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Influence of Contingency Recovery Plans on Survival of Horticultural Firms in Naivasha, Kenya

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Abstract

Contingency recovery plan is to contain and minimizes the loss that may be realized by the organization in the future. Horticulture farming activities in Naivasha has been decreasing with many firms closing down their operations and others relocating to other countries such as Ethiopia. For instance, Karuturi flower farm became unsustainable in 2016 and shut down its operations. This is an indicator of an underlying concern, thus, the study sought to assess the influence of contingency recovery plans on survival of horticultural firms in Naivasha. The study was anchored on knowledge-based theory. The study adopted a mixed research methodology. The researcher utilized a descriptive research design. The unit of observation was 195 respondents who included managers, supervisors and the staff. The study used primary and secondary data. Questionnaires were administered to supervisors and staff, while interview guides to the managers. Qualitative data was analyzed thematically while quantitative data using descriptive and inferential statistics. The study results showed that contingency recovery plans and firm survival is positively and significantly related (β=.452 p=0.000). The study concluded that recovery plans and firm survival is positively and significantly related. The study recommended that there is the need to have a disaster recovery team that are always ready for the recovery plans in the organization. Moreover, there is the need to have precautions developed in the organization to minimize the effects of a disaster. A written recovery plan that describes how the organization will respond when disaster or hardship strikes need to be drafted. It is recommended that there should be a time frame developed for the recovery plans in the organization. The communication system for the recovery plans in the organization needs to be effective to ensure smooth sharing of the information.

Keywords: *Contingency Recovery Plans, survival, horticultural firms, Naivasha, Kenya*

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1.0 Background to the Study

Contingency recovery plans refer to a set of steps, either written down or communicated to all that describes how the organization will respond when disaster or hardship strikes the organization (Tseng & Lee, 2014). The primary objective of the contingency recovery plans is to contain and minimizes the loss that may be realized by the organization in the future (Ezenyilimba, Maduagwu & Eze, 2018). Besides, according to Sharma, Bhat and Routroy, (2014), the importance of the contingency recovery plans is to enable the organization to continue with its operations as close to the previous actions where possible. The primary objective of the contingency recovery plans is to contain and minimizes the loss that may be realized by the organization in the future (Ezenyilimba, Maduagwu & Eze, 2018). The survival of the agriculture firms is mostly determined by the revenue generated and the cost used to generate that revenue (Shinogi, Krishnankutty, Krishnanw, Srivastava, Gills & Balakrishnan, 2017). The aspect of employing a variety of strategies within the agricultural firms is to outsmart the competitors and continue with operations and further expand the market share (Tseng & Lee, 2014).

The survival of agricultural firms can be influenced by the development of an effective recovery plan to be used in case an emergency occurs (Jorrigala, 2017). Sustainability of the agricultural sector in the Asian countries is significant as it has contributed to more than 30% of the total employment in many states, though the industry is faced with hurdles (AlSagheer & Ahli, 2016). The elongated survival of the farmers can be achieved when the institutions establish mechanisms to deal with the uncertainties that might happen in the future (Mkonda & He, 2016). According to Matsane and Oyekale (2014), agricultural firms are supposed to mitigate the difficulties that may reduce the survival in the industry for long. Tefera, Bijman and Slingerland, (2017) revealed that the survival of agricultural firms is essential and becomes a source of employment for many people in developing countries. The survival of the firms, according to Tefera, Bijman and Slingerland (2017), Matsane and Oyekale (2014), Pujara (2016), Mkonda and He (2016), Korir (2013), Maundu and Karugu (2016) can be determined by contingency recovery plans.

The components of contingency recovery plans entail the establishment of a disaster recovery team and the development of precautions to minimize the effects of a disaster (Githinji, 2016). The development of time frames and the establishment of a communication system is a significant factor in the contingency recovery plans in an organization in preparation for any unforeseen risk (Hassan, 2016). The importance of the contingency recovery plans is to enable the organization to continue with its operations as close to the previous actions where possible (Muteti, 2014). The survival of horticulture farming has been declining and farmers are shifting to other forms of agriculture (Kalui, 2016). For instance, Karuturi Flower Farm became unsustainable in 2016 and resulted in financial challenges that led to most of its assets been auctioned by CfC Stanbic in 2018 to cater for Sh1.8 billion debt (Anode, Onguso & Magoma, 2018). Besides, Oserian Ltd has been faced with a lot of challenges since 2017 has laid off more than 400 employees, pointing out reduced European market need and high cost of production. The closure of Kabazi Canners factory left farmers in the region without the market for their farm products. Based on this background, the conducting of the study was deemed to be worthy.

