Lead Paint Elimination Campaign in Nepal

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CEPHED

Center for Public Health and Environmental Development (CEPHED)

Goal: Improved environment management and public health.

Vision: Bridging people with science and technology for healthy living and environment safety.

Mission: Acts as bridging forum between people with science and technologies to made access to new scientific knowledge, technologies and safety measures of environment and public health sector through research, coordination, capacity building and policy dialogue.

Working area: Natural Resource Mgmt., Environment Cons., Chemical management, POPs Environmental pollution, and Public Health etc.

Global Linkage: **IPEN, HCWH, ZMWG/EEB, GAIA, CEH, Toxics Link**

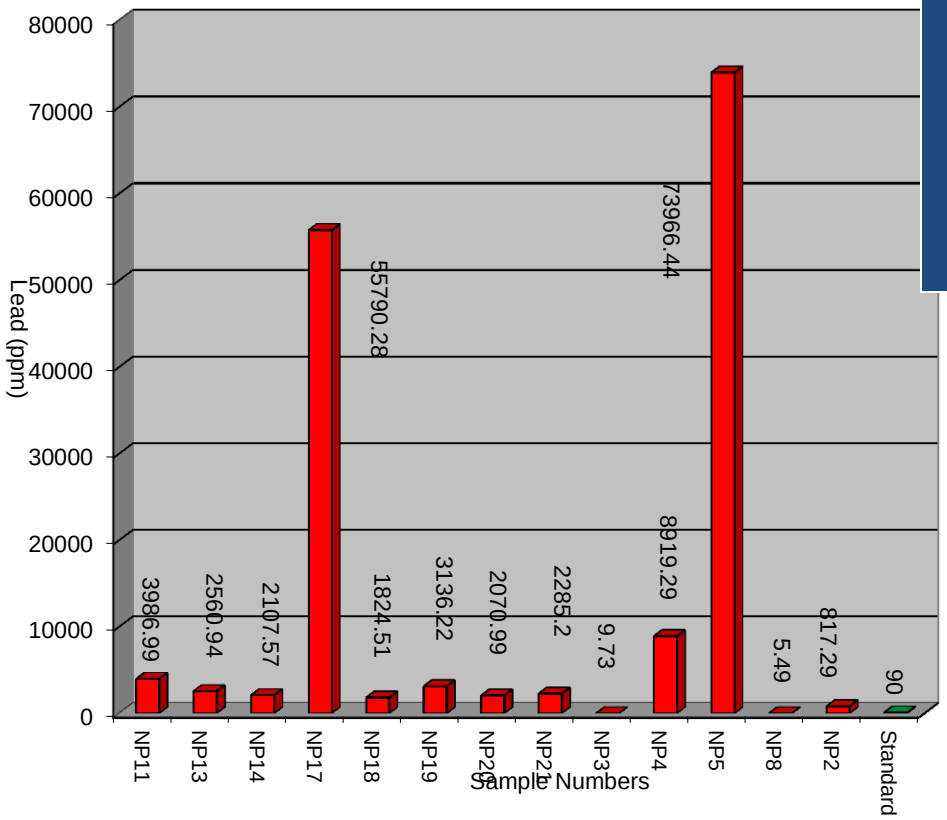
Lead (Pb) in Paint Campaign in Nepal

