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Corporate Social Responsibility And Agricultural Resilience: A Case Study of IFFCO'S Initiatives during The COVID-19 Pandemic in India

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Abstract

Currently, pandemic remediation is a concern for policies, as pandemics affect almost every sector, including agriculture, which is fundamental to all of humanity and the backbone of India. Despite the fact that agriculture in India is largely unorganized and manual, which reduces the overall loss at the time of complete lockdown because small scale farmers are not dependent on machinery or outside labors for harvesting, loss in Indian agriculture is somewhere restricted to large scale farmers, but the requirement of seed, fertilizer, agricultural inputs, and related trainings were in short supply and affects everyone. This paper brings to light a healthy comparison of the implementation of government policies through the assessment report of NABARD and a baseline survey of adopted villages of IFFCO, Phulpur. The entire business of IFFCO is owned by a group of Indian cooperative societies that produce and sell fertilizers to farmers throughout the country. IFFCO's corporate social responsibility (CSR) efforts supported rural development in the areas close to the IFFCO factory. For work like the distribution of seed, agricultural inputs, skill development programs, and agriculture training programs through CSR, IFFCO also uses CORDET to carry out its CSR programs. The Cooperative Rural Development Trust (CORDET) was founded in 1978 by IFFCO to educate and empower farmers across India. This paper shows that how, Social welfare doing by these private players, and their strategies, specialization, and direct interaction with rural people, get the outstanding results even at the time of pandemic.

Keywords: corporate social responsibility, agricultural inputs, women empowerment, rural development.

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INTRODUCTION

We are all familiar with the catastrophe inflicted by the Covid pandemic which touched practically every sector and industry as a consequence of complete lockdown. The supply chain and related economic estimates appear to have been impacted by Covid. Worldwide, the death rate was likewise very high; however, India had a low rate of infection and mortality in comparison. Countries all over the

world, including India, placed restrictions on the movement of people and goods during the pandemic period.^[1] This restriction on movement resulted in the shutdown of the import and export of food products in international as well as domestic markets

which intensified competition and hampered food security. The World Bank forecast that the global economy would shrink by more than 5%, which was expected to be the deepest recession since the Second World War.^[2] The World Food Programme's executive director, David Beasley, has warned that the world is "not only facing a global health pandemic but also a global human catastrophe", and that, without action, COVID - 19 could lead to "multiple famines of biblical proportions."^[3]

According to the Economic Survey of India (2021), the agriculture sector employs more than 47% of all Indian workers, and agriculture contributes about 18.3% of the nation's GDP.^[4] The economic activities associated with the farming system as well as farmers throughout South Asia have faced serious losses as a result of widespread COVID-19 mitigating steps nationally because of the exceptional conditions that have arguably overshadowed the direct impacts of COVID-19.^[5] During the lockdown in India, transportation has largely been halted, reducing yields and compromising food security, resulted in disrupting normal supply chains. The absence of agricultural and other migrant labour has also affected planting, harvest, and post-harvest operations.^[6] The study shows that lockdowns prevent 37% of farmers from harvesting their crops and 15% of farmers from selling their crops during the COVID period.^[7] A similar study reveals that 32% of households in UP and 48% of households in Bihar reported having food shortages during the pandemic period.^[8]

Although the policy response was largely coordinated by the central government, states adopted additional restrictive and relief measures with different levels of enforcement and monitoring, resulting in diverse lockdown environments. These, together with wide regional variations in cropping patterns, labor supply, and access to markets, may have given rise to a large degree of heterogeneity in the effects of COVID responses on agricultural activity and consumption.^[9] Many states that have large land holdings, like Haryana and Punjab, note a decline in agricultural production because of a shortage of labour. In labour intensive-production, farmers faced problems in managing labour, because of the sudden reverse migration of labour.^[10] The International Monetary Fund stated that as a result, India's economy slowed down in 2020; instead of the predicted 4.9%