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1.1 Statement of the problem

There has been declining performance of some of the horticulture firms in Naivasha (Michura, 2019), for instance, the gross profits of Karuturi Flower Farm reduced from a Ksh 38.15 million in October 2010 to ksh. 22.7 million at the beginning of 2014 and made 1.30 million in 2018. Besides, Oserian Ltd made a loss of Ksh.137 million in 2017 and further, the loss increased to 192 in 2018, which led to the firing of more than 400 employees to reduce the cost of production (Chemirmir, Musebe & Nassiuma, 2018). Moreover, the Kabazi Canners factory made a loss of Ksh 74 million that lead to its termination of the activities in Naivasha (Michura, 2019). Empirical studies by Brenda et al., 2015, Mwangi, 2016 and Kalui, 2009 recommends for studies that focus on firms' strategies on anticipating and mitigating unforeseen events that might influence the firm's survival. Korir (2013) established that the risks that affected the farmers in Uasin Gishu included drought, market prices and the institutions risk. These studies present a conceptual gap because they focused on the risk management and organizational strategies while the current study focused on contingency recovery plans. It was evidenced that a knowledge gap existed that needed to be ascertained by examining the role of contingency recovery plans on survival of horticultural firms in Naivasha, Kenya.

1.2 Research Objective

The research objective of the study was to examine the influence of contingency recovery plans on survival of horticultural firms in Naivasha, Kenya

2.0 Literature Review

2.1 Empirical Review

Basweti (2018) examined the effects of risk management on the financial output of tea factories in Kisii County. The research population consisted of all 7 KTDA factories in Kisii County. The data was collected through the administering of the questionnaires to the respondents. The results of the exploration noted that the financial performance of tea processing firms is determined by the production risk mitigation, predicament recovery process and economic risk mitigation. The study concluded that risk management is one of the core factors in an organization that needs to be taken earnestly to avoid the liquidation of the institutions. Kalui (2016) examined the consequence of financial risk management strategies on the output of horticulture firms in Kenya. The research used a descriptive research design. The data was collected through the administering of the questionnaires to the unit of observation (managers, supervisors and support staff). The results of the study showed that horticulture firms employ ranges of financial risk management strategies that include insurance, hedging and diversification and the use of commodity-linked bonds to enhance a firm's performance since there is no single strategy which can be utilized to manage all horticulture risks. The study also showed that horticulture firms that adopt and implement financial risk management strategies improve their performance in terms of increased sales, earnings and market share.

Ezenyilimba, Maduagwu and Eze (2018) conducted a study on contingency recovery plans on disaster management and the sustainability of the institutions in Nigeria. The researcher targeted those institutions that were involved in farming activities or dealt with the farm outputs. A purposive sampling technique was used to gather information for the analysis. The findings of the

research established that risk recovery plans management and adequacy of standard equipment were necessary for disaster management and the sustainability of the institutions. The study recommended that there should be an effective risk recovery plans and adequacy of standard equipment required for disaster management. Matsane and Oyekale (2014) examined the factors affecting the marketing and sustainability of vegetable farming among small-scale farmers in South Africa. The data was collected by way of questionnaire and analyzed using correlation and regression analysis. The outcome of the investigation revealed those farmers with a positive attitude towards savings and solution to risks were more sustainable in vegetable farming than those with a negative attitude toward savings and had no plan for an alternative in case a disaster occurs. The study concluded that attitude toward savings was a significant factor that influenced sustainability.

