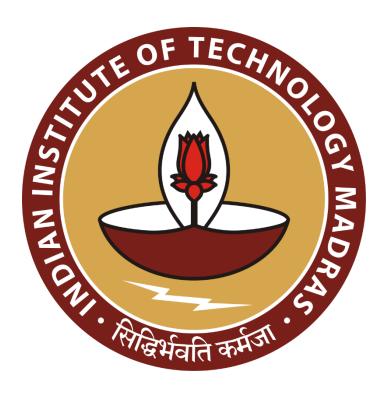
# Analyzing The Business Model of Kissan Sewa Kendra

A Mid-Term report for the BDM Capstone Project

Submitted by

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## Analyzing The Business Model of Kissan Sewa Kendra:

### 1. Executive Summary: -

This report provides an overview of the global market for pesticides, fertilizers, and insecticides. The report begins with an introduction that provides an overview of the purpose, scope, and methodology of the study. The methods section describes the data collection and analysis procedures used in the study. The findings section presents the results of the data analysis, including information about the sales and revenue of pesticides, fertilizers, and insecticides, as well as the factors that influence these sales and revenue. The analysis section discusses the implications of the findings, including information about the trends in sales and revenue, the factors that are driving these trends, and the implications of these trends for the agriculture industry. The recommendations section provides suggestions for how to improve the sales and revenue of pesticides, fertilizers, and insecticides. The conclusion summarizes the key findings and recommendations of the report.

In summary, the report finds that the global market for pesticides, fertilizers, and insecticides is growing at a rapid pace. This growth is being driven by several factors, including increasing demand for food, growing concerns about crop protection, and government regulations. The report also finds that there are a few opportunities for companies in this market, including new marketing strategies, product development, and government regulations.

### 2. Detailed Explanation of Analysis/Process Method: -

The following analysis is performed based on the business problems discussed by the shop owner:

### Sales:

The process method involves selecting the preprocessed data to create a pivot table for each of the following analysis. For the quarterly analysis of sales, I created the pivot table in which items are taken in rows and quarter in column, with no. of items sold as value.

- Quarterly sales for Year 2021-22.
- Quarterly Sales contribution by each item for Year 2021-22.
- Items vs Units Sold (Quarterly Analysis) for Year 2021-22.
- Comparing Sales in Q1(Jan-March) with quarter.
- Comparing Sales in Q2(April-June) with quarter.

For Monthly analysis of sale, created the pivot table and select the Items in rows and month in column, with Items sold as value.

- Months Wise Units Sold.
- Trend line in Sales over months
- Percentage sale contribution in each month for each item.

For the analysis of sales in each village a similar method is followed as done for Monthly analysis and took village as a column instead of month.

• Contribution to sales by each Village for the Year 2021-22.

• Percentage sale contribution in each item by each city.

Lastly for the analysis of Monthly percentage sales by each city I took month in rows and city as a column with Items sold as in value.

For the analysis of percentage Increase or Decrease in Sales with Respect to each month over the Year 2021-22. We have taken months in Rows and Percentage increase or decrease in columns.

• Growth Chart in Sales.

For the analysis of how much percentage of item contribute in 80% of Sales. On x-axis we have products and on y-axis we have %contribution and Sales.

Sales Pareto.

For the analysis of Trend of Sales in winter season and summer season a line chart is made months on x-axis and sales on y-axis.

### Revenue:

The process method involves selecting the preprocessed data to create a pivot table for each of the following analysis.

For quarterly revenue analysis, I created the pivot table in which items are taken in rows and quarter in column, with revenue as value.

- Quarterly revenue for The Year 2021-22.
- Percentage revenue contribution in each item by each quarter.
- Percentage Revenue Contribution in Each Quarter.

For Monthly analysis of Revenue, created the pivot table and select the Items in rows and month in column, with Revenue as value.

- Revenue Contribution of each Products.
- Trend line in Revenue over months
- Contribution in Revenue from each month.
- Percentage revenue contribution in each month.

For the analysis of revenue in each village a similar method is followed as I used for Monthly analysis and took city as a column instead of month.

- Monthly revenue for each village for Year 2021-22.
- Contribution of revenue by each city for FY 21-22.
- Percentage Revenue from each village.
- Revenue Generated by each village.
- Percentage revenue contribution in each item by each village.

For the analysis of how much percentage of item contribute in 80% of revenue. On x-axis we have products and on y-axis we have %contribution and Revenue.

• Revenue Pareto.

For the analysis of revenue vs Products sold I made a scattered plot in which revenue is taken on y-axis and Products sold on x-axis

• Revenue vs no. of cartons sold.

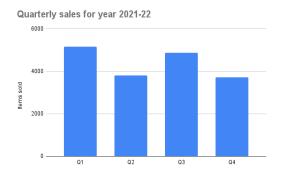
For the analysis of percentage Increase or Decrease in Revenue with Respect to each month over the Year 2021-22. We have taken months in Rows and Percentage increase or decrease in columns.

Growth Chart in Revenues.

For the analysis of Trend of Revenue in winter season and summer season a line chart is made months on x-axis and revenue on y-axis.

### 3. Results and Findings: -

This section describes the findings and results obtained from the detailed sales & revenue analysis of the data.



04 21.1% 01 29.4% 02 21.7% 02

Fig. 1.1: Sales in each quarter

Fig. 1.2: %Sales for each quarter

From Fig. 1.1, it is observed that the sales in Quarter 1(Jan-Mar) and Quarter 3(Jul-Aug) have sales of more than 400 items sold. On the other hand, the least sales are observed in Quarter 2(Apr-Jun) and Quarter 4(Oct-Dec). Similarly, from Fig. 1.2 it is observed that Quarter 1(Jan-Mar) and Quarter 3(Jul-Sept) have 29.4% and 27.8% respectively percentage of sales. The sales have declined in Quarter 2(Apr-Jun) and Quarter 4(Oct-Dec) approximately to 21% in both Quarter.

