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A STUDY ON FINANCIAL PERFORMANCE OF SELECTED WILDLIFE CONSERVATION ORGANIZATIONS IN INDIA AND ABROAD

Dr. S. Pradeep Kumar^a, Dr. M. Praveen^{*b}, Dr. R. Ranjitha^c, K. A. Rajeshwar^d

^aPrincipal (IC) Kaypeeyes College of Arts and Science Kotagiri, The Nilgiris.

^bAssistant Professor, Department of Commerce Kaypeeyes College of Arts and Science
Kotagiri, The Nilgiris.

^cHead Department of Commerce Kaypeeyes College of Arts and Science Kotagiri, The
Nilgiris.

^dAssistant Professor, Department of Commerce Kaypeeyes College of Arts and Science
Kotagiri.

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***Corresponding Author: Dr. M. Praveen**

Assistant Professor, Department of Commerce Kaypeeyes College of Arts and Science
Kotagiri, The Nilgiris.

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ABSTRACT

Wildlife conservation organizations play a significant role in protecting biodiversity and promoting environmental sustainability. Among the leading organizations working in this field are the World Wide Fund for Nature – India (WWF), African Wildlife Foundation (AWF), and Panthera Corporation (PAN). These organizations contribute significantly to wildlife protection, habitat conservation, and environmental awareness across different regions of the world. The financial strength of such organizations is essential to ensure the continuity of their conservation programs and initiatives. The present study examines the financial performance of selected environmental and wildlife conservation organizations by analysing their liquidity, profitability, solvency, and operational efficiency. The study evaluates key financial indicators such as Current Ratio, Return on Total Assets (ROA), Return on Capital Employed (ROCE), Operating Profit Ratio (OPR), Debt Equity Ratio (DER), Return on Net Assets (RONA), and Working Capital Turnover Ratio (WCT). Secondary data were collected from the profit and loss accounts and balance sheets of WWF, AWF, and PAN for the period 2020–2024. The study employs ratio analysis, trend analysis, and comparative statistical tools such as ANOVA, F-test, and correlation analysis to examine the financial performance and relationships between the selected ratios. The findings highlight variations in financial efficiency among the organizations and provide insights into their financial stability and operational performance in the wildlife conservation sector.

KEYWORDS: Wildlife Organizations, Ratio Analysis, Financial Performance, Trend Analysis, Correlation Analysis.

1. INTRODUCTION

Wildlife conservation organizations play a crucial role in protecting endangered species, preserving natural ecosystems, and promoting sustainable environmental practices. These organizations operate globally and undertake various initiatives such as habitat restoration, wildlife research, anti-poaching programs, and community awareness campaigns. Effective management of financial resources is essential for these organizations to successfully implement conservation projects and maintain long-term sustainability.

The World Wide Fund for Nature – India (WWF), African Wildlife Foundation (AWF), and Panthera Corporation (PAN) are prominent organizations dedicated to wildlife conservation and environmental protection. These institutions work in different geographical regions and focus on safeguarding wildlife species and ecosystems through research, policy advocacy, and conservation programs. Their financial performance plays an important role in ensuring that conservation programs are effectively funded and implemented.

Financial analysis helps to evaluate the operational efficiency and financial stability of organizations. By analysing financial ratios such as liquidity, profitability, and solvency, it is possible to understand how effectively these organizations manage their financial resources. Therefore, examining the financial performance of wildlife conservation organizations provides valuable insights into their sustainability and ability to support conservation activities over time.

2. REVIEW OF LITERATURE

Financial performance analysis is the process of selection, relation, and evaluation of organizational performance, as defined by Meigs W. B. (1978). Researchers analyze how different variables reflecting the operating characteristics of companies and the strategic decisions of managers influence multiple measures of financial performance. To evaluate the financial performance of organizations, various analytical tools such as ratio analysis, Du Pont analysis, and Z-Score analysis are commonly applied. Ratio analysis plays an important role in identifying the financial strengths and weaknesses of a firm compared with other firms in the same industry, and it also helps to determine whether the financial position of a company has improved or deteriorated over time (Hannan, 1998). Financial ratios are generally classified into profitability, liquidity, asset utilization, leverage, and activity ratios, which help in evaluating the operational performance of an organization (Jahur Mohammad Saleh & Uddin Mohammad Mohi, 1995). The Du Pont analysis evaluates return on investment (ROI) and return on equity (ROE) by considering structural, operational, and efficiency factors (Vanniarajan & Samuel Joseph, 2007). Similarly, Z-Score analysis is widely used to predict the financial health and potential failure of business organizations (Nikolaos Gerantonis et al., 2009).

Several studies have examined the financial and operational functioning of wildlife conservation organizations. Zwieten, Lamers, and Duim (2019) analyzed the funding mechanisms of the World Wide Fund for Nature (WWF) and highlighted how large environmental organizations manage complex public and private financial networks. Their study explained that organizations like WWF no longer rely solely on government grants but

increasingly integrate global financial partnerships, private sector funding, and international development programs to support conservation activities. The research emphasized that WWF strategically positions itself within global financial and policy networks to secure sustainable funding for environmental protection.

Similarly, Sachedina and Hassanali (2010) examined the growth of the African Wildlife Foundation (AWF) and its expanding influence in wildlife conservation activities in Tanzania. Their study revealed that although the organization gained international recognition and increased financial support, the expansion created certain challenges in balancing conservation goals with local community participation. The authors observed that increased dependence on global funding sources sometimes shifted the focus away from grassroots-level involvement and local conservation workers.

Another study by Ashley and Hussein (2000) explored the livelihood impacts of wildlife-based conservation and development initiatives implemented by the African Wildlife Foundation in East Africa. Using the Sustainable Livelihoods (SL) approach, the researchers developed a framework to assess how conservation programs influence local people's economic activities, social participation, and long-term well-being. Their findings indicated that conservation projects can improve household income and community resilience when local people are actively involved in planning and implementation.

Further research by Wijk, Der Duim, Lamers, and colleagues (2015) examined the innovative conservation strategies adopted by the African Wildlife Foundation through Tourism Conservation Enterprises (TCEs). The study explained how AWF combined conservation activities with commercial tourism ventures such as eco-lodges and wildlife tourism camps. These initiatives not only helped in protecting wildlife habitats but also generated income for local communities and contributed to poverty reduction in rural areas. The authors emphasized that integrating market-based approaches with conservation programs can improve financial sustainability and conservation outcomes.

In another study, William and John (2000) analyzed Integrated Conservation and Development Projects (ICDPs) implemented in Africa to connect wildlife protection with socio-economic development. The authors observed that although ICDPs represented an important shift from strict conservation policies toward community-based conservation approaches, many projects struggled to achieve their intended objectives due to weak institutional structures, limited community participation, and unrealistic expectations regarding conservation and development outcomes.

Further analysis by T and Sachedina (2010) investigated how the African Wildlife Foundation expanded from a small community-focused organization into a large international conservation institution. Their research highlighted that as the organization increased its engagement with global donors and government agencies, its conservation strategies gradually shifted toward large-scale projects. This transition sometimes weakened the connection between conservation organizations and local communities, raising concerns about balancing global conservation ambitions with local socio-ecological realities.

