IMPACT: International Journal of Research in Humanities, Arts and Literature (IMPACT: IJRHAL)
ISSN (P): 2347–4564; ISSN (E): 2321–8878
Vol. 7, Issue 2, Feb 2019, 589–598

MAHATMA GANDHI INSTITUTE FOR RURAL INDUSTRIALIZATION, WARDHA'S TECHNOLOGY IS AN ALTERNATIVE LIFE-GIVING BOON FOR FARMERS

Pankaj B. Chaudhari & Ravindra Borkar

Assistant Professor, New Arts, Commerce & Science College, Wardha, Maharashtra State, India

Associate Professor & HOD , Department of Commerce & Management, Mahatma Gandhi International Hindi University, Maharashtra State, India

Received: 12 Feb 2019 **Accepted:** 16 Feb 2019 **Published:** 28 Feb 2019

ABSTRACT

Suicide is becoming a global crisis among Farmers in India in the last two decades. Between 1997 and 2006, 166,304 farmers took their own lives (K. Nagaraj 7). In the 4 years between 2001 and 2005, nearly 87,000 farmers in India committed suicide (Mishra 6). In addition, farmer suicides make up 20.9 percent of all suicides in India (K. Nagaraj 14). Farmers commit suicide at a higher rate than the rest of the Population in India. For example, the suicide fatality rate per 100,000 among farming households increased from 9.7 to 16.2 between 1995 and 2001, compared to 12.5 to 14.0 for the general Indian male population during the same time span (Mishra 1568). Small-scale farmers, who are usually the poorest in rural areas, are often more likely to commit suicide. Local producers committed 68 percent of all communal violence, according to a survey performed in two of India's most agriculturally dependent states (Mohanty 253). The most surprising claim, according to journalist P. Sainath, is that since 2003, one farmer has committed suicide every 30 minutes ('Nearly 2 lakh farm...").

KEYWORDS: *MGIRI, Remedial Instrument, Farmers Suicides*

INTRODUCTION

A variety of causes have contributed to the rising number of farmer suicides in India.We would like to focus on such institutions whose really can be a remedial platform for stopping formers suicides i.e. The Mahatma Gandhi Institute for Rural Industrialization is a branch of the Indian government's MSME ministry. The fields are not as profitable as they once were, the economies are struggling, debts are mounting, and pests are gaining ground. In recent years, this has taken on political and international aspects, making it more than just an economic problem. A regional survey on farmer suicide conducted in rural Vidarbha (Maharashtra) in 2012, and Smith's Similarity method used for qualitatively rank articulated triggers among farm owners whom have lost somebody to suicide. Farm worker suicides were attributed to depression, alcoholism, the climate, poor produce rates, pressure and family responsibilities, ignorance, inadequate irrigation, rising cultivation costs, private money changers, the use of fertilizers, and crop failure, in that order. In other words, debt-related stress and family obligations ranked higher than fertilizers and crop failure. In a 2006 survey in the very same country, insolvency (87 percent) and declining financial standing (74 percent) discovered to be major risk factors for suicide. Therefore, in this article researcher want to open a way to get alternative source of income, which will, leads to Rural Industrialization and reinforcement of Framers wealth also to become a remedial on Farmers suicide in India. In this research paper researcher has attempts to suggest the alternatives source of income, which can be, establish by taking

training and financial assistance from MGIRI, so that Farmers do not adopt this life end step and can be save farmer's life and their family talents because each members of this family will be an "Iconic Frame of Future India". **Issues of Farmers**

SUICIDES IN INDIA

Issues of Weather and Climate

Climate trends have changed over the last three years. In addition, when there is regular rainfall, the situation does not change. Water is supplied to 56 percent of the nation by snow-fed rivers, and even minor variations can be devastating in such a situation. Very dry and damp weather will also wreak havoc. Rainfall accounts for 85 percent of India's precipitation, which exacerbates the problem. Dry spells can be especially harmful to crops, especially in the early stages of their growth. Dry spells that occur on a daily basis can cause serious crop failure.

Crop, Pesticide, and Fertilizer Content

Farmers throughout India are often forced to make do with low-quality seeds. There are numerous explanations for this unfortunate situation, including farmer ignorance, official incompetence, weak and coercive legislation, and inadequate enforcement of laws. They use low-quality fertilizers to grow their crops. All of these factors often result in crop failure. Small & mid farmers often, find that higher-quality seeds are prohibitively costly.

Storage Centers that are not up to Par

These flaws and problems have far-reaching consequences, far beyond what many people are aware. The primary concerns of a farmer mostly on verge of suicide are providing for his children in the aftermath of a catastrophe and repaying debts. Those who are that little better off and as this is a matter of recouping savings and avoiding the liquidity crisis that has engulfed so many of their peers.

