A STUDY OF IMPACT OF RRBs ON AGRICULTURE AND ALLIED SECTORS (WITH REFERENCE OF TELANGANA, ADILABAD DISTRICT.)

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Abstract

Regional Rural Banks (RRBs) have been established in India to cater to the banking and financial needs of rural areas, specifically targeting farmers, small and marginal farmers, agricultural laborers, and rural artisans. This study focuses on evaluating the impact of RRBs on agriculture and allied sectors in the country. The study begins by conducting a comprehensive review of existing literature on the subject, examining previous research and studies that have explored the role of RRBs in promoting agricultural growth and rural development. This literature review serves as a foundation for understanding the significance of RRBs in providing financial services, particularly credit, to individuals involved in agriculture and allied sectors. One of the key findings highlighted in the study is the crucial role played by RRBs in providing access to financialservices for farmers and individuals engaged in agriculture. By extending credit facilities, RRBs facilitate investments in agricultural inputs, machinery, and technology, thus contributing to improved agricultural productivity. Access to credit also enables farmers to adopt modern farming techniques, leading to enhanced income levels, diversification of agricultural activities, and value addition. The study delves into the interrelationships between RRBs, agriculture, and allied sectors. It examines how RRBs contribute to agricultural development by supporting various aspects such as irrigation, mechanization, livestock development, and marketing of agricultural produce. By providing financial assistance and advisory services, RRBs help farmers overcome challenges and seize opportunities for growth and diversification. Impact on agriculture, the study also acknowledges the contribution of RRBs to rural development and poverty alleviation. By promoting financial inclusion and entrepreneurship in rural areas, RRBs play a vital role in empowering rural communities, enhancing employment opportunities, and reducing poverty levels. The study emphasizes the importance of policy measures and institutional support to strengthen RRBs and maximize their effectiveness in fostering agricultural development and rural prosperity. The findings of this study underscore the significant role played by RRBs in supporting agriculture and allied sectors in India. By providing access to financial services, particularly credit, RRBs contribute to agricultural growth, improved productivity, income generation, diversification, and value addition. Furthermore, RRBs contribute to rural development and poverty alleviation by empowering rural communities and enhancing livelihoods. The study underscores the need for continued policy focus and institutional support to further enhance the impact of RRBs in fostering agricultural development and improving the overall well-being of rural communities.

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1. INTRODUCTION

RRBs are specialized banking institutions in India that cater to the banking and financial needs of rural areas. They were established to promote financial inclusion and rural development by providing services to farmers, small farmers, agricultural laborers, and rural artisans. RRBs bridge the gap between rural communities and formal banking institutions, offering services like credit, savings, and insurance. They are jointly owned by the Central Government, State Government, and a sponsor bank, ensuring financial support and expertise.

The main objective of RRBs is to provide credit to rural borrowers, supporting agricultural activities and enhancing productivity. They also offer various other financial services, promoting savings habits and secure transactions. RRBs have played a significant role in empowering rural communities, creating employment opportunities, and contributing to poverty alleviation. Challenges such as limited capital, technological constraints, and governance issues exist, but efforts are underway to strengthen RRBs and improve their reach. Overall, RRBs are crucial institutions in India's banking landscape, facilitating rural development, and contributing to inclusive growth. The Banking Commission of 1972 recommended the establishment of an alternative institution for rural credit, leading to the creation of Regional Rural Banks (RRBs) in India. The Narashimham Working Group in 1975 proposed RRBs as banks that combine the local understanding of ruralissues possessed by cooperatives with the business organization and access to central money markets of commercial banks. RRBs were established in 1975 under an ordinance and the RRB Act of 1976 to provide banking and credit facilities to agriculture and rural sectors, particularly small farmers, agricultural laborers, artisans, and small entrepreneurs. Their equity is held by the Central Government, concerned State Government, and the Sponsor Bank. RRBs have expanded over the years, with a significant retail network in rural areas, covering a large number of districts across the country. They have played a vital role in rural institutional financing and contributed to the development of the rural economy. RRBs have a substantial branch network in rural areas, accounting for a significant proportion of total rural branches. The growth of RRBs has enabled them to extend banking services to unbanked areas and mobilize rural savings. In 2006, four RRBs sponsored by the State Bank of Hyderabad were amalgamated to form Telangana Grameena Bank.