Studies have also examined the conservation initiatives of Panthera Corporation, a global organization dedicated to protecting wild cat species. Quigley, Foster, Petracca, Payan, and Salom-Perez (2015) analyzed Panthera's global conservation strategy and highlighted its focus on science-based conservation programs aimed at protecting species such as lions,

tigers, jaguars, and snow leopards. The study emphasized the importance of habitat protection, anti-poaching initiatives, and wildlife research in ensuring the survival of large carnivore populations.

Similarly, Macdonald, Loveridge, and Rabinowitz (2010) examined the role of international partnerships in wildlife conservation and emphasized that organizations such as Panthera collaborate with governments, researchers, and conservation agencies to implement large-scale wildlife protection programs. Their research highlighted that international cooperation is essential for addressing conservation challenges that extend across national boundaries.

Another important study by Rabinowitz and Zeller (2010) introduced the concept of wildlife corridors and landscape-level conservation strategies, particularly through Panthera's Jaguar Corridor Initiative. The study demonstrated that maintaining habitat connectivity across large geographic areas helps preserve genetic diversity and ensures the long-term survival of endangered species.

Furthermore, Ripple, Estes, Beschta, Wilmsers, and colleagues (2014) examined the ecological importance of large carnivores and emphasized that conservation organizations such as Panthera play a vital role in maintaining ecosystem balance. By protecting apex predators, these organizations help regulate wildlife populations and sustain ecological stability.

Similarly, Sanderson, Redford, and Chetkiewicz (2002) studied global conservation planning for large mammals and highlighted the importance of coordinated international conservation programs similar to those implemented by Panthera for protecting endangered wildlife species.

Overall, the reviewed literature highlights the importance of financial sustainability, international collaboration, community participation, and innovative conservation strategies in the effective functioning of wildlife conservation organizations such as WWF, AWF, and Panthera. These studies also emphasize that strong financial management and strategic partnerships are essential for ensuring long-term conservation success and environmental sustainability.

3. Statement of the Problem

Wildlife conservation organizations depend heavily on financial resources to carry out their conservation programs and environmental initiatives. However, differences in financial management, funding patterns, and operational efficiency may affect the sustainability and performance of these organizations. Therefore, it is important to analyse and compare the financial performance of major wildlife conservation organizations to understand their financial strength and operational effectiveness.

4. Objectives of the Study

1. To examine the liquidity position of selected wildlife conservation organizations.
2. To analyse the profitability performance of WFN, AWF, and PAN.
3. To evaluate the solvency position using the debt-equity ratio.
4. To compare the operational efficiency using working capital turnover and operating profit ratios.
5. To analyse the relationship between financial ratios using correlation and statistical tools.

5. Significance of the Study

The study is significant as it provides insights into the financial performance and sustainability of wildlife conservation organizations. Financial analysis helps to understand how effectively these organizations utilize their financial resources to support conservation programs and environmental protection activities. The study also helps researchers, policymakers, and environmental organizations to understand the financial strengths and weaknesses of these institutions. Furthermore, the findings of the study may help conservation organizations improve their financial planning, resource allocation, and operational efficiency, which are essential for achieving long-term wildlife conservation goals.

6. Research Methodology

The study is based on secondary data collected from the profit and loss accounts and balance sheets of World Wide Fund for Nature – India (WFN), African Wildlife Foundation (AWF), and Panthera Corporation (PAN) for the period 2020–2024.

Various financial ratios such as Current Ratio, Return on Total Assets (ROA), Return on Capital Employed (ROCE), Operating Profit Ratio (OPR), Debt Equity Ratio (DER), Return on Net Assets (RONA), and Working Capital Turnover Ratio (WCT) were calculated to analyse the financial performance of the organizations. In addition, trend analysis was used to study changes in financial performance over time.

Statistical tools such as Analysis of Variance (ANOVA), F-test, and Correlation Analysis were applied to compare the financial performance among the selected organizations and to examine the relationship between different financial indicators.

Research Period

The present study covers a period of five years from 2020 to 2024. The financial data of the selected environmental and wildlife conservation organizations were collected and analysed for this period to evaluate their financial performance and trends over time.

Source of Data

The study is based entirely on secondary data. The required financial information was collected from the published financial statements such as Profit and Loss Accounts and Balance Sheets of the selected wildlife conservation organizations, namely World Wide Fund for Nature – India (WFN), African Wildlife Foundation (AWF), and Panthera Corporation (PAN). Additional information was obtained from annual reports, official websites, research articles, and other relevant publications related to wildlife conservation organizations.

Scope of the Study

The present study focuses on analyzing the financial performance of selected environmental and wildlife conservation organizations, namely WFN, AWF, and PAN. The study evaluates the financial position of these organizations by using important financial ratios such as Current Ratio, Return on Total Assets, Return on Capital Employed, Operating Profit Ratio, Debt Equity Ratio, Return on Net Assets Ratio, and Working Capital Turnover Ratio. The analysis also includes trend analysis and statistical tools such as ANOVA, F-test, and correlation analysis to compare the financial performance of the selected organizations. The

study helps to understand the financial stability and operational efficiency of these organizations during the selected period.

7. Limitations of the Study

1. The study is limited to three wildlife conservation organizations, namely WFN, AWF, and PAN.
2. The study is based only on secondary data, and the accuracy of the results depends on the reliability of the published financial statements.
3. The research period is limited to five years (2020–2024), which may not fully reflect long-term financial performance.
4. The study focuses only on selected financial ratios, and other qualitative factors influencing organizational performance are not considered.
5. Differences in accounting practices and financial reporting among the organizations may influence the comparability of results.

8. RESULT AND DISCUSSION

This section presents the results obtained from the analysis of the financial data of the selected wildlife conservation organizations, namely World Wide Fund for Nature – India (WFN), African Wildlife Foundation (AWF), and Panthera Corporation (PAN) for the period 2020–2024. The purpose of this section is to examine and compare the financial performance of these organizations during the study period. The results are presented in the form of tables and are interpreted to understand the financial position and performance differences among the selected organizations. The discussion highlights the major variations, patterns, and relationships observed in the data and explains their implications for the financial stability and operational effectiveness of the organizations. This section therefore provides a clear understanding of how the selected organizations have managed their financial resources over the study period and discusses the key findings derived from the analysis.

Table:1: RATIO VALUE OF SELECTED ENVIRONMENTAL AND WILDLIFE CONSERVATION ORGANIZATIONS

(WFN-World Wide Fund for Nature - India, AWF- African Wildlife Foundation, PAN-Panthera Corporation)

(CR- Current Ratio, ROA- Return on Total Assets, ROCE- Return On Capital Employed, OPR- Operating Profit Ratio, DER- Debt Equity Ratio, RONA- Return on Net Assets Ratio, WCT- Working Capital Turnover Ratio)

Y E A R	CR			ROA			ROCE			OPR			DER			RONA		
	W F N	A W F	P A N	W F N	A W F	P A N	W F N	A W F	P A N	W F N	A W F	P A N	W F N	A W F	P A N	W F N	A W F	P A N
20 20	8. 41	5. 24	0. 20	5. 07	3. 25	3. 34	0. 06	0. 01	0. 02	5. 37	1. 33	1. 50	0. 84	0. 24	0. 15	68. 39	0. 95	1. 55
20 21	10 .3 8	6. 74	0. 19	4. 19	9. 30	2. 73	0. 05	0. 03	0. 02	3. 70	4. 09	1. 46	1. 04	0. 17	0. 17	14 6.2 1	2. 64	2. 12
20	16	4.	0.	3.	21	22	0.	0.	0.	2.	16	0.	0.	0.	0.	10	14	1.

