Original Article

Impact of Fraud Prevention Planning and Development Planning on the Welfare of Society: Mediating Role of Human Capital

Yusrizal Yusrizal [a]**, Sartiyah Sartiyah** [a] [*]**, Muhammad Abrar** [a],

[a] Department of Economics, Faculty of Economics and Business, Universitas Syiah Kuala, Kopelma Darussalam, Syiah Kuala, 23111 Banda Aceh, Aceh, Indonesia; yusrizalbakongan@gmail.com (Y.S.), muhammadabrar@usk.ac.id (M.A.)

[*] Correspondence: sartysabang@usk.ac.id (S.S.)

Abstract: Village funds play a crucial role in local development, especially in rural areas that are often marginalized in national development. However, a case study in South Aceh Regency highlights the misuse of these funds through fictitious projects and price manipulation, harming public finances and hindering local economic growth. This study surveyed the entire population of 260 villages in the South Aceh Regency. A minimum sample size of 112 respondents was determined using a formula considering 28 indicators and 4 research dimensions. The sample included village officials, finance section heads, development section heads, and tuha peut, and it was increased to 120 respondents to ensure representativeness and reliability. The data were analyzed using structural equation modelling partial least squares with the assistance of SmartPLS-4. This study found that fraud prevention has a significant positive effect on society's welfare. In addition, this study indicates that development planning does not affect society's welfare. This study indicates that development planning has a significantly positive effect on human capital. These findings suggest that effective fraud prevention measures and robust development planning efforts enhance rural communities' overall well-being and human resource capacity. In addition, this study proves that human capital does not mediate the relationship between fraud prevention and, development planning and social welfare. Therefore, it is essential to implement strategies that concurrently address financial integrity and socioeconomic development to drive sustainable progress.

Keywords: Development planning; Fraud prevention; Human capital, Society welfare

1. Introduction

Village development is one of the primary priorities in efforts to improve the welfare of society in Indonesia. As the smallest administrative unit of government, villages play a strategic role in national development. Recognizing the importance of village development, the government has allocated village funds as a crucial instrument to promote sustainable development at the village level. These village funds aim to accelerate infrastructure development, improve the quality of public services, and develop local economic potential. The effectiveness of using village funds heavily relies on good development planning and fraud prevention in their utilization. Good development planning can ensure that village funds are used appropriately and efficiently. Given the limited resources available and the high development needs across various sectors, it is crucial. With proper planning, village funds can be used to build infrastructure that

supports economic activities, enhance access to education and healthcare, and strengthen village institutions. Improving the quality of human resources (HR) in villages is a primary focus in using village funds. Quality of HR is the key to creating a prosperous, self-reliant, and competitive society. Enhancing HR quality includes improving education, skill training, and village community health. With quality HR, village communities are expected to manage existing resources better, create jobs, and improve economic and social welfare.

However, in practice, fraud often occurs when using village funds. Such fraud can include budget misuse, non-transparent financial reporting, and corruption by certain individuals. Misuse of village funds harms public finances and hinders achieving village development goals. Fraud in using village funds leads to development not proceeding as planned, infrastructure not meeting standards, and suboptimal public services. A case study in South Aceh Regency illustrates this reality. The village head is suspected of misusing village funds, including procuring fictitious projects and manipulating building material prices. Such practices result in public financial losses, impede local economic growth, and damage the credibility of government development programs. To address this issue, serious efforts are needed to improve the governance and management of village funds. Strengthening oversight and accountability mechanisms, increasing transparency in fund usage, and enhancing local community awareness and participation are key steps in maintaining the integrity and effectiveness of the village fund program. Through such concrete actions, village funds can truly become an effective instrument in advancing local development and reducing rural poverty.

Fraud cases in using village funds highlight weaknesses in the oversight and accountability system. Therefore, fraud prevention must be a priority in managing village funds. Fraud prevention measures can include increasing transparency and accountability, strengthening internal and external supervision, and enforcing strict legal actions against fraud perpetrators. Therefore, it is crucial to examine how development planning and fraud prevention using village funds can improve HR quality and society's welfare. This research provides insights and recommendations to help the government and other stakeholders better manage village funds. Thus, it is hoped that village development can proceed more effectively and efficiently and positively impact the welfare of society in villages.