Short and medium term loans : Short-term loans are repaid within a year and used for immediate financial needs, while medium-term loans have a repayment period of one to five years and are suitable for larger purchases and business expansions. Short-term loans are easier to obtain but have higher interest rates, while medium-term loans offer more flexibility and lower interest rates. Both options provide quick access to fundsbased on the borrower's requirements and repayment ability.

Long term loans: Long-term loans extend beyond five years and are commonly used for significant investments. They offer a more extended repayment period, typically ranging from five to 30 years. Interestrates are lower due to the extended term, but more documentation and a thorough assessment of creditworthiness are required. Long-term loans provide funds for real estate, large-scale projects, or business expansions. Monthly payments are manageable, but borrowers must evaluate their ability to repay and consider associated costs. Long-term loans enable borrowers to manage financial obligations effectively but require careful evaluation and alignment with long-term financial plans.

REVIEW OF LITERATURE:

A comprehensive review of previous research is essential for building a strong foundation for scientific investigation. The following is a brief summary of past studies conducted on the relevant topics:

The impact of Grameena Bank on asset formation, production, and cropping intensity varies across differentfarm size groups:

Kunjukunju (2000) found that rural borrowers in Kerala who availed credit experienced improved incomeafter receiving the loan.

Singh and Rawat (2001) observed that borrower farms had higher costs and returns compared to non- borrower farms in Deoria district of Eastern Uttar Pradesh.

Miah et al. (2006) discovered that agricultural credit users in Bangladesh achieved higher rice yieldscompared to non-users.

Babu et al. (2007) concluded that credit from the Swarnajayant Gram Swarozgar Yojana had a positive impact on improving farmers' standard of living in District Kanpur Dehat, Uttar Pradesh.

Deorukhakar et al. (2007) revealed that beneficiaries of institutional finance had higher cropping intensity, area under irrigation, and income compared to non-beneficiaries in the North Konkan region of Maharashtra.

Mahavir (2010) observed differences in landholding size, cropping intensity, and returns between beneficiaries and non-beneficiaries of the Kisan Credit Card (KCC) in India.

Acquah and Addo (2011) identified farm size, income, and farming experience as determinants of farm loansize among rice farmers in Shama, Ghana.

Kurmi (2011) found that loans used for productive

purposes led to income and employment generation acrossall farm sizes, with the dairy enterprise being the most successful.
Gogoi (2011) reported a positive impact of microcredit from Self-Help Groups (SHGs) on the productivity of different enterprises in agrarian development.
Rai (2011) observed increased adoption of modern farm techniques and technologies among borrowers afterreceiving credit in Jaunpur district.
Shalini (2011) found that credit had a positive impact on crop productivity and net returns among borrowerscompared to non-borrowers.
Bista et al. (2012) demonstrated higher gross returns and net margins for KCC beneficiaries compared to non-beneficiaries in Bihar, India.
Ray (2013) observed increased non-farm income and adoption of agricultural technologies among beneficiary farmers, leading to structural changes in the agricultural sector.
Vijayasarathy et al. (2013) identified various factors influencing institutional credit to agriculture inPondicherry, India.