GDP, only 4.5% was actually achieved. Contrarily, the state of the agricultural sector was better than that of other sectors; it grew at a rate of 2.4% between 2019 and 2020, higher than it had the year before.^[11] According to these data, the performance of agriculture is better than other sectors, but the negative impact and hardships faced by farmers in Covid- 19 were not negligible, especially related to demand and supply of agriculture input, dislocation of labour, and disruption of the supply chain. According to the Wholesale price index, food prices in the Indian market were already on the rise from 2019 to the beginning of 2020. The Covid- 19 induced prolonged lockdown resulting in closed state borders, unavailability of labours and public dependence on commodities with a longer shelf life, has contributed to remarkable losses.^[12] Due to the lockdown, which caused markets to be closed, prices for farming inputs, equipment, and tools have skyrocketed. On the other hand, due to the shutdown of the mandis, farmers have been forced to sell all of their produce at significantly lower prices.^[13] So, this can be concluded as, large scale farmers were majorly affected by the unavailability of agricultural labours because they were solely dependent on that, where as the unavailability of markets and other agricultural inputs were the major concern of small scale farmers.

The economies of India and Uttar Pradesh are agrarian in nature. Uttar Pradesh is considered the 'food bowl' of the country, accounting for 18.89% share of country's total food grain production.^[14] Uttar Pradesh had the highest number of operational land holders in the country. However, most of the land holdings in the state are marginal and small. According to agriculture census (2015-16), 80.18% of operational land holdings in Uttar Pradesh fall under the marginal category and 12.63% under the small land holding category.^[15] Apart from this, agriculture in the state is characterized by a low level of productivity, poor soil conditions, inadequate irrigation facilities, fragmented land holdings, indebted farmers, etc. For the majority of farmers, it is hard to access the required inputs like seeds, fertilizers, pesticides, etc. for agriculture, and at the time of the pandemic, the situation became harder for farmers. Against this backdrop, CSR initiatives have played a vital role in supporting agricultural development and mitigating the pandemic's adverse impacts on rural India. Corporations, recognizing their responsibility towards society, have extended their outreach to assist farmers and farming communities in coping with the challenges imposed by the pandemic. These initiatives encompass a broad range of interventions, such as providing agriculture inputs, financial

support, capacity building, technological innovations, and access to markets, aimed at enhancing the resilience, productivity, and sustainability of the agricultural sector. Corporate social responsibility (CSR) refers to a company's moral obligation to support social or environmental concerns by allocating at least 2% of its profits.^[16] Section 135 of the Companies Act of 2013 was the most extensive attempt to mandate corporate social responsibility (CSR) operations.^[17] It was the first time that Indian firm CSR efforts fell under the authority of corporation law and required CSR spending and reporting.

Indian Farmers Fertilizer Cooperative Limited (IFFCO), a leading agricultural cooperative in India, with its strong commitment to social responsibility, has undertaken various initiatives to address the challenges faced by farmers and rural communities amidst the pandemic. The cooperative has recognized the need to support farmers in sustaining their agricultural operations, ensuring food security, and enhancing their resilience to navigate through the crisis successfully.^[18] By examining IFFCO's CSR initiatives, we can gain valuable insights into the strategies and approaches employed by a prominent player in the agricultural sector to contribute to agricultural development during the pandemic.^[19]

This case study aims to analyze the different dimensions of IFFCO's CSR initiatives and their impact on agriculture and rural communities in India. By exploring the cooperative's response to the COVID-19 crisis, we can understand how CSR interventions have addressed the specific challenges faced by farmers, such as disruptions in supply chains, reduced access to inputs, and market uncertainties. Furthermore, this study aims to evaluate the effectiveness of IFFCO's initiatives in ensuring the livelihoods of farmers and promoting sustainable agricultural practices during the pandemic.

The findings of this case study will provide insights into the role of CSR in agriculture development in India during the COVID-19 pandemic, specifically through the lens of IFFCO's initiatives. By highlighting the cooperative's successes, challenges, and lessons learned, this research aims to contribute to the evolving discourse on the integration of CSR in the agricultural sector during times of crisis. The study also aims to inspire other businesses and

stakeholders to adopt similar approaches and collaborate effectively to ensure the resilience, sustainability, and well-being of Indian farmers and rural communities.

