consumption in single transaction, a new system generated DPR was developed by Ms. Neelam Sharma and Mr. Parth Sharma at Unit II Hydro. This new auto generated DPR eliminates the need for manually generating reports, reducing the possibility of errors and having quality data for analysis. Auto generated Hydro DPR is fully implemented and a system generated presentation will be available in the system.

Mining Safety Workshop at Zawar Mines

A workshop was conducted on Mining Safety on 1st November, 2018. The workshop was attended by mine managers, safety officers and other concerned people where safety measures were discussed.

ILZDA Battery Conference attended by HZL

International Lead Zinc Development Association (ILZDA) organized the - International Conference on 'Lead & Lead Batteries-Roadmap for India' on 22nd & 23rd October, 2018 in New Delhi. The objective was to find a headway for the Indian Lead Battery market amidst uncertain global economic & trade environment and a looming threat from Li-ion batteries. While the threat from Li-ion batteries is real, there are questions on its availability, technology on mass-production & major issues concerning safe disposal.



Training on VSAP Pillars at Zawar Mines

Training on all the VSAP Pillars was conducted for all the UIC members including UIC Chairman by the different Champions. The 2 day training program had 7 sessions where around 30 participants attended.

Shabaash Celebration at RDC

Monthly celebration - Shabaash was conducted at Dariba Smelting Complex on 4th October & 1st November, 2018 where employees from Business Partners were recognized and rewarded for their outstanding contribution.

Training on 5S at CSC

5S Awareness training was conducted on 15th October, 2018. About 45 participants including teachers & supportive staff of Hind Zinc School got benefitted from the training.

In order to promote safe workplace and ensuring effectiveness of emergency preparedness to minimize losses, a training program was organized on 18th October, 2018 on Emergency Preparedness Plan for contract workers & transport drivers.

“Help others and give something back. I guarantee you will discover that while public service improves the lives and the world around you, its greatest reward is the enrichment and new meaning it will bring your own life.”

- Arnold Schwarzenegger, The Governor, Actor & Philanthropist

NEBOSH Certification Training at HZL



Certified NEBOSH IGC training for safety professionals was conducted from 22nd October - 1st November, 2018 at Head Office, Udaipur. 22 employees participated.

NEBOSH International General Certification is the most widely recognized qualification in health and safety for managers, supervisors and personnel accountable for health and safety responsibilities, which provides a broad understanding of key health and safety issues. The course covers the principles relating to health and safety, identification and control of workplace hazards and the practical application of knowledge.

Lead Market Development - Partnership with Academia

In the last few years, there has been a considerable development in the energy storage technologies. Lead has conventionally been the primary choice for energy storage technologies. Zinc has also seen use in flow battery technologies. Under these circumstances, there is a hope to strike partnerships with academia around the country to publish reports to further the avenues for lead usage. The following 3 key purposes drives these partnership - a) Understanding the scientific progress made in the field of energy storage devices & conduct and analysis to find the high-potential ones, b) Develop alternative/novel applications for Lead, c) Understand the growth & applicability of Li-ion as motive & static power source.

MMRDA presentation on Galvanized Rebars

In the expansion phase of Mumbai Metro, MMRDA is planning to include galvanized rebars in the specification as the preferred material. For the same, IZA and HZL were called to give a presentation on Galvanized Rebars & provide information on technology involved, Indian & International case studies, standards, suppliers, etc. A meeting on 12th November, 2018 was held in Mumbai where the team presented more information and answers to questions sought.

Modification of existing Jarosite circuit to Jarosite Acid Wash(JAW) circuit in Leaching, Hydro-1 CSC

Major modification in process was done in Leaching Hydro-1 plant at Chanderiya Smelting Complex to improve current efficiency and Zinc recovery. Weak acid leaching (WAL) section has been cut off from Leaching process and double jarosite section was introduced to maximize the zinc leaching from jarosite, so that zinc loss in jarosite would be minimized. The circuit has started on 12th October, 2018 and normalized all required parameters by the end of this month. Initially zinc loss in jarosite was more than 3.2% which reduces to 2.8%.

“Now, you might say, ‘why should we pay people for doing what they’re supposed to do?’ It’s a fair question - but think of it this way. Every other anti-poverty program that’s been tried has failed to get the national poverty rate below 11 percent (USA). Why shouldn’t we experiment with a program built around the one strategy that has proven time and again to work wonders - capitalism?”

- Michael Rubens Bloomberg, Founder & CEO Bloomberg, Billionaire Philanthropist



In October, 2018, Customer Meetings and Die-casting seminars were organized in Delhi and Rajkot. A visit to Chanderiya Smelting Complex was also organized for Mr. Joe Annett - IZA's Global Experts to show HZDA plant & suggest improvements in quality. Since HZDA has been added to the product portfolio, it became imperative to utilize IZA's Global Experts to encourage the use of virgin metal for die-casting as well as to promote HZDA in domestic market. The company strives to develop the downstream industry through consistent focus on technological advancements of stakeholders, transfer of best in class global practices and technical support through IZA.



Leaders Speak at CSC

Under the focused group interaction initiative, Leaders Speak initiative by Location Head - Mr Pankaj Kumar Sharma was organized on 23rd November, 2018. The session was attended by Business Stars, Hipo and GETs. Session was well appreciated by participants wherein they get motivated to move towards beyond excellence.