Sugiharto, Sulistiowati and Nofiyanti (2018) examined the effect of contingency assessment on sustainability. The data was collected through primary data collection instruments (questionnaires). The findings revealed that contingency assessment was the most significant factor that determined the extent of sustainability. The examination further showed for tremendous sustainability and performance; organizations need to take much consideration for contingency assessment, liquidity level, size of the organization and number of employees. Moreover, exploration showed that contingency assessment allows the organization to budget itself on the resources needed to be put aside in case of an emergency. Maundu and Karugu (2016) looked at the factors affecting coffee production among small scale farmers in Kiambu County. The population of the study comprised of 30,379 small scale coffee farmers. The findings of the examination noted that the acreage under coffee and the general production of coffee continue to decline with some smallholders abandoning production of the crop as a result of making of losses due to inadequate risk assessment and lack of proper recovery plan. Most of the farmers had inadequate avenues for recovery after a calamity that results in many farmers relinquishing the venture and looking for some other avenues for survival.

2.2 Theoretical literature review

The study was based on knowledge-based theory. The theory was first proposed by Penrose (1959) and later Wernerfelt (1984) and Barney (1991) expounded on it. The theory establishes that the understanding of the employees is very significant and should be used by the organization while making a decision affecting the company daily and also in the future (Malmberg & Maskell, 2002). The theory also reports that based on the past experiences of the employees; they can suggest the best recovery plans that may be used when an emergency occurs. Further, the theory argues that resources that are based on knowledge are not easy to imitate and are socially complicated, based on heterogeneous knowledge and capabilities among companies (Nickerson & Zenger, 2004). Knowledge-based view indicates that companies can differentiate themselves through their strategies of managing knowledge. Each knowledge asset is complicated and not easy to imitate, and therefore, companies attain competitive advantage through systems of managing knowledge.

The theory has some weaknesses. For instance, Fromlet (2001) argued that the theory did not establish mechanisms to deal with the information asymmetry in which some of the information is only available within the organization and the management is not willing to expose it to the rest of the employees because of its sensitivity. Furthermore, Pompian and Longo (2004) revealed another weakness of the theory is that it was only involved with how to improve knowledge

management but did not elaborate on the remedies associated with those who trickled out the material facts to the opponents in the business. The theory is significant to the current research and it shows that the knowledge that available within the employees can be used to make policies and strategies that will help the company to survive in case of an emergency. The understanding of the employees is very significant and should be used by the organization while making a decision affecting the company daily and also in the future. Thus, theory was considered relevant to inform contingency recovery plans in the current study.

2.3 Conceptual Framework

Figure 1 summarizes the relationship between contingency recovery plans and firm survival

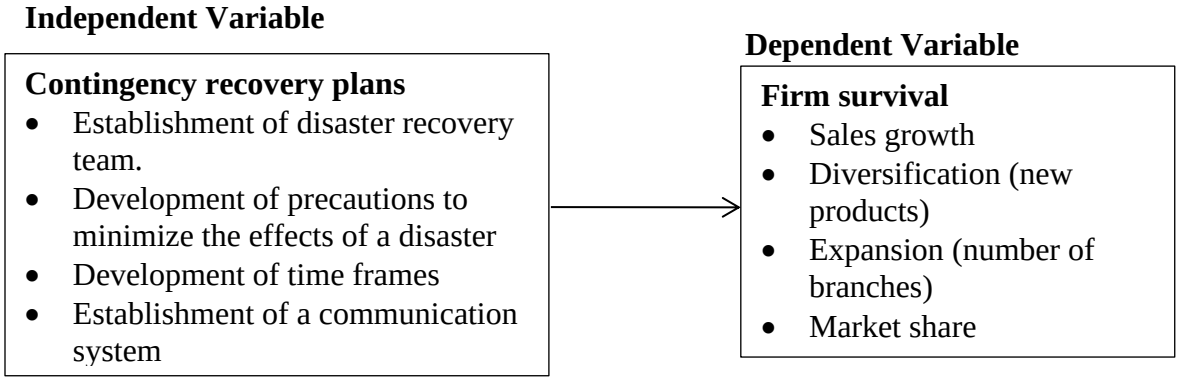

Figure 1: Conceptual Framework

3.0 Research Methodology

The study adopted a mixed research methodology that included carrying out the survey using qualitative and quantitative methods of data collection and analysis. With a mixed triangulation method, extensive and comprehensive data was obtained that was more effective for making the deductions. The descriptive research design was applied in the study. The target population was 14 large horticultural firms based in Naivasha. The target population was 195 and the unit of observation included managers, supervisors and the staff. Census was conducted and all managers, supervisors and staff were included in the study. Thus, the sample size was 195. A stratified simple random sampling technique was used.

