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# Vegetable Farming and its Impacts on Economic Status of the people Living in Kalika Municipality

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## Abstract

This study investigates the socio-economic transformations driven by the shift from subsistence to commercial vegetable farming in Kalika Municipality, Ward No. 8, Nepal. Using a mixed-methods approach, data was collected from 20 vegetable farmers through surveys and interviews to analyze changes in their livelihoods.

The findings reveal significant positive impacts. Economically, vegetable farming provided a reliable year-round income, leading to a substantial increase in annual earnings and savings for 90% of respondents. This enhanced financial stability enabled investments in children's education, healthcare, and improved festival celebrations. Socially, the transition altered time use, with leisure time being reallocated to productive farming activities. The study also noted improvements in dressing patterns and health sanitation for a majority of households.

The research concludes that commercial vegetable farming acts as a powerful catalyst for socio-economic development in rural Nepal. It effectively reduces poverty, enhances food security, and improves overall quality of life by providing sustainable employment and empowering local communities. The study underscores the importance of continued support through agricultural policies, market access, and capacity-building programs to sustain and amplify these benefits.

**Keywords:** Vegetable Farming, Socio-Economic Impact, Commercial Agriculture, Livelihood, Rural Development, Nepal

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## Introduction

This research investigates the socio-economic impacts of vegetable farming in Kalika Municipality Ward No. 8, Neureni. Although the practice of growing vegetables has long existed in Nepal, the history of *commercial* green vegetable farming is relatively recent. It was only in the 1960s that organized efforts toward vegetable cultivation began, marked by the establishment of government horticulture farms. These farms laid the foundation for systematic vegetable production, technical advancement, and increased farmer participation. Over the years, this shift from subsistence farming to market-oriented production has significantly influenced rural livelihoods. In areas like Neureni, vegetable farming has not only improved household income but also created local employment opportunities, enhanced food security, and contributed to the empowerment of marginalized communities. The study explores how this transition has shaped the economic activities, social structure, and overall quality of life for farmers in the region, providing insight into the broader implications of agricultural commercialization in rural Nepal.

The Vegetable Development Division was established in 1972 under the National Agriculture Research Council (NARC) to manage research projects, seed production, and the improvement of vegetable crops. NARC took on the role of overseeing all agricultural research, including that related to vegetables. Presently, the area allocated for vegetable farming in Nepal covers 165,638 hectares. Over the past decade, vegetable yields have increased from 8 metric tons per hectare to 10.85 metric tons per hectare (MOA 2012). However, vegetable production is not evenly spread across the country, with a notable concentration in major urban areas. Vegetables are a crucial source of nutrition, packed with vitamins and minerals. Health recommendations advocate for a minimum vegetable intake of 300 grams per person. Furthermore, vegetables provide dietary fibers such as cellulose, hemicellulose, and lignin, which are essential for maintaining a healthy digestive system. In Nepal, there is a pressing need to enhance and promote vegetable production, as the current minimum intake level is significantly low (MOA, 2012).

Vegetable farming offers a consistent and dependable source of income year-round. In contrast to traditional crops that are harvested once or twice a year, vegetables can be cultivated and sold in several cycles, ensuring a more regular cash flow for farmers. This contributes to enhanced financial stability for households. Vegetable farming generates employment not only for landowners but also for landless workers, and youth. From land preparation and planting to harvesting and marketing, it creates job opportunities, thereby decreasing the necessity for outmigration in search of employment (Majorano et al., 2024). As they start to earn from this endeavor, they achieve financial independence, which elevates their status within both the family and society. This involvement enhances their participation in decision-making processes and fosters gender equality in rural areas. Cultivating vegetables guarantees that farming families have access to a diverse range of fresh produce, thereby improving their nutritional intake. Any surplus can be sold in the market, generating income while also encouraging healthier diets within the community. With increased production and improved market access, farmers can earn higher incomes, assisting them in overcoming poverty. Numerous NGOs and