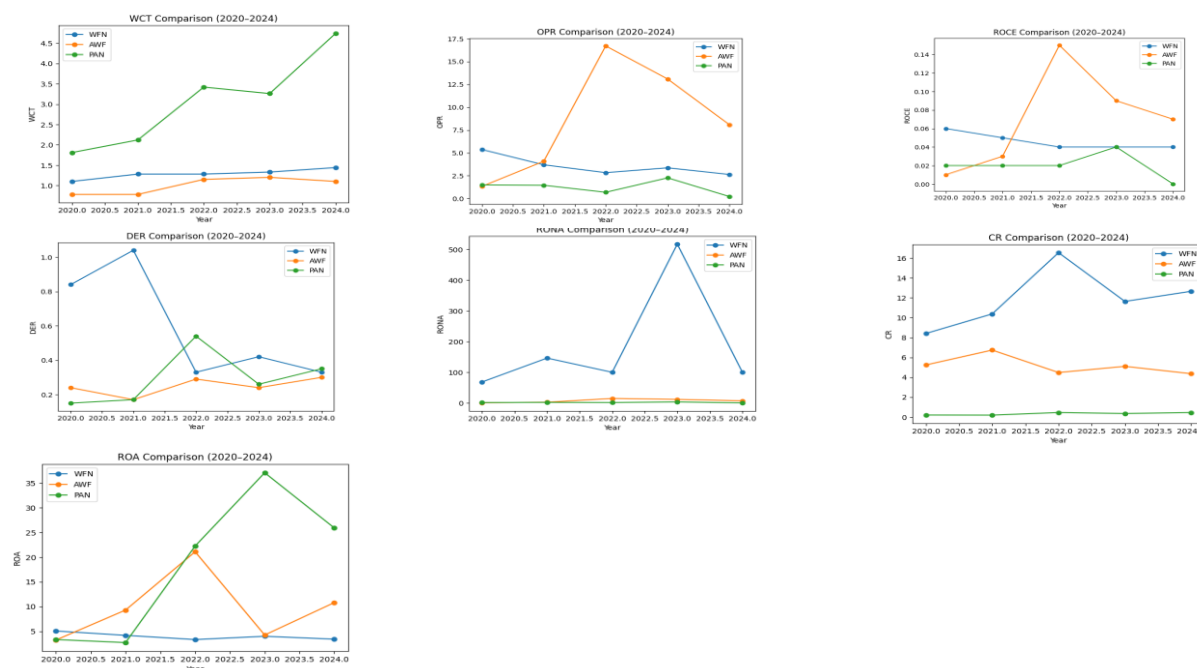
22	.5 5	48	45	34	.0 8	.2 3	04	15	02	84	.7 1	69	33	29	54	0.0 0	.8 6	63	
20 23	11 .6 4	5. 10	0. 35	4. 00	4. 26	37 .0 4	0. 04	0. 09	0. 04	3. 37	13 .0 9	2. 27	0. 42	0. 24	0. 26	51 7.0 8	11 .8 5	3. 51	
20 24	12 .6 6	4. 36	0. 45	3. 42	10 .8 0	25 .9 0	0. 04	0. 07	0. 00	2. 64	8. 07	0. 22	0. 33	0. 30	0. 35	10 0.0 0	7. 23	0. 45	
M ea n	11 .9 3	5. 18	0. 33	4. 00	9. 74	18 .2 5	0. 05	0. 07	0. 02	3. 58	8. 66	1. 23	0. 59	0. 25	0. 29	18 6.3 4	7. 51	1. 85	
SD	2. 71	0. 85	0. 11	0. 62	6. 36	13 .3 5	0. 01	0. 05	0. 01	0. 97	5. 65	0. 71	0. 29	0. 05	0. 14	16 7.2 2	5. 29	0. 99	
C V	22 .7 3	16 .3 8	34 .9 4	15 .6 1	65 .2 8	73 .1 4	17 .3 9	69 .9 9	63 .2 5	27 .0 3	65 .2 1	57 .8 0	49 .4 8	18 .6 4	48 .3 2	89. 74	70 .4 2	53 .6 0	
Y E A R	WCT																		
	W F N	A W F	P A N																
	20 20	1. 10	0. 78																1. 81
	20 21	1. 28	0. 78																2. 12
	20 22	1. 28	1. 15																3. 42
	20 23	1. 33	1. 20																3. 26
	20 24	1. 44	1. 10																4. 74
	M ea n	1. 29	1. 00																3. 07
	SD	0. 11	0. 18																1. 04
	C V	8. 54	18 .3 6																33 .9 7

Source: Profit and Loss and / Balance sheet Data

Figure:1 RATIO VALUE OF SELECTED ENVIRONMENTAL AND WILDLIFE CONSERVATION ORGANIZATIONS.

(WFN-World Wide Fund for Nature - India, AWF- African Wildlife Foundation, PAN- Panthera Corporation)

(CR- Current Ratio, ROA- Return on Total Assets, ROCE- Return On Capital Employed, OPR- Operating Profit Ratio, DER- Debt Equity Ratio, RONA- Return on Net Assets Ratio, WCT- Working Capital Turnover Ratio)



Interpretation

The table presents the ratio analysis of three environmental and wildlife conservation organizations, namely WFN (World Wide Fund for Nature – India), AWF (African Wildlife Foundation), and PAN (Panthera Corporation), for the period from 2020 to 2024. The analysis includes various financial ratios such as Current Ratio (CR), Return on Total Assets (ROA), Return on Capital Employed (ROCE), Operating Profit Ratio (OPR), Debt Equity Ratio (DER), Return on Net Assets (RONA), and Working Capital Turnover Ratio (WCT). The Current Ratio indicates the liquidity position of the organizations. WFN shows a strong liquidity position with a mean value of 11.93, which is significantly higher than the other organizations. The ratio reached its peak in 2022 at 16.55 and remained relatively high in the subsequent years, indicating strong capability to meet short-term obligations. AWF recorded a moderate liquidity position with a mean value of 5.18, though some fluctuations were observed during the study period. In contrast, PAN reported a very low liquidity position with a mean value of 0.33, suggesting that its current assets are relatively lower compared to its current liabilities. The coefficient of variation indicates that AWF and PAN experience greater variability, whereas WFN maintains relatively better stability in liquidity management.

The Return on Total Assets (ROA) reflects how efficiently the organizations utilize their assets to generate returns. WFN maintained a stable ROA with a mean value of 4.00, indicating consistent asset utilization throughout the period. AWF reported a higher mean ROA of 9.74 with considerable fluctuations, particularly showing a sharp increase in 2022. PAN recorded the highest average ROA of 18.25, suggesting strong profitability in terms of asset utilization; however, the values fluctuate widely over the years. The higher coefficient of variation in AWF and PAN indicates inconsistency in their asset profitability compared to WFN.