4.0 Research Findings and Discussion

4.1 Response Rate

The response rate of the supervisors was 93.10% and that of staff 99.17%. Moreover, 12 managers out of 14 were interviewed. This represented a response rate of 85.71%. According to Mugenda and Mugenda (2003) and Kothari (2004), a response rate of above 50% is adequate for a descriptive study. Babbie (2004) also asserted that return rates of above 50% are acceptable to analyze and publish, 60% is good and 70% is very good and 80% is excellent. Based on these assertions from renowned scholars, the response rate from all the unit of observation in the study was above 80% hence very good for the study for the analysis and making of the inferences.

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4.2 Descriptive Statistics

This section presented the descriptive statistics of contingency recovery plans. The study did the coding of 12 managers of the firms who were interviewed as follows; manager from Finlay Ltd was manager1, Wildfire Ltd manager2, Longonot Horticulture Ltd manager 3, Oserian Ltd manager 4, Nini Limited manager 5, Agriflora Kenya Limited manager 6, Delamare Estate manager 7, Aquilla Development Co. Ltd manager 8, Delmare Pivot manager 9, Gorge Ltd manager 10, Tulaga M manager and Sulmac manager 12. The descriptive statistics of contingency recovery plans is presented in Table 1

Table 1: Descriptive statistics of contingency recovery plans

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	SD
There is a disaster recovery team who are always ready for the recovery plans in the organization	2.80%	12.50%	9.70%	34.10%	40.90%	3.98	1.13
There are precautions developed in the organization to minimize the effects of a disaster	5.70%	9.10%	5.10%	36.40%	43.80%	4.03	1.17
There are written plans that describes how the organization will respond when disaster or hardship strikes	2.80%	11.40%	14.80%	33.50%	37.50%	3.91	1.11
There is time frame developed for the recovery plans in the organization	4.50%	15.30%	13.10%	31.30%	35.80%	3.78	1.21
There is an effective establishment of a communication system for the recovery plans in the organization	1.70%	6.80%	5.70%	38.10%	47.70%	4.23	0.96
Average						**3.99**	**1.12**

Based on the results presented in Table 1, 75% of the respondents disagreed there is a disaster recovery team who are always ready for the recovery plans in the organization, while 15.30% agreed with the statement and 9.70% remained neutral. The mean score of the survey question was 3.98 with a standard deviation of 1.13 and this implied that majority of the respondents disagreed there is a disaster recovery team who are always ready for the recovery plans in the organization. It was found that 80.20% of the respondents disagreed there are precautions developed in the organization to minimize the effects of a disaster and 14.80% agreed with the statement, while

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5.10% remained neutral. The mean score of the survey question was 4.03, with a standard deviation of 1.17. The study found that 71% of the respondents disagreed there are written plans that describes how the organization will respond when disaster or hardship strikes and 14.20% agreed with the statement while 14.80% remained neutral. The mean score of the survey question was 3.91, with a standard deviation of 1.11.

It was found that 67.10% of the respondents disagreed there is time frame developed for the recovery plans in the organization, while 19.80% agreed with the survey question and 13.10% remained neutral. The mean score of the survey question was 3.78, with a standard deviation of 1.21. The study found that 85.80% of the respondents disagreed there is an effective establishment of a communication system for the recovery plans in the organization and 8.50% agreed with the statement. The mean score of the survey question was 4.23, with a standard deviation of 0.96. Finally, the average mean score of the survey questions of contingency recovery plans was 3.99, with a standard deviation of 1.12. This signified that the majority of the respondents (supervisors and staff) disagreed with the developed survey questions.