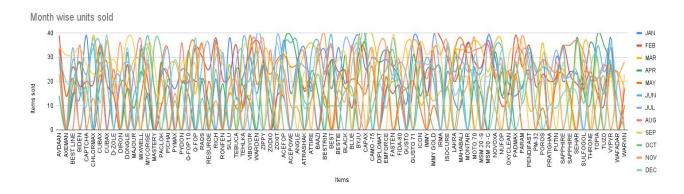


Fig. 2.1: Month-wise item sold for each item.

### Items count vs Months

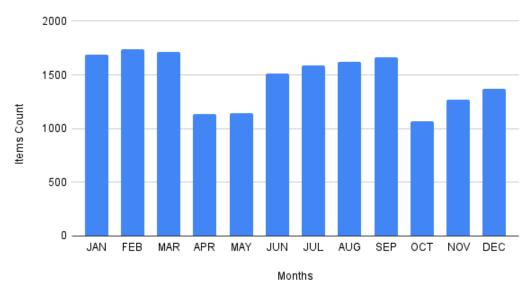


Fig. 2.2: Month-wise cartons sold for each item.

The analysis derived from Figure 2.1 reveals that sales patterns for the majority of items exhibit a consistent range of 20 to 30 units throughout all months. However, it is notable that merely half of the total items attain sales surpassing the 30-unit threshold. Notably, items AVDAAN and VYPYR demonstrate a relatively steady sales performance across the entire year, ranging between 25 and 40 units sold per month. Conversely, the item AXEMAN experiences sales solely during the months of February, May, September, and December, remaining devoid of sales for the remaining months. Additionally, the data illustrates a prevailing trend wherein a considerable number of products observe a lack of sales for most of the year, interspersed with occasional surges in sales exceeding 30 units. Subsequently, Figure 2.2 portrays a distinct observation that cumulative sales figures for each individual product surpass 1500 units during the months of January, February, March, July, August, and September. Conversely, the lowest sales figures are recorded in the months of April, May, and October, while November and December display moderate sales figures.

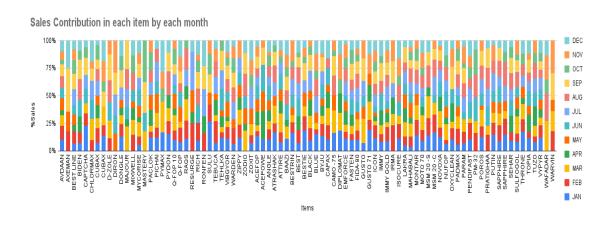


Fig. 3: Month-wise contribution in sales of items

Based on the information delineated in Figure 3, it becomes evident that among the products under consideration, AXEMAAN and VIBGYOR exclusively experienced sales during eleven months, remaining unsold in a single month. Similarly, BEST LINE, CUBAX, MYCORISE, LAKRA, and MAHABALI were sold in ten months while encountering a lack of sales in two months. The prevailing pattern indicates that a significant proportion of products achieved sales activity spanning six to seven months, leaving the remaining months marked by absence of sales. Noteworthy are the exceptional performances of WAFADAR SUPER, registering sales exceeding 50% in both March and August, and WARVIN, with comparable sales exceeding 50% in September and November. The months of March and September witnessed sales activity across all products, while the months of April and May displayed only limited product sales. Specifically, the products AXEMAN, MAJOUR, CHLOROMAX, D-ZOLE, DIRON, MASTERY RESUROE, ZODIO, IRMA, PM-32WAFADAR, and WARVIN recorded no sales during the month of January.

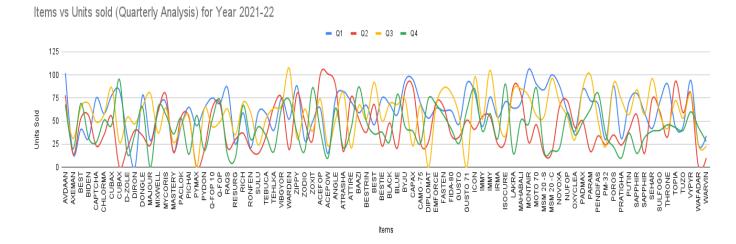


Fig. 4: Sales of items in each quarter.

Based on the data presented within Figure 4, it is evident that the sales performance of various products exhibits notable fluctuations across different quarters. During Quarter 1 (January-March), the product MONTAIR stands out with the highest sales, surpassing the threshold of 100 units. Transitioning to Quarter 3 (July-September), the products WARDEN, PARAM, and IMMY emerge as the leaders in sales, each achieving sales exceeding 100 units. Quarter 2 (April-June) records ACEPOW as the product with the highest sales, also surpassing the 100-unit mark. A distinctive characteristic emerges in the sales patterns of MSM 20-C, which maintains a sales figure of approximately 100 units in both Quarter 1 and Quarter 3. In a similar vein, BYJU presents a unique sales trend, securing sales of roughly 100 units in both Quarter 1 and Quarter 2. Among the observed products, VYPYR stands alone in maintaining sales figures exceeding 75 units throughout Quarters 1, 2, and 3, with sales remaining consistent between Quarters 2 and 3.