Human Rights, POSH and Vedanta Values at Zawar Mines

Training on Human Rights, Prevention of Sexual Harassment (POSH) and Vedanta Values were given to all NEEM trainees present at the site by Ms. Prerna Bhawalkar on 24th November, 2018.

ESS SAP Awareness Training at CSC

In order to create awareness about SAP ESS system among employees, 7 days training was initiated on 25th October 2018. The objective of the training session was to resolve queries related to leave, attendance and time management matters.

Quick method to standardize Potassium Permanganate in CSC LAB

Pot. permanganate solution is an unstable compound, required periodical standardisation. Routine method of standardization is time consuming & required other chemicals. So, another quick oxi-red method has been developed to standardize the solution by using routine available chemicals (solutions) & results are found satisfactory.

Hindustan Zinc hosts 1st All India Mines Safety, Cleanliness & Silicosis Awareness Week 2018



Under the aegis of Directorate General of Mines Safety, to discuss the safety & security systems & procedures in underground mines, and to minimize the risk of Silicosis, Hindustan Zinc hosted 1st All India Mines Safety, Cleanliness & Silicosis Awareness Week 2018 in December, 2018. The closing ceremony was held on 16th December, 2018 at Rajpura Dariba Complex, Rajsamand.

During the event, the Chief Guest, Mr. P.K. Sarkar - Director General of Mines Safety (DGMS) said that everyone is aware that the mineral resources are

limited and non-renewable. It becomes imperative to make its best use and introduce scientific methods of mining along with highest safety standards. In order to minimise the risk of disease like Silicosis and to ensure safety of people working in mines, it is important that every individual takes the responsibility. We all need to work jointly towards achieving Zero Harm and Zero Tolerance towards accidents. The efforts made by Hindustan Zinc towards creating awareness on Safety, Cleanliness and Silicosis are commendable.

A large exhibition was also put-up by various partners of Hindustan Zinc who have been working with the company for many years and have been part of the success story of Hindustan Zinc.

A day before, Mr. P.K. Sarkar - Director General of Mines Safety (DGMS) and other mining professionals from across the country had met Hindustan Zinc CEO Mr. Sunil Duggal and discussed about the issue and the way forward on safety standards, silicosis and cleanliness in mines in mining industry as a whole in India. CEO informed DGMS about how Hindustan Zinc is becoming a technology driven company and how innovation & technology will help drive next generation of production, cost optimization, safety and communication inside the mines.

On the occasion, Mr. Laxman Shekhawat – COO Mines, Hindustan Zinc informed mining experts, who had travelled from across India, that our country has over 40 mines operational and out of which only 20 mines are fully mechanized. It is important for all of us learn and implement each other's best practices in their respective mines. We need to leverage the best technologies and innovation in operations while excelling in safety performance. Safety is most important and Hindustan Zinc never compromises with safety. Silicosis is a chronic disease and everyone should be aware of its prevention, symptoms and cure.

The event also recognized 150 mining professionals who had participated in a competition on mining and safety.

From Hindustan Zinc, Mr. Rajesh Kundu – Director - SBU, Zawar Group of Mines, Mr. Pavan Kaushik – Vice President and Head Corporate Communication, Mr. Praveen Jain - Vice President Business Development and Corporate Affairs, Mr. K.C. Meena - Director, Dariba SBU and senior management of Dariba Complex were present along with their family members.



Kolkata Smart City Seminar was attended by Hindustan Zinc on 6th December, 2018. The objective of seminar was to spread knowledge and awareness of how corrosion takes place and what are the methods and practices to combat corrosion (by Galvanizing technologies) which would further lead to increase in consumption of Zinc in the market. There were 40 participants from different departments.



The departments present expressed interest in usage of galvanized rebars in tender documents and enquired about the relevant standards & codes. Mr. V.K. Sharma - Executive Director, NBCC was

present during the event and invited HZL team to do an in-house seminar at their organization and explore in detail opportunities of galvanized structures for their specific projects. The Public Health Engineering Department (PHED) faced a problem of low life of storage water tanks due to corrosion of the rebar used in the tanks. They were introduced to HDG (Hot Dip Galvanized) rebar and their advantages.

As per conversation with ED-NBCC, an auditorium constructed in Kolkata has used ~3000 sq. m of pure Zinc sheets for roofing purposes. Zinc Sheet Roofing has also been used in Durgapur Airport.

Chennai Auto Conference organized by HZL

Subsequent to the IIT-Bombay study on the corrosion-protection effectiveness of Mumbai & Chennai cars, the Parking Lot Surveys, it became essential to highlight the results of studies and its potential consequences to the public at large.

The aim was to create opinion leaders from a pool of esteemed journalists who would champion the cause of increasing the Galvanizing percentage in Domestic car body. Through these efforts, MoRTH, ARAI & iCAT have already issued replies advocating the increase in %age galvanizing in domestic car bodies.



Mine Rescue Training at SCCL Mines

15 days Mine Initial Rescue Training was attended by 12 employees of Kayad Mine at Singareni Collieries Company Limited Mines. Singareni Collieries Company Limited (SCCL) is a Government coal mining company jointly owned by the Government of Telangana and Government of India known for its best in-class rescue practices.

News Digest...

- ♦ Mandatory online safety test was conducted for all employees of Hindustan Zinc to raise awareness and ensure the compliance of the same on chemical handling, work at Height and confined space entry.
- ♦ Training on ARIBA module of SAP was organized at Zawar Mines on 16th November, 2018 where employees and contract workers were trained.