From the interview session, the research sought to determine how the firms have planned to respond in the future when a disaster or hardship strikes the organization and Manager 1 said, *through cutting off miscellaneous expenditure and allocating it to contingency*. Manager 1 [Key Informant, 2021]. Manager 2 noted, "*By setting aside a certain percentage of annual income for emergency/ disaster management when it strikes"* Manager 2 [Key Informant, 2021]. Manager 3 stated, "*Making more agreements with financial institutions for financial advances if a disaster strikes"* Manager 3 [Key Informant, 2021]. Manager 4 reported, "*By allocating enough funds to cover such disasters"* Manager 4 [Key Informant, 2021]. Manager 5 revealed, "*By setting aside a given amount money to help respond to the hardships/ disasters when it occurs" Manager* 5 [Key Informant, 2021]. Manager 8 said, "*By seeking more partnership and agreements with financial and lending institutions*" Manager 8 [Key Informant, 2021]. Manager 12 reported, "*By allocating more money to respond to such occurrences and doing more research to help predict the future."* Manager 12 [Key Informant, 2021].

Moreover, the study sought to determine the recovery plans the firms have established to enables them to continue with operations in times of a disaster or crisis and Manager 1 stated, "*through retaining few and very crucial employee to cut cost and reducing overheads" Manager 1 [Key Informant, 2021*]. Manager 2 reported, "*By seeking an advance loan from the lending institution*" Manager 2 [Key Informant, 2021]. Manager 3 said, "*Through borrowing loans and minimizing expenses*" Manager 3 [Key Informant, 2021]. Manger 5 reported, *"Through borrowing emergency loans from the financial institution*" Manager 5 [Key Informant, 2021]. Manager 7 said, "Through a*llocating more funds for contingency*" Manager 6 [Key Informant, 2021]. Manager 11 reported, "By *borrowing loans, reducing the number of staff and revising the credit facilities to some clients* Manager 11 [Key Informant, 2021].

The dependent variable in the study was survival and the descriptive statistics is presented in Table 2

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Table 2: Descriptive Statistics of Survival

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	SD
The annual average sales of the firm has been increasing over years	5.10%	14.80%	8.00%	36.40%	35.80%	3.83	1.21
The organization has opened variety of branches in the last five years	4.50%	13.60%	6.80%	23.30%	51.70%	4.04	1.24
The organization has introduced new products in the market to increase the revenue	4.00%	8.50%	7.40%	43.20%	36.90%	4.01	1.07
The profitability level of the firm has been above the average in the last five years	5.10%	10.20%	5.70%	47.20%	31.80%	3.90	1.11
The market share of the organization has been higher than those of other firms in the region	1.70%	9.10%	5.10%	50.60%	33.50%	4.05	0.95
Average						**3.97**	**1.12**

The study reported that 72.20% of the supervisors and staff disagreed the annual average sales of the firm have been increasing over the years, while 19.90% agreed with the survey question and 8.00% remained neutral. The mean score of the survey question was 3.83, with a standard deviation of 1.21. The indicated that the majority of the respondents (supervisors and staff) disagreed the annual average sales of the firm have been increasing over the years. It was found that 75% of the respondents disagreed the organization has opened various branches in the last five years, while 18.10 agreed with the survey question and 6.80% remained neutral. Moreover, the study found that 80.10% of the respondents disagreed the organization has introduced new products to increase the revenue and 12.50% agreed with the statement, while 7.40% remained undecided. The mean score of the survey question was 4.01, with a standard deviation of 1.07. This implied that the majority of the supervisors and staff disagreed the organization has introduced new products in the market to increase the revenue.

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Further, the study found that 79% of the supervisors and staff disagreed profitability level of the firm has been above the average in the last five years, while 15.30% agreed with the statement and 5.70% remained neutral. The mean score of the survey statement was 3.90, with a standard deviation of 1.11. This signified that the majority of the respondents disagreed profitability level of the firm has been above the average in the last five years. It was found that 84.10% of the respondents disagreed the market share of the organization has been higher than those of other firms in the region, while 10.80% agreed with the statement. The mean score of the survey question was 4.05, with a standard deviation of 0.95. The average mean score of the survey questions was 3.97 with a standard deviation of 1.12. This implied majority of the supervisors disagreed with the developed survey questions.