2. Literature Review

2.1. Development Planning in Villages

Development planning in villages is a systematic process that involves identifying community needs, drafting plans, allocating resources, and implementing development programs to achieve specific goals (Mustanir et al., 2022). Various studies have highlighted the importance of technology and community participation in village development planning to achieve more inclusive outcomes. Community participation increases the relevance of development programs and strengthens the sense of ownership and responsibility towards development outcomes. Syam et al. (2022) highlight the integration of technology in village development planning, such as web-based applications that can enhance the accuracy and transparency of planning.

On the other hand, Somiartha et al. (2024) emphasized the importance of training and capacity building for village officials in using information technology. This training helps village officials understand and utilize technology for more effective and efficient planning. Ramadhani & Aisyah (2021) found that participatory planning approaches involving various stakeholders, including academics, practitioners, and local communities, can produce more comprehensive and sustainable development plans. This study shows that multi-party collaboration can enhance the quality and implementation of village development plans. Dlodlo & Kalezhi (2015) mentioned that real-time data through sensors and Internet of Things (IoT) devices could provide more accurate information about villages' environmental and social conditions. This data can be used to make more precise decisions in development planning.

Effective village development planning involves a systematic process incorporating community needs, technology, and broad participation to ensure that development is inclusive, relevant, and sustainable (Akbar et al., 2020). By integrating web-based applications, digital platforms, community-based applications, and real-time data, villages can enhance their development plans' accuracy, transparency, and effectiveness. Training and capacity building for village officials are also crucial to maximize the benefits of technology in planning. Multi-stakeholder collaboration further strengthens the development process, ensuring comprehensive and sustainable outcomes that contribute to the overall welfare of society. Winston (2022) shows that a community-based development approach that considers social, economic, and environmental aspects in a balanced manner can result in better sustainability. This study underscores integrating these three aspects in village development planning. Ying et al. (2022) found that developing green infrastructure, such as clean water management systems and renewable energy, can improve the welfare of village society while preserving the environment. This infrastructure development requires thorough planning and active community participation.

2.2. Fraud Prevention in Village Governance Management

Fraud prevention in village governance management is crucial in enhancing the integrity and effectiveness of village fund utilization (Wahyudi et al., 2021). Researchers have highlighted effective strategies and mechanisms to

prevent village governance management fraud. Good controls and strict oversight are necessary to reduce this risk and prevent fraud. Suwandi & Darmawansah (2023) demonstrate that implementing blockchain technology can enhance transparency and accountability in village fund management, thereby reducing opportunities for fraud. Blockchain provides immutable transaction records, ensuring every fund usage can be transparently tracked. Margaretha Mait et al., (2020) found that training and capacity building for village officials in financial management and oversight can significantly reduce fraud cases. Sustainable and relevant training programs equip village officials with the knowledge and skills to manage funds effectively and accountably (Susilowati et al., 2020).

Ismail & Haryadi (2023) examined the role of village fund supervisory committees in preventing fraud. This study shows that active and independent supervisory committees can effectively oversee village fund usage and quickly identify potential fraud - the importance of transparency and community participation in fraud prevention (Vian, 2020). This study suggests that the chances of fraud decrease when communities actively monitor village fund usage. Irfan Florid et al. (2023) propose using information technology, such as financial management information systems, to strengthen internal controls and facilitate more accurate and transparent financial reporting. Al-alawi (2020) conducted a study on the role of independent institutions in fraud prevention. This research highlights the importance of independent institutions capable of conducting objective audits and investigations into village fund usage, thus reducing the risk of fraud. Sari et al. (2023) examined the impact of transparency and accountability in village fund management on community trust. This study shows that openness in village fund management increases community trust in village government and reduces the chances of fraud.

The research on fraud prevention in village governance management highlights several keys; implementing technology can significantly enhance transparency and accountability in village fund management, thereby reducing opportunities for fraud (Mufidah & Herawaty, 2023). Training and capacity building for village officials in financial management and oversight are crucial in reducing fraud cases, as they equip officials with the necessary skills to manage funds effectively and accountably (Bawono et al., 2020). Active and independent village fund supervisory committees are vital in providing effective oversight and quickly identifying potential fraud. Transparency and community participation are essential aspects of fraud prevention, as actively involved communities can monitor village fund usage and reduce the chances of fraud (Zeho et al., 2020). Information technology, such as financial management information systems, can strengthen internal controls and facilitate more accurate and transparent financial reporting. The presence of independent institutions capable of conducting objective audits and investigations further enhances fraud prevention efforts. Overall, the research emphasizes the importance of transparency, accountability, community participation, and technology in preventing fraud and building trust in village governance.