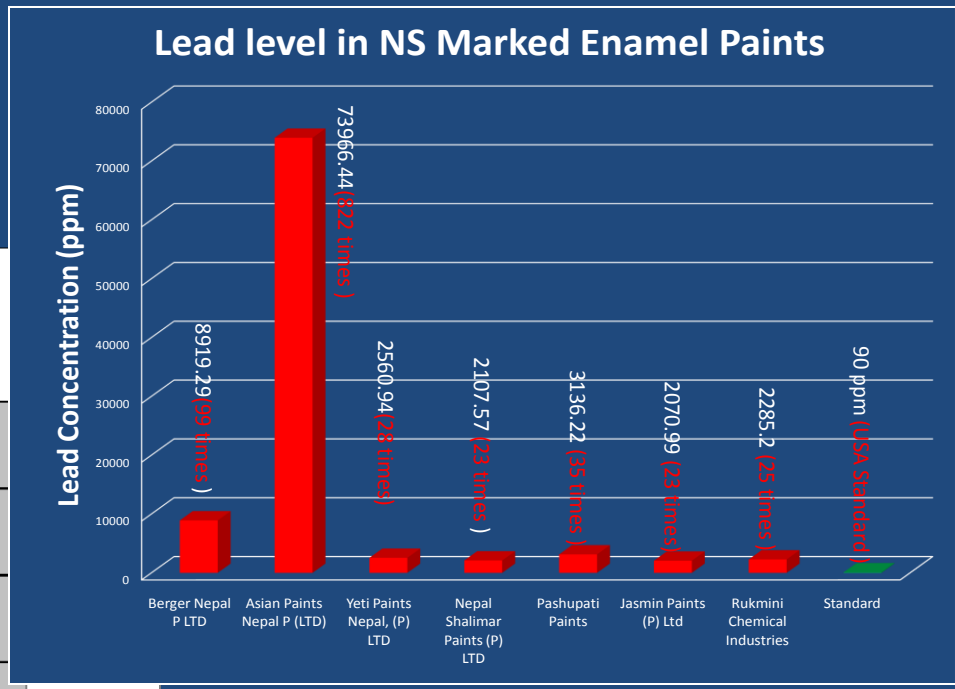
- Study completed in the year 2010 for 24 Samples (International, Multinational & National) with help of SSNC Sweden and Toxic Link.
- Found very high level of lead in 86% (11 of 13)of Enamel Samples ranges from **5.49 to 73966.4** ppm. All NS marked enamels have got high level of lead.
- Study of Common Brand of Paint for Lead Content (DOUBLE STANDARD). Ranges **7.5 to 212700** ppm with help of SSNC Sweden and Toxic Link.
- Distemper and Emulsion samples containing very less lead.
- **Carrying out awareness and capacity building in 20 district, 25 Schools of 5 Development Region of Nepal.**
- Interaction with NBSM (October 11, 2010) and advocate for formulation of standards and regulation with MOHP, MOE, NBSM,
- Advocacy with all including President, Prime minister, Environment Ministers, Secretaries about the issues multiple times.