Moreover, the research interviewed managers of the different firms and manager 1 said, "*The annual average sales of the firm in the last three years has been average and sometimes increasing and other times decreasing"* Manager 1 [Key Informant, 2021]. Moreover, Manager 1 noted, "*the firm has opened one branch in the last five years and no new products have been introduced in the same period*" Manager 1 [Key Informant, 2021]. Manager 2 reported, "*The annual average sales has been declining and neither no other branches has been opened nor new products" Manager* 2 [Key Informant, 2021]. Manager 3 said, "*The average sales has been flattening and no other branches have been opened or new products introduced in the last five years"* Manager 3 [Key Informant, 2021]. Moreover, manager 4 said, "*The annual average sales have been decreasing with no new branched or products introduced in the last five years"* Manager 4 [Key Informant, 2021]. Manager 5 said, "*The annual sales has been average with no new products or branches opened in the last five years"* Manager 5 [Key Informant, 2021].

Furthermore, Manager 6 reported, "*The annual sales has been decreasing with no new branches opened or new products introduced in the last five years"* Manager 6 [Key Informant, 2021]. Likewise, Manager 7 said, "*The sales has been declining but they have opened one branch in the last five years however, no new products introduced in the same period*" Manager 7 [Key Informant, 2021]. Manager 9 revealed, "*The annual average sales has been declining with no branches opened or new products introduced in the last five years"* Manager 9 [Key Informant, 2021]. Manager 10 said, "*The sales has been average and no new products or branches has been opened in the last five years"* Manager 10 [Key Informant, 2021]. Likewise, manager 11 argued, "*The sales has been decreasing and no new products or branches in the last five years"* Manager 11 [Key Informant, 2021]. Finally, manager 12 said, "*The annual sales has been average and no branches opened or new products introduced in the last five years*" Manager 12 [Key Informant, 2021].

Moreover, from the secondary data collected from the firms, it was noted that the average sales growth has been very low, with none of the firms recording the sales growth of above 1.2% since 2016. The average sales growth of Wildfire ltd between 2016 and 2019 was 1.027198%, Longonot Horticulture Ltd 1.062457%, Oserian Ltd 0.990931%, Nini Limited 1.005917%, Agriflora Kenya Limited 1.129268%, Aquilla Development Co. Ltd 0.974187%, Delamare Estate 1.016614%, Delmare Pivot 1.161459%, Gorge Ltd 1.013059%, Finlay Ltd 0.969797%, Carza Culture Ltd 1.067985%, Tulaga flower 0.993692%, May flower (k) Ltd 0.950375% and Sulmac Co. Ltd 0.976786% as presented in appendix VII. Moreover, only Delemare Estate and Finlay Ltd have

introduced a new product and open a new branch, respectively. Thus, it can be noted that almost all of the horticultural firms are performing dismally.

4.3 Inferential Statistics

The inferential statistics entails the correlation analysis and regression analysis.

4.3.1 Correlation Analysis

The correlation results are shown in Table 3

Table 3: Correlation Results

		Firm survival	Contingency recovery plans
Firm survival	Pearson Correlation	1.000	
	Sig. (2-tailed)		
Contingency recovery plans	Pearson Correlation	.714**	1.000
	Sig. (2-tailed)	0.000	

The correlation results depicted in Table 3 establish a positive and significant association between contingency recovery plans and firm survival (r=.714, p=.000). The results are in agreement with the findings of Basweti (2018) who indicated that financial performance of tea processing firms is determined by the production risk mitigation, predicament recovery process and economic risk mitigation. Kalui (2016) indicated that horticulture firms employ ranges of financial risk management strategies that include insurance, hedging and diversification and the use of commodity-linked bonds to enhance a firm's performance since there is no single strategy which can be utilized to manage all horticulture risks. The study also showed that horticulture firms that adopt and implement financial risk management. Ezenyilimba, Maduagwu and Eze (2018) established that risk recovery plans management and adequacy of standard equipment were necessary for disaster management and the sustainability of the institutions. Further, Matsane and Oyekale (2014) revealed those farmers with a positive attitude towards savings and solution to risks were more sustainable in vegetable farming than those with a negative attitude toward savings and had no plan for an alternative in case a disaster occurs. Sugiharto, Sulistiowati and Nofiyanti (2018) noted that contingency assessment is a significant factor that determine the extent of sustainability.