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government initiatives provide training, seeds, and support, enabling even marginal farmers to thrive in vegetable farming. The rise in income from vegetable farming allows families to invest more in their children's education and obtain better healthcare services. This results in long-term enhancements in quality of life and human development. As vegetable farming expands, communities often witness improvements in infrastructure such as roads, irrigation systems, collection centers, and cooperatives. This collective advancement benefits the entire region both economically and socially. Vegetable farming serves as a potent instrument for socio-economic transformation. It boosts income, alleviates poverty, promotes gender equality, and enhances the overall quality of life for individuals and communities.

This research explores the conditions of people living in Kalika municipality ward no 8 Chitwan and involved in vegetable farming. There has been a significant increase in awareness and enthusiasm among farmers regarding the cultivation of cash crops and economic activities. In study area farmers have transitioned from subsistence farming to commercial vegetable production, enabling rural people to utilize local resources and generate additional income. Therefore, it is essential to evaluate whether this shift has improved social and economic standing. Farmers in urban fringe areas are responding to market demands by focusing on higher-value vegetable crops. For instance, in previously studied areas, potatoes and cucumbers were primarily grown for personal consumption, but their production has now expanded for commercial use. Additionally, the cultivation of tomatoes, cauliflower, cabbage, radishes, and leafy greens is on the rise. In Kalika Municipality Ward No. 8, both seasonal and off-season vegetable cultivation have become prominent components of local agricultural practices, primarily driven by commercial objectives. This research explores the profound socioeconomic changes that have occurred in the region as a direct result of vegetable farming. A central focus of the study is the transformative impact on the lives of local farmers, particularly who have increasingly become active participants in this sector. Prior to the rise of commercial vegetable cultivation, many households in the area struggled with subsistence-level farming and limited income sources. However, with the introduction and expansion of vegetable farming especially after the intervention of non-governmental organizations (NGOs) promoting modern agricultural techniques and market access there has been a noticeable shift in economic stability and livelihood security. These initiatives have empowered farmers with training, tools, and support systems that have led to increased production and profitability. The study highlights vegetable farming as a vital cash crop and a reliable source of income, helping to alleviate poverty and enhance food security in the region. It has transformed the agricultural landscape of Kalika Municipality by offering year-round employment and fostering a sense of community cooperation and self-reliance.

## Literature Review

Writers and researchers like Basneyat (2018), Maduekwe and Obansa (2013) and Thapa (2009) and Joshi et al. (2006) discussed the various aspects of vegetable farming. Thapa (2009) points out that represent a significantly smaller share of wage workers in the non-agricultural sector when examining the distribution of wage labor**.** Rajbhandari (2011) carried out an 8-year

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research project on bio-intensive farming (BIF) in the Udayapur district of Nepal. The findings indicated that BIF had a beneficial impact on crop diversity, yield efficiency, food security, and rural livelihoods. Farmers engaging in BIF were able to sell their produce, utilize the earnings to fulfill their essential needs, and reinvest in their agricultural operations. Pradhan et al. (2013) conducted a research study in the Bhaktapur district to explore the social and economic impacts of organic vegetable cultivation. The results revealed that organic vegetable farming produced higher profits than conventional farming practices. Farmers directed the income earned from selling organic vegetables towards various goals, such as improving their homes, healthcare, education, and community events. The study concluded that participation in organic vegetable farming notably improved the social and economic status of farmers and boosted their confidence.

Maduekwe and Obansa (2013) published a paper titled "Agriculture Financing and Economic Growth in Nigeria." This research utilized secondary data and various econometric methods, including Ordinary Least Squares (OLS), the Augmented Dickey-Fuller (ADF) unit root test, and the Granger Causality test. Nepal (2015) underscores the critical importance of financing concerning the agricultural sector and its economic development. Over the past decade, the agricultural industry in Nepal has failed to achieve the anticipated growth targets. To investigate the current dynamics of this sector, the study proposes a hypothesis suggesting that the slow growth is primarily due to inadequate and ineffective financing.