Price realization is Unsatisfactory

Market research is one of the most pressing issues that farmers in India face. In India, Farmers are often forced to offer their produce in controlled markets, where the intermediaries profit the most, since the rules are outdated. On rare occasions, they will benefit by up to 75%.

Farm Labour Shortages

Farm labour, particularly casual labour, is now considered insulting. People who would otherwise be working in agriculture are now employed in sectors such as construction and industry. This is also one of the reasons for the rapid growth in urban migration in recent decades. Farmers' children are particularly involved in receiving formal education and employed in other professions. The government has also introduced a scheme of minimum support rates that has resulted in wage rises as well as inflation.

Farmers in India Face a Variety of other Issues, as mentioned below:

- Rising prices have made it difficult to manage farm livestock.
- Difficulties securing credit on generous conditions due to commercial banks reluctance.
- Inadequate irrigation

- There is no automatization.
- Inadequate transportation options

The implications of these vulnerabilities and problems would be far, far beyond what most people are aware.

Financial Anxiety

Continual economic burdens arising from the "Land Crisis," as well as continuing drought and floods, have worsened the country's economic woes.

Losing of Autonomy and Power

So many issues, such as illness, temperature, and governmental policies, are beyond the farmer's control, but the debts are solely his or her responsibility.

Sense of Loss

Land loss, the loss of a family property, and the loss of a way of life Crop loss, revenue loss, and cultural loss are all normal occurrences.

Untreated Mental Illness

The loss of emotional health resources in rural areas, as well as the stigma associated with treating depression induced by Agricultural chemicals or pesticides have been linked to an increased risk of depression and, potentially, suicide.

MGIRI as a Remedial on the Farmer's Suicide

The Mahatma Gandhi Institute for Rural Industrialization was founded with the intention of developing a framework that will provide the institute with the absolute best science, technology, and management inputs in such a comprehensive manner. The Institute is divided into six parts to meet the needs of the Khadi and Village Industries, as well as the formation of Bio and Chemical Product Systems, that will enable farmers with Eight Minor property and no other source of income to be more motivated. Farmers can grow their crops well in the worst climates with the aid of MGIRI research technology. MGIRI not only benefits farmers, but it also helps India's rural industrialization.

Khadi & Textile (K&T)

- Identifies problems in the Khadi and textile and provides recommendations across innovation and engineering interventions to make Khadi and featuring more competitive internationally.
- To develop product quality, performance assessment system and group before the activities for the Khadi industry for Desi silk and wool in contrast to yarn products.
- Keep up with trends, disseminating existing costuming developments.

Bio-Processing & Herbal (B & H)

- Create a hub to connect rural MSMEs with other S&T institutions, identifying and addressing MSME unit issues with products, processes, and quality.

- Making products of creative, value-added, increased products for rural sectors such as retail, herbal medicines, herbal cosmetics, Neutracitical, feed supplements, bio-fertilizers, bio-pesticides, biotin, and so on, and distributing the innovation to MSMEs to assist them develop their range of products and improve their performance so that they could still compete from both the domestic and global markets.
- Working on research verification, data quality, and optimization of the aforementioned materials, with a focus on assisting in the optimization of products based on ancient knowledge.

RCE Division

- Services Grows tools and machinery that can be used to make a difference craft working methods and techniques in order to enhance artisans' skills, creativity, and efficiency.
- It Provide innovation & engineering expertise for added value and quality assurance, as well as identifying and resolving massive technical problems that endanger international competitiveness.
- To improve making a case by implementing new industrial systems and competition designs, to promote creativity, creativity, and achieve effective.
- Create special crafting zones to sales increases among the nation's trained young people.

CI Division

- Development of non-chemical preservation and packaging methods that are cost-effective.
- Agrochemicals of potential use are identified, extracted, separated, and purified.
- Businesses that recycle waste using environmentally friendly technology.
- Development of small business schemes in the chemical sector (with an emphasis on companies that depend on resources and markets)
- In rural areas, the said unit conducting environmental affects assessments for chemical plants. Processes and plant designs those are suitable for micro and small businesses in rural areas.

Rural Energy and Infrastructure Division

- Consider the demand market in terms of segments that need the least amount of energy and work out strategies to meet those needs by creative use of local resources.
- Redesign products/processes to minimise energy consumption and arrive at devices/systems/energy blends that better suit products/scales.
- To demonstrate community scaling of technology through the creation of effective man-machine systems to ensure jobs while maintaining the quality and productivity required for global competence.