LEAD IN PAINT STUDY

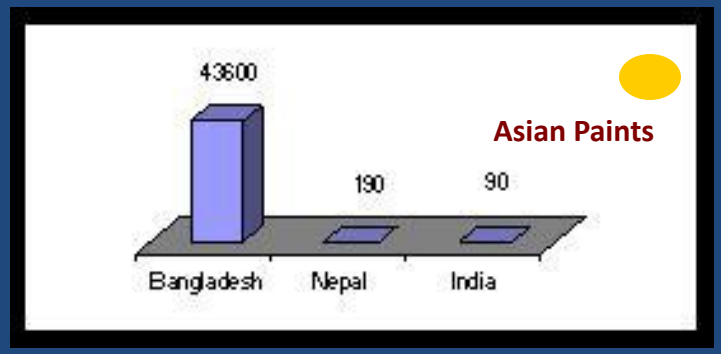
Average. 12113 .92 134.6 times higher

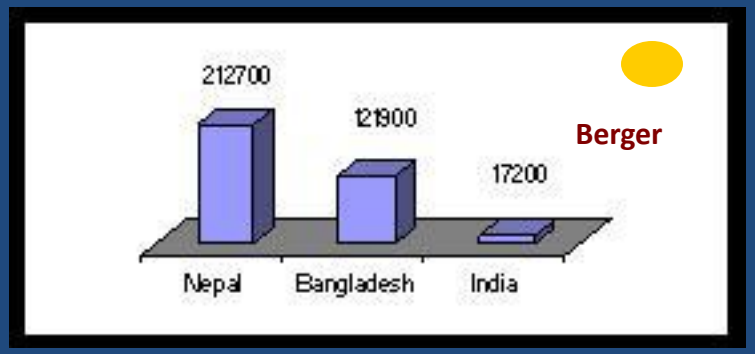
Maximum 73966.44 822 times higher

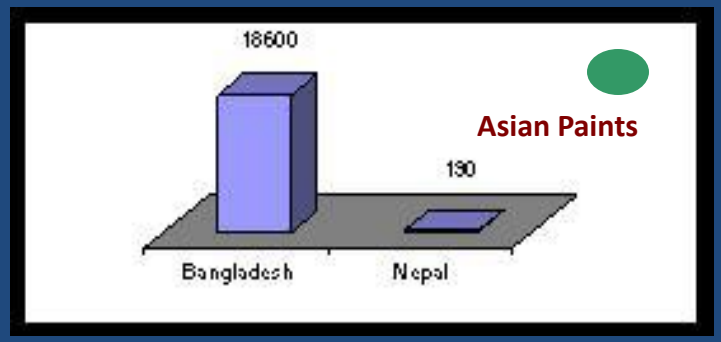


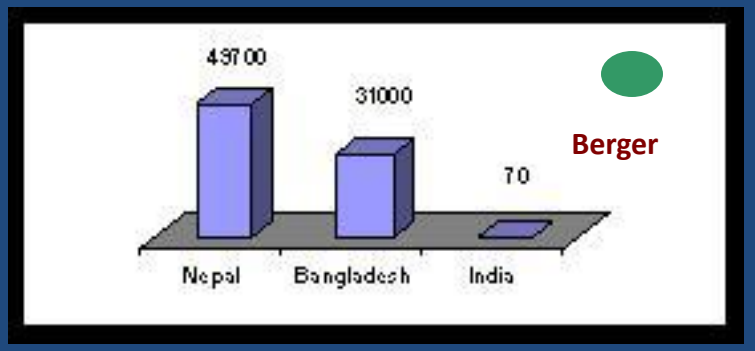


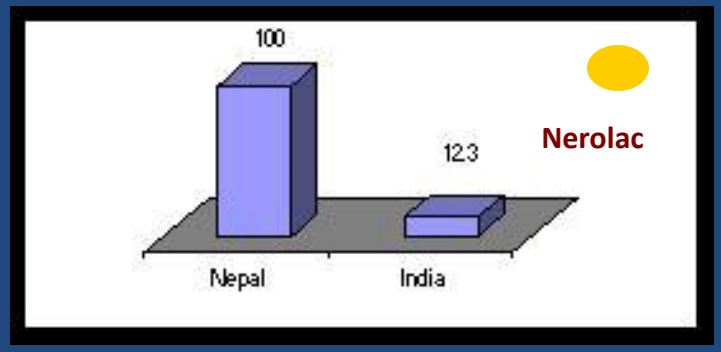
No Standard leads to Double Standard

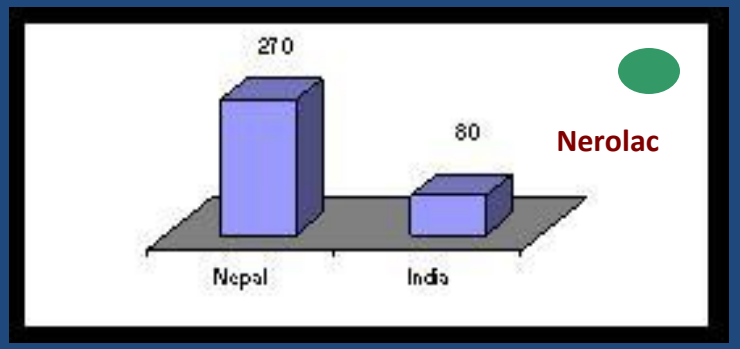












Not

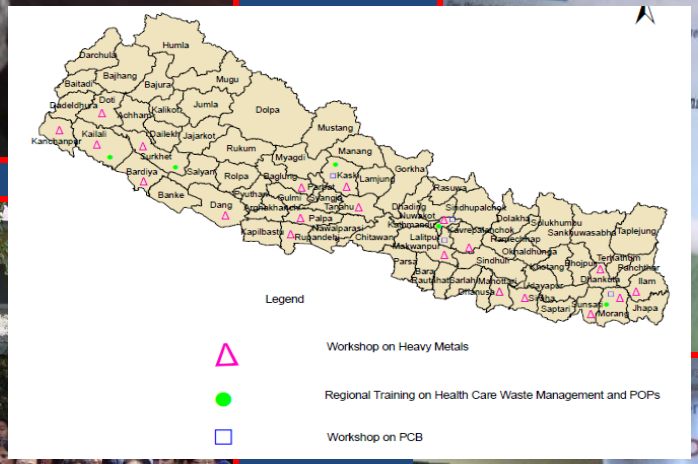
A C C E P T A B L E

Lead Campaign in Nepal……

- Different level of lead across the brands, shade and countries.
- Lead Stakeholder Interaction Program Nov. 3, 2011.
- High Level government engagement: Hon. Minister of Environment call for enacting stringent standard to regulate lead in paint.
- Multinational Paints industries making improvements in terms of lead content , labeling and commitments. National making commitment.
- Awareness level raised and information made access and available through different means (radio, TV, News, interaction, workshops')
- Industries are showing great concern and making shift.
- Continuing the program with EU SWITCH ASIA LEAD PAINT ELIMINATION project.

CEPHED Activities Outreach