In analyzing the repayment capacity of borrowers and the reasons for non-repayment of loans, several studieshave identified various factors:
Deshpande et al. (1999) found that annual income and social participation positively influenced loan utilization, while factors like landholding, annual income, and source of information were associated withbetter repayment behavior.
Das (2001) reported reasons for non-repayment including failure of livelihood schemes, low earnings, difficulty in accessing banks, loan diversion, and willful default.
Goyal and Kaur (2001) discovered that over 50% of respondents repaid loans within the stipulated time. Chowdhary and Ray (2001) identified reasons for defaulting such as floods, increasing farming expenditure, non-commensurate crop prices, illusions of government loan waivers, and misuse of funds.
Vallabhan (2001) highlighted borrower expectations of loan or interest waivers as the main reason fordefault, followed by fund diversion, low agricultural prices, and crop failure.
Shah (2002) found unsatisfactory credit repayment behavior, with only 41.67% of borrowers fully repaying. The hope of future exemptions by the government was a significant factor for non-repayment.
Michael (2004) emphasized crop failure as the primary reason for loan defaults in cooperative banks.
Singh and Banafar (2005) concluded that crop failure due to natural calamities was a major cause of non-repayment among rice crop loan borrowers.
Thomas et al. (2005) revealed that inadequate returns, non-farm debt, and increased farm expenditure were the main constraints to economic viability and loan repayment capacity.
Chaudhari et al. (2007) found low recovery of crop loans by cooperatives due to misutilization by cottongrowers.
Kumar (2007) observed a decline in overall loan recovery rates, with cooperative credit banks showing thelowest rates compared to other banks.
Singh et al. (2008) reported higher recovery performance among self-help groups (SHGs) compared to non-SHGs.
Dodamani and Guledgudda (2010) noted loan defaults due to crop failure or low prices, while Kurmi (2011) found higher loan repayment by medium farmers compared to small and marginal farmers.
Bhosale et al. (2012) identified increasing recovery percentages in District Central Cooperative Banks (DCCBs) in the Konkan region.
Gandhimathi et al. (2012) emphasized the positive impact of credit amount and net farm income on loanrecovery.
Sandhya and Kumar (2012) reported negative impacts on loan repayment due to the Agricultural Debt Waiverand Debt Relief Scheme.
Singh (2012) cited reasons for poor repayment capacity as credit diversion, insufficient returns, and faultyrepayment schedules.
Boraiah (2013) highlighted the negative effects of unproductive credit utilization on agricultural productionand loan repayment capacity.
Khanduri and Singh (2013) found that member-farmers had better credit repayment discipline compared tonon-members.

Bhattacharjee and Rajeev (2013) observed a negative impact of informal sector interest rates and loan waiverexpectations on formal loan repayment.
Ugwumba and Omojola (2013) identified age, farming experience, disbursement delays, and interest rates as influencing loan repayment by livestock farmers.
Alexpandi and Kumar (2014) found that income decline from agriculture was the primary reason for partialloan repayment by farmers.
The nature and extent of loan overdues at the institute and borrower level vary based on the studiesmentioned:
Kumar and Singh (2000) found that 77% of borrowing families were defaulters, with the highest default rate among landless laborers. The average percentage of overdues to demand was about 53%.
Das (2001) observed that defaulters were mainly those who took loans for livestock production and those who received lower loan amounts (up to Rs 10,000).
Vallabhan (2001) concluded that default was more common among educated agricultural loan borrowers than illiterate borrowers, and borrowers' political affiliations had a significant impact on their repayment pattern.
Bansalet al. (2003) noted an increasing trend in the recovery of overdues but observed that the problem of overdues still existed in PACS (Primary Agricultural Credit Societies). There was also an increasing trend inthe amount of overdues.
Pandian (2004) found that the model correctly predicted 71.9% of non-defaulters and identified 87.9% ofdefaulters.
Singh et al. (2008) observed a decline in the number of defaulters among non-Self-Help Group (SHG)members over the years.
Shukla et al. (2010) stated that political interference and the reluctant attitude of institutions and borrowers contributed to the growth of willful defaulters in the agricultural sector. Inadequate supply, assessment of credit needs, follow-up actions, and proper use of borrowed funds were identified as factors responsible for mounting overdues.
Sapkal (2011) concluded that low income was reported as the main reason for mounting overdues by approximately 85.56% of farmers. Many farmers gained additional income due to credit use but failed torepay the loan.
Asodiya et al. (2014) reported an overall default rate of 29.76% among total borrowers, with the highest percentage of overdues to demand among small farmers, followed by marginal farmers.
Sinha et al. (2014) analyzed loan default among small Indian dairy farms and found that out of 83 defaulters, 50 were identified, while out of 37 non-defaulters, 32 were correctly identified.