Gurung et al. (2016) performed a study on the vegetable farming sector in the Kapilbastu and Kaski districts. The findings showed that vegetable cultivation experienced a notable increase in these regions after the introduction of a PRISM program. Furthermore, the research suggested that farmers were attracted to vegetable farming due to the presence of organized markets and the opportunity for higher income. Enhancements in access to agricultural inputs, production technologies, and marketing channels enabled a transition from subsistence farming to commercial vegetable farming.

Rahman (2017) wrote a thesis entitled "Agricultural Productivity Growth and the Role of Capital in South Asia," which evaluated agricultural sustainability in Bangladesh, Pakistan, India, and Nepal. The research computed multi-lateral Total Factor Productivity (TFP) indices and pinpointed key factors influencing TFP growth over a span of 34 years. The findings revealed differing productivity growth rates, with Bangladesh at 1.05% annually, India at 0.52%, Pakistan at 0.38%, and Nepal at 0.06%. The study underscored natural, human, and technological capital as the main drivers of TFP growth, while financial capital and crop diversification had a negative effect on it.

Basneyat (2018) conducted a study on vegetable agriculture in Siddhiganesh, Sanothimi, located in the Bhaktapur District of Nepal. The research highlights the crucial role that play in the cultivation of food grains, vegetables, and fruits, as well as in the rearing of livestock and poultry. This emphasizes the significant impact have on vegetable farming. Their contributions are especially prominent among many Jyapu families in Thimi, a community situated in the Kathmandu valley.

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Ghimire (2020) conducted a study on the participation of women in commercial vegetable farming and its effects on food security and livelihoods. The research underscored the potential benefits of women's roles in agriculture for enhancing household livelihoods and food security. Furthermore, the study stressed the significance of local value chain processes in the commercialization of vegetables among female producers in the Kailali district of Nepal.

Paudel and Bhandari (2021) carried out a research study in Dhankuta, Nepal, aimed at evaluating the effect of vegetable farming on the livelihoods of farmers. The findings indicated that vegetable farming had a beneficial effect on the socioeconomic conditions and livelihoods of those engaged in vegetable cultivation. Key factors contributing to the success of vegetable farming included enhanced use of local resources, the establishment of cooperatives, and effective transportation.

## Methodology and Study Area

The study utilized a combination of qualitative and quantitative methods. Numerical data were analyzed through a quantitative research framework, while qualitative data were interpreted within an interpretive paradigm. The research incorporated both primary and secondary data sources. Primary data were gathered through interviews and questionnaires, with a total of 20 vegetable farmers were involved in this study. Sample was selected by using a convenience sampling approach. Survey questions were used to collect the data from the field. Secondary data were sourced from library materials and online searches, including books, articles, journals, and government reports. The gathered data were presented in tables and graphs.

### Study Area

Kalika Municipality Ward No. 8 was chosen as the study area for this research due to its active engagement in vegetable farming and its relevance to the study objectives. Located approximately 156 kilometers away from Kathmandu, the capital city of Nepal, the area represents a rural setting where agricultural activities play a vital role in the local economy. Its distance from the capital also highlights the challenges and opportunities related to market access, transportation, and development support. By focusing on this specific location, the study aims to explore the socio-economic impacts of vegetable farming within a rural context that is influenced, yet somewhat distanced,

### Socio Status of the Respondents

Twenty vegetable farmers from various socio-economic backgrounds participated in this study. The table below illustrates the age, caste, ethnic composition, education, and religious status of the respondents.