Carrying out awareness and capacity building in 20 district, 25 Schools of 5 Development Region of Nepal.



Colorful Class Rooms is dangerous

लिडयुक्त कक्षाकोठा हानिकारक

गोरखापत्र समाचारदाता

काठमाडौं, जेठ १६ गते। तपाईंलाई थाहा छ ? तपाईंका बालबालिका पढ्ने विद्यालयका कक्षाकोठा कति सुरक्षित छन् ? अहिले निजी तथा अधिकांश सामुदायिक विद्यालयमा अभिभावक र बालबालिकालाई आकर्षण गर्न कक्षाकोठा, बेन्च, डेस्क, टेबुल र बालबालिकाले खेल्ने खेलौनामा समेत लिड (सिसा) पेन्ट्स (इनामेल) लगाइएको हुन्छ जुन स्वास्थ्यका लागि अत्यन्तै घातक हुने विगत १२ वर्षदेखि यस क्षेत्रमा अध्ययन तथा अनुसन्धान गर्दै आउनुभएका जनस्वास्थ्य एवं वातावरण प्रबर्द्धन केन्द्र, ललितपुरका प्रमुख रामचरित्र शाहले जानकारी दिनुभयो।

दैनिक रूपमा बालबालिका सात/आठ घण्टासम्म लिडयुक्त पेन्ट्स लगाइएको वातावरणमा घुलमिल हुँदा हावाको माध्यमबाट र सिधै हातले छुँदा खाना खाँदा वा अन्य कुनै माध्यमबाट मुखहुँदै पेटमा पुग्ने उल्लेख गर्दै शाहले जसबाट प्राणघातक रोगसमेत लाग्न सक्नेप्रति चिन्ता व्यक्त गर्नुभयो।

लिडले मानव स्वास्थ्यमा रक्त अल्पता, कब्जियत तथा बान्ता हुने, तौल घट्ने स्नायु र मुवनलीमा समस्या देखापर्ने पेट तथा टाउको दुख्ने, मनस्थितिमा परिवर्तन आउने, क्यान्सर हुने र अन्तमा बालबालिकाको मृत्युसमेत हुन सक्ने बताउँदै शाहले लिडयुक्त वातावरणबाट बालबालिकालाई टाढा राख्नु राम्रो हुने बताउनुभयो।