Return on Capital Employed (ROCE) measures the efficiency with which capital is used to generate profits. WFN shows a relatively stable but low ROCE with a mean value of 0.05, indicating moderate capital efficiency. AWF recorded a slightly higher mean ROCE of 0.07 and experienced a notable increase in 2022 with a value of 0.15. PAN reported the lowest mean ROCE of 0.02, suggesting limited efficiency in utilizing capital for profit generation. The coefficient of variation reveals that AWF and PAN exhibit greater fluctuations, whereas WFN maintains comparatively stable performance.

The Operating Profit Ratio (OPR) represents the profitability generated from core operations. WFN reported a mean OPR of 3.58, reflecting moderate operational profitability across the years. AWF recorded the highest mean OPR of 8.66, largely due to significant increases observed in 2022 and 2023. PAN, on the other hand, showed the lowest mean OPR of 1.23, indicating relatively weaker operational profitability. The higher coefficient of variation for AWF and PAN indicates greater fluctuations in their operating performance during the study period.

The Debt Equity Ratio (DER) indicates the proportion of debt used in the capital structure. WFN reported a mean DER of 0.59, suggesting moderate reliance on external financing. AWF maintained the lowest mean DER of 0.25, indicating a stronger equity-based financing structure with minimal dependence on debt. PAN recorded a mean DER of 0.29, also reflecting relatively low reliance on borrowed funds. The coefficient of variation suggests that WFN experiences higher variability in its debt structure, while AWF maintains relatively stable leverage.

Return on Net Assets (RONA) measures how effectively the organizations utilize their net assets to generate income. WFN demonstrates exceptionally high performance with a mean RONA of 186.34, including a significant spike in 2023 with a value of 517.08. AWF reported a mean RONA of 7.51, showing gradual improvement during the study period. PAN recorded the lowest mean RONA of 1.85, indicating comparatively lower efficiency in generating returns from its net assets. The coefficient of variation is considerably high, particularly for WFN, indicating substantial fluctuations in asset returns.

The Working Capital Turnover Ratio (WCT) indicates the efficiency with which working capital is utilized to generate revenue. WFN shows steady improvement over the years with a mean value of 1.29, indicating effective working capital management. AWF recorded a mean WCT of 1.00, reflecting moderate utilization of working capital. PAN reported the highest

mean WCT of 3.07, suggesting very efficient utilization of working capital in generating revenue. The lowest coefficient of variation of 8.54 for WFN indicates highly stable performance in working capital management.

Overall, the ratio analysis reveals that WFN demonstrates strong liquidity, stable operational performance, and high returns on net assets. AWF exhibits moderate financial stability but shows considerable fluctuations in profitability ratios. PAN demonstrates strong working capital efficiency and relatively high asset profitability but experiences lower liquidity and operational profitability. Therefore, WFN appears financially stronger in terms of liquidity and asset returns, while PAN shows better efficiency in working capital utilization, and AWF maintains a balanced yet fluctuating financial performance during the study period.

Hypothesis

Null Hypothesis (H_0): There is no significant difference in the financial ratios (Current Ratio, Return on Total Assets, Return on Capital Employed, Operating Profit Ratio, Debt Equity Ratio, Return on Net Assets Ratio, and Working Capital Turnover Ratio) among WFN, AWF, and PAN.

Alternative Hypothesis (H_1): There is a significant difference in the financial ratios (Current Ratio, Return on Total Assets, Return on Capital Employed, Operating Profit Ratio, Debt Equity Ratio, Return on Net Assets Ratio, and Working Capital Turnover Ratio) among WFN, AWF, and PAN.

Table:2 ANOVA Results for Financial Ratio Comparison among Selected Environmental and Wildlife Conservation Organizations (WFN, AWF, and PAN)

(WFN-World Wide Fund for Nature - India, AWF- African Wildlife Foundation, PAN- Panthera Corporation)

Source of Variation	Sum of Squares	df	Mean Square	F	P-value	F crit
CURRENT RATIO						
Between Groups	315.2104	2	157.6052	56.894	0.00	4.256
Within Groups	24.93108	9	2.770119			
Total	340.1414	11				
RETURN ON TOTAL ASSETS						
Between Groups	671.1829	2	335.5914	3.959	0.058	4.256
Within Groups	762.773	9	84.75255			
Total	1433.956	11				
RETURN ON CAPITAL EMPLOYED						
Between Groups	0.008717	2	0.004358	4.683	0.040	4.256
Within Groups	0.008375	9	0.000931			
Total	0.017092	11				
OPERATING PROFIT RATIO						
Between Groups	193.3582	2	96.67911	9.120	0.006	4.256
Within Groups	95.39788	9	10.59976			
Total	288.7561	11				
DEBT EQUITY RATIO						
Between Groups	0.1664	2	0.0832	1.710	0.234	4.256
Within Groups	0.4378	9	0.048644			

Total	0.6042	11				
RETURN ON NET ASSETS RATIO						
Between Groups	118025	2	59012.5	4.334	0.048	4.256
Within Groups	122522.5	9	13613.61			
Total	240547.5	11				
WORKING CAPITAL TURNOVER RATIO						
Between Groups	12.94085	2	6.470425	16.27621	0.001024	4.256495
Within Groups	3.57785	9	0.397539			
Total	16.5187	11				

Interpretation

The table presents the results of the Analysis of Variance (ANOVA) conducted to examine whether there are significant differences in financial ratios among the selected environmental and wildlife conservation organizations, namely WFN, AWF, and PAN.

For the Current Ratio, the calculated F value (56.894) is higher than the table value (4.256), and the P-value (0.00) is less than the significance level of 0.05. Therefore, the null hypothesis is rejected, indicating that there is a significant difference in the liquidity position among the three organizations.

In the case of Return on Total Assets, the calculated F value (3.959) is lower than the table value (4.256), and the P-value (0.058) is greater than 0.05. Hence, the null hypothesis is accepted, indicating that there is no significant difference in the asset profitability among the selected organizations.

For Return on Capital Employed, the calculated F value (4.683) exceeds the table value (4.256), and the P-value (0.040) is less than 0.05. Therefore, the null hypothesis is rejected, showing that there is a significant difference in capital utilization efficiency among the organizations.

Regarding the Operating Profit Ratio, the calculated F value (9.120) is greater than the table value (4.256), and the P-value (0.006) is less than 0.05. Thus, the null hypothesis is rejected, indicating a significant difference in operational profitability among WFN, AWF, and PAN.

In the case of the Debt Equity Ratio, the calculated F value (1.710) is lower than the table value (4.256), and the P-value (0.234) is greater than 0.05. Therefore, the null hypothesis is accepted, indicating that there is no significant difference in the capital structure among the organizations.

For the Return on Net Assets Ratio, the calculated F value (4.334) is higher than the table value (4.256), and the P-value (0.048) is less than 0.05. Hence, the null hypothesis is rejected, indicating a significant difference in the efficiency of utilizing net assets among the organizations.