4.3.2 Diagnostics Tests

The section entails linearity test, normality test and heteroscedasticity test.

4.3.2.1 Linearity Test

Linearity assumes a straight-line relationship between the predictor variables and the dependent variable. Linearity test was assessed by examination of a scatter plot as shown in Figure 2

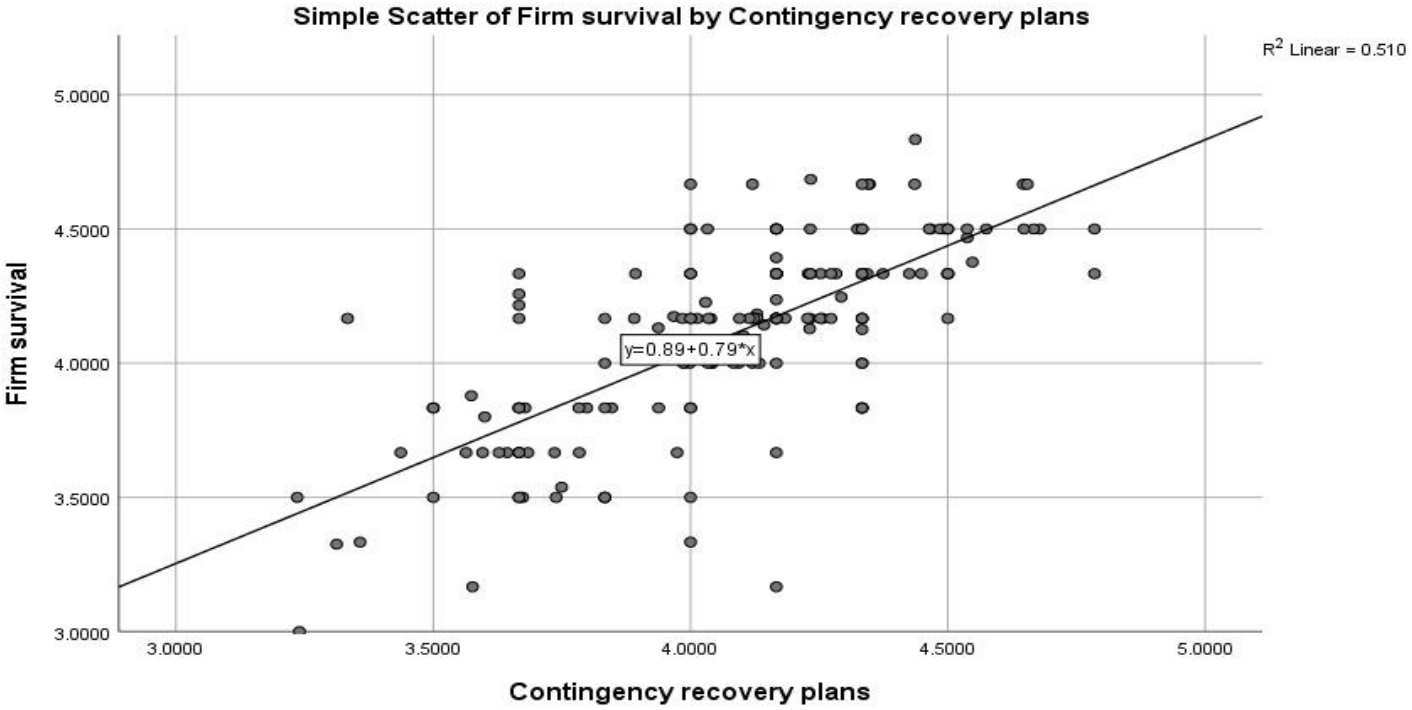

Figure 2: ***Scatter Plot of Contingency Recovery Plans against Firm Survival***

Figure 2 shows that contingency recovery plans depicted a straight-line relationship with the dependent variable survival. In addition, the R-squared showed the percentage of the dependent variable variation that a linear model explains.