“Our greatest natural resource is the minds of our children. Having spent most of my life creating material for children and observing their potential, I feel convinced that a full-time education for our youth is the best investment in the future.”

- Walter Elias Disney, Pioneer of Animated Cartoon Films, Creator of Mickey Mouse & Donald Duck



Awareness Campaign on Sanitary Napkin at RDC

Awareness Campaign on Sanitary Napkin was organized by Rajpura Dariba Complex team in association with GMC Medical College students for team Sakhi. Overall 500 participants around 4 villages participated in this program.

Training for Maruti Entrance Exam at Zawar Mines

A training program was organized for rural youth from 5 villages at Zawar Mines for Maruti Entrance Exam. 8 youth were selected out of 14 youth who appeared in the entrance exam from Zawar location for November, 2018 batch.

Child Welfare Centres at RDC

They are 3 Child Welfare Centres that are running in nearby villages of Rajpura Dariba Complex. Regular Monitoring of these centres are being done and the enrolment of children at these centres which was 55 got increased to 58 in October, 2018.



Ringus College Feedback Program at Zawar Mines

Feedback session was held with 26 girls from Zawar Mines sponsored for higher education at Vedanta P.G. Girls College on 12th November, 2018. Parents of these girls attended the feedback session. Girls shared their experience and after attending college away from home.

Shiksha Sambal Project at RDC

Shiksha Sambal Project is running in 8 Government Secondary and Senior Secondary Schools of nearby villages. Over 720 students are being benefitted through Shiksha Sambal Project in 8 Govt. Schools. About 160 extra classes were conducted in October, 2018 for class 10th students.

Khushi Baatiye at Zawar Mines

Around 800 stakeholders at Zawar location contributed a amount of Rs. 4.45 lakhs under Khushi Baatiye initiative, which will lead to 890 anganwadi children getting one pair of uniform and sandals. This will further motivate the parents to send their children to receive preschool education at these anganwadi centres in villages located in the vicinity of Zawar Mines.

Hindustan Zinc Mining Academy at RDC

Hindustan Zinc Mining Academy is running at Railmagra where rural youth are imparted skill development training in Jumbo Drill Operations & Winding Engine Operations in collaboration with IISD & SCMS. 32 trainees of 4th batch of JDO and 33 trainees of 5th batch of JDO are currently getting trained.



मारुती में दो वर्षीय ट्रेनिंग हेतु दल रवाना

राजपुरा दरीबा कॉम्पलेक्स के आस-पास के गाँवों जैसे कोटडी, लाटियाखेडी, सांसेरा, सिन्देसरकला, पीपावास, खेड़िया इत्यादि के युवाओं को रोज़गार से जोड़ने की एक नई पहल मारुती के संयुक्त तत्वावधान में आई.आई. एस.डी. के साथ हिन्दुस्तान जिंक के सहयोग से किया गया है। इस कार्यक्रम के अन्तर्गत 40 स्थानीय युवाओं का मारुती गुडगांव में प्रशिक्षण हेतु चयन किया गया, इस दो वर्षीय कार्यक्रम में सरकार द्वारा मान्यता प्राप्त आई.टी.आई. डिग्री के अलावा मारुती द्वारा प्रतिमाह 13500/- स्ट्राइफण्ड के रूप में देने का भी प्रावधान है। भविष्य में सफलतापूर्वक ट्रेनिंग के उपरान्त चयनित युवाओं को मारुती कम्पनी में नियुक्ति की जा सकती है।

युवाओं का चयन हेतु दो दिवसीय परीक्षा का आयोजन दौसा में इण्डियन इन्स्टीट्यूट ऑफ स्किल डवलपमेन्ट

दिल्ली के साथ किया गया, तत्पश्चात् चयनित परिक्षार्थियों को 24 नवम्बर, 2018 को गुडगांव स्थित मारुती फैक्ट्री के लिए रवाना हुए। हिन्दुस्तान जिंक, राजपुरा दरीबा के साईट प्रेसीडेन्ट – श्री के.सी. मीणा, श्री नरहरी देव सिंह – वरिष्ठ उपाध्यक्ष, राजपुरा दरीबा खान मजदूर संघ, श्री दीपक गखरेजा – प्रबन्धक एच.आर., श्रीमती निधी शर्मा – प्रबन्धक वित्त, लोकेशन सी.ए.आर. हेड – श्री अभय गौतम, श्री एस. एन. टेलर एवं चयनित युवाओं के अभिभावक ने दल को दरीबा गेस्ट हाउस से गुडगाँव के लिए विदा किया।

Furniture Distribution at Zawar Mines

850 furniture were provided to school students in 5 identified Government Schools by Zawar Mines team in quarter 3.



Farmer's Visit to SKM

A visit to Sindesar Khurd Mine was conducted for 10 select farmers from core operational villages. The purpose of the visit was to show them the complete mining process.



“For a long time now, I have believed that industry & agriculture are natural partners & that they should begin to recognize & practice their partnership. Each of them is suffering from ailments which the other can cure. Agriculture needs a wider & steadier market; industrial workers need more steadier jobs. Can each be made to supply what the other needs? I think so. The link between is Chemistry.”