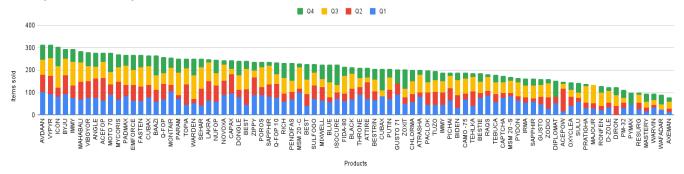


Fig. 5: Quarterly sales of items in Year 2021-22.

Drawing insights from the information presented within Figure 5, it becomes evident that PYMAX emerges as the singular product with no sales recorded during both Quarters 2 and 3. Conversely, WAFADAR stands as the exclusive product registering zero sales solely in Quarter 2. For all remaining products, sales activity is discernible across the remaining quarters. During Quarter 1, noteworthily high sales figures of 100 units or more are attributed to the products AVDAAN, MONTAIR, MSM 20-C, CAPAX, and GUSTO 71. In contrast, the products AXEMAN, WAFADAR, WARVIN, and MASTERY exhibit sales figures that fall below the 100-unit threshold for the year 2021-22. Predominantly, the majority of products within the range exhibit annual sales ranging from 200 to 300 units.

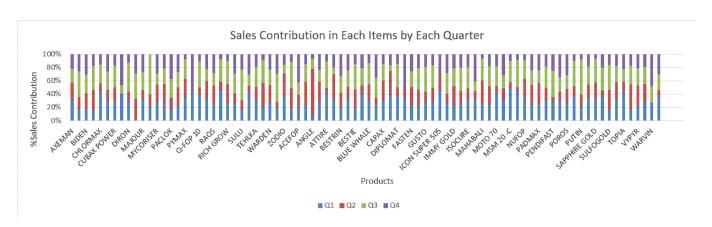


Fig. 6: Quarter-wise contribution to sales of items.

In accordance with the data presented within Figure 6, the product denoted as ANGLE stands out by exhibiting sales that surpass 60% during Quarter 2. During Quarter 1, CHLOROMAX, Q-FOP 10, ATTIRE, DIRON, ICON SUPER 505, MSM 20-C, NUFOP, and TOPIA are the products that achieve sales accounting for 40% or more of the total. Moving to Quarter 4, products such as WARVIN, FASTEN, DIRON, and Q-FOP 10 contribute sales figures amounting to 40% or more. Notably, Q-FOP 10 is exclusively sold during Quarters 1 and 4, while remaining unsold in Quarters 2 and 3. Among all the quarters, Quarter 4 registers the lowest sales for products including PUTIN, NUFOP, MSM 20-C, SAPPHIRE GOLD, PYMAX, RICH GROW, ANGLE, and MAHABALI. Quarter 3 displays comparatively lower sales figures for the products CUBAX POWDER and DIPLOMAT when juxtaposed with other items in the portfolio.

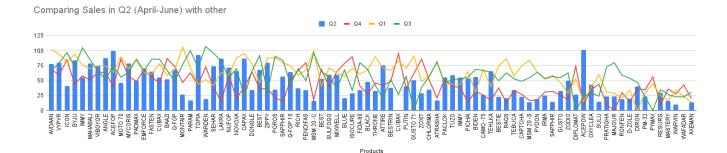


Fig. 7: Comparing Sales of Quarter 2 with others.

Based on the data presented within Figure 7, the primary purpose of the depicted graph is to undertake a comparative analysis of sales trends during Quarters 1, 3, and 4 in relation to Quarter 2. The data reveals that sales figures registered during Quarter 2 (April-June) for the year 2021-22 were notably the lowest. Specifically, only the products ACEFOP and ACEPOW achieved sales of 100 units each during Quarter 2, while PYMAX, WAFADAR, and CUBAX encountered no sales during the same period. The disparity between sales in Quarter 2 and Quarter 4 is characterized by a relatively modest magnitude, with the majority of products recording sales figures spanning the range of 20 to 60 units. Noteworthy is the performance of PYMAX, which demonstrates favorable sales across other quarters but experiences a marked decline specifically during Quarter 2. It is discernible that sales during Quarter 2 exhibit substantial variability, characterized by distinct and pronounced peaks.

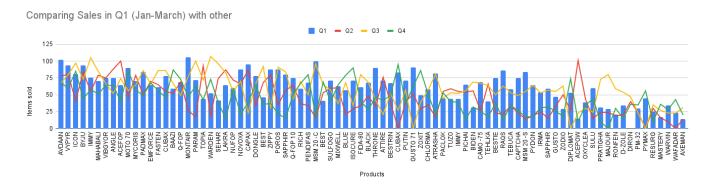


Fig. 8: Comparing Sales of Quarter 1 with others.

Based on the information elucidated in Figure 8, the principal intent of this graph pertains to the comparison of sales fluctuations across Quarters 2, 3, and 4 in relation to Quarter 1. The data presented reveals that the most noteworthy sales figures were recorded during Quarter 1, with the exception of the product DIRON, which encountered no sales activity. An abrupt surge in sales for the product ACEPOW becomes conspicuous during Quarter 2, signifying the highest sales volume among all the products surveyed. The remaining product sales range between 40 to 75 units. Notably, sales during Quarter 1 exhibit a state of relative constancy.

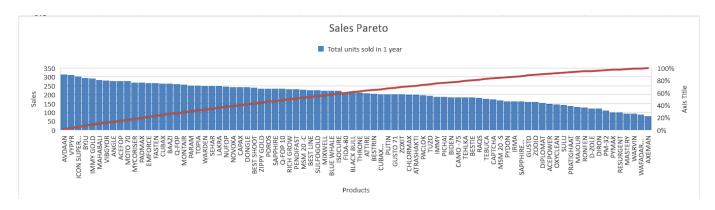


Fig. 9: Sales Pareto

Based on the data elucidated in Figure 9, it becomes evident that a total of 60 products out of the 84 under consideration collectively contribute to 80% of the total sales. This outcome deviates from the initial supposition that a mere 20% of the products would account for 80% of the sales. The implications of this data suggest that all products available within the shop demonstrate commendable sales performance, thereby leading to the conclusion that each product holds a substantial degree of market acceptance.