नेपालमा पाइने धेरै पेन्ट्सहरू इनामेल र इमलसनमा लिड मिसाइएको बताउँदै शाहले नेपाल गुणस्तर चिह्न प्राप्त पेन्ट्सहरूमा पनि अत्यधिक लिड हुने अनुसन्धानबाट पत्ता लागेको छ शाहले भन्नुभयो।

लिड आफैं विशाक्त हुने र यो बालबालिकाको शरीरमा प्रवेश गर्यो भने यसले दिमागमा असर गर्ने हुँदा बालबालिकाको सोच सक्ने क्षमतामा कमी आउने बालरोग विशेषज्ञ डा. महेन्द्रबहादुर मल्लले जानकारी दिनुभयो। "बालबालिका स्वाभाविक रूपमा बढी चकचके र चुलबुले हुने हुँदा लिडयुक्त वातावरणमा बालबालिकालाई राख्नु घातक हुन्छ, मल्लले भन्नुभयो।

लिड बालबालिकाले चाट्दा वा खाँदा विषाक्त हुने उल्लेख गर्दै डा. मल्लले जसले बालबालिकामा पढ्ने क्षमता कम हुने, रक्तअल्पता हुने, दाँतको गिजामा हरियो तथा नीलो रङको धर्साहरू देखापर्ने र बालबालिकाको तौल बिस्तारै घट्दै जाने लक्षण देखापर्ने मल्लले बताउनुभयो।

साथै, यस्तो कोठामा लामो समयसम्म बस्दा बालबालिका बेहोस हुने स्मरण शक्ति कम हुँदै जाने उहाँले बताउनुभयो।

सबै अभिभावकलाई लिडले कस्तो असर गर्छ भन्ने कुरा थाहा नहुने र अभिभावकहरू राम्रो र आकर्षक भएको विद्यालयमा आफ्ना बालबालिकालाई पढ्न पठाउने हुँदा अफ्ठ्यारो पनि यस विषयमा कुनै चासो नराख्नेको भक्तपुर दधिकोटका अभिभावक रमेश न्यौपानेले बताउनुभयो।

लिडले बालबालिकालाई कस्तो असर गर्छ भन्ने कुरा धेरै अभिभावकलाई थाहा नभएको बताउँदै न्यौपानेले यसका लागि अभिभावकलाई सचेतनाको आवश्यक भएको खाँचो औंल्याउनुभयो ।

यस्ता कुरामा अभिभावक, विद्यार्थी, समुदाय र अनुगमन तथा निरीक्षण गर्ने निकाय स्वयं शिक्षा विभागको समेत ध्यान आकृष्ट हुन नसकेको शिक्षा विभागका निर्देशक खगराज बरालले स्वीकार गर्नुभयो। लिडमुक्त विद्यालय निर्माण गर्न शिक्षा विभागले सक्दो सहयोग गर्ने उल्लेख गर्दै बरालले यसका लागि जनचेतनाको खाँचो भएको आवश्यकता औंल्याउनुभयो ।

