

# A Comparative Analysis of Production Workers Developmental Milieu from Management Perspective and Workers Perspective of Selected Small Scale Industrial Units (SIUS) In PCMC

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**Abstract – Production Workers Developmental Milieu (PWDM) is one of the important aspect and need to check for evaluate the productivity of the plant. Many managements and workers believes in it but ground reality needs to check the same. In this research responses of Production Workers Developmental Milieu (PWDM) at Plant Level from Managements perspective are compared with worker's perspective. Responses collected from 248 production mangers and 361 production workers. Results reveled that Management's perception and workers perceptions towards Production workers Developmental Milieu are not different.**

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## INTRODUCTION & METHODOLOGY

Many organizations claims that they work on development of production workers. Responses collected from 248 small industrial units' management and 361 workers of these SIU's. Data collected, tabulated and hypothesis tested after evaluation of responses. This paper, although it is an offshoot of the thesis entitled "A study of Plant Level Production Management (PLPM) at Small Scale Industrial Units – With special reference to Pimpri-Chinchwad areas from Pune"

However, the substantial efforts are made to segregate the content of the paper from the thesis and the same is primed to establish ubiquitously applicable "Tool" to the situation where there is a need to evaluate PWDM.

37 statements are designed describing the PWDM of an SIU organization under varying dynamism. These statements are based on experience collected in pilot survey and survey of the literature. Against these statements, each sampled worker from SIU is asked to give his/her evaluation as perceived by him/her.

After pilot survey this hypothesis was formed to check the deviation between the opinion of management and

production workers about Production workers Developmental Milieu and same is found after the analysis.

Two structured questionnaires designed to seek the response and Likert scale used in all questions. It is used to compare two proportions created by two random samples or two subgroups of one random sample. The assumptions for this test are a) Independent random sampling b) Categorical data & c) Large sample size.

Here the responses obtained from person to person are independent; the response are either '5 - Strongly follows', '4 - Partially follows', '3 – Can't Say', '2- Rarely follows' or '1 – strongly not follow'

## Production Workers Developmental Milieu (PWDM) at Plant Level -

SIU has to take care of personnel function especially for the production workers at plant level since they colonize more than a three-fourth chunk of the working force. Numbers of devices or methods are used by the few SIUs for developing production workers' satisfaction and their involvement in plant level management. With the recent emphasis on Human Resources Developmental inside the

industrial unit, some SIUs are focusing their concentration on Production Workers Developmental Milieu (PWDM) of their organizations. In order to evaluate the PWDM, an unusual questionnaire is developed after pilot survey and is administered by Researcher with the help of six investigators on 83 sampled production workers selected from 248 SIUs (Robert V. Krejcie &, Duluth Daryle W. Morgan, 2009) under judgment sampling method by giving weight to experience engaged in 248 sampled SIUs.

The Production Workers Developmental Milieu (PWDM) sculpts of SIU is characterized as consisting of the following tendencies:

- (i) A tendency at all levels starting from the top management to the lowest levels to treat people as the most important resource.
- (ii) A perception that an urge of developing the competencies of Workers to the job of every manager/ supervisor/worker.
- (iii) A belief that Workers can change and acquire new competencies at any stage of life.
- (iv) A tendency on the part of all Workers is opened (encouraging free expression of ideas, opinions and even feelings) trusting, encouraging experimenting, collaborating, authentic and pro-active.
- (v) Team spirit and discipline
- (vi) Tendency to discourage pigeonhole and favoritism.
- (vii) Compassionate personnel policies and HRD practices including performance appraisals, job-rotation, training, reward administration, career planning etc.

If SIU desires to be dynamic and growth oriented it has to pay attention to the Developmental of its human resources, especially at the plant level. Plant workers must be continuously helped to acquire capabilities for the effective performance of new roles/functions /tasks that may arise in the process of organizational growth and change in the environment. Thus HRD becomes crucial for SIUs dynamism and growth. In the recent past, mechanisms like performance appraisal, counseling, potential appraisal, job enrichment etc have been introduced in some SIUs in Pune. Against this setting, there is a need to set Production Workers Developmental Milieu (PWDM) since it covers all the above programmes. The present survey aims to find out the extent to which PWDM exists in the Small Scale Industries from PCMC areas (Pune). This study is based on the Premises mentioned above and under the assumption that the SIUs altogether is separate organization although an individual SIU's input/output and their manipulation are of varying nature.

