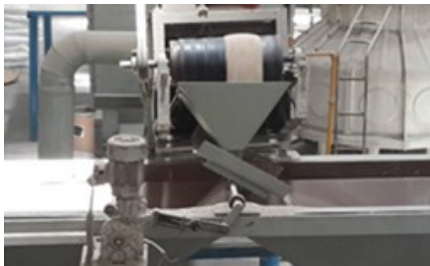


## M/s "PFI" reduces material spillage through Lean Six Sigma



Improved Design to Reduce Spillage

*"If you want to improve, you have to measure first. Measurement leads to understanding and controlling the processes eventually."*

**Mr. M. Hamza Bajwa**  
Director, Pesticides Formulation Industries Pvt. Ltd.

ESPIRE is a partnership project between bfz gGmbH, business associations and SMEDA.

By partnering with ESPIREgreen, industries are taking responsibility to reduce the environmental impact of operations and improving resource efficiency cost effectively by adopting the following four services:

- **Chemical Management (CM) Assessment** to identify Waste Streams and risks in Chemical Flow and recommendations for Risk Mitigation and Wastage Reduction
- **Productivity Assessments** to analyze Process and Material Flows, identify Production Wastes and recommendations for improving productivity
- **Resource Efficiency (RE) Assessment** to identify Waste Streams in processes and facilities and recommendations for Wastage Reduction through Good Housekeeping
- **Training of Companies** on Green Productivity issues such as Health, Safety, Environment etc. to build an enabling environment for sustainability

www.espire.com.pk

### Background

M/s Pesticides Formulation Industries (PFI) Pvt. Ltd. is an industry leader in the formulation of granular pesticides. The company primarily focuses on the automation to control the processes. With an experienced team and state of the art facility, the company has placed itself as a leader in innovation and quality.

### ESPIRE Intervention

In February 2014, bfz gGmbH in collaboration with the Small & Medium Enterprises Development Authority (SMEDA) launched a 10 day training on Lean Six Sigma Green Belt certification for local industry. Mr. M. Hamza Bajwa (Director, PFI) attended the training and was assigned to design and implement a Lean Six Sigma project in his company.

PFI selected three projects for Lean Six Sigma; (i) Reducing Material Wastage in Pesticide Granule Formulation; (ii) Leaning the Information Flow of Quality Test Results; (iii) Material Saving by reducing Over Filling in final bags. For 6 months the Lean Six Sigma expert Ms. Bilquis Yasmeen from VRI USA (Pakistan Chapter) monitored the implementation of the projects at PFI, and guided in documenting the progress and quantifying the realized cost savings.

### Achievements

PFI managed to reduce material loss due to spillage by 98% by improving maintenance and housekeeping practices. A 86.7% reduction in Information Flow Lead Time of pesticide formulation testing lab was achieved by reducing documentation requirements and developing an ERP software. Variance in Overfilling of final bags was reduced by 84% by standardizing the process parameters and training of staff.

The projects resulted in cumulative annual saving of 2.63 Million PKR with an investment of only 0.05 Million PKR at a 7 day payback time.

