



A Study On Effects Of Chemical Farming On Farmers At Kilkundaiyar Village, Thiruvallur District, Tamilnadu

KEYWORDS

Chemical Farming, Ill Effects, Organic Farming. Agriculture

NADIMIDODDI LEELA SHARON

M.Phil Scholar, Department of Social Work (SFS)
Madras Christian College.

Dr. G. F. ALBAN NISHANTHALU

Assistant professor, Department of Social Work (SFS)
Madras Christian College. Chennai

ABSTRACT

Chemical farming has been adopted by many landlords because it's the faster way to get yield. Farmers who are concerned of the yield, health is not their major concern, their main aim is to provide living to their family, when they work in the farm it is not of their concern to protect themselves from the harmful poisonous pesticides. Farmers who do chemical farming breathe in the poison entire day while spraying, unaware of the fact that it's harmful. Most of the farmers suffer with skin allergies, diseases and the most worsening cancer. Lack of awareness and proper guidance they have been losing their lives. For this study exploratory research design has been adopted. The objectives of this study are; to assess the ill effects of chemical agriculture on farmers, to assess the external input expenditure of farmers and to assess the availability of external inputs. Non probability purposive sampling method has been adopted; the tool for data collection is interview schedule. The respondents of this study are 30 farmers, an inclusive criterion is farmers that have farms and also work in other farms. This study is to know the effects of chemical farming on farmers, results and suggestions are discussed in the main paper.

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INTRODUCTION

Agriculture is the primary sector in India as India is dependent on agriculture most of the experiments are done in that area and some of those exploit and use the farmers. At present India is shifted to chemical farming from organic which gives them money to an extent but leaves them with immense health problems. Exposure to pesticides both occupationally and environmentally causes a range of human health problems. At present, India is the largest producer of pesticides in Asia and ranks twelfth in the world for the use of pesticides.

Chemical farming in India

Agriculture remains the principal source of livelihood for majority of the population in India. The increased use of synthetic fertilizers and chemical pesticides in agriculture started in India since 1960s as part of the Green Revolution. Over the past five decades synthetic fertilizers' consumption has drastically increased several folds and India is now one of the leading producers of agrochemicals in the world. Many of the chemical pesticides can have harmful effects on human beings either as acute or chronic toxicity. Acute exposure to pesticides can lead to death or serious illnesses. About 355,000 people die globally each year due to unintentional acute poisonings. Two-thirds of these deaths occur in developing countries where such poisonings are associated with excessive exposure and or inappropriate use of toxic chemicals and pesticides present in occupational and domestic environments. The cumulative health impacts of human exposures to various agrochemicals can be a factor in a range of chronic health conditions and diseases like cancer, reproductive, endocrine, immunological, congenital and developmental disorders. (Rakesh.P.Seatl, Sep. - Oct. 2013,IOSR Journal Of Environmental Science, Toxicology And Food Technology (IOSR-JESTFT), Volume 5, Issue 5,Vellore 632004, Tamil Nadu, India. www.iosrjournals.Org)

Statement of the problem

In the current era farmers do not cultivate without the usage of chemicals as they want more yield. They are not troubled about their health but they want the money, this leads to excess usage

of chemicals in order to get the yield. On the other hand that it focusses on who is mostly exposed and are affected by the chemicals. This study tries to know the effects of chemical on social and health of farmers.

Importance of the study

Chemical farming has been adopted by many landlords because it's the faster way to get yield. Landlords who are concerned of the yield so health is not their major concern, the landlords have farmers and they also work along. Farmers their main aim is to provide living to their family, when they work in the farm it is not of their concern to protect themselves from the harmful poisonous pesticides. Farmers who work in inorganic farms breathe in the poison entire day while spraying, unaware of the fact that it's harmful. Most of the farmers suffer with skin allergies, diseases and the most worsening cancer. Lack of awareness and proper guidance they have been losing their lives.

Research Methodology

The researcher has chosen descriptive research design for the study. The objectives of the study are to assess the ill effects of chemical agriculture on farmers, to assess the health status of the farmers, to assess the environmental concerns of the farm. Non probability purposive sampling method has been adopted; the tool for data collection is interview schedule. The respondents of this study are 30 farmers. This research was conducted in Kilkundaiyar village, Thiruvallur district, Tamilnadu

Analysis and Interpretation

Table no.1

The chemicals used in maximum quantities

Chemicals	Yes (%)	No (%)
Urea	100	-
Complex	67	33
DAP	50	50
Potash	40	60
Zinc Sulphate	30	70
Ammonium Chloride	20	80

Table no.1 signifies the varieties of chemicals and they are used in maximum quantity. 100 per cent of the respondents use urea, 67 per cent of the respondents use complex, 50 per cent of the respondents use DAP, 40% of the respondents use potash, 30 per cent of the respondents use zinc sulphate, and 20 per cent of the respondents use Ammonium chloride.