Research Objectives:

This study is designed with the primary goal of evaluating the impact of CSR on Indian agriculture, particularly during the Covid pandemic. The study's particular goals are to comprehend and evaluate –

- The impact of the Covid pandemic on agriculture in India.
- The different dimensions of IFFCO's CSR activities and their effectiveness in addressing the challenges faced by the farmers.
- The impact of IFFCO's CSR activities on agriculture development, particularly during Covid pandemic

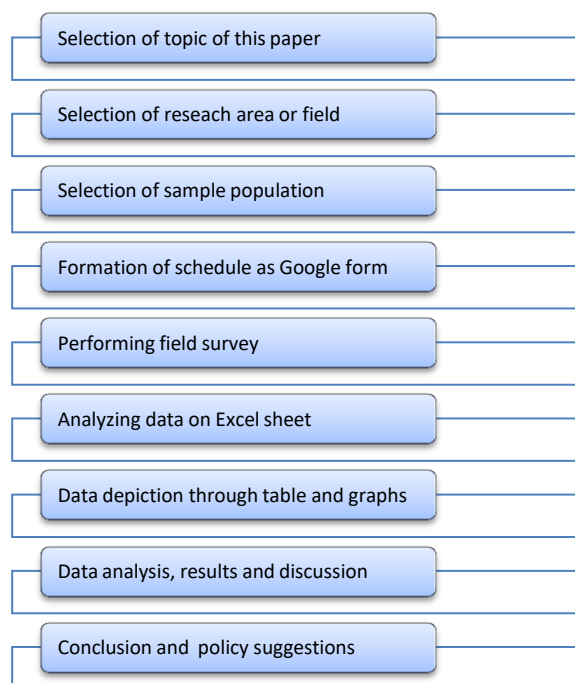
Method:

To identify, describe, and assess the impact of corporate social responsibility on Indian farming systems in the wake of the COVID-19 pandemic, this semi-empirical study combines several quantitative and qualitative information sources. Data from the National Bank for Rural Development report, "grey" literature, such as reports and official information released by national and state governments and various organizations, media reports, research articles, and finally empirical data obtained from field surveys targeting a random selection of farmers, are the sources of information used for this descriptive analysis.

This research is based on a case study of IFFCO, Phulpur, a CSR-paying urea and fertilizer manufacturing firm with its headquarters in Prayagraj. Within 15 km of its headquarters, IFFCO-Phulpur has adopted six villages for its CSR initiatives. Out of these, two villages - Arwansi and Bhelhabandh- of Prayagraj's Phulpur tehsi have been considered for this study. Agriculture is the major source of livelihood in these villages. The majority of villagers are either engaged in farming or work as wage labour in agriculture and other unorganized sectors. There are 672 homes in Arwansi mai and 256 in Khawajgi patti urf Belhabandh, with 3,279 and 1,409 people living in each. The sample size for the study, which employed a random sampling approach to choose respondents for the interview, was set at 150 samples from both villages.

In order to conduct the survey, the researcher created a structured, closed-ended questionnaire that asked about the respondents' personal information, their socioeconomic status, agricultural productivity over the preceding year, i.e., during the Covid

period, and the support received from IFFCO in the form of agricultural inputs like seeds and fertilizer. All information was gathered, processed, and presented using Microsoft Excel in the form of various facts, graphs, and tables. To analyze the impact of IFFCO's CSR activities on the agriculture development of villages under study, the survey results have been compared with data from the NABARD report, i.e., 'Impact Assessment of COVID-19 on Indian Agriculture and Rural Economy', 2020, which is an assessment report representing the agriculture situation of villages during the Covid pandemic.



Result and Discussion:

To identify, describe, and assess the impact of corporate social responsibility on Indian farming systems in the wake of the COVID-19 pandemic, this semi-empirical study combines several quantitative and qualitative information sources. Data from the National Bank for Rural Development report, "grey" literature, such as reports and official information released by national and state governments and various organizations, media reports, research articles, and finally empirical data obtained from field surveys targeting a random selection of farmers, are the sources of information.

a. Sample description:

The sample consists of 300 respondents (150 from each village), is roughly representative of Uttar Pradesh's demography, with 54% of men and 46% of women. In both settlements, Hindus

make up the majority of the population (n=99%). Caste-wise breakdown of the sample population reveals that the 'Other Backward Classes' (n=51.3%) are the largest segment of the population, followed by the general category population (n=44.6%). The scheduled caste (n=4%) only makes up a minor portion of the population. The survey also observed that joint families with average family sizes are the norm in the communities under examination.