## **LITERATURE REVIEW**

**N. Nagesha, M. H. Bala Subrahmanya** – Researcher highlighted that in the globalized era if SSI wants to survive and grow, they need to focus on three very important dimensions of sustainability which are nothing but Economic factor, Environmental factor, and Social factor. **(Nagesh, Bala, & Subrahmanyam, 2006)**

**Hiranya K Nath** - Researchers measured relative efficiency of selected SSI's in fifteen major states of India based on Second All India Census of Small Industrial Units. Focus was on two aspects Relative Capital Productivity and Relative Efficiency. Various initiatives of using modern management principles enable small units to achieve maximum production with minimum inputs. **(Nath, 2008)**

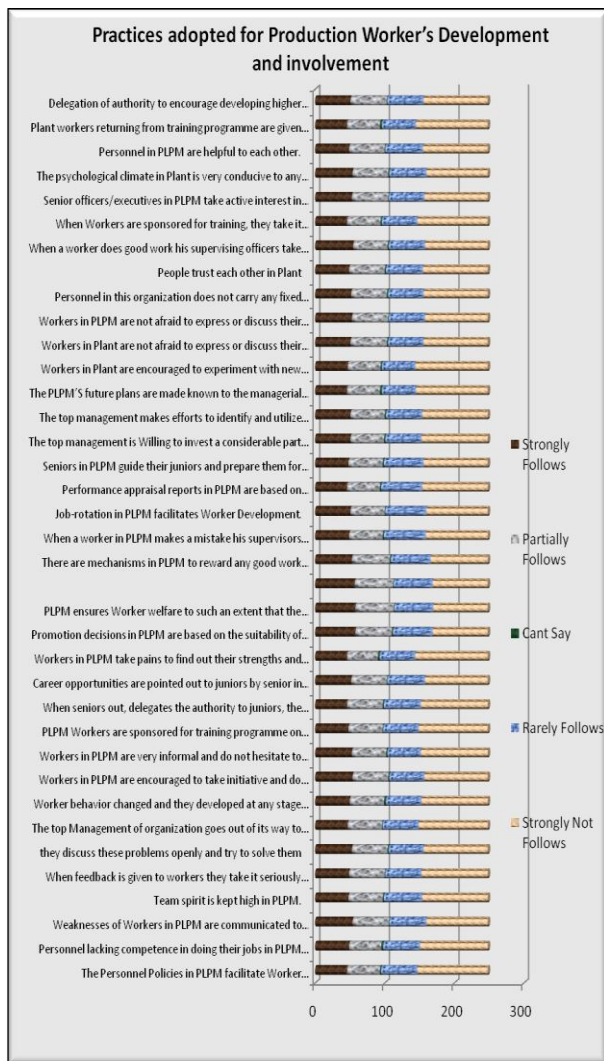
**Joy Clancy, Mark Lakmakker** – This research focuses on environmental management within the small-scale dyestuffs industry in India. 11 firms producing dyestuffs were visited and interviews were conducted with owners/managers and employees involved in the production process. **(Clancy & Lakmakker, 1994)**

**Vasant Desai SSEM Vol.08 -Assistance and Incentives** – In this volume, author highlighted the Incentives schemes for promotion of small industries. Also cover various incentives like taxation incentive, institutional incentive, and incentives by state governments, reservations, and other industrial support. **(Desai, Small Scale Enterprise Management Volume 08 - Assistance and Incentives, 1999)**

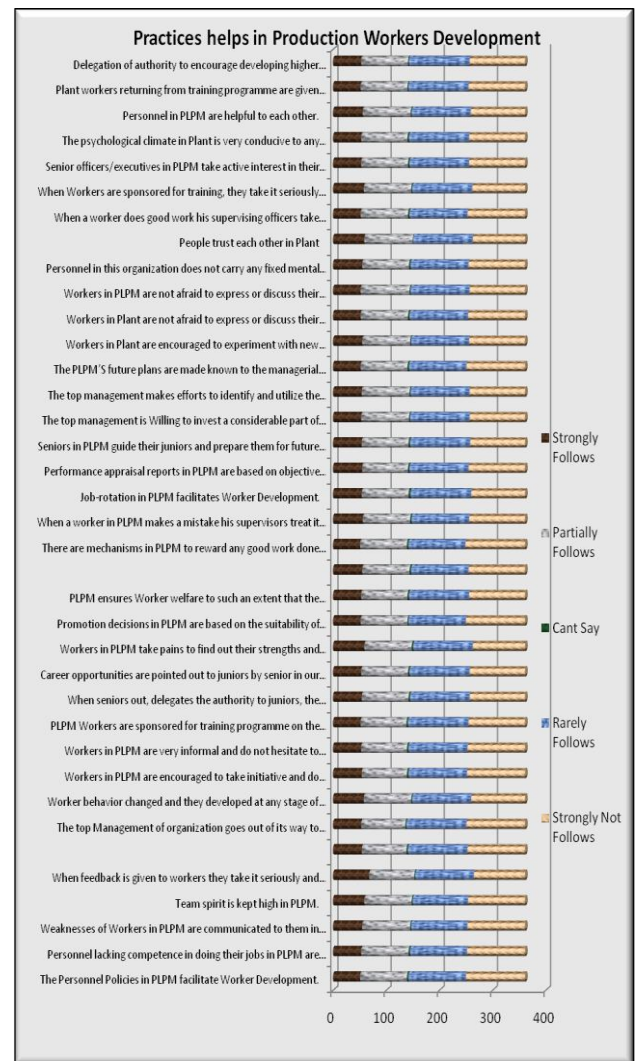
**Lee Roy Beach** – Renowned name in cognitive psychology and organizational behavior has provided a guide for solving the day to day problems of employees that are more concern to managers and organizations. Organized around six principles that are the hallmarks of good employee management, the book fills the gap between the legal and policy issues that are the mainstay of human resources and supervision courses and the practical needs of managers as they attempt to cope with the human side of their jobs. **(Beach, 2007)**