2.3. Quality of Human Resources (HR) in Villages

Education and training are important to improve the quality of HR in villages. Access to formal education and skills training enhances the ability of rural communities to address development challenges (Nasfi et al., 2023). UNESCO (2021) evaluates the impact of education and training programs in remote villages, emphasizing the importance of investing in access to quality education to improve HR quality. Nuryanto et al. (2023) demonstrate that access to healthcare services directly impacts HR quality in villages. Providing quality and affordable healthcare facilities improves the health of village communities, thus enhancing their productivity and quality of life. Research by the World Health Organization (2022) analyzes the success of community health programs in rural areas, highlighting the importance of equitable access to healthcare services to improve quality of life and the welfare of village society.

Purnomo et al. (2020) emphasize the role of economic empowerment in improving HR quality in villages. They found that entrepreneurship training and support for local economic sectors can enhance the economic self-reliance of village communities and reduce poverty levels. The World Bank's World Development Report (2023) evaluates economic development programs in rural areas, highlighting the importance of policies supporting the growth of small and medium enterprises and financial inclusion to improve HR quality. Active community participation is important to enhance HR quality in villages (Wijayanti & Taufik, 2022). They found that participation in local decision-making and village development programs enhances community ownership and involvement in the development process. Research by the United Nations Development Program (UNDP) (2024) identifies successful participatory practices in village development management, highlighting the importance of community inclusion and participation in formulating policies and development programs.

Abbas et al. (2020) focus on demographic and social factors influencing villages' HR quality. They find that factors such as education level, social status, and access to resources play a significant role in determining the abilities and potential of rural communities. The International Labor Organization (ILO) (2023) analyzes challenges and opportunities to improve the quality of HR in the informal sector in rural areas, highlighting the role of demographic and social factors in shaping the working conditions and economy of village communities. By understanding the factors that affect the quality of HR in villages, more effective and sustainable development strategies can be formulated to enhance the well-being and progress of rural communities.

2.4. Welfare of Society in villages

Improving village society's welfare is the primary goal in efforts toward sustainable rural development (Tarlani & Sirajuddin, 2020). One proven effective approach to achieving this goal is through local economic development programs. Local economic development enhances rural welfare (Wijijayanti et al., 2020). By developing micro, small, and medium enterprises (MSMEs), rural communities can be empowered to become agents of economic change in their environment. The empowerment of MSMEs is one effective strategy for improving the economic well-being of rural communities (Irawan et al., 2023). Local economic development programs also focus on Utilizing local natural resources. By optimizing the potential of existing natural resources such as agriculture, fisheries, and forestry, villages can create added value for their local products. This increases the income of farmers and fishermen and creates job opportunities in related sectors. According to the OECD (2024), leveraging local natural resources is crucial for driving rural economic growth. Local economic development programs also encourage forming partnerships and collaborations among stakeholders, including government, private sector, and civil society. These collaborations enable the sharing of resources, knowledge, and technology, which can enhance the efficiency and effectiveness of development programs. Asher & Novosad, (2020) emphasize that collaboration among various parties is the key to success in implementing local economic development programs. Through sustainable and participatory-based local economic development programs, it is hoped that the welfare of village society will continue to improve. These programs not only create jobs and increase income but also strengthen the local economy's competitiveness, improve access to social services, and enhance food sovereignty at the local level.

3. Materials and methods

3.1. Research Design

The research design employed in this study is quantitative research aimed at examining the influence of development planning and fraud prevention in utilising village funds to promote the welfare of society, with the mediation of human resources (HR) quality. This study utilizes a survey method to collect data from respondents comprising village officials, community leaders, and residents in South Aceh Regency.

3.2. Population and Sample

The population in this study comprises all villages in South Aceh Regency that receive village funds. The total population is all villages in South Aceh Regency, amounting to 260 villages. Hair et al. (2018) developed a statistical analysis method to determine the sample size, which has been proven effective in various fields, including management science and statistics. This method includes regression analysis, path analysis, factor analysis, and correlation analysis. With a confidence level of 95%, this research allows for a margin of error of 5% or 0.05. The sample is taken using a purposive sampling technique, where villages with variations in development level, the amount of village funds received, and reported fraud issues are selected. To determine the sample size with a 5% margin of error, the researcher incorporates the margin of error value into the formula considering the number of indicators and research variables. This study has 28 indicator variables multiplied by 4 research dimensions, resulting in 112 respondents consisting of Village Officials, Financial Officers, Development Officers, and Traditional Village Leaders in South Aceh Regency as the minimum limit of required respondents. However, to ensure the representativeness and reliability of the research findings, the chosen number of respondents as the sample is 120 respondents. This step is taken to strengthen the findings' validity and optimise the interpretation of the research results.