Finally, for the Working Capital Turnover Ratio, the calculated F value (16.276) is greater than the table value (4.256), and the P-value (0.001) is less than 0.05. Therefore, the null

hypothesis is rejected, indicating a significant difference in working capital efficiency among the selected organizations.

Overall, the ANOVA results reveal that significant differences exist among the organizations in terms of Current Ratio, Return on Capital Employed, Operating Profit Ratio, Return on Net Assets Ratio, and Working Capital Turnover Ratio, whereas Return on Total Assets and Debt Equity Ratio do not show significant differences among WFN, AWF, and PAN.

Table:3 Trend Analysis of Financial Ratios of Selected Environmental and Wildlife Conservation Organizations. (WFN, AWF and PAN) (Base Year 2020 = 100)

(WFN-World Wide Fund for Nature - India, AWF- African Wildlife Foundation, PAN- Panthera Corporation)

(CR- Current Ratio, ROA- Return on Total Assets, ROCE- Return On Capital Employed, OPR- Operating Profit Ratio, DER- Debt Equity Ratio, RONA- Return on Net Assets Ratio, WCT- Working Capital Turnover Ratio)

Y E A R	CR			ROA			ROCE			OPR			DER			RONA		
	W F N	A W F	P A N	W F N	A W F	P A N	W F N	A W F	P A N	W F N	A W F	P A N	W F N	A W F	P A N	W F N	A W F	P A N
20 20	10 0. 00	10 0. 00	10 0. 00	10 0. 00	10 0. 00	10 0.0 0	10 0. 00	1 0. 0	1 0. 0	10 0. 00	1 0. 0	10 0. 00	10 0. 00	10 0. 00	10 0. 00	10 0. 00	10 0. 00	10 0. 00
20 21	12 3. 42	12 8. 63	95 .0 0	82 .6 4	28 6. 15	81. 74	12 0. 00	3 3. 3	1 0. 0	11 6. 68	2. 0 6	75 .5 7	80 .7 7	14 1. 18	88 .2 4	46 .7 8	35 .9 8	73 .1 1
20 22	19 6. 79	85 .5 0	22 5. 00	65 .8 8	64 8. 62	66 5.5 7	15 0. 00	6. 6 7	1 0. 0	16 3. 75	7. 2 5	13 3. 75	25 4. 55	82 .7 6	27 .7 8	68 .3 9	6. 6 39	95 .0 9
20 23	13 8. 41	97 .3 3	17 5. 00	78 .9 0	13 1. 08	11 08. 98	15 0. 00	1 1. 1	5 0. 0	11 9. 49	9. 5 6	33 .0 6	20 0. 00	10 0. 00	57 .6 9	13 .2 3	8. 8 02	44 .1 6
20 24	15 0. 54	83 .2 1	22 5. 00	67 .4 6	33 2. 31	77 5.4 5	15 0. 00	4. 2 9	1 0. 0	13 9. 90	3. 4 7	34 9. 86	25 4. 55	80 .0 6	42 .8 6	68 .3 9	13 .1 4	34 4. 44

YEAR	WCT		
	WFN	AWF	PAN
2020	100.00	100.00	100.00
2021	85.94	100.00	85.38
2022	85.94	67.83	52.92
2023	82.71	65.00	55.52
2024	76.39	70.91	38.19

Source: Profit and Loss and / Balance sheet Data.**Interpretation**

The table presents the trend analysis of financial ratios of the selected environmental and wildlife conservation organizations, namely WFN (World Wide Fund for Nature – India), AWF (African Wildlife Foundation), and PAN (Panthera Corporation), taking 2020 as the base year (100). The analysis includes important financial indicators such as Current Ratio (CR), Return on Total Assets (ROA), Return on Capital Employed (ROCE), Operating Profit Ratio (OPR), Debt Equity Ratio (DER), Return on Net Assets Ratio (RONA), and Working Capital Turnover Ratio (WCT) for the period from 2020 to 2024.

The Current Ratio trend indicates that WFN shows considerable growth over the study period, increasing from 100 in 2020 to 196.79 in 2022 and remaining above the base year level in subsequent years, which reflects an improvement in liquidity position. AWF shows fluctuations with a peak in 2021 (128.63) followed by a decline in later years. PAN demonstrates significant growth in liquidity during 2022 and 2024, reaching 225, which indicates a considerable improvement in short-term financial strength.

The Return on Total Assets (ROA) trend reveals that WFN experienced a gradual decline compared with the base year, indicating lower asset efficiency during the study period. In contrast, AWF shows significant fluctuations with a sharp increase in 2022, reaching 648.62, followed by a moderate decline. PAN records extremely high growth in asset profitability, especially in 2023 and 2024, where the trend index reaches very high values, indicating substantial improvement in asset utilization.

The Return on Capital Employed (ROCE) shows steady growth for WFN, increasing from the base index of 100 to 150 in the later years, indicating improved efficiency in capital utilization. AWF shows a sharp decline after the base year, reaching very low values, which indicates reduced capital efficiency. PAN remains stable initially but declines significantly in later years, reaching zero in 2024, indicating weak capital utilization performance.

The Operating Profit Ratio (OPR) indicates that WFN experienced moderate growth in operational profitability over the study period, reaching 139.90 in 2024. AWF shows a continuous decline from the base year, reflecting reduced operational profitability. PAN shows fluctuating performance, with a notable increase in 2022 and a substantial rise in 2024, suggesting significant improvement in operating efficiency in the final year.

The Debt Equity Ratio (DER) trend reveals considerable fluctuations for WFN, particularly showing sharp increases in 2022 and 2024, which suggests greater reliance on debt financing during these years. AWF demonstrates relatively stable performance with moderate fluctuations around the base value. PAN shows a declining trend in debt utilization compared with the base year, indicating reduced dependence on external financing.

The Return on Net Assets (RONA) trend indicates a declining performance for both WFN and AWF during most of the study period, though slight improvements appear in later years.

In contrast, PAN shows a remarkable increase in 2024, reaching 344.44, which reflects a significant improvement in generating returns from net assets.

The Working Capital Turnover Ratio (WCT) trend reveals a declining pattern for all three organizations. WFN shows a gradual decrease from 100 in 2020 to 76.39 in 2024, indicating a reduction in working capital efficiency. AWF also demonstrates a decline after the base year, though slight improvement is observed in 2024. PAN records the most significant decline in working capital turnover, falling to 38.19 in 2024, suggesting lower efficiency in utilizing working capital for generating revenue.

Overall, the trend analysis indicates that WFN demonstrates relatively stable performance in liquidity and operational profitability, AWF shows high fluctuations in profitability and asset utilization, and PAN exhibits significant growth in certain profitability indicators but declining working capital efficiency during the study period.