Table 1: Demographic characteristics of sample population.

Gender	Village 1- Arwansi	Village 2- Belhabandh	Total (Village 1+ Village 2)	Uttar Pradesh Demographic Characteristics
Male	106 (70.66%)	56 (37.33%)	162 (54%)	
Female	44 (29.33%)	94 (62.66%)	138 (46%)	
Religion				
Hindu	147 (98%)	150 (100%)	297 (99%)	79.73%
Muslim	3 (2%)	00	3 (1%)	19.26%
Other	00	00	00	1.01%
Caste				
General	73 (48.66%)	61 (40.66%)	134 (44.66%)	49%
OBC	70 (46.66%)	84 (56%)	154 (51.33%)	40%
SC	7 (4.66%)	5 (3.33%)	12 (4%)	20.7%
ST	00	00	00	0.57%
Family System				
Joint	82 (54.66%)	98 (65.33%)	180 (60%)	-
Nuclear	68 (45.33%)	52 (34.66%)	120 (40%)	-
No. of membe				

r in family				
> 5	75 (50%)	68 (45.33%)	143 (47.66%)	-
6-10	70 (46.66%)	78 (52%)	148 (49.33%)	-
< 10	5 (3.33%)	4 (2.66%)	9 (3%)	-
Land holding				
0-2 hectare	145 (96.66%)	150 (100%)	295 (98.33%)	-
3-10 hectare	5 (3.33%)	00	5 (1.66%)	-
< 10 hectare	00	00	00	-

According to Government of India regulations, farmers who own less than 2 hectares of land fall into the category of marginal and small farmers, those who own between 2 and 10 hectares of land are considered medium farmers, and those who own more than 10 hectares of land are considered large farmers.¹ According to this standard, the study discovered that these two villages possessed the most marginal and tiny farmers ($n=98%$). Only small numbers of farmers have medium-sized land holdings. The joint family with small land holdings inevitably results in poverty and disguised unemployment. Agriculture is the primary source of livelihood for most villagers. Due to the poverty, underdeveloped agriculture, and agriculture dependent economy of these areas, IFFCO has a lot of room for CSR initiatives.

a. IFFCO CSR Activities:

Indian Farmers Fertilizer Cooperative Limited (IFFCO) is a cooperative organization working in the area of manufacturing and sale of fertilizers. The cooperative, which serves more than 50 million Indian farmers, was established in 1967 with 57 member cooperatives. Since then, it has expanded to become the largest cooperative in the world by turnover based on GDP per capita. ^[21] IFFCO's mission is "to enable Indian farmers to prosper through the timely supply of reliable, high-quality agriculture inputs and services in an environmentally sustainable manner and to undertake other activities to improve their

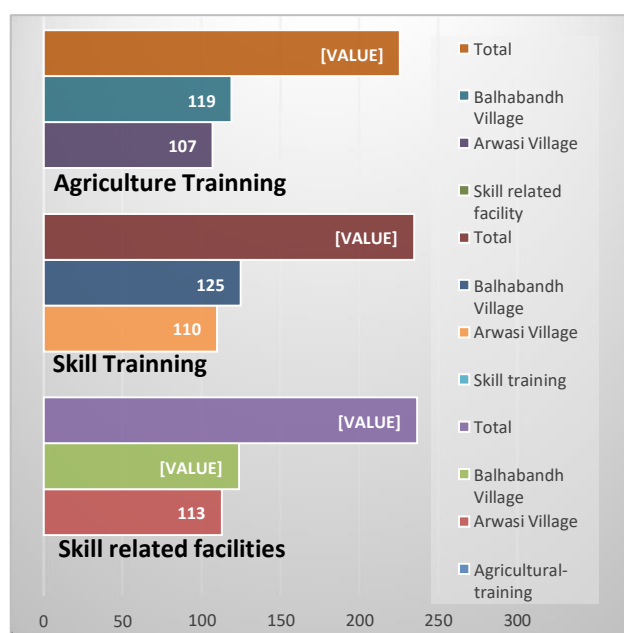
welfare." To achieve this mission, IFFCO launches its not-for-profit subsidiaries to assist farmers and their families in their journey towards prosperity and development. These subsidiaries are **IFFCO Kisan Sewa Trust (IKWT)**, founded to provide financial assistance to poor farmers during times of need, calamities, and suffering brought on by unexpected weather conditions; **Indian Farm Forestry Development Cooperatives (IFFDC)**, with the aim of creating more avenues for tribal and rural communities to enhance their livelihood and socio-economic status, and **The Cooperative Rural Development Trust (CORDET)**, founded to offer training and guidance to rural communities throughout India. IFFCO fulfills its social responsibility through these subsidiaries. CORDET has been instrumental in helping farmers increase their farm income by demonstrating farming system models and organizing various training and skill development programs.