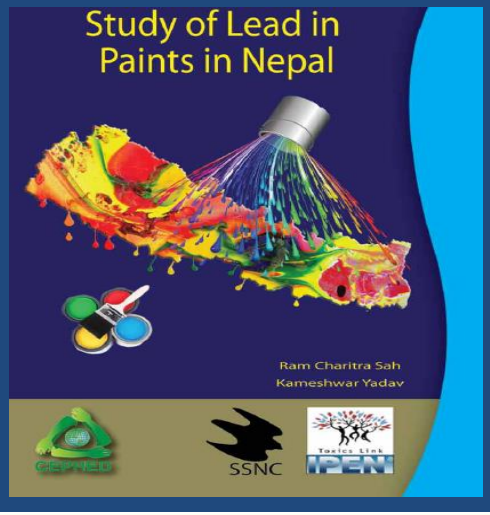
ISSUES OF LABELLING

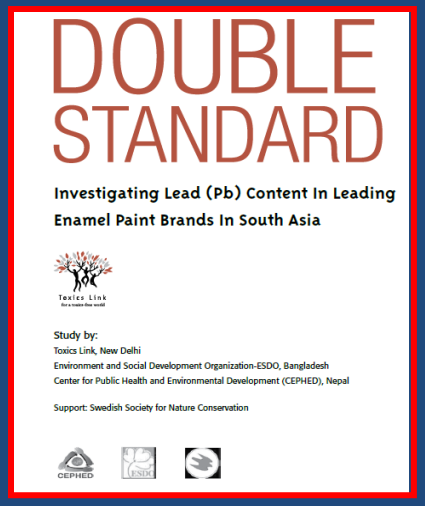
International Brand

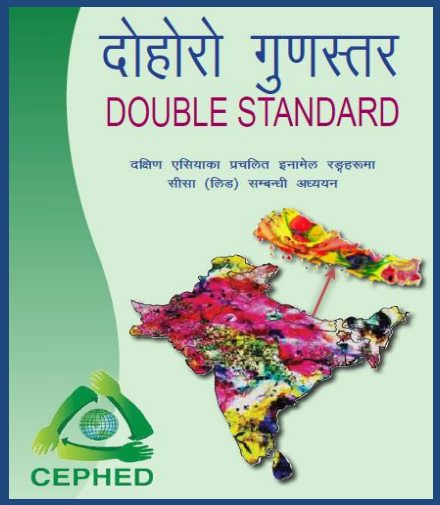
Nepalese Brand

Multinational Brand

IECs: Reports, Posters , fact sheets, Radio jingle and TV documentary

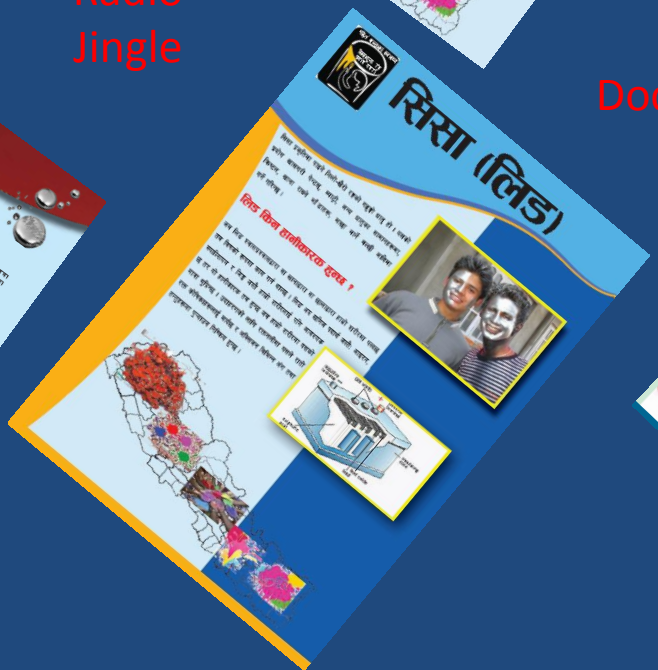






IEC Materials: Fact Sheets, Video and Radio

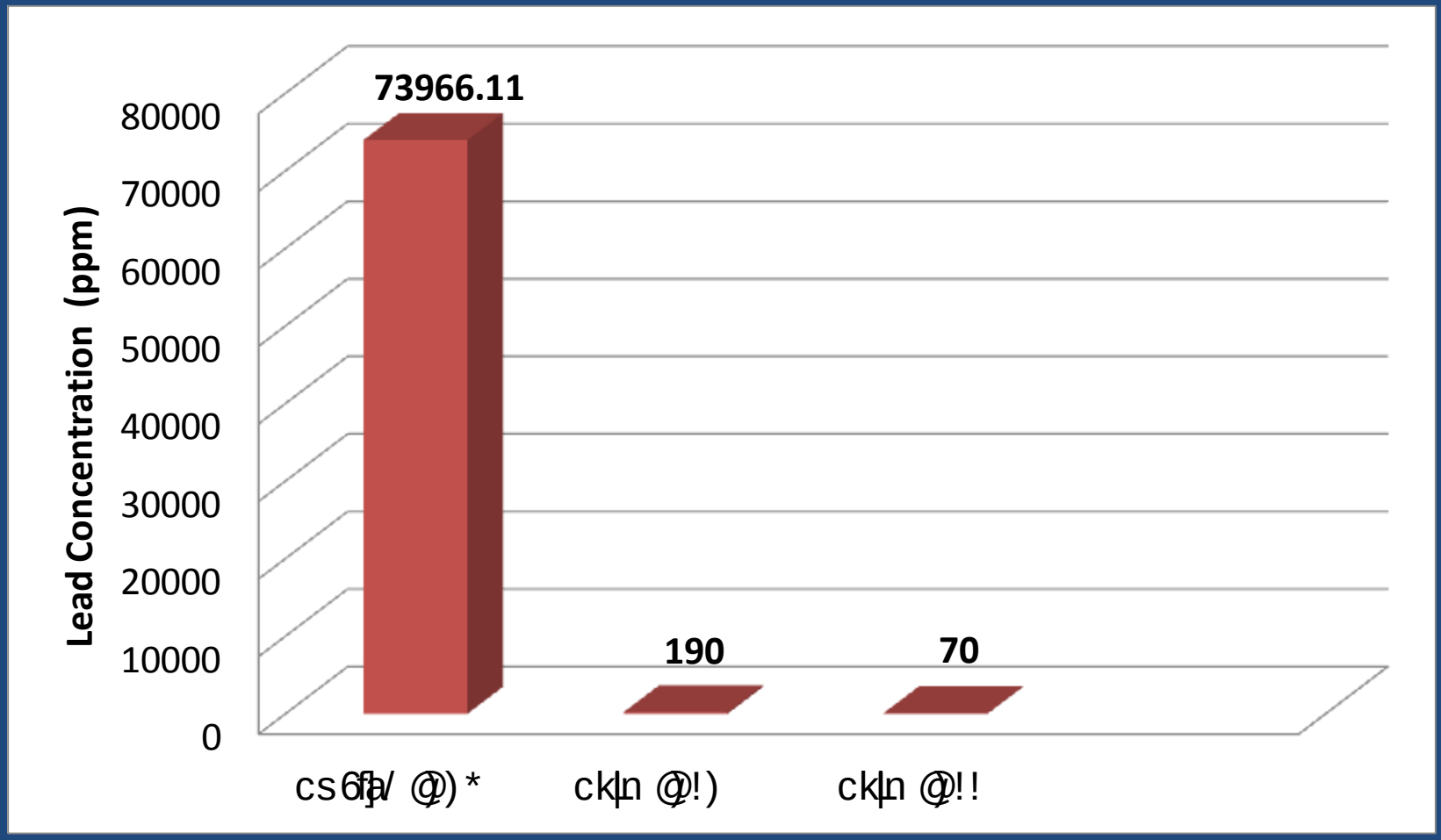
Radio Jingle



Video Documentary

Quality Improvement Indicators

Leap Frog Steps By Asian Paints



All other need to take same steps and make improvement

Govt to regulate import of leaded enamel paints

Environment Minister Hem Raj Tater has said that the government will soon formulate a stringent legislation to regulate leaded enamel paints which are harmful to human health.

THT green Plus

"Plans to protect air and water, wilderness and wildlife are in fact plans to protect man
— Stewart Udall

TOXIC HUES

Sharada Adhikari
Kathmandu

Painted in shades of different colours, your house definitely looks beautiful. But while you are giving a complete new look to your house with these paints, you might be inviting dangers into your home as well as harming your health and environment. The paints might contain lead that is hazardous to human health and environment.

Lead-paint association

No paint is manufactured using lead. But lead is "added" for some other purpose. "Lead is added to paints to speed drying, increase durability, retain a fresh appearance, and resist moisture that causes corrosion and it also acts as an anti-fungal agent," said Ram Charitra Sah, Executive Director of Centre for Public Health and Environmental Development (CEPHED).