Management & System Division

M&S created three web portals as part of their operations, with the following goals and URLs:

www.ruralhaat.com

www.ruralhaat.com is a web portal created by Section to help Nano, Micro, and Small rural entrepreneurs advertise their goods widely so that they can get the best price for their products and expand their customer base. This portal has features that connect the Manufacturer and the Buyer via SMS. It also has functionality for listing a prospective buyer's wants. The Portal is currently available for free, allowing entrepreneurs to easily reach out to the general public. www.greenkhadidesigns.com – An online repository for disseminating cutting-edge technological design (both woven and garment) and requirements for the Khadi and Solar based fabric industries.This will ensure major improvements in the quality and design of Khadi fabrics, as well as increased marketability and the growth of new market segments. Khadi and Solar Fabric Organizations can use it for free.

www.udyamisahayak.com

www.udyamisahayak.com is a web online repository portal that supports rural entrepreneurship growth by providing information on available technologies, industrial services offering institutions, available sources of raw materials and spare parts, available sources of machineries, and institutions that provide process training, among other items.

Hypothesis

- H1 : MGIRI's technology is a effective tool for stop farmers sucide.
- H2: MGIRI can reinforcement of rural industrialization to minimize farmers sucides.

RESEARCH METHODOLOGY

Research Design

A variety of methods were used in this study. The first part of the report was made up of a collection of very well questionnaires and quasi interviews with key stakeholders from participating businesses. An individual interviews and field observations at selected manufacturing sites were also used to determine how they felt about occupational safety and fitness.

Consequently, this report uses a comprehensive descriptive research to come to a consensus on impact on an occupational protection, health scheme on health services, and safety management harm in specific industrial sectors. Descriptive interpretation paints a complete view of people, events, or situations. From an intimate, organizational, and business perspective, This structure gives researchers a profile of well-known important facets of the hypotheses they're studying.

The below is the Methodology

This study used a mixture of qualitative and quantitative approaches, similerely main and secondary sources are to discuss the key researches goal. Qualitative evidence is used to back up the quantitative data interpretation and conclusions. Since the study mixed qualitative data sources, the data set was triangulated. This section discussed the research subject, information sources, and sampling procedure.

AREA OF STUDY

Random sampling was used in this analysis. This data was collected from selected small business units in Maharashtra from December 31, 2014 to December 31, 2015.

SOURCES OF KNOWLEDGE

Primary Sources

It came by initial data. The Primary information was much more precise & confident in their decision-making, with the trustworthy report with a direct connection to the occurrence of the events. Industry operating environments and staff in business units are the principal data points.

Secondary Sources

To gather data from different secondary sources, a desk analysis was undertaken. Reports and project records from each business unit are included in this. The manufacturing industrial sectors were researched using books, various publications, periodicals, proceedings, newsletters, reputable journals, newspapers, blogs, magazines and other media. For the study, Internal working papers, books, protocols, documents, historical data, rules, regulations, and standards were used to compile the results.

Sample Size

Table 1

S. No	Beneficiary / Farmers	Number of Respondents
01	Farmers and Beneficiary	25
02	Individual Beneficiary	30
Total Number of Respondents		**55**

In Maharashtra, the sample population included farming and non-farming clusters. The following is a list of respondent definitions:

Choosing a Sample Size for a Questionnaire

The study's descriptive factors responsible and participants were chosen using basic random sampling and purposive sampling approaches. Simple random sampling implies that every other participant has an equal chance of being chosen or obtaining responses, which could be more than the data analysis reasoning. To obtain optimal and rational statistics, a determining sample size protocol was used. Since the sectors are diverse, both probability and no probability sampling techniques were used in this analysis. This is dependent on the characteristics of the sources of data, which enabled the authors to use a variety of methods. This aids the study in triangulating the data gathered, thus increasing the trustworthiness of the test result and judgment.

Formula

$$n = z^2 p (1-p) / d^2$$

P = predicted prevalence or proportion (in proportion of one; if 50%, P = 0.5), and d = precision (in proportion of one; if 6%, d = 0.06), where n = sample size, Z = statistic for a degree of confidence, P = expected prevalence or proportion (in proportion of one; if 50%, P = 0.5). The Z statistic (Z) is a type of statistic that is used to describe a The Z

value is 1.96 with a degree of trust of 95%, which is the norm. The researchers in this analysis present their findings with 95% confidence intervals (CI).

DATA COLLECTION

Following fundamental approaches were used to gather data. Data collection systems have been designed and are ready to go with their techniques. As described in the previous section, these included secondary sources collections based on both data.