3.3. Data Collection Techniques

Questionnaire Used to collect quantitative data from respondents regarding development planning, fraud prevention, hr quality, and the welfare of society. Documentation is utilized to gather secondary data from village financial reports, development activity reports, and other relevant official documents.

3.4. Definition of Operational Variables

- Development planning (DP) as independent variable (X1): The planning process involves needs identification, plan formulation, budget allocation, and implementation of development in the village.
- Fraud prevention (FP) as independent variable (X2): Measures taken to prevent the misuse of village funds, including transparency, accountability, and oversight.
- Quality of human resources (HR) as intervening variable (M): The level of education, skills, and socioeconomic status of the village community is measured through indicators such as education level, participation in training, and economic status.

- The welfare of society (WS) as dependent variable (Y): The welfare of society is measured through economic, social, and service indicators, such as community income, access to services, and community participation in social activities.

3.5. Research Instruments

The main instrument used in this study is the questionnaire. The questionnaire is structured based on predetermined variable indicators. Each question in the questionnaire uses a 4-point Likert scale, where 1 indicates strongly disagree and 4 indicates strongly agree. The questionnaire instrument is tested for its validity and reliability to ensure the consistency and validity of each indicator item.

3.6. Data Analysis Technique

The data obtained from the questionnaire will be analyzed using statistical analysis techniques using SEM-PLS (Structural Equation Modeling - Partial Least Squares). The analysis technique is descriptive statistics. It describes the characteristics of respondents and the distribution of responses to each question in the questionnaire. Linear Regression Analysis is used to test the influence of Development Planning and Fraud Prevention on The Welfare of Society, as well as the influence of the quality of Human Resources as a mediating variable, and mediation analysis is used to test the mediating role of Human Resources in the relationship between Development Planning and Fraud Prevention with The Welfare of Society. The structural model can be seen in Figure 1.
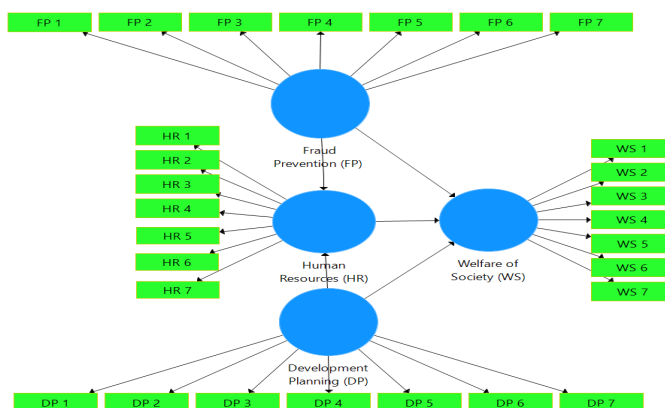

Figure 1. Research Framework

4. Results

The study's findings revealed several key insights into the relationship between development planning, fraud prevention, human resources quality, and the welfare of society in rural areas.

4.1. Evaluating the Measurement Model

4.1.1. Construct Validity and Reliability

The analysis process involves assessing the outer loading values of variables, which indicates the strength of the relationship between each variable and its corresponding measurement indicators in the structural equation model. This description mentions that outer loading values are considered valid if they exceed 0.7, suggesting a strong relationship between the variables and their indicators. If any outer loading value is below 0.7, the corresponding indicator may not adequately represent its underlying variable. In such cases, eliminating or removing these indicators from the analysis might be necessary to ensure the validity and reliability of the results. This process aims to maintain the consistency and accuracy of the analysis by focusing on indicators that have a strong association with their respective variables. The outer loading results represent how outer loading values are assessed and possibly identify any indicators that require elimination based on their values. The illustration is presented in Figure 2.

The results are presented in Figure 2, which illustrates that the fraud prevention variable exhibits an outer loading value of 0.656. The indicators for the Human Resources variable demonstrate the following values: SDM 1 = 0.361, SDM 2 = 0.451, SDM 3 = 0.640, and SDM 4 = 0.640. The indicators for the development planning variable are PP1 at 0.628, PP3 at 0.628, and PP4 at 0.697. Notably, within the welfare of society variable, the indicator KM 5 displays a value of -0.019, necessitating its removal. To maintain the validity and reliability of the analysis, all indicators with outer loading values are below the threshold of 0.7. were excluded. This process ensures the analysis remains robust by

