

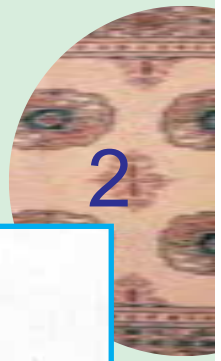
WEAVING NEW DREAMS



Story of an innovation for combating hazardous child labour in carpet industry by improving working conditions, health and productivity of adult workers



Carpet weaving is a labour intensive and tiresome task. It provides very useful livelihood to poor rural families.



2



Lot of children are engaged in carpet weaving





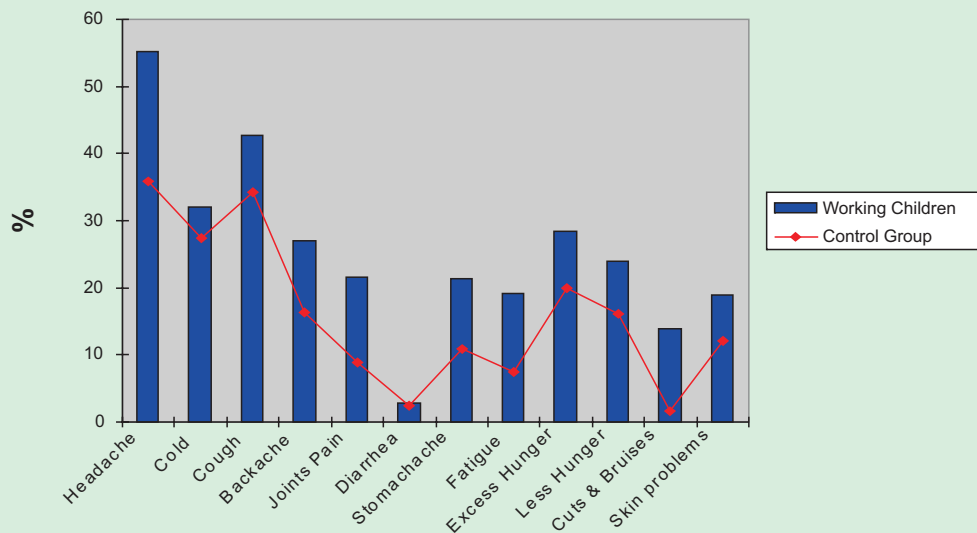
ILO-IPEC with the help of US Department of Labor has started a major project for the elimination of child labour from this sector through education of carpet weaving children and empowering their families.



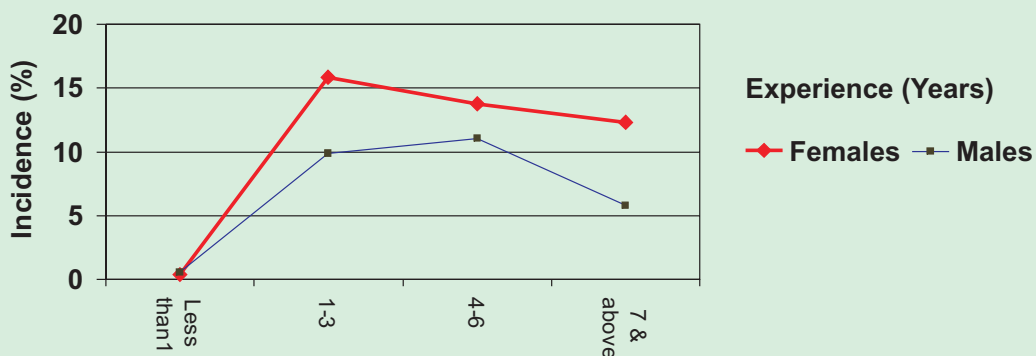
Health and Safety Problem of Carpet Weavers

A study by Centre for the Improvement of Working Conditions & Environment of the Punjab Labour Department revealed that carpet weavers suffer from frequent health problems related to pains of bones and joints as well respiratory ailments. Bad working posture, long working hours and poor work environment was found to be the major cause of their health problems. Low productivity and earnings of adults due to tiresome work, and health problems was a major contributing factor for engaging children in this sector.

