

Efforts to fight bangle-making hazards

By Our Reporter

LAHORE, Aug 31: The Punjab government's Centre for Improvement of Working Conditions claims to have developed low-cost but safe processes for the elimination of child labour from the bangle industry. It has set up 10 model units in Hyderabad.

The centre organised a function here the other day to spell out the measures it has taken to improve the working conditions, eliminating occupational hazards. It also threw light on the bangle-making process.

Officials said the hazardous processes of 'sadhaai' (levelling), 'tarai' (glass joining), 'marvi' (tinsel coating), 'aari' (moulded bangle-making), grinding and paint spray had been modified and made safe at the model units, each costing only Rs15,000.

SADHAAI & JARAAI: Traditionally, the workers were required to sit on their feet and weld the ends of bangles cut from a glass spring by heating it on the flame. They not only suffered burns, but also faced musculoskeletal problems due to awkward posture. A modified workstation developed to replace the

process is suitable for the height of only young and adult workers who sit on chairs instead of floor and heat and join the ends of the bangles on flame.

Special finger-protecting gloves also have been developed for protecting the workers against burns.

MAARVI: The workers had to apply wet paint to glass bangles placed on a roller and roll on a heated rubber covered with a metal foil using all their strength under the traditional method. Improved workstations, according to officials, have been designed for applying paint along with tinsel coating machines, making the work easy. They are not required to bend and apply manual force for rolling the bangles anymore.

AARI: According to the previous practice, the workers were required to make special moulded bangles by melting the round glass bangles in a metal die on which a glass flame was blown. By doing so, the workers were exposed to heat during the process.

The moulding process has been modified and enclosed in a machine which protects the workers from direct exposure to flames.



GRINDING: Then comes the process of grinding. Patterns were engraved on the bangles by grinding on a wheel grinder placed on the ground. The workers suffered backache and shoulder pains due to uncomfortable posture. Now the grinding platform has been raised in the improved process and workers can engrave patterns on bangles sitting on the stools instead of ground.

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based, with the involvement of all members of a household (including children).

Approximately 9,800-10,000 children are engaged in the industry in Hyderabad. The total number of workers engaged in this sector has been estimated to be 30,000. Hyderabad is the hub of this industry in Pakistan as the traditionally bangle-making families have migrated from India and settled here.

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divided in three broad stages, identified by the output of each stage of the manufacturing process. In the first stage (open bangle), molten glass is converted into semi-circular open bangles which are bundled together into a tora.

Then there is the second stage (closed bangle) in which the open bangles are levelled and joined into closed bangles. The final stage (finished glass bangle) takes the closed bangle and pro-



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PAINT SPRAY: The traditional process of spraying paint on bangles in open air or closed rooms would result in spread of toxic vapours. It has now been replaced by spray booths designed to prevent vapours. Special frames have been developed to dry the sprayed bangles.

Glass bangles of different types are popular fashion accessories in Pakistan and South Asia region. Manufacturing of glass bangles is carried out mainly in Firozabad district of India and Hyderabad in Pakistan. Much of the work in this sector is home-

based, with the involvement of all members of a household (including children).

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In December 2007, the Centre for the Improvement of Working Conditions and a Punjab government department were invited by the ILO's Time-bound Programme to improve occupational health and safety in this sector. A specific objective was to improve the working conditions of young and adult workers by making the work less or non-hazardous.

Around three dozen distinct processes and skills were identified in the manufacture of glass bangles. The processes could be

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Then there is the second stage (closed bangle) in which the open bangles are levelled and joined into closed bangles. The final stage (finished glass bangle) takes the closed bangle and produces the finished glass bangle.

Most of the processes in each stage of the production cycle involve the application of intense heat to glass for melting, shaping, reshaping, and joining. The diverse processes require different sources of heat – including furnaces, ovens and even small burners. Other generic processes include snapping glass, making bundles of bangles, and the application of chemicals for cleaning and polishing bangles.