Primary Data Collection

The main data sources are primary and secondary data sources. Qualitative data sources include land evaluations, assessments, and informal encounters, while quantitative sources of information include survey questionnaires and interview questions. The sections that follow describe how the data are collected from primary sources.

Data Analysis from Workplace Observations

Science needs a great deal of observation. Documentation, archival documents, interviews, direct reports, and participant observations are also examples of observation that are closely linked to data collection. Since the study is able to gather a great deal of knowledge on a certain behaviour, observational analysis results are known to have high validity. The authors in this research used observation as one instrument for gathering knowledge and evidence both before and after the questionnaire was designed. More than 20 detailed observations of manufacturing sectors in the sample areas were made by the researcher. It discovered a greater understanding of the working world during the experiments.

Interview Method

A contextual conversation with participants who knows to be especially insightful about the subject of concern is referred to as an interview. The semi - structured interview method is typically done on the basis of face to face environment, allowing interviewer for gaining new observations, evaluate phenomena by ask quiestion from several angles. It enabled the researcher to gain a thorough understanding of working environments influencing factors and outcomes. It has allowed for the refinement of data collection efforts as well as the examination of specialised structures or procedures. It has been used where a researcher needed to triangulate proof from other primary and secondary sources of information due to a lack of paper information or published documents. In addition to using a qualitative approach and interviewing people, this research was written using a quantitative approach. Interviews have the advantage of allowing respondents to bring up topics that the interviewer would not have expected

Questionnaires are used to Gather Data

The questionnaire yielded useful information that was needed to meet the dissertation's objectives. The five item Likert scale was used to construct the questionnaires. Each argument was rated on five point Likert scale with 01 indicating ‘strongly disagree’ and 05 is indicating ‘strongly agree.’ Responses were tallied to give each test a ranking. Questionnaires are the maximum not unusual place technique for amassing number one records in purposeful evaluation the pattern length and forms of inquiries to ask. Each respondent in this study was asked to answer the same series of questions, which were then combined to disprove bias.

Measurement of Workplace Exposure

To determine the degree of each component, the researcher measured dust, friction, heat, pressure, illumination, and noise in the workplace. The key data sources that were expected and the real coverage were compared as follows:

Table 2

Instrument Particulars	Planned	Actual Coverage	Success Level
Survey Questionnaire's	50	35	71%
Observation	20	18	90%
WorkplaceSite exposure measurement	20	20	100%
Interview or Discussion	15	13	87%

Survey Coverage as Planned versus Actual

The suggested data source had a strong response rate. The respondents responded to the interview/discussion with 87 percent, the response rate to the survey questionnaire was 71% & for the entire data analysis process, the field observation response rate was 90%. As a result, the data organization's output has not been jeopardized.

This sample size is thought to be typical of organisational research. It is appropriate because the analysis accepts that the response rate should be 30%. The survey with an answer rate of 20% on a scale is sufficient, according to the argument. Researchers need not be discouraged by the low answer rate since this is true of much published study. As a result, the study's response rate is adequate and excellent for achieving the study's goals.

Secondary Data Collection

Secondary data is information that has been gathered by someone other than the customer. This data source provides information about the existing state-of-the-art method's study area. It also creates some kind of study vacuum that the researcher must fill. Internal and external data sets of information could be used as alternative data sources, and they could cover a broad variety of topics.

Examination of the Literature, as well as Business Documents and Reports

The writer has completed extensive paper analysis and company reports in both online and offline formats to achieve the dissertation's objectives. Literature reviews may be thought of as content analysis from an analytical perspective, in which quantitative and qualitative elements are combined to determine descriptive as well as content parameters.

METHODS OF DATA ANALYSIS

The protocol for data processing is shown in the following pages. The data analysis section included answers to the fundamental questions raised in the problem statement. The detailed study of the business units' interactions in developed and developing countries was studied, debated, compared and contrasted, and synthesized.

Analyzing Quantitative Results

Quantitative data was derived from the primary and secondary sources listed earlier in this chapter. This data processing was done using Excel, SPSS 20.0, Office Word format, and other software depending on their data sort. The emphasis of this data analysis is quantitative data analysis.

Data research has been done using descriptive statistics and graphical visualisation as part of the data analysis. The research involved looking at the relationships between factors and comparing how different classes influence each other. Cross tabulation/chi square, correlation, and factor analysis, as well as nonparametric statistics, were used.

Analyzing Qualitative Results

The quantitative data analysis was triangulated using qualitative data analysis. The conclusions were backed up with documents from the interviews, observations, and reports. In the data interpretation parts, the analysis has been combined with the quantitative discussion findings.