Figure:2 Trend Analysis of Financial Ratios of Selected Environmental and Wildlife Conservation Organizations (WFN, AWF and PAN)

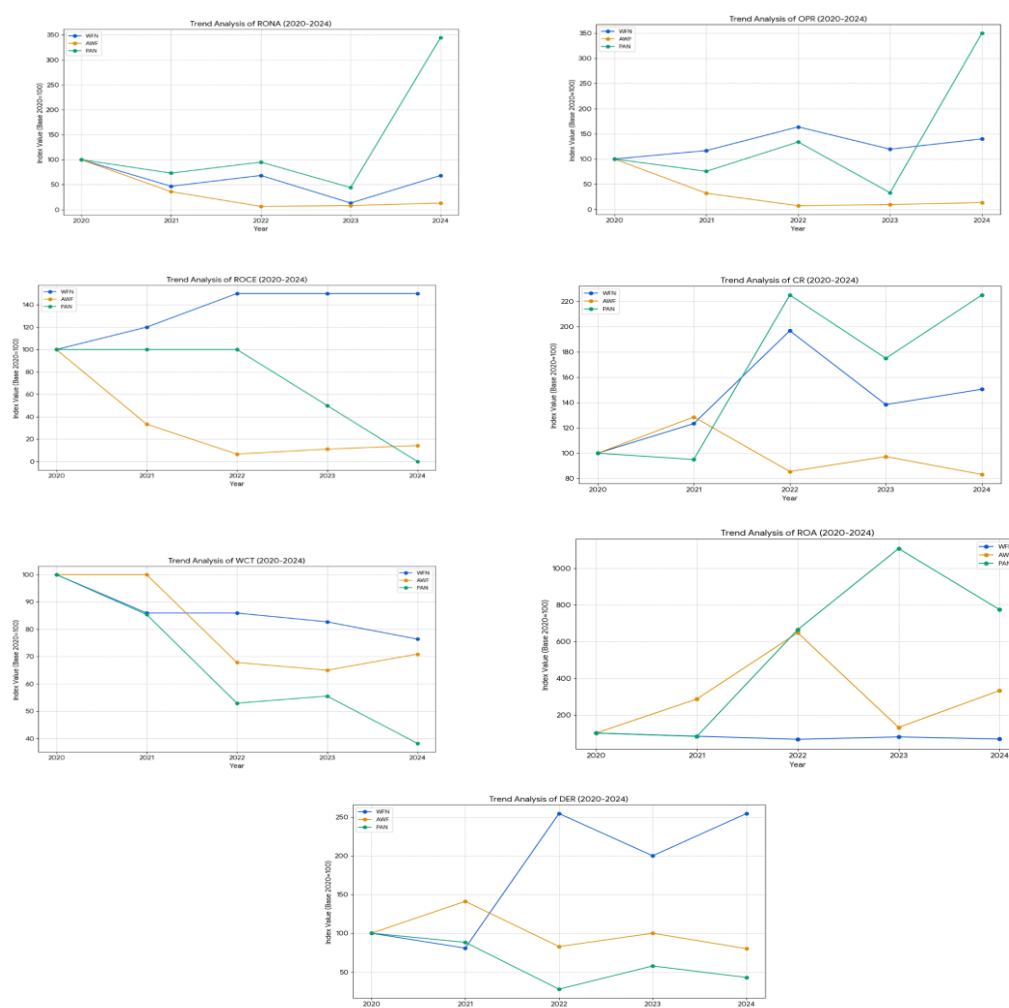


TABLE 4: F-Test Analysis for the year 2020-24

(WFN-World Wide Fund for Nature - India, AWF- African Wildlife Foundation, PAN- Panthera Corporation) (CR- Current Ratio, ROA- Return on Total Assets, ROCE- Return On Capital Employed, OPR- Operating Profit Ratio, DER- Debt Equity Ratio, RONA- Return on Net Assets Ratio, WCT- Working Capital Turnover Ratio)

	CR						ROA						WCT	
	WFN	AWF	WFN	PAN	AWF	PAN	WFN	AWF	WFN	PAN	AWF	PAN	WFN	AWF
Mean	11.928	5.184	11.928	0.328	5.184	0.328	4.004	9.738	4.004	18.248	9.738	18.248	1.286	1.002
Variance	9.188	0.90148	9.188	0.016	0.901	0.016	0.488	50.515	0.488	222.651	50.515	222.651	0.01508	0.04232
Observations	5	5	5	5	5	5	5	5	5	5	5	5	5	5
df	4	4	4	4	4	4	4	4	4	4	4	4	4	4
F	10.192		559.596		54.901		0.009		0.002		0.226		0.356333	
P(F<=f) one-tail	0.022		0.00		0.00094		0.000		0.00		0.089		0.170796	
F Critical one-tail	6.388		6.388		6.388		0.156		0.156		0.156		0.156538	
	ROCE						OPR						WCT	
	WFN	AWF	WFN	PAN	AWF	PAN	WFN	AWF	WFN	PAN	AWF	PAN	WFN	PAN
Mean	0.046	0.07	0.046	0.02	0.07	0.02	3.584	8.658	3.584	1.228	8.658	1.228	1.286	3.07
Variance	0.00	0.003	0.00	0.000	0.003	0.0002	1.173	39.847	1.173	0.629	39.84732	0.62977	0.01508	1.3594
Observations	5	5	5	5	5	5	5	5	5	5	5	5	5	5
df	4	4	4	4	4	4	4	4	4	4	4	4	4	4
F	0.026		0.4		15		0.029		1.863		63.272		0.011093	
P(F<=f) one-tail	0.001		0.198		0.011		0.002		0.280		0.000		0.000358	
F Critical one-tail	0.156		0.156		6.388		0.156		6.388		6.388		0.156538	
	DER						RONA						WCT	
	WFN	AWF	WFN	PAN	AWF	PAN	WFN	AWF	WFN	PAN	AWF	PAN	AWF	PAN
Mean	0.592	0.248	0.592	0.294	0.248	0.294	186.336	7.506	186.336	1.852	7.506	1.852	1.002	3.07
Variance	0.10727	0.00267	0.10727	0.02523	0.00267	0.02523	34955.19	34.92173	34955.19	1.23172	34.92173	1.23172	0.04232	1.3594
Observations	5	5	5	5	5	5	5	5	5	5	5	5	5	5
df	4	4	4	4	4	4	4	4	4	4	4	4	4	4
F	40.17603		4.251685		0.105826		1000.958		28379.17		28.352		0.031131	
P(F<=f) one-tail	0.001741		0.094966		0.025722		2.99E-06		3.72E-09		0.003403		0.00268	
F Critical one-tail	6.388233		6.388233		0.156538		6.388233		6.388233		6.388233		0.156538	

Interpretation

The F-test analysis is used to compare the financial performance of World Wide Fund for Nature – India (WFN), African Wildlife Foundation (AWF), and Panthera Corporation (PAN) with respect to various financial ratios such as Current Ratio (CR), Return on Total Assets (ROA), Return on Capital Employed (ROCE), Operating Profit Ratio (OPR), Debt Equity Ratio (DER), Return on Net Assets Ratio (RONA), and Working Capital Turnover Ratio (WCT) during the period 2020–2024.

The results indicate that the Current Ratio (CR) between WFN and AWF shows an F value of 10.192, which is higher than the F critical value 6.388, and the P-value 0.022 is less than 0.05. This indicates that there is a significant difference in the liquidity position between the organizations during the study period.