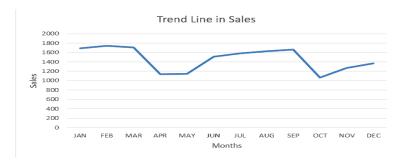


Fig. 10: Trend in Sales with respect to Months.



Fig. 11: Growth Chart in Sales.

Based on the information depicted in Figures 10 and 11, a notable decline in sales is discernible during the month of April, with a subsequent analogous decrease occurring in the month of October. Conversely, the pinnacle of sales performance is observed during the months of January, February, and March, which is succeeded by a diminishment in sales during April and May. A modest resurgence becomes apparent in June, followed by a phase of sales stability until the occurrence of another decline in October. Notably, sales exhibit a modest augmentation once again in the months of November and December.

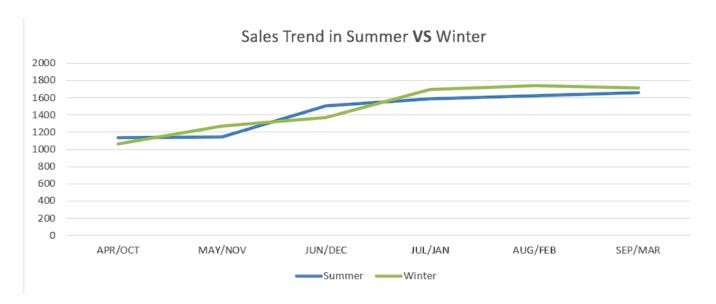


Fig. 12: Sales Trend in Summer VS Winter.

Based on the data illustrated in Figure 12, it becomes apparent that sales during the winter season exhibit a marginally higher disposition in contrast to the summer season. However, it is noteworthy that the variance in sales between these two seasons is not notably substantial, resulting in sales figures that remain largely comparable. During the initial months of both the summer and winter seasons, namely April, May, June, and October, November, December, the sales figures are observed to be relatively subdued. Subsequently, as the concluding months of these respective seasons draw near, a discernible uptick in sales becomes evident. This pattern implies that sales demonstrate an upward trajectory coinciding with the zenith or culmination of both the summer and winter periods.

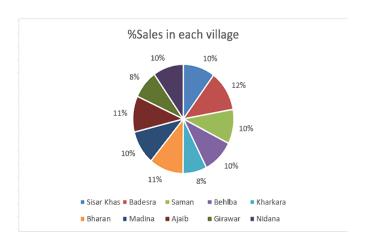


Fig. 13.1: Percentage sales in each village

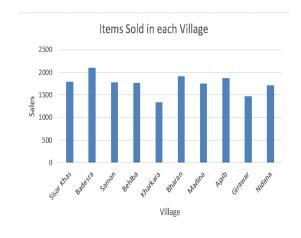


Fig. 13.2: Items Sold in Each Village

Based on the data depicted in Figure 13.2, it is readily apparent that sales figures below 1500 units are solely evident in the Kharkara and Girawar regions. Conversely, the Badesra region exhibits the highest sales, exceeding 2000 units. In the remaining villages, sales consistently fall within the range of 1500 to 2000 units. It is evident that each village makes a nearly equivalent contribution to the overall sales, as indicated by the nearly uniform distribution of slices in Figure 13.1. This equitable distribution of contribution across all villages implies a high level of customer satisfaction, with all purchasers from these villages seemingly content with their purchases from the shop.

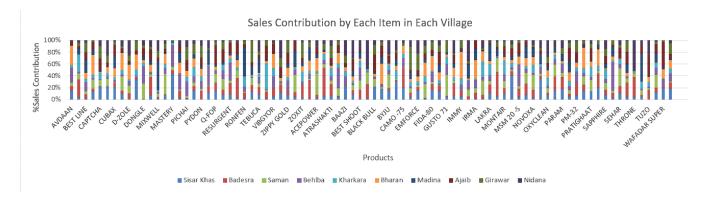


Fig. 14: Sales Contribution by Each Item in Each Village.

Based on the data presented within Figure 14, it becomes evident that Sisar Khas village emerges as the sole contributor, accounting for 40% of the sales of both MSM 20-S and MASTERY. Furthermore, Sisar Khas significantly contributes nearly 40% of the sales for OXYCLEAN. Similarly, Bharan village plays a pivotal role by contributing 40% of the sales for the product IMMY, while Behlba's village mirrors this contribution percentage in the sales of SAPPHIRE. Correspondingly, Nidana village's notable contribution of 40% is observed in the sales of BLACK BULL and THRONE, whereas Madina village makes a substantial contribution of nearly 50% to the sales of TOPIA. Conversely, the contribution of the remaining villages across various products generally ranges between 20% to 35%. The village of Nidana exhibits a heightened contribution primarily in the products IRMA, THRONE, and BAAZI. However, Nidana's contribution remains relatively low, hovering around 2%, in relation to other products.