Comparison of Health Related Complaints of Working and Control Group Children



Gender-wise comparison of pain neck & shoulders by experience in the carpet weaving children

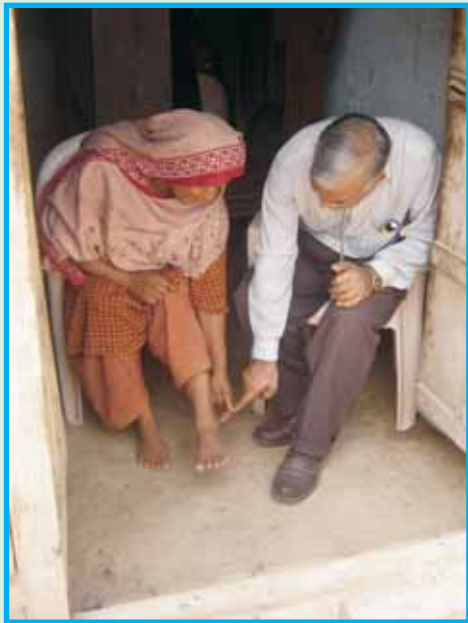




Carpal Tunnel Syndrome is wide spread in carpet weavers



Some children suffer from bone deformities by sitting on looms



Women and girls are more vulnerable to joints and back pain



Poor personal hygiene causes frequent eye ailments

Carpet loom major cause of health problems & low productivity

The design of carpet loom has not changed over the centuries. It is the primary cause of the musculoskeletal problems of the carpet weavers.

Traditional looms are usually installed in darek and dingy rooms



6



The carpet weavers have to sit in very uncomfortable posture.

The heavy metal chain can come loose from its position and lash the face of weavers during tightening of the finished carpet causing grave facial injuries.



The wooden rods and a metal pipe used for changing the side of warp for knotting frequently hit the weavers in head while entering or exiting from loom causing serious injuries

The genesis of a new ergonomically designed Loom

The solution to carpet weaver's problems is the better designed loom and improved work environment. The CIWCE with the help of ILO-IPEC Carpet Project has designed an ergonomically designed loom for carpet weaving which has been successfully tested at 30 sites spread across three districts

On new loom the weaver sits on a bench instead of the toes



It is portable and can be rearranged in the home to suit the workers comfort. There is a foot rest and optional arms rest.



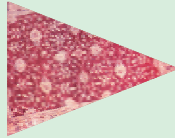


The wooden rod for changing warp side has been eliminated and replaced by a locking gear, thus no head injuries are caused.





For winding of finished carpet, manual handles, levers and gears have been provided which do not cause any injuries during carpet winding.



10



The lighting and ventilation and dust control at the sites with ergonomic looms has also been improved through low cost solutions

The families have been provided with dust masks, first aid kits and training on the use of the new loom.



11

The families have been provided with dust masks, first aid kits and training on the use of the new loom.

The carpet weaving communities, contractors and community leaders were mobilized through an awareness campaign. They were made aware of the health and safety risks faced by carpet weaving children and were introduced new loom and the practical methods for reduction of hazards.



12



The new loom has resulted in enhanced earning of carpet weavers.

It has drastically reduced child labour as the families send their children to schools and adults work more hours as they have better work environment and less health problems to face

It has improved the quality of carpets as it does not tilt to one side like the traditional looms. Also most of the families have negotiated a new and better deal with the carpet contractors, because now they are the owners of new loom. It has increased the earning of carpet weaver upto 150 %.

This intervention has been recognized at global level and Mr. Saeed Awan Director of CIWCE, who conceived and implemented the idea of ergonomic loom has been declared the winner of the prestigious Tech Award for Innovations benefitting Humanity given by the Tech Museum of Innovation in San Jose California USA



13

The real winners of this Award are the downtrodden and poor carpet weaving families the importance of whose work got noticed. I wish to thank ILO, US Department of Labor and the Labor Department in Government of Punjab for their support for this work and hope that similar innovations will be tried where poorest of the poor are toiling with no one paying attention to their problems

Produced by:



Centre for the Improvement of Working
Conditions & Environment (CIWCE)
Labour & Human Resource Department
Government of the Punjab, Township
Lahore-PAKISTAN



Tel: +92-42-5150042, Fax: +92-42-5123537
Email: awosh@brain.net.pk
Web: www.ciwce.org.pk, www.clrc.org.pk