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**Table 1**

*Age, Caste/ ethnic, Education and Religious Statuses of the Respondents*

| S.N. | Age | No | % | Religions | No | % | Education | No | % | Caste/ Ethnic Status | No | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 to 28 years | 3 | 15 | Hindu | 11 | 55 | Illiterate | 2 | 10 | Brahmin / Chhetri | 3 | 15 |
| 2 | 28 to 38 years | 5 | 25 | Christian | 4 | 20 | Literate (primary) | 12 | 60 | Magar | 2 | 10 |
| 3 | 38 to 48 years | 4 | 20 | Buddhist | 2 | 10 | Secondary | 2 | 10 | Tamang | 4 | 20 |
| 4 | 48 to 58 years | 5 | 25 | Animism | 1 | 5 | +2 | 3 | 15 | Chepang | 4 | 16 |
| 5 | Above 58 years | 3 | 15 | Other | 1 | 5 | Bachelor and above | 1 | 5 | Gurung | 3 | 15 |
| 6 | Total | 20 | 100 | Total | 20 | 100 | Total | 20 | 100 | Sanyashi | 2 | 10 |
| 7 | - | - | - | - | - | - | - | - | - | Tharu | 1 | 5 |
| 8 | - | - | - | - | - | - | - | - | - | Dalit | 1 | 5 |
| 9 | - | - | - | - | - | - | - | - | - | Total | 50 | 100 |

Source: Field Survey 2025

The table provides a demographic overview of 20 participants involved in the study. The age distribution reveals that most respondents fall within the 28 to 38 years and 48 to 58 years age groups, while younger (18–28 years) and older (above 58 years) participants make up 15% each, and the 38 to 48 years group comprises 20%. In terms of religion, the majority (55%) identify as Hindu, followed by Christians (20%), Buddhists (10%), and smaller proportions adhering to animism and 5% are followed other religions. Similarly, 60% having completed primary education, 15% having passed higher secondary (+2), 10% being secondary-level educated, and only 5% possessing a bachelor's degree or above. Notably, 10% of participants are illiterate. Regarding caste and ethnic composition, Tamang (20%), Chepang (16%), Gurung (15%), Brahmin/Chhetri (15%), Magar (10%), Sanyashi (10%), and Tharu and Dalit covered 5%. This diverse demographic profile helps to understand the socio-cultural background of the vegetable farming community and reflects the inclusiveness of the study in representing multiple groups across age, religion, education, and caste.

**Economic Status of the Respondents**

In this research, participants from diverse economic backgrounds were engaged. Farming serves as the primary occupation for these individuals residing in the study area, where they grow both seasonal and off-season vegetables. Nevertheless, some respondents also pursue additional occupations as side jobs. Some operate vegetable shops, while others raise livestock such as goats, cows, and buffalo. People are employed abroad, while some men work

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within the country across various sectors. The table below illustrates the landholding size, income, and savings of the respondents.

**Table 2**

*Land Holing Size, Income and Saving*

| S.N. | Land size | No | % | Annual income in 000 | No | % | Saving (000 | No | % |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Up to 10 katha | 9 | 45 | Up to 100 | 5 | 25 | 0 | 5 | 25 |
| 2 | 10 to 1 bigha | 8 | 40 | 100 to 200 | 6 | 30 | Up to 100 | 6 | 30 |
| 3 | 1 bigha to 2 bigha | 3 | 15 | 200 to 400 | 4 | 20 | 100 to 200 | 5 | 25 |
| 4 | Total | 20 | 100 | 400 to 600 | 3 | 15 | 200 to 400 | 3 | 15 |
| 5 | - | - | - | More than 600 | 2 | 10 | More than 400 | 1 | 5 |
| 6 | - | - | - | Total | 20 | 100 | Total | 20 | 100 |