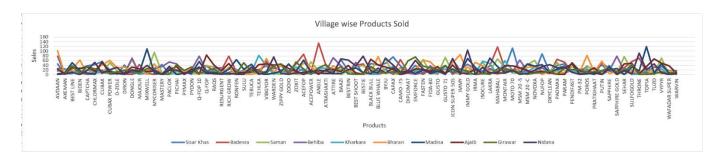
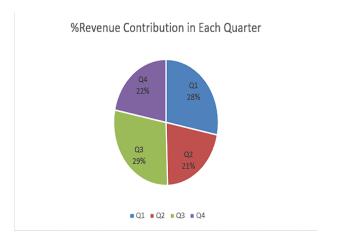


Fig. 15: Village wise Products Sold.

Inferred from the data presented within Figure 15, ANGLE surfaces as the solitary product evoking discernible demand, notably conspicuous within the geographic precincts of Badesra, where sales reach an approximate count of 140 units. Furthermore, the residents of Badesra emerge as prominent contributors to the sales of the product MAHABALI. It becomes readily conspicuous that the remaining products exhibit congruous sales distributions across all villages, marked by sales figures spanning the

spectrum of 20 to 80 units. Furthermore, it's evident that the product TOPIA attains its highest sales figures within the village of Madina, reaching an approximate count of 100 units.



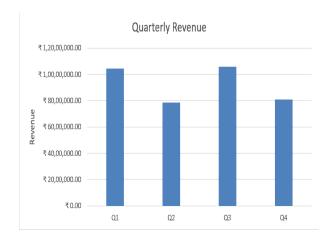


Fig 16.1: %Revenue for each Quarter

Fig. 16.2: Quarterly Revenue Distribution

Drawing insights from Figure 16.1, it is apparent that the highest revenue figures, surpassing the threshold of 1 crore, are realized during Quarter 1 (January-March) and Quarter 3 (July-August). In contrast, the lowest revenue is evidenced in Quarter 2 (April-June) and Quarter 4 (October-December). Similarly, Figure 16.2 showcases that Quarter 1 (January-March) and Quarter 3 (July-September) contribute 28% and 29%, respectively, to the cumulative revenue accrued during the fiscal year 2021-22. This contribution proportionality diminishes during Quarter 2 (April-June) and Quarter 4 (October-December), to approximately 21% for both quarters.

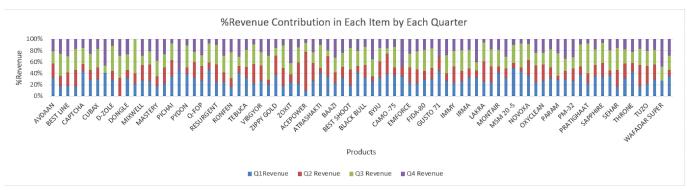


Fig 17: %Revenue Contribution in Each Item by Each Quarter

In alignment with the information presented within Figure 17, it becomes apparent that ACEPOWER yields the highest revenue during Quarter 2 (April-June), while WAFADAR SUPER reports no revenue within the same quarter. Similarly, DONGLE registers zero revenue in Quarter 1 (January-March), and EMFORCE records zero revenue in Quarter 3 (July-September), yet surprisingly contributes 50% of the total revenue for that product during Quarter 4 (October-December). Conversely, MISWELL posts zero revenue in Quarter 4 (October-December). Notably, the revenue distribution for PYDON is intriguing, with approximately 40% of the total generated revenue occurring in Quarter 1, while 60% is amassed in Quarter 4 during the fiscal year 2021-22. During Quarter 4, products LAKRA, NOVOXA, PRATIGHAAT, and ACEPOWER contribute minimally to the overall revenue. Conversely, the remaining products demonstrate favourable revenue generation across all quarters.

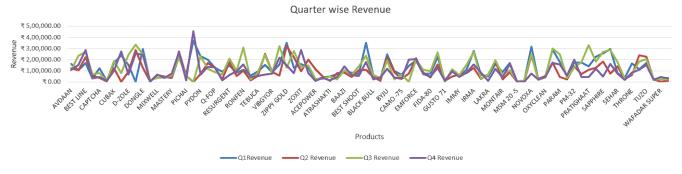


Fig 18: Quarterly Revenue of each item

Derived from the insights gleaned from Figure 18, a conspicuous pattern emerges wherein the revenue attributed to PYDON reaches its zenith during Quarter 4 (October-December), amounting to an approximate sum of 4.5 lakhs. This achievement also marks the highest revenue generated by any individual product within any quarter. In contrast, WAFADAR SUPER stands out as the sole product consistently generating revenue of less than 50 thousand across all quarters. Evidently discernible is the relatively uniform revenue generation among products during Quarter 1 and Quarter 3, a trend mirrored in the alignment of Quarter 2 and Quarter 4 revenue trajectories, where the lines representing these two quarters coincide closely.

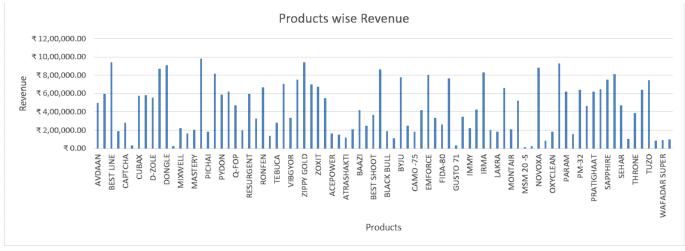


Fig 19: Total Revenue from each item.

Derived from the insights garnered through an analysis of Figure 19, a conspicuous trend emerges wherein a substantial number of bars are prominently large in size, while a smaller proportion exhibits diminutive dimensions. Significantly, the revenue generated by the product PACKLOK attains the pinnacle, approximating a significant 10 lakh monetary units. Concurrently, the revenue figures accrued by the products BEST LINE, ZIPPY GOLD, and PADMAX closely align, positioning them at the second tier in terms of revenue generation. Notably, WAFADAR SUPER, VYPYR, NUFOP, CHLORMAX, GUSTO 71, MSM 20 -C, MAJOUR, and MSM 20 -S are among the products that achieve revenue figures beneath the 1 lakh threshold.