- Henry Ford, The Business Magnate, Automobile Pioneer ”

53 Villages to get Free Primary Health Facilities through Mobile Vans by Hindustan Zinc



Hindustan Zinc under its Community Service Initiatives has launched 2 Mobile Health Vans in the districts of Udaipur (Zawar Miens area) and Chittorgarh covering more than 53 villages around its business locations. These mobile health vans will target rural & tribal areas that are currently devoid of adequate primary healthcare facilities. These Vans will provide free treatment to the villagers and are equipped to provide more than 10 types of Health related tests. Every mobile medical van are equipped with a doctor, driver and a

coordinator along with the necessary medicines and diagnostic kits.

These Vans are being launched under the Smile on Wheels Campaign, in association with Smile Foundation.

Through this initiative, in Chittorgarh district more than 20000 rural people of 25 villages will be benefitted and in Udaipur, more than 15000 rural & tribal people of 28 villages will be benefitted.

Eye Check-up Camp at Zawar Mines

Hindustan Zinc organized a free eye check-up camp for around 60 beneficiaries, of which 28 were a part of stitching and production centre at Zawar under Sakhi project on 8th October, 2018. These 28 women have joined Sakhi training centre to learn stitching.

Company run Hospital at RDC

More than 6500 rural patients were treated at Company run Hospital of Rajpura Dariba Complex in the September & October, 2018.

Medical Camp at PMP

A medical camp was conducted for Prisoners on 4th November, 2018 along with Partner NGO and District Administration by Pantnagar Metal Plant team.

Medical Eye Camp at RDC

Medical Eye Camp was organized by Rajpura Dariba Complex team and Alakh Nayan Eye Hospital, Udaipur at Kotdi and Mehenduriya Gram Panchayat. More than 140 people got benefitted from the program in quarter 3.



Mobile Health Clinic at PMP

A mobile health clinic has been started by Pantnagar Metal Plant team in quarter 3 with Jimmedari Foundation to uplift & provide the better health solutions for nearby villagers.

Mr. Pankaj Kumar - COO Smelters, HZL visited at the camp side of Mobile Health Clinic at Amritnagar with Mr. Lalan Deo - Unit Head, PMP on 30th October, 2018.



Rural Drinking Water Project at RDC

Under Rural Drinking Water Project, drinking water has been supplied through pipelines and tankers in 5 nearby villages of Rajpura Dariba Complex in September & October, 2018. More than 4000 people of 1000 rural families were got benefitted.

Swachhta Pakhwara at RDC

With the message of clean communities, healthy citizens - Swachhta Pakhwara was observed from 27th September - 2nd October, 2018 at Rajpura Dariba Complex. Under the initiative various activities were organised like community sensitization towards cleanliness and cleaning public drains, wasting cleaning drives and awareness cleanliness drive in village community centers, school campuses and public premises, etc.



ग्राम नया दरीबा एवं काबरा में सखी चौपाल मीटिंग का आयोजन



हिन्दुस्तान ज़िंक एवं पार्टनर एनजीओ के संयुक्त तत्वावधान में दिनांक 29 अक्टूबर, 2018 एवं 20 नवम्बर, 2018 को ग्राम – काबरा में सखी चौपाल का आयोजन किया गया जिसमें दोनों गाँवों के करीब 25 से अधिक सखी स्वयं सहायता समूह की 300 से अधिक महिलाओं ने भाग लिया।

चौपाल का मुख्य उद्देश्य था कि महिलाएँ आत्मनिर्भर बनकर परिवार व समुदाय का सर्वांगीण विकास करने में सक्षम हो सकें। चौपाल पर महिलाओं ने अपने परिवार व समाज की समस्याओं पर चर्चा की व अपने समूह की बचत व लोन लेकर स्वरोजगार की चर्चा कर भविष्य में समूह को कैसे संगठित करते हुए अपनी अलग पहचान बनाने की चर्चा की।

“Women form a very significant part our society and demonstrate great skill, intelligence, hard work and innovation. If we harness the potential of these attributes through a proper skill development programme, India's growth will be very equitable and inclusive.”
- Anil Agarwal, Metal King with a Golden Heart – A Billionaire Philanthropist

Sakhi Project at PMP & RDC

Two training sessions of three days each on poultry farming & duck farming were organized for Sakhi SHG women at Pantnagar Agriculture University.

To analyze the market potential of handmade products made by the Sakhi SHG members, a stall was put up in Kisaan Mela at G.B. Pant University of Agriculture and Technology on 6th, 7th & 8th October, 2018 by Pantnagar Metal Plant team.

Sakhi Self Help Groups (SHG) have been formed where around 3330 women across 31 villages have been covered in these SHGs till October, 2018. Till now, 17 VOs have been formed in 17 villages at Rajpura Dariba Complex. SHGs have opened their Bank accounts that have been raised to 250 bank accounts till October, 2018. A tailoring Centre has also been started at Sunariyakheda village under Sakhi project where about 30 women participated in the tailoring program.



RDC Visit by Sakhi Women

20 Sakhi rural women from SHG groups of surrounding villages were taken to Dariba Smelter Complex as part of exposure visit on 26th October, 2018. They also visited Captive Power Plant. The women were distributed Jute Bags as a step towards to save environment and discard plastic bags.