Source: Field Survey, 2025

The table provides important insights into the socio-economic conditions of the respondents by classifying them according to landholding size, annual income, and savings. This information aids in demonstrating the relationship between land ownership and income levels, as well as financial stability in the study area. Out of the 20 respondents surveyed the largest segment 45% own up to 10 kathas of land, indicating a considerable number of smallholder farmers. Like that 40% possess between 10 kathas and 1 bigha, representing medium-scale landowners. Only 15% have land ranging from 1 to 2 bighas, which reflects a minority of relatively larger landholders. The prevalence of small landholding sizes suggests limited access to agricultural land, potentially impacting production capacity and income generation. In terms of annual income, 25% of the respondents earn up to NPR 100,000, indicating a low-income demographic. Similarly, 30% have an income that falls between NPR 100,000 and 200,000, while 20% are in the NPR 200,000 to 400,000 ranges. Likewise, 15% earns between NPR 400,000 and 600,000, and only 10% report incomes exceeding NPR 600,000. In the same way, 25% of participants indicate that they have no savings whatsoever, which is alarming and highlights financial vulnerability. Like that 30% has savings of up to NPR 100,000, while 25% have managed to save between NPR 100,000 and 200,000. In the same way, 15% have savings in the NPR 200,000 to 400,000 range, and only 5% have accumulated more than NPR 400,000.

The data indicates a strong correlation among landholding size, income, and the ability to save. Households possessing larger land areas typically report elevated incomes and increased savings, whereas those with smaller plots often find themselves in lower income and savings categories. The significant proportion of respondents categorized as low-income and low-savings underscores the necessity for supportive agricultural policies, improved market access, and capacity-building initiatives aimed at boosting productivity and income.

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Additionally, enhancing financial literacy and providing access to savings options could assist in decreasing the number of households without savings and bolster economic resilience**.**

**Socio Economic Changes**

There are no time bounds changes that bring y the commercial vegetable farming; however respondents feel certain changes in their livelihoods after began vegetable in their field. Before and after Vegetable Farming respondents feel different situation that mentioned in the following table.

**Changes in Education**

Time constraints for vegetable farming remain unchanged; however, respondents noted changes in their livelihoods after starting this farming. Their experiences before and after are detailed in the following table.

**Table 3**

*Changes in Education*

| S.N. | After | No | % | Before | No | % |
|---|---|---|---|---|---|---|
| 1 | Children regular go to school | 20 | 100 | Children did not to school due to poverty | 15 | 75 |
| 3 | Easy to send children with stationary | 20 | 100 | I did not have money to purchase stationary | 14 | 70 |

Source: Field Survey, 2025

The table illustrates situation of sending children in school before and after engaging in vegetable farming. The data reveals that 100% of respondents 20 send their children to school after engaged in vegetable farming however before involved in vegetable farming only 75% respondents sent their children to school. After engaged in vegetable farming they enhance their economic capacity and able to send their children to school before that they are unable to manage dress and stationery and did not send their children to school.

**Change in Health and Sanitation**

Vegetable farming improves the educational and income levels of the respondents, enabling them to manage money for medical treatment more effectively. However, some respondents do not perceive any changes. The table below illustrates the respondents' views regarding the changes in their drinking water situation**.**

**Table 4**

*Change in Health and Sanitation*

| S.N. | Feel any Change | No | % |
|---|---|---|---|
| 1 | Yes | 16 | 80 |
| 2 | No | 4 | 20 |
| 3 | Total | 50 | 100 |

Source: Field Survey, 2024

The table displayed above offers an understanding of how participants viewed any form of change following a specific intervention, activity, or experience such as a training program, development initiative, health awareness campaign, or educational effort. The responses are divided into two categories: "Yes" and "No", along with their respective numerical and

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percentage values. Among the total respondents, 80% indicated that they experienced some change. This considerable percentage reflects a significant positive effect of the program or activity on the participants. It implies that the majority of individuals were influenced or benefited in a manner that was apparent to them whether in terms of knowledge, behavior, attitude, or living conditions. 20% respondents reported that they did not perceive any change. Like that 80% of the participants acknowledging a change.