Fig 20: Month-wise Revenue obtained.

Emanating from the insights discerned through a comprehensive examination of Figure 20, a conspicuous pattern emerges, wherein the highest revenue accumulation occurs during the month of September, achieving an approximate value of 39 lakhs. Similarly, the months of July and February yield revenue amounts closely approximating 37 lakhs, thereby manifesting a noteworthy similarity in their revenue generation. It is notable that solely during the months of February, July, and September does the revenue surpass the 35 lakhs benchmark. Conversely, the months of October and April manifest the lowest revenue generation among all months, reaching an aggregate of 23 lakhs. Across the remaining months, the revenue generated is consistently situated within the range of 25 lakhs to 35 lakhs, marking a prevailing trend throughout the observed period.

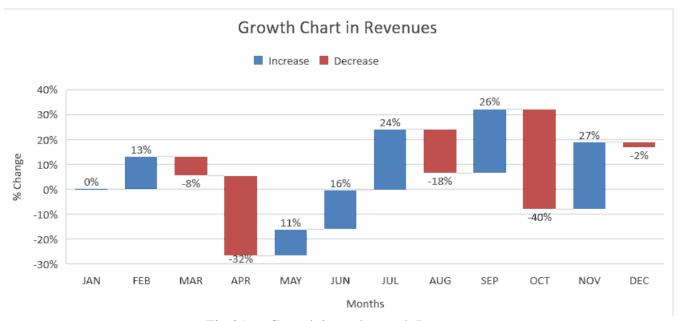


Fig 21. %Growth in each month Revenue

Derived from the insights amassed through a meticulous analysis of Figure 21, a discernible pattern emerges where a sudden decline in revenue contribution becomes evident during the months of April and October. Further observation highlights a similar reduction in the month of August, although to a lesser

extent compared to the pronounced declines witnessed in April and October. Subsequently, a noteworthy escalation of 11% is observed in the month of May, which is further augmented by a corresponding 16% upsurge in the ensuing month of June. This progression continues with a substantial 24% increase in the month of July. Of particular significance is the pinnacle of revenue contribution escalation observed in the months of September and November, attaining an impressive ascent of nearly 26%. This heightened contribution serves as a conspicuous highlight within the revenue trend analysis.



Fig 22: Trend in Revenue in each month

Derived from the comprehensive analysis undertaken based on the information presented within Figure 22, a discernible pattern emerges wherein the revenue generated consistently maintains a range spanning from 25 lakhs to 35 lakhs across all months. Following the month of February, there is a progressive decline in revenue contribution from each subsequent month, culminating in April. However, a sudden and notable resurgence is observed from April through July. This fluctuating trend of sequential ascents and descents persists, with a notable decrease in October followed by a subsequent increase in November. Moreover, it is noteworthy that during the months of November and December, the contribution to revenue exhibits a comparable and nearly equivalent stance, substantiating a balanced and consistent contribution during this period.

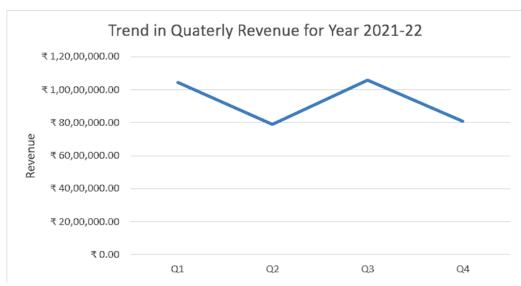


Fig 23: Trend in Quarterly Revenue for Year 2021-22

Based on the insights derived from an examination of Figure 23, a distinct pattern emerges, wherein the revenue generated during Quarter 1 and Quarter 3 exhibits a notable similarity, hovering around the mark of 1 crore. In contrast, during Quarter 2 and Quarter 3, a decrease in revenue generation is evident, resulting in a figure of approximately 80 lakhs.

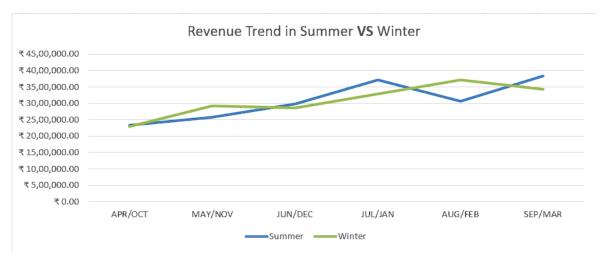


Fig 24: Revenue Trend in Summer VS Winter

Based on the analysis derived from the revenue illustrated in Figure 24, it becomes evident that revenue exhibits a slight inclination towards higher values during the winter season when compared to the summer season. Nevertheless, it is important to note that the disparities in revenue between these two seasons are not particularly significant, resulting in revenue that exhibits a notable degree of comparability. During the initial months of both the summer and winter seasons, specifically April, May, June, and October, November, December, revenue generated is observed to be relatively modest. Subsequently, as these seasons approach their respective conclusions, a discernible upsurge in revenue becomes apparent. This recurring pattern suggests that revenue experiences an upward trajectory aligning with the zenith or culmination of both the summer and winter periods.