## **OBJECTIVE OF STUDY**

Primary objective of this research is to compare and analyze Management's perception and workers perceptions towards Production workers Developmental Milieu are same are different.



**Fig –Frequency distribution chart of respondents about Practices adopted for Production Worker's Development and involvement – Management view**



**Fig–Frequency distribution chart of respondents about Practices adopted for Production Worker's Development and involvement – Worker's view**

**Hypothesis 8: Management's perception and workers perceptions towards Production workers Developmental Milieu are different.**

*248 responses of Questionnaire 1 compared with 361 responses of Questionnaire 2*

To test the hypotheses,

The null hypothesis,  $H_0$ : The population proportion of managers who agree to various sections related to Production workers Developmental Milieu is equal to the population proportion of workers who agree to various sections related to Production workers Developmental Milieu.

Vs.

The alternative hypothesis,  $H_a$ : The population proportion of managers who agree to various sections related to Production workers Developmental Milieu is greater than the population



proportion of workers who agree to various sections related to Production workers Developmental Milieu.

The test used is z test for proportions.

Test statistics:

$$Z = \frac{P_1 - P_2}{\sqrt{\bar{P}(1-\bar{P})\left(\frac{1}{m} + \frac{1}{n}\right)}}$$

Here  $P_1$  = sample proportion of managers who agree to various sections related to satisfaction,

$P_2$  = the proportion of workers who agree to various sections related to satisfaction,

$\bar{P}$  = Overall proportion,  $m$  = sample size of managers = 248,  $n$  = sample size of workers = 361

Calculation table:

Practices adopted for Production Worker's Development and involvement	Proportion of managers (P1)	Proportion of workers (P2)	Z statistic	p value	Significance
The Personnel Policies in PLPM facilitate Worker Development.	0.38	0.39	-0.2507	0.5990	Not Significant
Personnel lacking competence in doing their jobs in PLPM are helped to acquire competence rather than being left unattended.	0.38	0.39	-0.2558	0.6010	Not Significant
Weaknesses of Workers in PLPM are communicated to them in a non-threatening way.	0.43	0.40	0.63447	0.2629	Not Significant
Team spirit is kept high in PLPM.	0.39	0.41	-0.4659	0.6794	Not Significant

When feedback is given to workers they take it seriously and use it for their Development	0.40	0.42	-0.5068	0.6938	Not Significant
When problems arise in PLPM Personnel, they discuss these problems openly and try to solve them rather than keep accusing each other behind the back.	0.42	0.38	0.91881	0.1791	Not Significant
The top Management of organization goes out of its way to make sure that Workers enjoy their work	0.39	0.38	0.2588	0.3979	Not Significant
Worker behavior changed and they developed at any stage of their life based on feedback.	0.40	0.41	-0.1979	0.5784	Not Significant

Workers in PLPM are encouraged to take initiative and do things on their own without having to wait for instructions from supervisors.	0.42	0.39	0.94877	0.1714	Not Significant
Workers in PLPM are very informal and do not hesitate to discuss their personal problems with their supervisors.	0.41	0.39	0.65083	0.2576	Not Significant

PLPM Workers are sponsored for training programme on the basis of genuine training needs.	0.39	0.38	0.22061	0.4127	Not Significant
When seniors out, delegates the authority to juniors, the juniors use it as an opportunity for Development.	0.39	0.39	-0.0552	0.5220	Not Significant
Career opportunities are pointed out to juniors by senior in our PLPM.	0.42	0.39	0.61216	0.2702	Not Significant
Workers in PLPM take pains to find out their strengths and weaknesses from their supervising officers or colleagues.	0.36	0.41	-1.1696	0.8789	Not Significant