In both villages under consideration, CORDATE did very wholesome work by providing agriculture training to the farmers, doing their skill development in allied activities, and providing facilities related to that skill to the farmers. In agriculture training, CORDET gives class room training to the farmers, instructive exhibition on the topic, chaupal, as well as educational tours. Agriculture training workshop farmers learn systematic and scientific way of agriculture, managing and handling of crop, and market assessment, etc. During the field visit, 79% of the sample population reported that they were part of agriculture training provided by IFFCO related to crop improvement or to new agriculture techniques. Farmers also accepted that these agricultural trainings helped them in improving their crop quality as well as their production.

Under its social responsibility endeavour, IFFCO runs skill development programs with hands-on experience in the fields of dairy production, horticulture, pisciculture, apiculture, etc. The major projects sought to empower women and create new work prospective. The manufacturing unit's emphasis is currently directed towards the training program for the food processing and food preservation facility. The study found that almost 78% of the people in the IFFCO-adopted villages received skill-development training from IFFCO, which aided them in managing their means of subsistence. The institute is working on IRDP with the goal of helping farmers grow. In these programs, such as farmers meetings, soil testing campaigns, plant seed distribution, fertilizer distribution, helping in

agriculture implementation, and health camps for humans and animals, IFFCO also distributed equipment and mechanical help for the sustainable development of beneficiaries, sewing machine distribution after the skill development training, and equipment like grain storage drums, sickles and spades etc., all of which were held in the villages that IFFCO has adopted. And the best part of this program is they distributed these agricultural inputs at the time of the pandemic, when every possible way of obtaining these availabilities was closed to farmers, but IFFCO did it at minimal or zero cost.

CORDET has demonstrated crop production systems, dairy, balanced fertilizer, the use of bio-fertilizer, beekeeping, pisciculture, fruit and vegetable preservation training, adult education programs, etc, across its centers.



IFFCO in adopted villages.

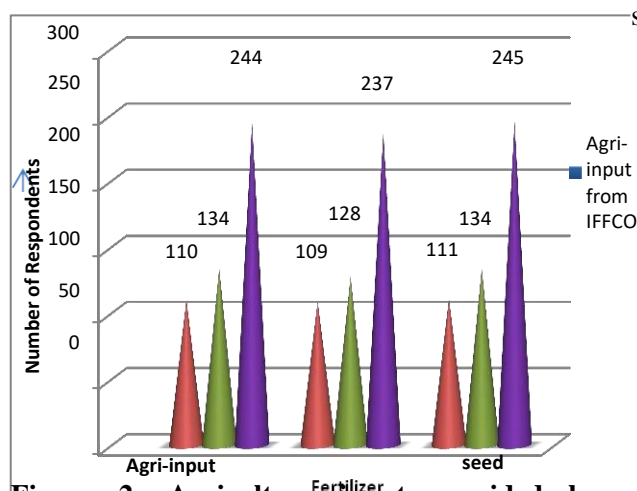


Figure 2: Agriculture input provided by

IFFCO during Covid pandemic.