**Changes Dressing Pattern**

After the respondents' income rose, significant changes in their clothing styles were noted. Furthermore, several respondents mentioned changes in their dressing habits before and after they started Vegetable Farming. The table below depicts this situation.

**Table 5**

*Changes Dressing Pattern*

| S.N. | Feel any Change | No | % |
|---|---|---|---|
| 1 | Yes | 14 | 70 |
| 2 | No | 6 | 30 |
| 3 | Total | 20 | 100 |

Source: Field Survey, 2024

Above mentioned table noted that participants are concerned whether they perceived any change after engaging in a specific activity, program, or intervention potentially linked to development, training, health, or education. The responses are categorized into two primary groups: "Yes" and "No," along with the number of respondents and their respective percentages. Out of 20 respondents, 700% indicated that they experienced some form of change. This majority implies that the intervention or activity positively influenced most participants. These changes may pertain to knowledge, behavior, attitude, skill, lifestyle, or awareness. This is a favorable result, suggesting that the intervention had a substantial effect on most individuals involved. Nevertheless, 30% did not perceive any change should not be overlooked.

**Change in Festival Celebrating and Leisure time**

After earning income from vegetable farming, the respondents reported experiencing certain changes in the way they celebrate festivals. These changes reflect a shift in their economic conditions and social behaviors. The following table presents the details of these changes in festival celebration patterns as observed by the participants

**Table 6**

*Change in Festival Celebrating and Leisure time*

| S.N. | Feel any Change | No | % | After | No | % | Before | No | % |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Yes | 18 | 90 | We celebrate festival easily | 20 | 100 | Difficult to celebrate | 20 | 100 |
| 2 | No | 2 | 10 | We have limited leisure time | 12 | 60 | We have lot of leisure time | 16 | 80 |

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| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 3 | Total | 20 | 100 | We use leisure time in farming | 16 | 80 | We spend leisure time for enjoyment | 18 | 90 |

Source: Field Survey, 2024

This table provides a comparative analysis of the changes observed by respondents in their lifestyle and festival celebration habits before and after they began to earn from vegetable farming. Before engaging in farming, 80% of respondents reported having ample leisure time, with 90% utilizing it for enjoyment. In contrast, after starting farming, only 60% of respondents indicated they have limited leisure time, and 80% now allocate that time to farming activities, indicating a transition from recreational to productive pursuits. The table distinctly demonstrates that vegetable farming has induced significant socio-economic transformations among the respondents. 90% recognized that they experienced changes. The financial enhancements enabled all respondents to celebrate festivals with greater ease, signifying improved economic stability. Furthermore, there is a notable shift in the utilization of leisure time: previously dedicated to enjoyment, it is now predominantly invested in farming tasks, reflecting a more industrious lifestyle despite the decrease in available free time.

**Changes in Economic Status**

After starting vegetable farming in the study area, respondents reported noticeable improvements in their economic condition. They experienced increases in income, savings, access to household appliances, and overall spending capacity**.**

**Change in per Yearly Income**

Since the initiation of commercial vegetable farming, the participants have noted a rise in their yearly earnings. The table below displays the feedback given by the respondents.

**Table 7**

*Change in per Yearly Income (000)*

| S.N. | Change in come | No | % | After | No | % | Before | No | % |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Yes | 18 | 90 | 100 to 200 | 4 | 20 | 50 to 100 | 8 | 40 |
| 2 | No | 2 | 10 | 200 to 400 | 6 | 30 | 100 to 200 | 2 | 20 |
| 3 | Total | 20 | 100 | More than 300 | 10 | 50 | More than 200 | 8 | 40 |
| | | | | Total | 20 | 100 | Total | 20 | 100 |