Occupational Discomforts	Yes (%)	No (%)
Cough	80	20
Headache	100	-
Itching	100	-
Burning sensation	100	-
Breathlessness	13	87
Eye issues	87	13
Ulcer	13	87

Table no.2
The occupational discomforts

Table no.2 reveals 80 per cent of the respondents have cough, 100 per cent of the respondents have headache, 100 per cent of the respondents have itching, 100 per cent of the respondents have burning sensation and 13 per cent feel breathless. As they are exposed to chemicals they suffer throughout the year unaware of the poison. All these are continuous ones that they get because chemical farming.

Main Findings

Chemical Expenses:

In regard to finance yearly farmers are spending 10,000 to 90,000 and more than that through cash and credit. They buy from the private shops because the dealers or the shop owners have the farmers in their grip by suggesting them the chemicals, so farmers take their suggestion and buy more chemicals.

Medical Concerns:

The medical concerns in the study reveals that 87 per cent of the respondents say that women are the ones who are most exposed and are affected by chemicals. Mostly men and women are sick throughout the year and they get headache, itching, burning sensation, and cough. Long term medical issues are ulcer and eye issues. 100 per cent of respondents agree chemical are the cause for these occupational discomforts.

Ecological Concerns:

Focusing on the environment all of them agree that the quality of the soil has declined, the weed population, microbial population and beneficial insects have been decreased. These are ones that provide nutrients to the soil and keeps up the fertility but these are not found in the soil, the water holding capacity of the soil has declined drastically. The earth lost its fertility and has become poisonous to an extent.

Suggestions

It is essential to first educate the farmers about the organic farming, and the benefits they get apart from money, most of them use chemicals just for money ignoring their health, they are also aware that due to these chemicals they are being sick.

Government should have control over the private shop and should see that they do not give in excess to the farmers, as a first step government should see that private shop owners sell only the approved brand. Later they can slowly start to ban the chemicals.

Local NGO's should keep a track and encourage the farmers to do organic farming, should train them seriously on their health status and about future generation and also considering the ecological factors.

Should set up long term goal with farmers and involve them in organic farming. Government should encourage them by saying loans and subsidy will be provided if they shift to organic farming.

Social work Intervention

It is essential for social workers to involve in policy making, as it is regarding the farmers. Social workers should become voice to the voiceless community by working in government on behalf of them.

Social workers should be able to analyze and educate the farmers by proving the beneficial factors of organic farming. As women are the one who effected in the long run, need to educate them in this area, in some cases their reproductive system may be affected by being in the farm entire day due to chemicals. So women should be taken into consideration and need to instruct them. Men also should be educated regarding their health and also finance. A well knowledgeable social worker can empower the farmers regarding the ill effects of chemical farming and how we can protect and preserve our environment for the future generation.

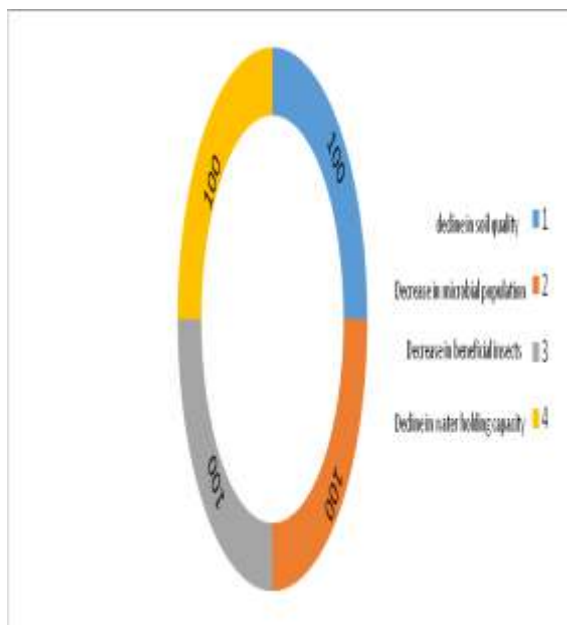


Figure no.1
The Ecological parameters

Figure no.1 reveals 100 per cent of the respondents agreed that there is decline in soil quality, 100 per cent agree that there is decrease in microbial population, 100 per cent agree that there is decrease in beneficial insects, 100 per cent agree that there is decrease in weed population.

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