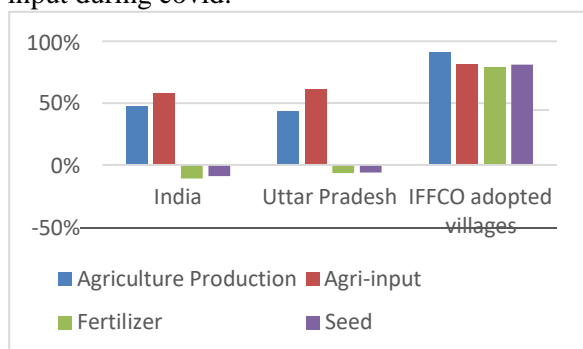
a. Impact of IFFCO's CSR activities of Agriculture development:

According to NADARD report 'Impact Assessment of COVID-19 on Indian Agriculture and Rural Economy' 2020, in 47% of the districts of country, the overall production levels in the agriculture sector decreased, indicating a significant impact of the nationwide lockdown imposed as a result of COVID-19. The majority of states have noticed a drop in agricultural production. In Uttar Pradesh, 43% of the districts saw a decline in agricultural production, while 29% of the districts saw no growth. The deficient manpower and other agricultural inputs, the necessity for social isolation, restrictions on the free movement of people and machines, and other factors are a few of the causes of the decline in crop production. Conversely, the study revealed that in IFFCO-adopted villages, agricultural output was quite good all through the Covid year, and the Covid lockdown had no negative effects on it. About 91% of respondents in the survey said that their agriculture produced well even during the pandemic. The assistance offered by IFFCO in the form of free agricultural inputs, such as seed, urea, etc., greatly aided farmers and was said to be the cause behind good agricultural output even during pandemic times.

According to the NABARD report, the overall supply of agricultural inputs across all sectors in India has decreased. In 58% of the districts, it was stated that the total availability of agricultural inputs had decreased. The availability of fertilizers had the biggest reduction (11.2%). Pesticide and seed availability both experienced significant declines (9.8% and 9.1%, respectively). Uttar Pradesh reported a reduction in the supply of agri-inputs in 61% of districts, and approximately 54% of districts reported an increase in the prices of these agri-inputs due to the shortage of supply. Seeds reported an

8.8% increase in price at the all India level and a 6.2% increase in Uttar Pradesh. Similarly, fertilizer showed an increase in prices of 10% at the national level and a 9.4% increase in Uttar Pradesh. This reduction in supply and resultant increase in farm inputs prices adversely impacted agriculture during the covid period. In this scenario, farm inputs provided by IFFCO in adopted villages helped farmers do their agricultural activities without any hurdles. In the survey, 81% of the population admitted that they received agri-input from IFFCO either in the form of seed (81%), fertilizer (79%) or both. This CSR activity of IFFCO negated the adverse impact of the scarcity of farm inputs in agriculture and on resultant productivity.

Table 2: Showing impact of CSR on agriculture production and availability of agriculture input during covid.



Data of India & Uttar Pradesh is based on NABARD report ,2020. * represents impact on percentage of districts. # represents decrease in total availability. Data of IFFCO adopted villages are based on the response of the participants.

Discussion and Conclusion:

This case study has revealed the significant impact of Corporate Social Responsibility (CSR) initiatives on Indian agriculture, particularly during the Covid-19 pandemic, with a focus on the CSR efforts of Indian Farmers Fertilizer Cooperative Limited (IFFCO). The study was intended to appraise the effectiveness of IFFCO's CSR activities in addressing the challenges faced by farmers and rural communities amidst the pandemic.

The Covid-19 pandemic had a profound impact on the agriculture sector in India, disrupting supply chains, reducing access to agricultural inputs, and creating challenges for farmers. Despite being an agrarian economy, India faced significant challenges in ensuring food security and maintaining agricultural production during the pandemic. However, amidst these challenges, Corporate Social Responsibility (CSR) initiatives, like those undertaken by Indian Farmers Fertilizer Cooperative Limited (IFFCO), played a vital role in supporting agricultural development and mitigating the pandemic's adverse impacts on rural India.

The study revealed that IFFCO's CSR activities had a positive impact on agriculture production in the adopted villages. Despite the overall decline in agricultural production reported in various districts across the country, the respondents from the IFFCO-adopted villages reported good agricultural output during the pandemic. This was attributed to the support provided by IFFCO in the form of free agricultural inputs, including seeds and fertilizers. The availability of these

inputs from IFFCO helped farmers continue their agricultural activities without hindrance, even during times of scarcity and high prices for agricultural inputs.