Tools for Analyzing Data

The data was entered and evaluated using SPSS 20.0 on Windows 10. The research, which was aided by SPSS tools, played a significant role in the discovery. It had helped to validate the data and ensure that the SPSS findings were accurate. The programme compared and interpreted the outcomes of various factors used in the testing questionnaires. Excel is often used to create the illustrations and quantify some of the analytical solutions.

The Quantitative Data's Reliability and Validity Analysis

Reliability of Data

The reliability of measurements specifies the amount to which it is without bias (error free) and hence ensures consistent measurement across time and across the various items in the instrument. In reliability analysis, it has been checked for the stability and consistency of the data. In the case of reliability analysis, the researcher checked the accuracy and precision of the procedure of measurement. Reliability has numerous definitions and approaches, but in several environments, the concept comes to be consistent. The measurement fulfills the requirements of reliability when it produces consistent results during data analysis procedure. The reliability is determined through Cranach's alpha as below:

Table 3

S. No	Qualitative Data (Group Wise)	Instrument Number	Alpha Standardized
01	Factors Associated with Personal Specific Tasks	PPE 01 to PPE 10	0.93111
02	Factor Concerning Knowledge	K 01 to K 08	0.86423
03	Factors Associated with Technology and Suppliers	T 01 to T 10	0.79222
04	Factors Associated With Management	M 01 to M 17	0.87734
05	Factors Related to Policies, Standards, and Guidelines	P 01 to P 08	0.88824
06	Factors Associated with Personal Protective Equipment	PPE 01 to PPE 10	0.93132
07	Factors Affecting Collaboration and Support	C 01 to C 07	0.78114
08	Factors Associated with Hazards and Accidents	H 01 to H 10	0.72032
	Total	70	0.966

Internal accuracy and reliability of questionnaire items is assessed.

The letter K stands for information. M stands for management; T stands for technology; C stands for collaboration; and P stands for legislation, guidelines, and regulations. H, dangers and potential for accidents; Personal protective equipment (PPE) is a term that refers to the equipment that is used to

Validity

Until developing the measurement instruments, the researcher was guided by studied literature relating to compliance with work health & safety conditions and data collection methods. Furthermore, the researcher was aided by the pretest analysis

that was performed prior to the key study in avoiding uncertainties of the contents of the data collection measuring instruments. The measurement instruments were enriched after a rigorous review by the statistician, the researcher's supervisor, and joint experts to ensure that all topics relevant to the sample were used.

Consideration of Ethical Issues

Moral approval was received from the MGIRI's beneficiaries, who came from both farming and non-farming backgrounds. The study's intent was explained to the participants. Each participant gave their informed consent. Both company units participating in the report will get updates on the results of the poor working climate evaluation.

The Results are Disseminated and Put to Use

The findings of the study will be shared with the Maharashtra small and medium businesses from which the data was gathered. The results will be made public by publication and introduction in Academic Journals.

CONCLUSIONS

Simply looking at the numbers is enough to make us ill. However, the figures raise the question of what extent of destruction India's farmers are facing to justify such drastic steps. Given all of the preceding information, we should be aware that change is the most powerful natural law. Consequently, MGIRI can be seen as a ray of hope for a bereft farmer's family's survival. Simply contact such institutes as MGIRI, which can help farmers, improve their life styles and thinking power so that they can have more than two sources of income and be prepared to combat any adverse conditions that can occur in their lives in India.

REFERENCES

1. *Barringer, B., & Ireland, D. (2005). Entrepreneurship: successfully launching new ventures. Boston, NJ: Pearson Education.*
2. *Carree, M. A., & Thurik, A. R. (2003).The impact of entrepreneurship on economic growth. In Z. J. Acs& D. B. Audretsch (Eds.), Handbook of entrepreneurship research (pp. 437–471). Boston: Kluwer Academic Publishers.*
3. *Creswell, J. W. (2013). Research design: qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage Publications.*
4. *Feenstra, R., & Hanson, G. (2005).Ownership and control in outsourcing to China: estimating the property-rights theory of the firm. Quarterly Journal of Economics, 120(2), 729–761 May.*
5. *World Development Indicator 2001, World Bank Washington DC.*
6. *UNDP: Human Development Report- 2000, Oxford University Press, Oxford.*
7. *PPST Bullet in (1983), What is development: Recalling an old debate, p3-11.*
8. *PM's council on Trade and Industry (2001): How can India avoid Pitfalls of Globalization?*
9. *http://www.nic.in/pmcouncils/reports/global*
10. *www.google.com*
11. *www.mgiri.org*