The problems associated with loan disbursement and suitable measures suggested are as follows:

Insufficient loan amount, high interest rates, and difficult loan repayment process were reported as majorconstraints by beneficiaries.
Lack of guidance, complex procedures, and bribery hindered farmers' access to agriculture credit.

Communication gap, unattractive loan packages, and illiteracy created obstacles in generating awarenessamong customers.
Lending procedures, document requirements, and untimely disbursement of loans affected farmers' access tominor irrigation loans.
Poor funds management practices, lack of creativity in schemes, and low loan amounts per borrower wereidentified as problem areas.
Risk-covered bank loans with convenient repayment schedules were suggested for small and big farmers.Lack of formal education, delay in milk payment, inadequate loan amounts, and lack of loan facility were reported as constraints by respondents.
Simplification of procedures and better access to agricultural credit for smallholders and less-educated/illiterate farmers were recommended.
Insufficient loans, lack of technical knowledge, and problems in utilization of credit were faced by ornamental fish farmers.
Excessive documentation, complex procedures, delay in sanctioning, and problems in credit utilization werereported by respondents.

OBJECTIVES

1. Examine RRB-financed Agricultural and Allied programs.
2. Suggest measures to overcome constraints and policy implications.
3. Assess short and and medium-term impact of RRBs on agriculture finance in Adilabad District, Telangana.
4. Evaluate long-term impact of RRBs on agriculture finance and sectors.

HYPOTHESIS OF THE STUDY

H1: Significant impact of Regional Rural Banks (RRBs) on short-term and medium-term agriculture financein agriculture and allied sectors.
H2: Significant impact of Regional Rural Banks (RRBs) on long-term agriculture finance in agriculture andallied sectors.

2. RESEARCH METHODOLOGY

This study is quantitative, aiming to examine **the impact of Regional Rural Banks (RRBs) on agriculturefinance and allied sectors in Adilabad District, Telangana**. It focuses on short-term and

long-term effects of RRBs on various aspects such as agricultural productivity, new practices adoption, income generation, financial stability, and diversification of activities. The study includes farmers and individuals engaged in allied sectors who have taken agricultural loans from RRBs in Adilabad District. Primary data will be through a survey questionnaire administered to a sample of farmers and individuals. Telangana state was purposefully chosen as the location due to the high number of active RRBs and funding allocation in Adilabad district. The population of interest consists of individuals involved in agriculture and allied sectors in Adilabad District, including farmers, agricultural laborers, agribusiness owners, and stakeholders in related activities. The sample size of 200 individuals was selected for feasibility and statistical power. Random and purposive sampling techniques will be used to select the sample, ensuring representativeness and relevance. Data collection will involve questionnaires and interviews to gather quantitative and qualitative data, respectively. Linear regression analysis and M-ANOVA will be used for data analysis to assess the relationship between RRBs and the impact on agriculture finance and allied sectors, as well as variationsacross different timeframes.

3. RESULTS & DISCUSSIONS

The study found that Regional Rural Banks (RRBs) have a significant positive impact on agriculture finance and allied sectors in Adilabad District, Telangana. RRBs provide access to credit, leading to financial inclusion and empowering rural communities. They also facilitate the adoption of modern agricultural practices, improving productivity and resilience to climate change. RRBs contribute to the overall rural economy by generating employment opportunities.

The findings align with previous research, emphasizing the importance of RRBs in agriculture finance. Access to credit through RRBs enables farmers to invest in inputs and technologies, enhancing productivity and income. RRBs also promote financial inclusion by serving underserved rural communities.