Furthermore, IFFCO's CSR initiatives also included skill development programs and training for farmers in various agricultural activities. These initiatives helped improve the farmers' knowledge and capabilities, empowering them to adopt new agricultural techniques and improve crop quality and productivity. The best aspect of IFFCO's CSR is that it does not only focuses on raising awareness, conducting training, or making other short-term improvements. Instead, it focuses on self-sustaining development programs, connecting with people through the formation of SHGs, agricultural training for improving agricultural practices, and skill development training for generating a better source of income. **The study found that a significant proportion of respondents from the adopted villages had received skill development training from IFFCO, which positively impacted their means of subsistence.** Moreover, IFFCO's focus on self-sustaining development programs and women's empowerment initiatives further strengthened the impact of its CSR activities. Women's active participation in agriculture training and skill development programs brought positive changes to the farming community, leading to better livelihoods and income sources.

The case study highlights the importance of direct expenditure on CSR activities by corporations, as it allows for better implementation, monitoring, and evaluation of activities. The success of IFFCO's CSR work and extra efforts during the pandemic showcase the potential of responsible corporate engagement in supporting agricultural development and rural communities.

The research further emphasizes the significance of integrating CSR into the agricultural sector, especially during times of crisis like the Covid-19 pandemic. By sharing insights into IFFCO's CSR strategies, challenges, and achievements, this study aims to inspire other businesses and stakeholders to adopt similar approaches in contributing to the resilience, sustainability, and well-being of Indian farmers and rural communities.

In conclusion, IFFCO's CSR initiatives have had a transformative impact on the agricultural development of the adopted villages during the Covid-19 pandemic. The cooperative's dedication to empowering farmers, providing essential support, and fostering sustainable practices has not only helped the communities weather the challenges posed by the pandemic but has also contributed to

the overall resilience and growth of Indian agriculture.

As the world continues to navigate through various crises and challenges, the role of CSR in supporting vulnerable communities and sectors like agriculture becomes even more crucial. Companies like IFFCO have set a commendable example, demonstrating the power of responsible corporate engagement in bringing positive change to the lives of millions of farmers and fostering agricultural development in India.

Recommendations and Future Policy

Suggestion: Based on the findings and conclusions of this case study on the impact of Corporate Social Responsibility (CSR) initiatives on Indian agriculture, particularly during the Covid-19 pandemic, the following future policy suggestions and recommendations are proposed:

Encouraging direct implement of CSR: The government should encourage and incentivize corporations to engage in direct CSR initiatives, especially in sectors like agriculture. Direct engagement allows corporations to understand the specific needs of communities and tailors their interventions accordingly, leading to more effective and impactful outcomes.

Need to scale up CSR initiatives in agriculture: Given the benefits of IFFCO's CSR initiatives for agriculture, other corporation in this sector should think about stepping up their CSR initiatives. This can entail offering farmers in crisis or disaster-affected areas training, support, and agricultural inputs.

Empowering Women in agriculture: Corporate should prioritize empowering women in agriculture through training opportunities, financial assistance, and skill development initiatives. Empowering women would benefit rural areas since they are essential to the agriculture economy.

By enhancing skill- development programs: To offer farmers with the most up-to-date farming methods, cutting-edge technology, and sustainable practices, the scope and quality of skill-development programmers should be expanded. In the long run, this will boost agriculture production and resilience in India.

Monitoring and evaluation: For the purpose of evaluating how CSR activities are affecting agriculture, effective monitoring and evaluation methods need to be put in place. Regular

assessments will aid in identifying effective actions and problem areas.

Policy support for CSR: For CSR projects in the agriculture sector, the government should provide supportive policies and an enabling environment. Corporations may be encouraged to increase their investments in ethical and sustainable business practices via tax incentives and regulatory frameworks.

Tailoring CSR initiatives to regional needs: The requirements of different communities and areas should be taken into consideration while designing CSR projects. It would be easier to plan focused solutions if you are aware of the particular difficulties that farmers in various regions experience.

In conclusion, adopting these policy suggestions and recommendations will further strengthen the role of CSR in supporting agricultural development and rural communities in India. Corporations, the government, and other stakeholders must work together to ensure the sustainable growth and well-being of Indian farmers and rural areas, particularly during times of crisis and uncertainty.

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Conflict of Interest: The authors declare that they have no conflict of interest

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