The Return on Total Assets (ROA) comparison shows a very high F value of 559.596 with a P-value 0.00, which indicates a significant variation in the profitability performance of the organizations. Similarly, the Working Capital Turnover Ratio (WCT) also shows variation among the organizations, indicating differences in operational efficiency.

For Return on Capital Employed (ROCE), the F value 0.026 is lower than the F critical value, which indicates that there is no significant difference between the organizations in terms of capital utilization efficiency. The Operating Profit Ratio (OPR) shows an F value of 15, which is greater than the F critical value, indicating a significant difference in operating profitability among the organizations.

The Debt Equity Ratio (DER) comparison shows an F value of 40.176, which is greater than the critical value 6.388, indicating a significant difference in the solvency position of the selected organizations. This suggests that the organizations follow different capital structure strategies in managing their financial resources.

Similarly, the Return on Net Assets Ratio (RONA) shows a very high F value 1000.958, which clearly indicates a significant variation in the efficiency of asset utilization among the organizations. The Working Capital Turnover Ratio (WCT) also shows significant variation, suggesting differences in the management of working capital.

Overall, the F-test results reveal that there are significant differences in several financial ratios among WFN, AWF, and PAN, particularly in liquidity, profitability, solvency, and operational efficiency. This indicates that the financial management practices and performance levels vary among the selected wildlife conservation organizations during the study period 2020–2024.

TABLE 5: CORRELATION ANALYSIS FOR THE RATIOS OF WORLD WIDE FUND FOR NATURE.

(**CR**- Current Ratio, **ROA**- Return on Total Assets, **ROCE**- Return On Capital Employed, **OPR**- Operating Profit Ratio, **DER**- Debt Equity Ratio, **RONA**- Return on Net Assets Ratio, **WCT**- Working Capital Turnover Ratio)

Correlations							
	CR	ROA	ROCE	OPR	DER	RONA	WCT
CR	1	-0.88	-0.79	-0.80	-0.73	-0.03	0.49
ROA	-0.88	1	0.92	0.92	0.98	0.73	-0.83
ROCE	-0.79	0.92	1	0.95	0.80	-0.41	-0.86
OPR	-0.80	0.98	0.95	1	0.68	-0.17	-0.91
DER	-0.73	0.73	0.80	0.68	1	-0.24	-0.59
RONA	-0.03	-0.05	-0.41	-0.17	-0.24	1	0.26
WCT	0.49	-0.83	-0.86	-0.91	-0.59	0.26	1

**Correlation is significant at the 0.01 level ($p < 0.01$), *Correlation is significant at the 0.05 level ($p < 0.05$)

Interpretation

The correlation analysis for the ratios of World Wide Fund for Nature (WWFN) reveals the relationships among liquidity, profitability, solvency, and efficiency measures. The Current Ratio (X1) shows strong negative correlations with Return on Total Assets (X2, -0.88), Return on Capital Employed (X3, -0.79), Operating Profit Ratio (X4, -0.80), and Debt Equity Ratio (X5, -0.73), indicating that higher liquidity is associated with lower profitability and financial leverage. X1 is moderately positively correlated with Working Capital Turnover Ratio (X7, 0.49), suggesting that as current assets relative to current liabilities increase, the efficiency in using working capital slightly improves. Profitability ratios such as Return on Total Assets (X2), Return on Capital Employed (X3), and Operating Profit Ratio (X4) show strong positive inter-correlations (0.92–0.98), reflecting that improvements in one profitability measure are closely associated with others. Debt Equity Ratio (X5) also shows positive correlations with profitability ratios, though weaker, while Return on Net Assets (X6) appears largely independent, displaying weak or insignificant correlations with most other ratios.

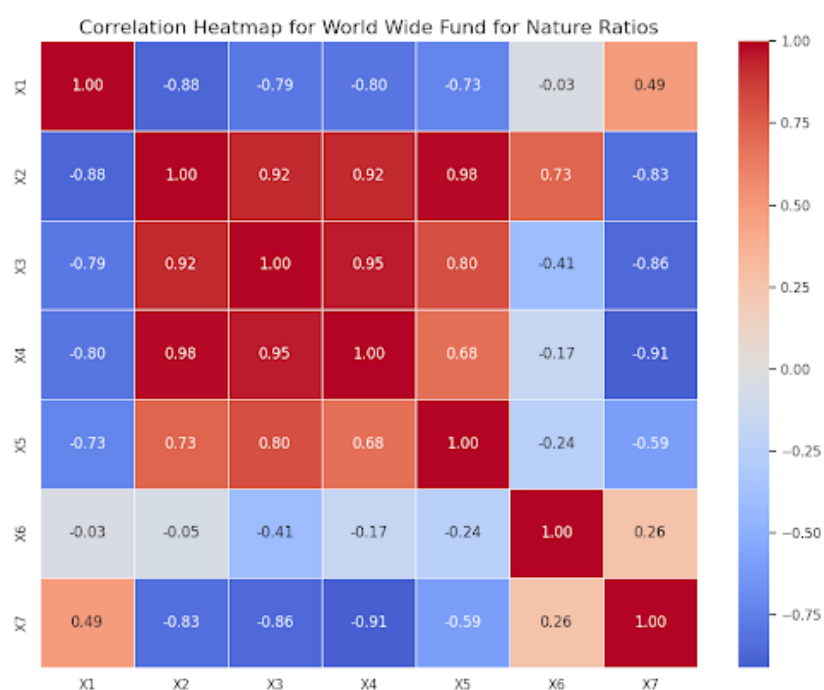


Figure 3: CORRELATION ANALYSIS FOR THE RATIOS OF WORLD WIDE FUND FOR NATURE

TABLE NO 4 CORRELATION ANALYSIS FOR THE RATIOS OF AFRICAN WILDLIFE FOUNDATION

(**CR**- Current Ratio, **ROA**- Return on Total Assets, **ROCE**- Return On Capital Employed, **OPR**- Operating Profit Ratio, **DER**- Debt Equity Ratio, **RONA**- Return on Net Assets Ratio, **WCT**- Working Capital Turnover Ratio)

Correlations							
	CR	ROA	ROCE	OPR	DER	RONA	WCT
CR	1	-0.35	-0.59	-0.55	-0.99	-0.59	-0.72
ROA	-0.35	1	0.77	0.65	0.45	0.62	0.38
ROCE	-0.59	0.77	1	0.98	0.60	0.98	0.84
OPR	-0.55	0.65	0.98	1	0.53	1.00	0.90
DER	-0.99	0.45	0.60	0.53	1	0.57	0.68
RONA	-0.59	0.62	0.98	1.00	0.57	1	0.92
WCT	-0.72	0.38	0.84	0.90	0.68	0.92	1

**Correlation is significant at the 0.01 level ($p < 0.01$), *Correlation is significant at the 0.05 level ($p < 0.05$)

Interpretation

The correlation analysis for the African Wildlife Foundation (AWF) reveals the relationships among liquidity, profitability, solvency, and efficiency ratios. The Current Ratio (X1) shows very strong negative correlation with Debt Equity Ratio (X5, -0.99) and moderate to strong negative correlations with other ratios such as Return on Capital Employed (X3, -0.59), Operating Profit Ratio (X4, -0.55), and Working Capital Turnover Ratio (X7, -0.72). This indicates that higher liquidity is associated with lower leverage, profitability, and operational efficiency. Profitability ratios, including Return on Total Assets (X2), Return on Capital Employed (X3), Operating Profit Ratio (X4), and Return on Net Assets (X6), show strong positive inter-correlations (0.62–1.00), suggesting that improvements in one profitability measure are closely linked to increases in others. Similarly, Working Capital Turnover Ratio (X7) is positively correlated with most profitability measures (0.38–0.92), reflecting that better efficiency aligns with higher returns.