Sakhi Silai Centre at PMP

This is a story of Sakhi Women from Jaynagar-1 who never knew about their potential to become self-reliant. They got themselves enrolled in Sakhi Prashikhyan Kendra to get skilled in tailoring, crafts and computer education. In 3 months, they got skilled in tailoring and crafts allowing them to explore their hidden potential. In another 3 months, they gained the confidence to invite fellow members in their Village Organization (VO) and inaugurated their Sakhi Silai Centre. These strong & confident ladies - Devanti, Lata and Jamuna are the proud owners of Sakhi Silai Centre.

Infrastructure Development at RDC

Rajpura Dariba Complex team has initiated the work to install community RO at Kotdi village in October, 2018. The team has also constructed Cremation shed at Dariba and Lab renovation work at Sr. Sec. School, Rajpura is completed.

Livestock Camp at RDC

About 500 Artificial Insemination camp was carried out in both core and peripheral villages in September & October, 2018. Scientist visit was held in the cluster relating to WADI activity during which around 100 farmers participated and 3 trainings relating to Rain fed package was conducted involving around 110 farmers.

32 employees at Zawar location bought 172 candles made by Sakhi women under employee engagement initiative, generating a income of Rs. 6300 for Sakhi women.

15 employees at Zawar location bought 158 diyas under employee engagement initiative of Jeevan Tarang project, generating an income of Rs. 3950 for deaf children at Badhir Samiti, Ajmer.

On 19th October 2018, a week-long training of Sakhi members started at Ajolio Ka Kheda. After which the work of making candles as Diwali presents for the various stakeholders of Hindustan Zinc was given to them. 23000 candles of 5 varieties were made as presents by 25 members from 4 Sakhi SHGs nearby villages. The total remuneration paid as part of the project to the members comes to Rs. 77,250.

This Diwali under the Jeevan Tarang project, Hindustan Zinc organized “CraftAbility” campaign in November, 2018 in support of deaf children of Badhit Baal Vikas Samiti, Ajmer, Rajasthan. These deaf students handcrafted Diyas for the employees who bought them and Diyas were sold out. The fund raised was utilized by the school for various development initiatives of deaf children.

A cultural program was organized with Blind Students during Diwali Milan program along with employees & their families by Pantnagar Metal Plant team on 13th November, 2018.



Samadhan Project at RDC

In September, 2018, 500 farmers were supported with crops like maize/urad/soyabean by Rajpura Dariba Complex team. Seed treatment and IPM support of pheromene traps and cloropyrofos were also provided and in October, 2018, 430 farmers were supported with the input provided for crops like gram and mustard. Seed treatment and IPM support of pheromene traps and cloropyrofos was also provided. 100 WADI participants were also provided with input support for crate, IPM.



Indian Flag formation at Kayad Mine

Kayad Mine supported unique event of Indian Flag formation by 15000 participants at Patel Stadium Ajmer on 30th November, 2018. Keeping in mind this year's theme of Accessible Election a symbolic Wheel chair was also made by Human formation which eventually dissolved and formed Ashok Chakra of Tricolor Flag giving message that the way Indian Flag is incomplete without Ashok Chakra, same way the society is incomplete without specially abled persons. The event has been recorded in India Book of Records.

News Digest...

- ◆ Community RO has been started at Kotdi village by Rajpura Dariba Complex from 28th October, 2018.
- ◆ 4 students from Rajpura Dariba Complex team are preparing for engineering studies under Unchi Udaan Program at Udaipur.

► Quality of Life

Pharmacy Shop inaugurated at Zawar Hospital

Apollo Pharmacy has been inaugurated at Zawar Hospital on 1st October, 2018. The pharmacy has all the prescribed medication and all the latest, recommended medicines.



Competitions at DAV School, Zawar

Different programs were organized at DAV School, Zawar on the occasion of Gandhi Jayanti and Children's Day. Also special programs - Inter-house debate competition, poem recitation competition and poster making competition were conducted where students got the platform to showcase their talents and finer skills.

Delegation from Vigyan Samiti visited Hindustan Zinc

A delegation of 24 team members from Vigyan Samiti, Udaipur visited Hindustan Zinc's Chanderiya Smelting Complex. The delegation visited Smelter Plant to understand the process of Zinc Metallurgy and also witnessed various community service initiatives being implemented by Hindustan Zinc in nearby villages.

Chanderiya utilizes a combination of best proven technologies and innovation to continuously improve environmental and operational performance. The delegation comprising retired Bureaucrats, Engineers and Scientists also



alongwith had 5 female members who were briefed about various sustainability initiatives taken up by Hindustan Zinc at its business locations. The delegation visited Sakhi Tailoring Centre at Putholi village and interacted with Sakhi rural women to know more about the initiative and their journey of empowerment. They were also briefed about various community development programs – Khushi, Shiksha Sambal and Samadhan through a stall exhibition.

Krygystan Youth Delegation visits Zinc football Academy

20 member of Kyrgystan Youth Delegation visited India from 4th -11th October, 2018, as part of International Youth Exchange Program between India and Kyrgyzstan. The objective of program was to promote the exchange of ideas, values, and culture amongst the youth of the partnering countries and also to develop international understanding among the youth. As a part of this program, a visit for the group was planned to Zinc Football Academy on 10th October, 2018. The visit started with a traditional Rajasthani welcome from DAV school girls, followed by meeting with the residential academy players.