focusing on the indicators that effectively measure their respective constructs. The results emphasize the importance of adhering to validity and reliability standards in evaluating the measurement model.
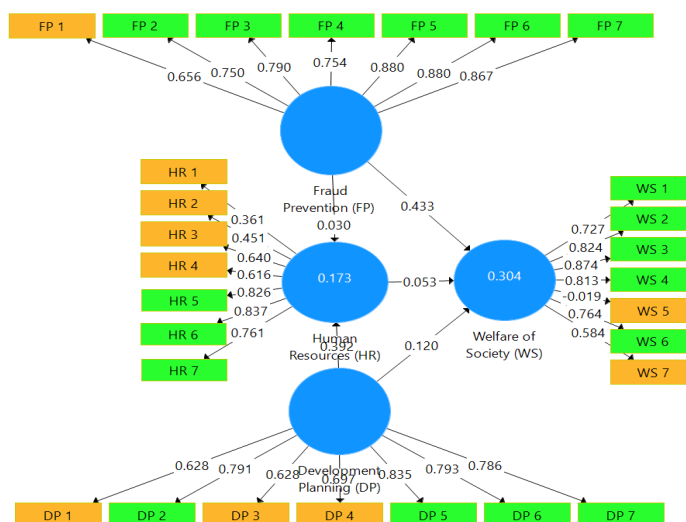

Figure 2. Result of Outer Loading.

Various metrics were employed to determine the efficacy of the indicators in assessing the construct validity and reliability of the measurement model. A detailed analysis of the data is presented in Table 1.

Table 1. Result of Construct Validity and Reliability

	Welfare of Society (KM)	Fraud Prevention (PK)	Development Planning (PP)	Human Resources (SDM)
Cronbach's Alpha (CA)	0.864	0.908	0.862	0.844
rho_A	0.872	0.916	0.863	0.848
Composite Reliability (CR)	0.903	0.930	0.906	0.905
Average Variance Extracted (AVE)	0.651	0.689	0.708	0.761
Indicator(s)	Loading Factor(s)			
KM 1	0.731			
KM 2	0.837			
KM 3	0.886			
KM 4	0.825			
KM 6	0.746			
PK 2		0.733		
PK 3		0.804		
PK 4		0.764		
PK 5		0.893		
PK 6		0.897		
PK 7		0.873		
PP 2			0.788	
PP 5			0.882	
PP 6			0.847	
PP 7			0.846	
SDM 5				0.866
SDM 6				0.888
SDM 7				0.862

As illustrated in Table 1, Cronbach's alpha measures internal consistency, specifically how closely related a set of items is as a group. It is considered to be a measure of scale reliability. A commonly accepted criterion is that an alpha

value of > 0.7 or higher is deemed acceptable. The Welfare of Society is 0.864 (acceptable, good internal consistency). Fraud Prevention: 0.908 (excellent, very good internal consistency). Development Planning: 0.862 (acceptable, good internal consistency). Human Resources: 0.844 (acceptable, good internal consistency). The composite reliability measures the internal consistency of a set of items. Similar to Cronbach's alpha, a value of ≥ 0.7 is considered acceptable. The welfare of society is 0.903 (excellent internal consistency). Fraud Prevention: 0.930 (excellent, very good internal consistency). Development Planning: 0.906 (excellent, very good internal consistency). Human Resources: 0.905 (excellent, very good internal consistency). AVE measures the variance a construct captures concerning the amount of variance due to measurement errors. An AVE of 0.5 or higher is considered acceptable, indicating that the construct explains at least 50% of the variance of its items. The Welfare of Society: 0.651 (good, adequate convergence). Fraud Prevention: 0.689 (good, adequate convergence). Development Planning: 0.708 (good, adequate convergence). Human Resources: 0.761 (good, adequate convergence).
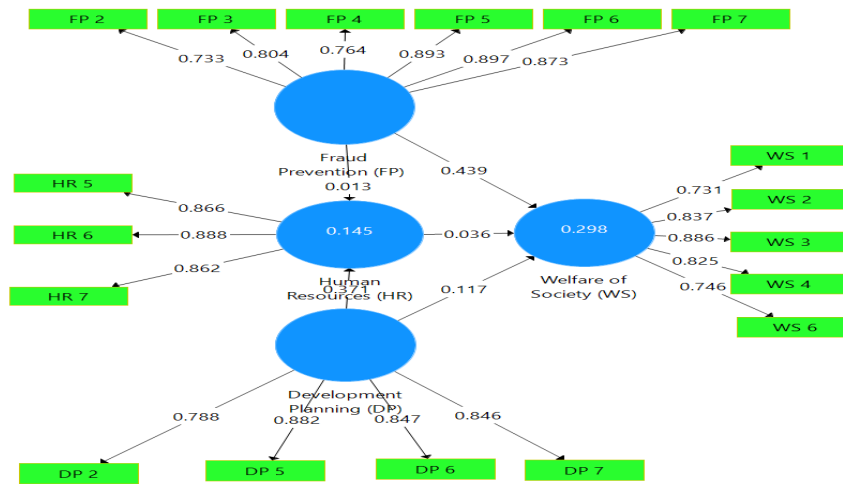

Figure 3. Result of Outer Loading After removed items.