And the main source of these lead are "decorative paints used in a wide variety of products including ceramics, pipes, gasoline, batteries, cosmetics, building construction *et cetera*" and when there is "wearing of the paints of these products in certain stage, it pollutes the environment".

As lead is a heavy metal, it doesn't disappear and remains as a residue in soil causing contamination of soil. "And when we consume rice and vegetables grown in the same soil, we consume lead with it," Sah argued.

But why should one worry about lead? The United States Environmental Protection Agency has referred to lead as a "highly toxic metal". Also the World Health Organisation has recognised it as "prime toxic".

It means lead is "a poisonous metal that can damage nervous connections (especially in young children) and cause blood and brain disorders. Lead poisoning results from ingestion of food or water contaminated with lead".

Paints' status in Nepal

A number of national, international and multinational brands of paint are available in Nepal and they are not lead-free. As per a 2010 study conducted by CEPHED about lead in paints from the Nepali market, in general all brands and all types (distemper, emulsion, enamel, varnish and touch wood) of paints available in Nepal contain lead.

Of the 24 samples taken, the average lead content was found to be 6574.71 ppm — 73 times higher than the US or the Chinese standards of 90 ppm for lead in paints.

The second batch of the same study had also revealed that some multinational paint companies had "adopted double standard products in the region. The same companies' products in India were found to have less lead concentration as compared to the high lead concentration in Nepal".

Positive steps

Though not all paint companies are aware of the need to shift towards lead-free technology, a few of them have managed to do so.

Sailendra Kumar Sitaula, Regional Manager, Sales and Marketing at Pashupati Paints P Ltd revealed, "Our water-based products have become lead-free from the last year and we are in the process of making other products lead-free too."

Even some multinational companies blamed to have manufactured double-standard products seem to have made greater improvements. As per the study of CEPHED, Asian Paints, which had quite a low lead concentration in Indian samples (90ppm and 7.15ppm) had an average of 21483.3ppm — 238 times higher concentration than the US standard in Nepal.

However, a highly placed source from Asian Paints on condition of anonymity informed that from 2010 April onwards, all their products have gone to a platform to use raw materials without lead. Claiming that the samples taken for the research were probably picked up before April 2010, the source revealed their products are even below the US standard of 90 ppm — less than 0.01 ppm. And Asian Paints has also begun to give lead-free logo on their packs.

Even Berger Paints, as per the third batch of the Study of CEPHED, has reduced to 165 ppm of lead concentration in the paints. "It was from 2068 Shrawan, that we totally converted to lead-free," informed Saibal Ghosh, Country Manager of Berger Jenson and Nicholson (Nepal) Pvt Ltd.

They had "replaced all such dryers and pigments containing lead" after the realisation that they should go lead-free.

Challenges with hopes

Countries in Europe had banned the use of lead in household paints, as early as 1935 and the US did so in 1971, as per Sah.

But in the context of Nepal, "there is no such standard regarding the amount of lead in paints," as per Ram Adhar Sah, Director General at Nepal Bureau of Standards and Meteorology (NBSM).

And lack of standards is one reason that paint companies are making use of lead in Nepal, as per Ram Charitra who thinks "the improvements need to be continued by multinational companies and it is even more important for the national paint manufacturing companies to make a positive shift from lead-based paints to no added lead paints".

But one of the obstacles in doing so is "lack of vendors who can provide organic raw materials as an alternative to lead," according to Sitaula. And even these multinational companies who have shifted their technology from lead-based to lead-free agree that "general cost increases with the shift". This is because "the raw material required for lead-free dryer can be 162 per cent more than lead-based dryer" as informed by the Asian Paints source.

To this Ghosh added, "It is not an easy step to go lead-free." He, however, regards that the step "must be taken by the companies".

And the good news is that NBSM is in the process of defining the standards of lead in paint. "We have realised that now it is a must to make such standard and NBSM has manpower and equipment to test the lead-content in paints," Ram Adhar said.

The new standard will be ready within the next one or two months.