4.3.2.2 Normality Test

The normality of the variablewas tested using the Kolmogorov–Smirnov test. The Kolmogorov–Smirnov test is used when the sample size is greater than 50 while Shapiro–Wilk test is used when the sample size is less than 50 or equal to 50. If the p-value is less than 0.05, the null of normality at the 5% level is rejected. The normality test is presented in Table 4

Table 4: Test for Normality

	Kolmogorov–Smirnov test.		
Variable	**Statistic**	**df**	**Sig.**
Contingency recovery plans	.097	176	0.252

The results from Table 4 show that the data was normally distributed as the respective p value for contingency recovery plans was greater than 0.05. Therefore, we can conclude that the data is normally distributed.

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4.3.2.3 Heteroscedasticity Test

A heteroscedasticity test was run using Breusch-Pagan / Cook-Weisberg test to test whether the error terms are correlated across observations in the cross-sectional of the data. If the p-value is less than 0.05, the null hypothesis is rejected. Results are presented in Table 5

Table 5: Heteroscedasticity Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity Ho: Constant variance Variable: fitted values of Survival		
chi2(1)	=	4.59
Prob > chi2	=	0.322

Results in Table 5 show that the p-value is greater than 0.05. Then the null hypothesis was not rejected at a critical p value of 0.05 since the reported value was 0.322>0.05 and thus, the data did not suffer from heteroscedasticity.

4.3.3 Regression Analysis

The regressions of coefficient results are presented in Table 6

Table 6: Regressions of Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.44	0.246		-1.788	0.076
	Contingency recovery plans	0.452	0.061	0.409	7.462	0.000

a Dependent Variable: Firm survival

The results from Table 6 indicates that contingency recovery plans and firm survival is positively and significantly related (β=.452 p=0.000). This was supported by a calculated t-statistic of 7.462 that is larger than the critical t-statistic of 1.96. This signified a unitary improvement in contingency recovery plans leads to an increase in survival of the horticultural firm by 0. 452 units when other factors are held constant. The results concur with Ezenyilimba, Maduagwu and Eze (2018) who established that risk recovery plans management and adequacy of standard equipment are necessary for disaster management and the sustainability of the institutions. Sugiharto, Sulistiowati and Nofiyanti (2018) reported that contingency assessment is significant in determining the extent of sustainability. In addition, Maundu and Karugu (2016) indicated that the survival of the firms is positively influenced by adequate allocation of the resource to mitigate the risks when they occur. Basweti (2018) indicated that financial performance of tea processing firms is determined by the production risk mitigation, predicament recovery process and economic risk mitigation. Kalui (2016) indicated that horticulture firms employ ranges of financial risk management strategies that include insurance, hedging and diversification and the use of commodity-linked bonds to enhance a firm's performance since there is no single strategy which can be utilized to manage all horticulture risks. The study also showed that horticulture firms that

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adopt and implement financial risk management. Further, Matsane and Oyekale (2014) revealed those farmers with a positive attitude towards savings and solution to risks were more sustainable in vegetable farming than those with a negative attitude toward savings and had no plan for an alternative in case a disaster occurs..

5.0 Conclusions

The study concluded that recovery plans and firm survival is positively and significantly related. It was found that a unitary improvement in contingency recovery plans increases the horticultural firm's survival by 0. 452 units when other factors are held constant. The study also concluded that contingency recovery plans include steps, either written down or communicated to all that describe how the organization will respond when disaster or hardship strikes the organization. It was further concluded that contingency recovery plans include having a disaster recovery team, the development of precautions to minimize the effects of a disaster and developing a time frame for the recovery plans in the organization. The contingency recovery plans also include establishing a communication system for the recovery plans in the organization.

6.0 Recommendations

The study recommended that there is the need to have a disaster recovery team that are always ready for the recovery plans in the organization. Moreover, there is the need to have precautions developed in the organization to minimize the effects of a disaster. A written recovery plan that describes how the organization will respond when disaster or hardship strikes need to be drafted. It was recommended there should be a time frame developed for the recovery plans in the organization. The communication system for the recovery plans in the organization needs to be effective to ensure smooth sharing of the information.

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