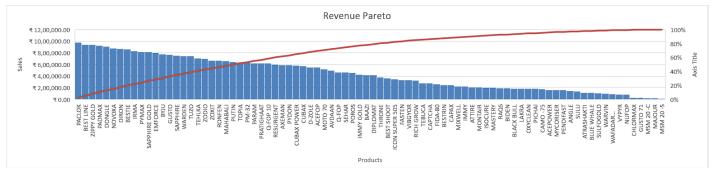


Fig 25: Revenue Pareto

Based on the information presented in Figure 25, a clear trend emerges wherein a cumulative total of 45 products among the total of 84 evaluated, jointly contribute to 80% of the overall revenue generated. This outcome stands in contrast to the initial assumption that only 20% of the products would encompass 80% of the total revenue. The insights gleaned from this data imply that the entirety of the products offered within the shop exhibit commendable revenue-generating capabilities. Consequently, it can be deduced that each product garners a significant level of market acceptance, as evidenced by their consistent contribution to the overall revenue. Hence, 50% products contribute to 80% revenue.

### %Revenue from each Village

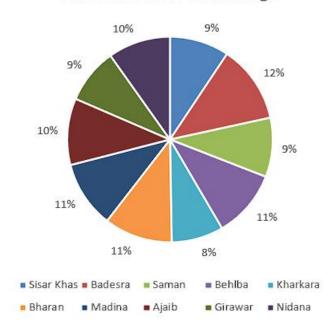


Fig 26: Percentage Revenue in each Village

Derived from the information elucidated within Figure 26, it becomes apparent that each of the villages makes a nearly equivalent percentage contribution to the total revenue. The observed slices within the visual representation depict a uniform distribution, rendering any significant distinctions indiscernible. This phenomenon is likely attributed to the fact that the sales contribution from all the villages is consistent and does not exhibit substantial variability.

# Revenue Generated by each village \$\frac{\pi}{\pi 45,00,000.00} \tag{\pi 45,00,000.00} \tag{\pi 45,00,000.00} \tag{\pi 35,00,000.00} \tag{\pi 25,00,000.00} \tag{\pi 25,00,000.00} \tag{\pi 15,00,000.00} \tag{\pi 10,00,000.00} \tag{\pi 5,00,000.00} \tag{\pi 5,00,000.00} \tag{\pi 5,00,000.00} \tag{\pi 5,00,000.00} \tag{\pi 0.00} \tag{\pi 10,00,000.00} \tag{\pi 5,00,000.00} \tag{\pi 10,00,000.00} \tag{\pi 10,00,000.00} \tag{\pi 10,00,000.00} \tag{\pi 10,00,000.00} \tag{\pi 10,00,000.00} \tag{\pi 10,000.00} \tag{\pi 10,000.0

Fig 27: Revenue Generated from Each Village

Extracting insights from the data expounded in Figure 27, a conspicuous pattern emerges, highlighting that the highest revenue is generated from the village of Badesra, amounting to a substantial 45 lakhs. In contrast, Kharkara yields a relatively modest revenue figure of 30 lakhs, while Girawar contributes approximately 32 lakhs in revenue. Conversely, the remaining villages collectively generate revenue

ranging from 35 lakhs to 40 lakhs. This consistent distribution of revenue signifies a trend where the revenue contributions from the different villages align within a relatively narrow range.

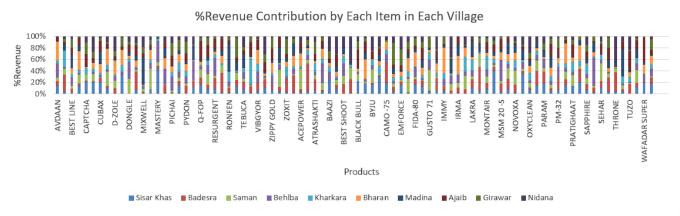


Fig 28: Revenue Contribution by Each Item in Each Village

Extracting insights from the information delineated within Figure 28, a distinct pattern emerges, shedding light on the revenue generated from the product MASTERY, where Sisar Khas village significantly contributes approximately 40% to the total. Similarly, within the product MIXWELL, the village of Madina plays a prominent role, accounting for 50% of the total revenue. This parallel trend is also observed in the product ANGLE, wherein 50% of the revenue generated is attributed to the village of Badesra. Furthermore, in the case of the product IMMY, the village of Bharan emerges as a pivotal contributor, accounting for 50% of the total revenue derived from IMMY.

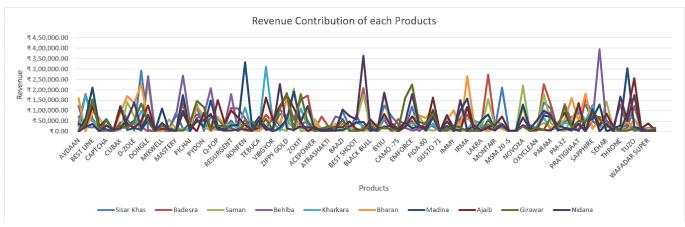


Fig 29: Revenue Contribution Of each Products

Deriving insights from the information presented in Figure 29, a conspicuous pattern emerges wherein the village of Behlba contributes the highest revenue within SEHAR, amounting to 4 lakhs. Similarly, within the product BLACK BULL, the village of Madina assumes prominence by generating the highest revenue, approximately 3.6 lakhs. Notably, in both the products RONFEN and VIBGYOR, the villages of Behlba and Kharkara emerge as the predominant contributors in revenue generation. Additionally, it is observed that the revenue contribution within each product remains notably consistent across the various villages, unlike other scenarios where some villages exhibit high contribution in certain products while remaining inconspicuous in others. This pattern underscores a consistent contribution approach across products for these villages.