Loading factors indicate the correlation between the observed variables (items) and their underlying latent construct. High loadings (typically above 0.70) suggest that the item is a good indicator of the construct. Here's an evaluation of the provided factor loadings. All items for The Welfare of Society have factor loadings above 0.7, indicating good convergent validity. All items for Fraud Prevention have factor loadings above 0.7, indicating good convergent validity. All items for Development Planning have factor loadings above 0.7, indicating good convergent validity. All items for Human Resources have factor loadings above 0.7, indicating good convergent validity. All items across the four constructs show factor loadings above 0.7, suggesting strong correlations with their respective constructs and good convergent validity. This further supports the reliability and validity of the measurement model. The high factor loadings imply that the items are good indicators of their respective constructs, contributing to the overall robustness of the model.

4.1.2. Discriminant Validity

Discriminant validity assesses the extent to which constructs are distinct from one another. A common method for evaluating discriminant validity is the Fornell-Larcker criterion, which compares the Average Variance Extracted (AVE) square root for each construct to the correlations between constructs. The square root of the AVE should be greater than the correlations between the constructs. An analysis of the provided data is shown in Table 2.

Table 2. Result of Discriminant Validity using Fornell-Larcker criterion

Variable(s)	Welfare of Society	Fraud Prevention	Development Planning	Human Capital
Welfare of Society	0.807			
Fraud Prevention	0.538	0.830		
Development Planning	0.462	0.755	0.841	
Human Resources	0.209	0.293	0.381	0.872

For discriminant validity to be established using the Fornell-Larcker criterion, the square root of the AVE for each construct should be greater than the correlations with other constructs (see Table 2). The Welfare of Society: 0.807 Correlation with Fraud Prevention: 0.538. (0.807 > 0.538), Correlation with Development Planning: 0.462 (0.807 > 0.462), Correlation with Human Resources: 0.209 (0.807 > 0.209). Fraud Prevention 0.830. Correlation with The

Welfare of Society: 0.538 (0.830 > 0.538), Correlation with Development Planning: 0.755 (0.830 > 0.755), Correlation with Human Resources: 0.293 (0.830 > 0.293). Development Planning 0.841, Correlation with The Welfare of Society: 0.462 (0.841 > 0.462), Correlation with Fraud Prevention: 0.755 (0.841 > 0.755), Correlation with Human Resources: 0.381 (0.841 > 0.381). Human Resources 0.872. Correlation with The Welfare of Society: 0.209 (0.872 > 0.209), Correlation with Fraud Prevention: 0.293 (0.872 > 0.293), Correlation with Development Planning: 0.381 (0.872 > 0.381). The square root of the AVE for each construct is greater than the correlations with other constructs. This indicates that each construct shares more variance with its indicators than other constructs, thus establishing discriminant validity according to the Fornell-Larcker criterion. The constructs exhibit good discriminant validity, ensuring they are distinct and measure different concepts. This is crucial for the robustness and validity of the measurement model.

4.2. Evaluating the Structural Model

R Square (R²) and Adjusted R Square indicate how well the independent variables explain the variance in the dependent variables. R Square (R²) value represents the proportion of the variance in the dependent variable that is predictable from the independent variables. It ranges from 0 to 1. Adjusted R Square value adjusts the R² for the number of predictors in the model, providing a more accurate measure when multiple predictors exist. It can be lower than R². An analysis of the provided data is shown in Table 3.