Mayo College visits CSC

Around 30 students from Mayo College visited Chanderiya Smelting Complex on 25th October, 2018 along with 3 teachers. They were given brief orientation on Safety followed by interaction with Senior leadership team. Plant visit was also organized to give them an overview of the process. The token of gift was handed over to all the students/teachers by Mr. Hemendra Sharma and Mr. Kamod Singh.

Mines Environment and Mineral Conservation Association (MEMCW) visits Zinc Football Academy

Zinc Football Academy hosted a team of Mines Environment and Mineral Conservation Association (MEMCW) Inspection team from three different manufacturing units of India viz. Rajasthan Copper, Ambuja Cement and Aaditya Cement on 19th November, 2018. A short 20 minute demo was also presented for them at F-Cube performance center through which the coaches evaluate the performance of the players on the basis of response time, shot speed, accuracy, etc.

Visit of Joint Director, Animal Husbandry Dept. and SDO Sarada Block to Zinc Football Academy

Mr. Lalit Joshi - Joint Director, Animal Husbandry Dept., Udaipur, Ms. Neelam Lakahara - SDO Sarada Block, Udaipur, Mr. Suraj Kumar Gupta - Director of Commission Custom Excise, Delhi and Mr. Dayalal Damor - Tehsildar of Sarada Block visited Zinc Football Academy on 1st December, 2018. A short 20-minute demo was also presented to them at F-Cube Performance Centre through which the coaches evaluate performance of the players on the basis of response time, shot speed, accuracy, etc. From HZL, Col. Vinay Sharma - Head Admin & External Affairs, Zawar SBU along with CSR team of Zawar SBU were present. Mr. Harbans Thakur - DAV HZL Principal and Mr. Rohit Parasher - Head Scouting Team, TFL along with coaches were also present during the visit.

V-Bond - Friendly Cricket Match at CSC



A friendly cricket match was organized between Putholi villagers and Zinc employees on 10th October, 2018 at Putholi School Ground. The match was played by Team Zinc Panthers led by Mr. Pankaj Sharma – Location Head, CSC and Team Putholi Tigers led by Mr. Rajendra Sukhwai- village representative. The match was won by Putholi team by 8 wickets.

Basketball Tournament at RDC

Rajpura Dariba Complex team organized Basketball Tournament on 30th & 31st October, 2018. During the tournament, Mr. K.C. Meena - IBU Director, Mr. Deepak Sopori - Dariba Smelter Head, Mr. Manoj Agarwal - CPP Head, Mr. Pawan Baheti - DSC, Finance Head and Mr. Anil Gadiya - DSC, HR Head were also present to lift up the spirit of players.



“Education is something which ought to be brought within the reach of everyone. The policy therefore ought to be to make higher education as cheap to the lower classes as it can possibly be made. If all these communities are to be brought to the level of equality, then the only remedy is to adopt the principle of equality and to give favoured treatment to those who are below level.”
- Dr. B.R. Ambedkar, Baba Saheb Economist and Social Reformer



CRICKET MANIA

By Maitreyee Sankhla

Cricket, the gentleman's game is more than just a game. And in India, even a not cricket fan like me, would be found glued to the TV screen when India is playing its crucial overs. So no one goes unaffected by the love-wave of cricket. As Cricket World Cup is around the corner, so let's discuss about Cricket mania in India & abroad. Cricket as a sport has a fascinating history with some quirky distinctions and unique records, so it comes as no surprise that there are plenty of interesting facts about the game.

So here it, some mindboggling facts about cricket that all cricket lovers must know. I know you all know more than me but it is just an attempt to fuel the craze for Cricket:-

1. Cricket has its origins with shepherds in England who devised the game as a way of passing the time while guarding their sheep.
2. The first game of cricket ever recorded took place in 1646. The game proved to be so popular that eventually fines had to be given to those who missed church in order to play.
3. History's longest cricket match was played in 1939 between South Africa and England for an epic 14 days and even after two weeks the game still wasn't over.
4. One of the greatest batsmen in New Zealand, Bert Sutcliffe must have been exceptionally unlucky as he played 42 tests but never once won a match. The New Zealand team did have a few wins during this time, but whenever they achieved a success, he had missed the game
5. The oldest cricketer to have ever played for England was Wilfred Rhodes. His last match was on 12th April 1930 when he was 52 years old.
6. The first recorded match of women's cricket was reported in The Reading Mercury on 26 July 1745, a match contested "between eleven maids of Bramley and eleven maids of Hambledon, all dressed in white.
7. 'Captain Cool' of Kenya, Aasif Karim has played both International Cricket and Tennis (Davis Cup, 1988) for his country, Kenya.
8. M.L. Jaisimha and Ravi Shastri are the only Indian players, who got to bat on all the five days of a Test match. This is also a unique record.
9. Shahid Afridi used the bat of Sachin Tendulkar to hit the fastest ODI century of his career.
10. Most interesting of all, India is the only country to hold the record of winning all the 60-overs, 50-overs and 20-overs World Cup.
11. This will definitely make you happy: India won the World Cup in 1983 and won its first test match at Lord's three years later in 1986. India next won the World Cup in 2011 and won its second test match at Lord's three years later in 2014.
12. The first game of cricket in India for instance was played almost 150 years ago.

Also, centuries before cricket or baseball were invented, India had Gilli-Danda similar to Cricket. Gilli-Danda is an ancient sport of the Indian subcontinent, possibly with origins over 2500 years ago!!