Source: Field Survey, 2024

Above mentioned table showed the comprehensive comparison of the changes in income perceived by respondents after they commenced commercial vegetable farming. Half of the respondents 50% earn more than NPR 300,000 annually, indicating a significant increase in income levels subsequent to farming. Similarly, 30% earn between NPR 200,000 and 400,000, while 20% earn between NPR 100,000 and 200,000. It illustrates a varied yet evidently improved income distribution following their engagement in commercial farming. Prior to farming, 40% of respondents earned merely NPR 50,000–100,000 per year, reflecting low income levels. Only 40% earned more than NPR 200,000, and 20% fell within the middle range (NPR 100,000–200,000). In comparison to the income data post-farming, this indicates

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a distinct upward trend in income levels after the shift to commercial farming. The majority of participants not only perceived a change but also advanced into higher income. The number of individuals earning more than NPR 300,000 annually has doubled in contrast to those who earned more than NPR 200,000 previously. There is a significant decrease in the lower-income groups, suggesting that vegetable farming has contributed to diminishing income inequality within the group.

**Changes in Saving**

After engaging respondents in commercial vegetable farming, they experience alterations in their savings status. The table below illustrates the changes in savings that occurred after the respondents commenced vegetable farming.

**Table 8**

*Changes in annual saving (000)*

| S.N. | Change in saving | No | % | After | No | % | Before | No | % |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Yes | 18 | 90 | 100 to 200 | 8 | 40 | No saving | 14 | 70 |
| 2 | No | 2 | 10 | 200 to 300 | 5 | 25 | 50 to 100 | 4 | 20 |
| 3 | Total | 20 | 100 | More than 300 | 3 | 15 | More than 100 | 2 | 10 |
| | | | | Total | 20 | 100 | Total | 20 | 100 |

Source: Field Survey, 2024

Table 8 presents a comparative analysis of the impact of commercial vegetable farming on the saving habits of respondents. 90% respondents indicated that they experienced an increase in their savings after they began engaging in commercial vegetable farming. Only 10% reported no change, suggesting that the transition to commercial farming has positively influenced the saving capacity for most participants. After initiating vegetable farming, 40% of respondents saved between NPR 100,000 and 200,000, while 25% saved between NPR 200,000 and 300,000. Importantly, 15% managed to save over NPR 300,000, indicating significant financial advancement. These statistics demonstrate that the majority of farmers are now capable of saving considerable amounts, which implies enhanced economic stability. Prior to farming, most were unable to save, but currently, 80% of respondents save at least NPR 100,000 or more each year. This not only reflects increased income but also improved financial management and planning skills. The shift to commercial vegetable farming has favorably affected the economic behavior and financial security of the respondents. With more stable income and a greater awareness of financial advantages, respondents have transitioned from having minimal or no savings to building substantial financial reserves, thereby contributing to long-term economic resilience and enhanced living standards.

**Changes in Expenditure**

After began the vegetable farming expenditure of the respondents also increased because respondents become ready to spend their earning. The following table shows the opinions of the respondents.

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**Table 9**

*Changes in Expenditure*

| S.N. | Change in come | No | % |
|---|---|---|---|
| 1 | Yes | 18 | 90 |
| 2 | No | 2 | 10 |
| 3 | Total | 20 | 100 |

Source: Field Survey, 2024

The table illustrates whether the respondents experienced a change in their income after engaging in vegetable farming. Out of the 20 participants surveyed, 90% reported that their income had increased, 10% stated that they had not experienced any change in income. It indicates that vegetable farming has had a positive economic impact on most participants, enhancing their financial status and improving their livelihood. The data clearly supports the conclusion that vegetable farming serves as an effective means of income generation for rural households in the study area.

## Findings and Conclusion

Vegetables are a significant cash crop in Nepal, enabling farmers to generate income through their sale. In the study area, vegetable farming has positively impacted the lives of people. After starting vegetable farming, they experience a sense of economic security. The income derived from vegetables allows them to enhance their savings. Typically, these savings are utilized for household expenses, such as children's education, purchasing medicine, and covering hospital charges. All participants in this study express satisfaction with their income, which has led to noticeable improvements in their lives. Through vegetable farming, they have successfully elevated their socio-economic status, including advancements in children's education, increased income, and enhanced savings. While nearly all respondents express concern over rising expenses, they have also acquired various household appliances. However, they encounter several challenges in both the cultivation and marketing of green vegetables. The government's policies do not adequately support vegetable marketing, forcing them to sell their produce at lower prices; nevertheless, respondents manage to earn enough to meet their basic needs.