### 4. Interpretation of Results and Recommendation: -

### **Interpretation of Analysis: -**

- Sales Patterns Across Quarters: The analysis reveals a consistent trend where Quarter 1 (January-March) and Quarter 3 (July-September) consistently exhibit higher sales figures compared to Quarter 2 (April-June) and Quarter 4 (October-December). This could be attributed to factors such as agricultural cycles, festive seasons, or specific promotional activities during these quarters.
- Monthly Sales Patterns: The data showcases that the majority of items maintain a stable sales range of 20 to 30 units per month. However, certain items like AVDAAN and VYPYR exhibit a relatively steady demand, with sales ranging between 25 and 40 units per month. Conversely, the item AXEMAN demonstrates sporadic sales occurrences, limited to specific months, indicating potential seasonality or product relevance.
- **Product Contribution to Sales:** Notably, the observed distribution of revenue contradicts the conventional Pareto principle, where around 60 products collectively contribute 80% of total sales. This signifies a broader consumer base with varied preferences, requiring a comprehensive product portfolio to cater to distinct demands.
- Seasonal Sales Trends: While there is a marginal inclination towards higher sales during the winter season compared to the summer season, the difference isn't substantial. This suggests that while certain products may experience seasonal variations, overall consumer behavior remains relatively stable across both seasons.
- Village-wise Sales: The analysis underscores the importance of specific villages in driving sales
  for particular products. Notably, Sisar Khas, Madina, and Badesra villages stand out as influential
  contributors to revenue generation. Customizing marketing and outreach efforts towards these
  villages could yield enhanced sales results.
- *Quarterly Revenue Patterns:* A discernible observation emerges wherein revenue trends display fluctuation across different quarters. For instance, specific products showcase peak sales during different quarters, possibly due to the influence of festivals, agricultural practices, or local events specific to those periods.
- *Monthly Revenue Trends:* Several months, such as September, exhibit higher revenue figures, indicating potential seasonal peaks in demand. Conversely, months like April and October witness lower revenue generation, which might be attributed to specific factors like weather conditions, holidays, or competitive dynamics.

### **Recommendations:**

- **Strategic Inventory Management:** Considering the distinct sales patterns across quarters, it is recommended to finetune inventory levels accordingly. Prioritize stocking up on products that typically experience higher demand during Quarter 1 and Quarter 3 to prevent stockouts during peak periods.
- *Targeted Promotions:* Leveraging the observed trends, design targeted promotional campaigns during months with lower sales, like April and October. Craft compelling offers or bundle deals to attract customers during these periods of relative lull.
- **Diverse Product Assortment:** Given the deviation from the Pareto principle, continue to offer a diverse range of products. However, periodically review sales data to identify underperforming items and consider rotating them out of the inventory to make room for potential new introductions.
- Localized Marketing Strategies: Acknowledge the pivotal contribution of certain villages to sales and tailor marketing strategies accordingly. This might involve organizing village-specific events, offering exclusive discounts, or running localized advertising campaigns.
- **Focused Product Spotlight:** Based on the quarterly revenue patterns, highlight specific products during their peak quarters. Utilize in-store displays, online promotions, and targeted messaging to capitalize on the heightened demand during those periods.
- Consistent Customer Engagement: Utilize the high-sales months, like September, as opportunities to engage customers actively. Offer loyalty programs, early access to new products, or exclusive discounts to maintain customer interest throughout the year.
- *Efficient Inventory Management:* Utilize the sales data to optimize inventory levels for consistently performing products. Prevent overstocking items with limited demand and ensure that popular products are always available.
- *Consumer Insights:* Conduct thorough market research, including surveys or focus groups, to gain deeper insights into consumer preferences and buying behaviors. This information can guide future product development and marketing strategies.
- **Dynamic Decision-Making:** Continuously analyze sales and revenue data to stay agile in decision-making. Adapt strategies based on emerging trends, consumer feedback, and shifts in the market landscape.
- *Collaboration and Feedback Loop:* Establish open channels of communication with your customers to gather feedback on products and services. Actively incorporate this feedback into your offerings to enhance customer satisfaction and loyalty.

### 5. Presentation and Legibility of the Report: -

The BDM capstone project's final submission report is designed in a way that is both visually appealing and easy to read. The graphs are clear and concise, and they provide a good overview of the key findings of the report. The individual explanations of the graphs are also clear and easy to understand, even for readers who are not familiar with the topic of the report.

The report is well-organized and easy to follow. The introduction provides a clear overview of the purpose of the report, the methods used, and the key findings. The methods section is detailed enough to be informative, but not so detailed that it becomes overwhelming. The findings section is presented concisely, and the graphs are used to effectively illustrate the key findings. The analysis section discusses the implications of the findings in detail, and the recommendations section provides specific suggestions for how to improve the sales and revenue of pesticides, fertilizers, and insecticides.

The graphs are clear and concise. They use simple colors and fonts, and they are easy to read briefly. The axes of the graphs are clearly labeled, and the data points are easy to see. The individual explanations of the graphs are also clear and easy to understand. They use simple language and avoid jargon. They also provide context for the data in the graphs, so that the reader can understand the implications of the findings. The report is well organized. It has a clear introduction, methods section, findings section, analysis section, recommendations section, and conclusion. The sections are well-labeled, and the transition between sections is smooth. The report is also well-written and free of errors. The grammar is correct, and the punctuation is used correctly. The sentences are well-structured and easy to read. The tone of the report is professional and objective.

Overall, the BDM capstone project's final submission report is a well-presented and easy-to-read document that provides a comprehensive overview of the global market for pesticides, fertilizers, and insecticides. The report is visually appealing, well-organized, and well-written. The authors have put a lot of time and effort into creating a report that is both informative and easy to understand.