So, Cricket World Cup - 2019, the 12th edition is scheduled to be hosted by England and Wales, from 30th May - 14th July, 2019.

Yes Gear-up yourself!!!

I Know - Can't Wait, Can't Wait!!

कमजोर तप

एक बौद्ध कथा है। भगवान बुद्ध के बड़े-बड़े राजा और साहूकार अनुयायी थे। भगवान बुद्ध को भेंट में बहुत धन आता था। चढ़ावे में जो धन आता था शिष्यों को आदेश देकर उसका ढेर लगा देते थे।

बुद्ध के पास कमजोर, जरूरतमंद भी सहायतार्थ आते थे। वे उन लोगों से ढेर में से धन लेने की इजाजत देते थे। जरूरतमंदों को उनका निर्देश होता था कि आवश्यकता से अधिक एक भी पैसा मत लेना।

एक शराबी को मालूम हुआ कि भगवान बुद्ध के दरबार में धन बंटता है। उसे बहुत आश्चर्य हुआ। मन ही मन खुशी से झूमने लगा। वहां जाने से शराबी डर रहा था। उसे भय था कि कहीं वहां लोग उसे पहचान न लें। इसी डर से साधु का भेष बनाकर बुद्ध के पास गया। साधु को सामने देखकर बुद्ध के शिष्य उसे आदरपूर्वक भगवान के सामने ले गए।

भगवान ने साधु की बात ध्यान से सुनी। साधु ने धन की जरूरत बताई। भगवान ने उसे ढेर में से धन लेने की इजाजत दे दी। शराबी मन ही मन बहुत प्रसन्न हुआ।

रोज शराब पीने का हिसाब करके उसने एक महीने का धन मांगा। धन प्राप्त करके शराबी मूँछों पर ताव देता हुआ अपने अड़्डे पर वापस आ गया। घर आकर साधु का चोला उसने उतार कर फेंक दिया। इसके बाद शराबखाने से शराब की बोतलें लेकर आया। बहुत शान से शराब पीना शुरू किया।

एक दिन भगवान के शिष्य रास्ते से गुजर रहे थे। उन्होंने देखा कि एक शराबी नशे में चूर होकर अनाप-शनाप बक रहा था। शिष्य शराबी के पास गए। उन्होंने शराबी को ध्यान से देखा तो उसे पहचान लिया।

एक शिष्य ने कहा—“यह शराबी वही है जो साधु के रूप में भगवान के पास गया था। वहां से ढेर सारा धन लाकर शराब पी रहा है।”

शिष्यों ने उसको मारा-पीटा और पकड़कर भगवान के पास लाए। भगवान बुद्ध को शिष्यों ने सब बातें बताईं।

भगवान ने शिष्यों को आदेश दिया— इसे मारो मत, छोड़ दो! यह ठीक ही कर रहा था। इसमें इसका कोई दोष नहीं है। मेरी गलती है। मेरा तप अभी कमजोर है। मुझमें अभी इतना प्रकाश नहीं आया कि मैं सामने वाले को पहचान सकूँ। मेरे सामने झूठा भी आकर सत्य बोले। इसने मेरे सामने झूठ बोलने की हिम्मत कैसे की? मैं अभी भगवान कहलाने के लायक नहीं हूँ। मैं पुनः तप करने जा रहा हूँ। अभी मेरा व्यक्तित्व अपूर्ण है। सत्य और असत्य का सत्यापन करने की शक्ति प्राप्त कर लूंगा तभी सच्चे लोगों को आशीर्वाद दूंगा। इससे उन्हें आत्मतृप्ति होगी और जीवन में मंगल होगा।

यह कहकर बुद्ध पुनः समाधिस्थ हो गये।

— पुस्तक 'वट वृक्ष की छांव' में

My Safety

My Responsibility

Make safety your first thought
with these workplace safety tips



- **Your safety is your personal responsibility.**
- **Always follow the correct procedures.**
- **Never take shortcuts.**
- **Take responsibility and clean up if you made a mess.**
- **Clean and organize your workspace.**
- **Ensure a clear and easy route to emergency exits and equipment.**
- **Be alert and awake on the job.**
- **Be attentive at all times to your work surroundings.**
- **When in doubt, contact your supervisor or manager for instruction, guidance, or training.**
- **Never take risks when it comes to safety.**
- **Obey safety signs, stickers, and tags.**
- **Take short breaks when you keep up a repetitive motion for a long period of time, and sit, stand, or walk with good posture.**
- **Report serious injuries immediately to a supervisor and get emergency assistance.**
- **Educate everyone in the workplace about the safety requirements and consider posting a list of workplace safety tips.**
- **Always keep the communication lines open with your co-workers, employers, or employees in order to promote and maintain a safe environment.**

हिन्द जिंक तो सबका प्यारा



हिन्द जिंक तो सबका प्यारा, और रोज़गार का सहारा है।
सब मज़हब के लोग हैं यहाँ, और सब जन का सहारा है॥

जिंक, लेड, केडमियम व सिल्वर का, उत्पादन खूब करता है।
खनिज खनन का मास्टर है ये, देश को आत्म-निर्भर बनाता है।
पूरे विश्व का भी आदर्श है ये, वर्षों पुराना इतिहास इसका है।

हिन्द जिंक तो सबका प्यारा, और रोज़गार का सहारा है।
सब मज़हब के लोग हैं यहाँ, और सब जन का सहारा है॥