Table 3. Result of Coefficient Determination

Variable(s)	R Square	Adjusted R Square
Welfare of Society	0.298	0.280
Human Resources	0.145	0.131

The Welfare of Society, R²: 0.298. This means that the independent variables in the model explain 29.8% of the variance in The Welfare of Society. Adjusted R²: 0.280. This adjusted value accounts for the number of predictors in the model, indicating that after adjusting for potential overfitting, the independent variables explain 28.0% of the variance in The Welfare of Society. This slight decrease from the R² value suggests a reasonable model fit. Human Resources, R²: 0.145. This means that the independent variables in the model explain 14.5% of the variance in Human Resources. Adjusted R²: 0.131. This adjusted value indicates that after accounting for the number of predictors, the independent variables explain 13.1% of the variance in Human Resources. The decrease in the R² value suggests some predictors might not strongly contribute to the model. In the Welfare of Society, the model explains a moderate amount of variance (29.8%), which is slightly adjusted to 28.0%, indicating a good fit with some room for improvement. Human Resources: The model explains a lower variance (14.5%), with an adjusted value of 13.1%, suggesting that the independent variables have a weaker explanatory power for this construct. Overall, while the model for The Welfare of Society shows a relatively better fit, the model for Human Resources may need additional or different predictors to improve its explanatory power.

4.2.1. Model of Fit

Model fit indices determine how well a model fits the observed data. Here are explanations and evaluations of the provided fit indices for the Saturated and Estimated Models. An analysis of the provided data is shown in Table 4.

Table 4. Result of Model of Fit

	Saturated Model	Estimated Model
SRMR	0.074	0.074
d_ULS	0.948	0.948
d_G	0.552	0.552
Chi-Square	367.480	367.480
NFI	0.765	0.765

Standardized Root Mean Square Residual (SRMR) measures the discrepancy between the observed and predicted correlations (see Table 4). Values less than 0.08 are generally considered good fits. Saturated model is 0.074 and Estimated Model is 0.074, Both values are below 0.08, indicating a good fit for both models. d_ULS (Unweighted Least Squares Discrepancy) assesses the discrepancy between observed and model-implied covariance matrices. Lower values indicate a better fit, but there's no strict threshold; it's used comparatively. Saturated Model is 0.948 and

Estimated Model is 0.948. Identical values suggest consistent models fit in both models. d_G (Geodesic Discrepancy) is similar to d_ULS but uses a geodesic distance metric.

Lower values indicate a better fit. The saturated model is 0.552, and the Estimated Model is 0.552. These Identical values again suggest a consistent model fit. The Chi-Square statistic tests the null hypothesis that the model fits the data perfectly. Lower values indicate a better fit, but this statistic is sensitive to sample size. The saturated model was 367.480 and the Estimated Model was 367.480. Identical values imply the same model fit quality. Normed Fit Index (NFI) compares the fit of the target model to a null model. Values range from 0 to 1, with values closer to 1 indicating a better fit. Values above 0.9 are generally considered good, but values above 0.8 are acceptable in some fields. Saturated Model: 0.765 and Estimated Model: 0.765 Both values are below 0.9 but close to 0.8, indicating an acceptable but not excellent fit. SRMR models show a good fit with values below the 0.08 threshold. d_ULS and d_G were Consistent and relatively low, indicating a reasonable fit. Chi-Square is Identical for both models, implying no difference in fit quality. NFI was an acceptable fit, though there is room for improvement to reach a value closer to 0.9. Overall, the fit indices suggest that the Saturated and the Estimated Models have similar and reasonable fits to the data. The SRMR values indicate a good fit, while the NFI values suggest that the model could be improved for a better fit.

4.3. Hypotheses

Using the provided data, evaluated the hypotheses based on the path coefficients, t-values, and p-values. Here's the detailed interpretation shown in Table 5.

Table 5. Result of Hypotheses Testing (Direct Effect)

Path Analysis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Fraud Prevention -> Welfare of Society	0.439	0.448	0.141	3.109	0.002
Development Planning -> Welfare of Society	0.117	0.112	0.158	0.742	0.458

Table 5 shows the result of hypothesis testing (direct effect). This study found that fraud prevention has a significant positive effect on the welfare of society. The regression coefficient of fraud prevention is 0.439, standard deviation is 0.141, t-stat is 3.109 and significant at 1 percent. It means that suppose fraud prevention increases 1 percent, then the welfare of society will be increased by as much as 43.9 percent. Besides that, this study indicates that development planning does not affect the welfare of society.

Table 6. Result of Hypothesis Testing (Mediating Effect)

Path Analysis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Fraud Prevention -> Human Resources > Welfare of Society	0.0005	0.001	0.010	0.048	0.585
Development Planning -> Human Resources -> Welfare of Society	0.4070	0.424	0.210	3.238	0.643

Table 6 reports the result of hypothesis testing for examining the mediating role of human capital. The result found that human capital does not mediate the relationship between fraud prevention and development planning on welfare of society.