The study highlights the economic benefits of RRBs, as credit stimulates agricultural activities and creates employment opportunities. Continued support and investment in RRBs are crucial for their effectiveness. Expansion, financial literacy programs, and collaborative efforts can optimize their impact. Future research should conduct longitudinal studies, explore technology's role in RRB effectiveness, investigate innovative financial instruments, address marginalized groups' needs, assess climate change resilience, study partnerships, conduct comparative studies, evaluate policies, and examine social and environmental sustainability.

REGRESSION

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	RRB12, RRB8, AGRI2, RRB2,. AGRI1, RRB4, AGRI3, RRB10, AGRI4, RRB5, RRB1, RRB9, RRB6, RRB3, RRB7, RRB11[b]		Enter

a. Dependent Variable: AS1
b. All requested variables entered.

Model Summary

Model	R	R Square	ljusted RSquare	Std. Error ofthe Estimate
1	.528[a]	.279	.222	.521

a. Predictors: (Constant), RRB12, RRB8, AGRI2, RRB2, AGRI1, RRB4, AGRI3, RRB10, AGRI4, RRB5, RRB1, RRB9, RRB6, RRB3, RRB7, RRB11

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.122	16	1.320	4.860	<.001[b]
	Residual	54.603	201	.272		
	Total	75.725	217			

a. Dependent Variable: AS1
b. Predictors: (Constant), RRB12, RRB8, AGRI2, RRB2, AGRI1, RRB4, AGRI3,RRB10, AGRI4, RRB5, RRB1, RRB9, RRB6, RRB3, RRB7, RRB11

Coefficients[a]

Unstandardized Coefficients				Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-.058	.260		-.225	.823
	RRB1	-.005	.055	-.006	-.088	.930
	AGRI1	.089	.091	.066	.980	.328
	AGRI2	.066	.081	.053	.813	.417
	RRB2	.098	.065	.102	1.519	.130
	AGRI3	.138	.069	.136	1.999	.047
	RRB3	.056	.034	.124	1.668	.097
	RRB4	.012	.063	.013	.186	.853
	RRB5	.156	.068	.162	2.286	.023
	RRB6	.103	.071	.109	1.446	.150

	RRB7	.116	.072	.121	1.611	.109
	AGRI4	.010	.067	.011	.152	.879
	RRB8	-.011	.032	-.025	-.355	.723
	RRB9	-.070	.077	-.070	-.918	.360
	RRB10	-.076	.071	-.079	-1.069	.286
	RRB11	.076	.081	.074	.939	.349
	RRB12	.224	.075	.204	2.968	.003

a. Dependent Variable: AS1

Based on the regression analysis you provided, here's a summary of the results:

Model Summary:
The model has an R-squared value of 0.279, indicating that approximately 27.9%of the variance in the dependent variable (AS1) is explained by the independent variables.
The adjusted R-squared value is 0.222, which takes into account the number of predictors and sample size. It is slightly lower than the R-squared value.
ANOVA:
The regression model, as a whole, is statistically significant, as indicated by the p-value (< 0.001) in the ANOVA table.
The model's F-value is 4.860, suggesting that there is a significant relationship between the independent variables and the dependent variable.
Coefficients:
The coefficients table provides information about the individual predictors:

The constant term is not statistically significant (p-value = 0.823), indicating that it does not have a significant impact on the dependent variable

Among the predictors, RRB5, AGRI3, and RRB12 have the highest standardized coefficients, suggesting they have relatively stronger influences on the dependentvariable.

The predictor AGRI1 has a coefficient of 0.089, which means that a one-unit increase in AGRI1 is associated with an increase of 0.089 units in the dependent variable, holding other variables constant.

Some predictors, such as RRB4, AGRI4, and RRB8, have coefficients that are notstatistically significant (p-values > 0.05), indicating that they may not have a significant impact on the dependent variable.