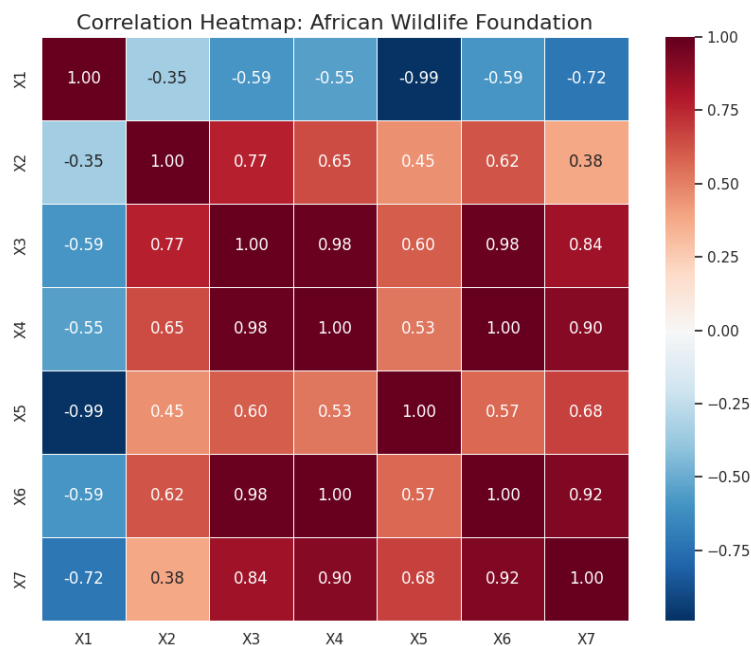


Figure 4: CORRELATION ANALYSIS FOR THE RATIOS OF AFRICAN WILDLIFE FOUNDATION

TABLE NO 4.7: CORRELATION ANALYSIS FOR THE RATIOS OF PANTHERA CORPORATION

(**CR**- Current Ratio, **ROA**- Return on Total Assets, **ROCE**- Return On Capital Employed, **OPR**- Operating Profit Ratio, **DER**- Debt Equity Ratio, **RONA**- Return on Net Assets Ratio, **WCT**- Working Capital Turnover Ratio)

Correlations							
	CR	ROA	ROCE	OPR	DER	RONA	WCT
CR	1	0.77	-0.28	-0.57	0.88	-0.28	0.91
ROA	0.77	1	0.26	0.04	0.51	0.30	0.74
ROCE	-0.28	0.26	1	0.91	-0.20	0.97	-0.45
OPR	-0.57	0.04	0.91	1	-0.58	0.92	-0.60
DER	0.88	0.51	-0.20	-0.58	1	-0.25	0.64
RONA	-0.28	0.30	0.97	0.92	-0.25	1	-0.38
WCT	0.91	0.74	-0.45	-0.60	0.64	-0.38	1

**Correlation is significant at the 0.01 level ($p < 0.01$), *Correlation is significant at the 0.05 level ($p < 0.05$)

Interpretation

The correlation analysis for Panthera Corporation shows the relationships among liquidity, profitability, solvency, and efficiency ratios. The Current Ratio (X1) has strong positive correlations with Return on Total Assets (X2, 0.77), Debt Equity Ratio (X5, 0.88), and Working Capital Turnover Ratio (X7, 0.91), suggesting that higher liquidity is associated with greater leverage, asset efficiency, and working capital utilization. However, X1 shows negative correlations with Return on Capital Employed (X3, -0.28), Operating Profit Ratio (X4, -0.57), and Return on Net Assets (X6, -0.28), indicating that higher liquidity may slightly reduce certain profitability measures. Profitability ratios such as Return on Capital Employed (X3), Operating Profit Ratio (X4), and Return on Net Assets (X6) are strongly positively correlated (0.92–0.97), demonstrating that improvements in one profitability metric are closely linked with others. Working Capital Turnover (X7) shows mixed correlations, being positively associated with liquidity and total assets, but negatively correlated with some profitability measures, reflecting complex interactions between efficiency and profitability.

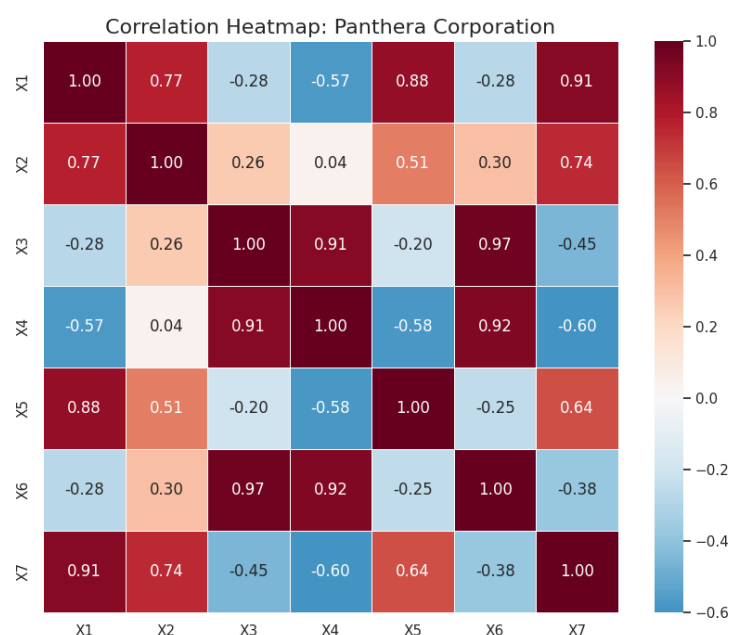


Figure 5: CORRELATION ANALYSIS FOR THE RATIOS OF PANTHERA CORPORATION

Suggestions

1. Wildlife conservation organizations should maintain a balanced liquidity position to ensure smooth implementation of conservation programs.
2. Improving operational efficiency can help organizations utilize financial resources more effectively.
3. Organizations should focus on diversifying funding sources to improve financial stability.
4. Better financial planning and monitoring can enhance profitability and sustainability.

5. Strengthening financial transparency and reporting systems can increase donor confidence and long-term support.

CONCLUSION

The study analysed the financial performance of WFN, AWF, and PAN using ratio analysis and statistical techniques. The results indicate that there are significant differences in financial performance among the organizations in terms of liquidity, profitability, and operational efficiency. The ANOVA results reveal that some ratios show significant variation among the organizations, indicating differences in financial management practices. Correlation analysis further highlights the relationships between various financial indicators such as profitability, liquidity, and operational efficiency. Overall, the study concludes that effective financial management is essential for wildlife conservation organizations to sustain their conservation programs and achieve their environmental objectives.

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