Promotion decisions in PLPM are based on the suitability of promote rather than on favoritisms.	0.44	0.39	1.37377	0.0848	Not Significant
PLPM ensures Worker welfare to such an extent that the Workers can save a lot of their mental energy for work purposes.	0.46	0.39	1.66896	0.0476	Significant
The top management Believes that Human Resources are extremely important resources and they have to be treated more humanly.	0.45	0.40	1.29498	0.0977	Not Significant

There are mechanisms in PLPM to reward any good work done or any contribution made by workers.	0.43	0.39	1.14678	0.1257	Not Significant
When a worker in PLPM makes a mistake his supervisors treat it with understanding and help him to learn from such mistakes rather than punishing him or discouraging him.	0.39	0.40	-0.261	0.6029	Not Significant

Job-rotation in PLPM facilitates Worker Development.	0.40	0.39	0.24465	0.4034	Not Significant
Performance appraisal reports in PLPM are based on objective assessment and adequate information and not on favoritism.	0.38	0.39	-0.3884	0.6511	Not Significant
Seniors in PLPM guide their juniors and prepare them for future responsibilities/roles they are likely to take up.	0.39	0.39	-0.0552	0.5220	Not Significant

The top management is Willing to invest a considerable part of their time and other resources to ensure the Development of Workers.	0.40	0.40	0.07611	0.4697	Not Significant
The top management makes efforts to identify and utilize the potential of the Workers.	0.40	0.40	0.10723	0.4573	Not Significant
The PLPM'S future plans are made known to the managerial staff to help them develop their juniors and prepare them for future.	0.38	0.39	-0.3196	0.6254	Not Significant

Workers in Plant are encouraged to experiment with new methods and try out creative ideas.	0.38	0.40	-0.5619	0.7129	Not Significant
Workers in Plant are not afraid to express or discuss their feelings with their superiors.	0.42	0.39	0.61216	0.2702	Not Significant
Workers in PLPM are not afraid to express or discuss their feelings with their subordinates.	0.42	0.40	0.60411	0.2729	Not Significant
Personnel in this organization do not carry any fixed mental impressions about each other.	0.42	0.40	0.47444	0.3176	Not Significant
People trust each other in Plant	0.40	0.42	-0.3028	0.6190	Not Significant

When a worker does good work his supervising officers take special care	0.42	0.39	0.71144	0.2384	Not Significant
When Workers are sponsored for training, they take it seriously and try to learn from the programme they attend.	0.38	0.41	-0.6985	0.7576	Not Significant
Senior officers/executives in PLPM take active interest in their juniors and help them learn their job.	0.42	0.39	0.81061	0.2088	Not Significant
The psychological climate in Plant is very conducive to any Worker interested in developing himself by acquiring new knowledge and skills.	0.42	0.39	0.87964	0.1895	Not Significant

Personnel in PLPM are helpful to each other.	0.40	0.40	-0.0298	0.5119	Not Significant
Plant workers returning from training programme are given opportunities to try out what they have learnt.	0.38	0.39	-0.3196	0.6254	Not Significant
Delegation of authority to encourage developing higher responsibilities is quiet common in PLPM.	0.42	0.39	0.61216	0.2702	Not Significant

Since p value is less than 0.05 for only one factor 'PLPM ensures Worker welfare to such an extent that the Workers can save a lot of their mental energy for work purposes'; the null hypothesis is rejected for the mentioned factor only.

## CONCLUSION:

The population proportion of managers who agree to 'PLPM ensures Worker welfare to such an extent that the Workers can save a lot of their mental energy for work purposes' is greater than the population proportion of workers who agree to the same.

The population proportion of managers who agree to various sections related to Production workers Developmental Milieu is equal to the population proportion of workers who agree to various sections related to Production workers Developmental Milieu.

Since majority of parameters the hypothesis for hypothesis 'Management's perception and workers perceptions towards Production workers Developmental Milieu are different' is non-significant so **hypothesis is rejected**. Management's perception and workers perceptions towards Production workers Developmental Milieu are different. As a result **Hypothesis is rejected**

## REFERENCES

- Nagesh, N., Bala, M. H., & Subrahmanyam. (2006, October). Energy efficiency for sustainable development of small industry cluster : what factor influence it? *The International Journal of Economic Policy Studies* , Article 7.
- Nath, H. K. (2008, September). Relative efficiency of modern small scale industries in India: An inter state comparison. *SSRN Electronic Journal* , - .
- Desai, V. (1999). *Small Scale Enterprise Management Volume 08 - Assistance and Incentives* (01 ed., Vol. 08). Mumbai: Himalaya Publishing House.
- Beach, L. R. (2007). *The human element understanding and managing employee behavior*. (01, Ed.) New York, USA: M. E. Sharpe.
- Dr Adhikari (2010). Organizations, International Journal of Productivity and Management
- Wilkinson and Bhandarkar (1979). Methodology and Techniques of Social Research, TMGH.

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