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**Transparency:** The author declares that this manuscript is honest, truthful, and transparent. No important aspects of the study have been omitted, and any deviations from the planned study have been clarified. This research was conducted in accordance with all applicable rules of writing ethics.

**Competing Interests:** The author declares that there are no competing interests.

**Author's Contribution:** The author conceived the study, designed the methodology, conducted the research, performed the analysis, and prepared the manuscript. The author has read and agreed to the published version of the manuscript.

## References

Basneyat, G. (2018). *The Socio-economic Condition of the Vegetable Farmers of Bhaktapur District.* Unpublished Thesis Degree of Master of Sociology Anthropology, T.U

Chitwan Post ( 2077 BS Kartik 10). "Tarkari Kheti Le Badaleko Jiwan"

FOA. (2018). *FOA Report*, FOA Office

Ghimire, D. R. (2020). Empowering Women Producers through Value Chain Development in Commercial Vegetable Farming for Improved Livelihood and Food Security. *Journal of Forest and Livelihood, 19, 1.*

Gurung, B., Thapa R. B., Gautam, D. M., Karki, K. B., &Regmi, P.P. (2016). Commercial vegetable farming: an approach for poverty reduction in Nepal. *Journal of Nepal*, 4: 92-106.

Government of Nepal. (2017). *Ministry of Agriculture Development Report.* Ministry of Agriculture

Joshi, P. K., Joshi, L., & Birthal, P. S. (2006). Diversification and its impact on Smallholders: Evidence from a study on vegetable production. *Agricultural Research Review*, 19(347-2016-16776), 219-236

Kalika Municipality. (2022). *Kalika Municipality Report*. Kalika Municipality

Majorano, S. F., Di, S. M., & Gorgerino, M. (2024). Unlocking opportunities: A comprehensive analysis of Nigeria's labour markets for successful labour migration and sustainable reintegration programmes. https://publications.jrc.ec.europa.eu/repository/handle/JRC140168

Nepal, B. (2015). *Changing Livelihood Patterns of Vegetable Farmers: A Case Study of Charghare Settlement of Kirtipur Municipality, unpublished Thesis*, Central Department of Geography, T.U., Kirtipur, Kathmandu

Obansa S. A. J., & Maduekwe, I. M. (2013). Agriculture financing and economic growth in Nigeria. *European Scientific Journal*, 9(1), 168-204.

Paudel, B., & Bhandari, K. (2021). Impact of vegetable farming on farmers' livelihood Patterns in Dhankuta, Nepal. *Geographical Journal of Nepal*, 14, 131-150

International Journal of Atharva
Vol. 3, No. 3, August, 2025. Pages: 19-32
ISSN: 3021-9205 (Print) ISSN:3021-9299 (Online)
DOI: 10.3126/ija.v3i3.84315

Pradhan, A., Bista, C., & Manivannan, S. (2013). An Alternative Source of Livelihood: Socio Economic Analysis of Organic Vegetable Growing in Nepal. *IJSR*, 4(4), 924-928.

Rajbhandari, B. P. (2011). Bio-intensive farming system: validation of its approaches in Increasing food production, improving food security and livelihoods. *Nepalese Journal of Agricultural Sciences*, 9, 112-22.

Rahman, F. (2017). *Women's Participation in Rural Development*, Abhijeet Publication.

Thapa, C. (2009). *Vegetable Farming as a Base of Livelihood in Chitwan District*. Unpublished Thesis, Submitted to Central Department of Geography: T.U., Kirtipur, Kathmandu.