5. Discussion

This hypothesis elucidates the complex interplay among fraud prevention, development planning, human resources, and societal welfare in rural development. This study's findings provide robust support for H1, indicating a significant positive association between fraud prevention measures and societal welfare in rural areas. This underscores the critical role of stringent measures in mitigating fraudulent activities, leading to substantial improvements in the socioeconomic fabric and overall quality of life within rural communities. Effective fraud prevention mechanisms safeguard village funds and foster an environment conducive to sustainable development and prosperity. However, the analysis fails to corroborate hypothesis H2, suggesting no substantial relationship between fraud-prevention efforts and Human Resources in rural settings. This implies that while combating fraud is essential for financial integrity, its impact

on nurturing and advancing human capital within village communities appears to be limited. Thus, additional strategies may be required to address rural populations' broader socioeconomic development needs beyond fraud-prevention measures alone. Similarly, H3 lacks support, indicating no significant relationship between development planning efforts and societal welfare in rural areas. This challenges the notion that the mere existence of development plans guarantees observable enhancements to the overall well-being of rural populations. This underscores the importance of effective implementation and execution of development plans to translate aspirations into tangible socioeconomic improvements at the grassroots level.

Conversely, H4 finds strong empirical support, highlighting a meaningful positive correlation between Development Planning initiatives and Human Resources in village communities. This underscores the pivotal role of strategic development planning in enhancing the quality, skills, and capacity of human resources in rural areas. Effective planning ensures the alignment of resources and efforts toward fostering human capital development, establishing a foundation for sustainable rural development. Hypothesis H5 failed to find significant empirical support, indicating no direct relationship between human resources and societal welfare in rural settings. This suggests that while improvements in human resources may hold potential benefits, such enhancements may not always translate into tangible improvements in the overall well-being of rural populations. This underscores the complexity of the factors influencing rural development outcomes and the need for comprehensive strategies that address multidimensional challenges. This study emphasizes the importance of holistic approaches integrating fraud prevention measures and development planning efforts to drive rural development. Although fraud prevention improves societal welfare, effective development planning is critical in enhancing human resources. Interactions and nuanced interactions among these factors highlight the complexity of rural development dynamics and underscore the need for tailored strategies to address rural communities' diverse challenges.

6. Conclusion

In conclusion, the analysis of the hypotheses elucidates the significant relationships between fraud prevention, development planning, human resources, and the welfare of society within the context of rural development. The evaluation revealed strong positive associations, particularly between fraud prevention and the welfare of society and between development planning and human resources. These findings indicate that effective fraud prevention and sound development planning are crucial to enhancing rural communities' well-being and human resource capacity. However, hypotheses H2, H3, and H5 were not supported, suggesting no significant relationships between fraud prevention and human resources, development planning and society's welfare, or human resources and society's welfare. These challenges previously held assumptions and illustrated the complexity of rural development dynamics. They emphasised that while fraud prevention and development planning are vital, they do not directly influence human resource capacity or overall well-being in isolation. The nuanced insights from this analysis underscore the necessity for integrated approaches that consider the interplay of various factors to address the diverse challenges rural communities face. Furthermore, this study confirmed the reliability and validity of the measurement model, ensuring that the constructs were accurately assessed and distinct from one another. Overall, the findings contribute to a more comprehensive understanding of the relationships between these constructs and emphasize the importance of holistic strategies to promote sustainable rural development and enhance the quality of life of rural populations.

6.1. Implication and Recommendations

This study underscores the necessity of enhancing policies and regulations pertaining to fraud prevention in rural development projects with a focus on transparency, accountability, and robust monitoring mechanisms. It proposes integrating development-planning processes with community participation to ensure alignment with local needs and priorities. Moreover, allocating resources for capacity-building initiatives that enhance human capital, such as education, skill development, and vocational training, is essential. Implementing training programs for local government officials and community leaders on effective fraud prevention strategies and financial management practices is recommended. Collaborative efforts should be fostered through partnerships among governmental organizations, non-governmental organizations, and community-based groups to enhance rural development initiatives. Furthermore, prioritizing investments in infrastructure, healthcare, education, and social services will improve the overall well-being of rural populations. Future research should conduct longitudinal studies to assess the long-term effects of fraud prevention measures and development planning on the socioeconomic outcomes of rural communities. In addition, exploring the influence of cultural factors, governance structures, and institutional arrangements on rural development processes can provide valuable insights. Investigating innovative approaches and best practices in rural development in diverse regions and countries will also aid in informing evidence-based policymaking and program implementation.

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