पाताल की गहराई में जाकर, श्रमिक जो इसमें काम करते हैं।
अपने श्रम का पूरा दाम, समय पर वो पूरा पाते हैं।
घर परिवार, माँ-बाप का, श्रमिक ही तो सबका सहारा है।

हिन्द जिंक तो सबका प्यारा, और रोज़गार का सहारा है।
सब मज़हब के लोग हैं यहाँ, और सब जन का सहारा है॥

जावर खान है जो हिन्द जिंक की मदर यूनिट कहलाई है।
फैलाई शाखाएँ देश-विदेश में, और प्रतिष्ठा गज़ब बनाई है।
आसपास के गाँवों को भी, खूब मिला सबको सहारा है।

हिन्द जिंक तो सबका प्यारा, और रोज़गार का सहारा है।
सब मज़हब के लोग हैं यहाँ, और सब जन का सहारा है॥

बाल शिक्षा और अस्पताल में, गरीबों की जिंक मदद करता है।
प्राकृतिक आपदाओं में भी, हर श्रमिक दिल से दान करता है।
गर्व है हमें जो हमने, हिन्द जिंक का दुनिया में नाम फैलाया है।

हिन्द जिंक तो सबका प्यारा, और रोज़गार का सहारा है।
सब मज़हब के लोग हैं यहाँ, और सब जन का सहारा है॥

10 जनवरी सन् 1966 को हिन्दुस्तान जिंक लिमिटेड कहलाया है।
आसमाँ की ऊँचाईयों को छूकर, जिंक ने वेदान्ता बनाया है।
सन् 16 में मना रहे हैं "स्वर्ण जयन्ती" जिसने इतिहास बनाया है।

हिन्द जिंक तो सबका प्यारा, और रोज़गार का सहारा है।
सब मज़हब के लोग हैं यहाँ, और सब जन का सहारा है॥

— मदन लाल मेघवाल
सहायक फोरमेन (इले.)
कर्म.सं. 22038

Naughty Sohan made 10 differences while copying the Picture - 1, he missed some and added some in the new Picture - 2. Let's find those 10 differences in Picture - 2.

Kid's
Column !!

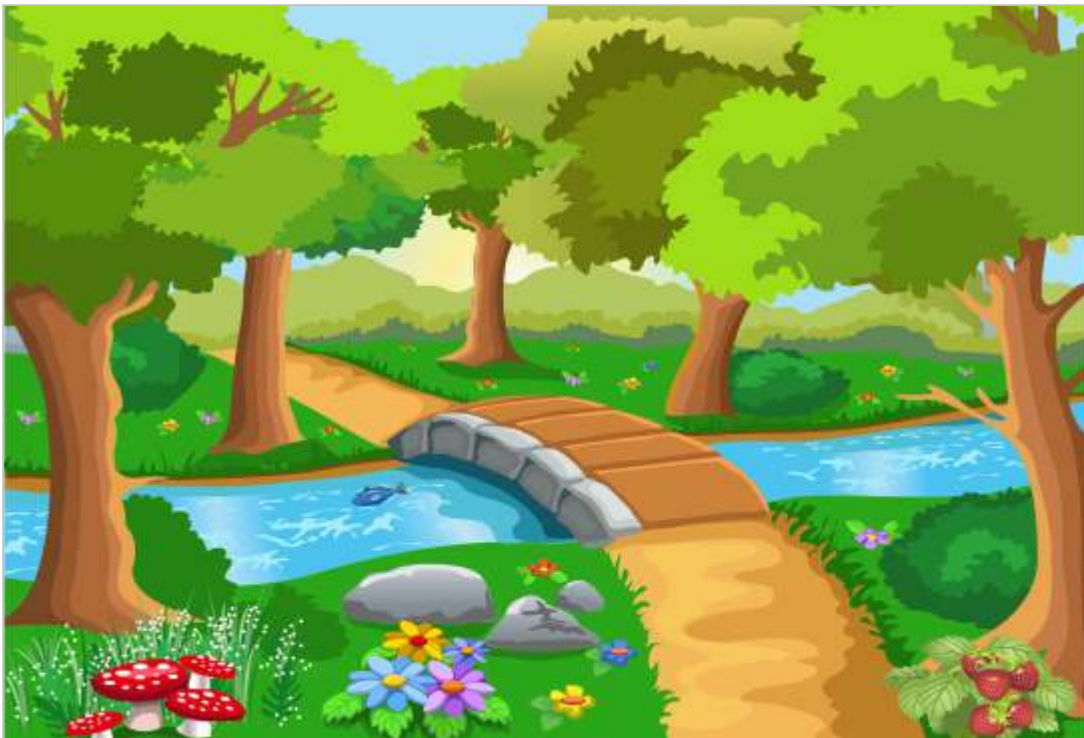
Master Picture : Picture - 1



Oops !!!

Sohan missed some,
added some...

Copied Picture : Picture - 2



- Answers: Picture 2
1. Mushroom is added on the extreme left.
 2. Fish is added in river in the centre of picture.
 3. Flower is added in grass in the centre of picture.
 4. A strawberry is removed on the extreme right.
 5. Flower is removed near the bridge.
 6. Tree branch is removed from the left side of tree.
 7. One stone is added in centre of the picture.
 8. Hole is removed from the tree on extreme left.
 9. Change in the colour of the mountain.
 10. A line is removed from bridge.

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