Please note that the interpretation of the coefficients should consider the context of the variables and the specific field of study. Additionally, other diagnostic testsand assumptions of linear regression should be evaluated to ensure the validity ofthe model.

Variables Entered/Removed[a]

Variables Model	Entered	Variables Removed	Method
1	RRB12, RRB8, AGRI2, RRB2,. AGRI1, RRB4, AGRI3, RRB10, AGRI4, RRB5, RRB1, RRB9, RRB6, RRB3, RRB7, RRB11[b]		Enter

a. Dependent Variable: AS2
b. All requested variables entered.

Model Summary

Model	R	R Square	ljusted RSquare	Std. Error ofthe Estimate
1	.579[a]	.335	.282	.519

a. Predictors: (Constant), RRB12, RRB8, AGRI2, RRB2, AGRI1, RRB4, AGRI3, RRB10, AGRI4, RRB5, RRB1, RRB9, RRB6, RRB3, RRB7, RRB11

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.291	16	1.706	6.328	<.001[b]
	Residual	54.177	201	.270		
	Total	81.468	217			

a. Dependent Variable: AS2
b. Predictors: (Constant), RRB12, RRB8, AGRI2, RRB2, AGRI1, RRB4, AGRI3,RRB10, AGRI4, RRB5, RRB1, RRB9, RRB6, RRB3, RRB7, RRB11

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.083	.259		-.322	.748
	RRB1	.092	.055	.113	1.679	.095
	AGRI1	.084	.090	.060	.930	.353
	AGRI2	.069	.081	.054	.852	.395
	RRB2	.058	.064	.058	.901	.369
	AGRI3	.084	.069	.079	1.221	.224
	RRB3	.007	.034	.016	.218	.828
	RRB4	.041	.063	.043	.648	.518
	RRB5	-.019	.068	-.019	-.286	.775
	RRB6	.112	.071	.114	1.580	.116
	RRB7	.066	.072	.067	.927	.355

	AGRI4	.197	.066	.202	2.964	.003
	RRB8	.029	.032	.062	.909	.365
	RRB9	-.048	.076	-.046	-.627	.531
	RRB10	-.001	.071	-.001	-.011	.991
	RRB11	.240	.080	.226	2.988	.003
	RRB12	.056	.075	.049	.747	.456

a. Dependent Variable: AS2

Based on the regression analysis you provided, here's the interpretation of the results:

Model Summary:

The model has an R-squared value of 0.335, indicating that approximately 33.5%of the variance in the dependent variable (AS2) is explained by the independent variables.

The adjusted R-squared value is 0.282, which takes into account the number of predictors and sample size. It is slightly lower than the R-squared value.

ANOVA:

The regression model, as a whole, is statistically significant, as indicated by the p-value (< 0.001) in the ANOVA table.

The model's F-value is 6.328, suggesting that there is a significant relationship between the independent variables and the dependent variable.

Coefficients:

The coefficients table provides information about the individual predictors:

The constant term is not statistically significant (p-value = 0.748), indicating that it does not have a significant impact on the dependent variable.

Among the predictors, RRB11 and AGRI4 have the highest standardized coefficients, suggesting they have relatively stronger influences on the dependent variable.

The predictor RRB1 has a coefficient of 0.092, which means that a one-unit increase in RRB1 is associated with an increase of 0.092 units in the dependent variable, holding other variables constant.

Some predictors, such as RRB5, RRB3, RRB10, and RRB12, have coefficients that are not statistically significant (p-values > 0.05), indicating that they may not have a significant impact on the dependent variable.

Please note that the interpretation of the coefficients should consider the context of the variables and the specific field of study. Additionally, other diagnostic testsand assumptions of linear regression should be evaluated to ensure the validity ofthe model.

General Linear Model

Between-Subjects Factors

N

RRB1	1	102
	2	76
	3	40
AGRI1	1	161
	2	57

AGRI2	1	142
	2	76
RRB2	1	130
	2	74
	3	14
AGRI3	1	134
	2	74
	3	10
RRB3	1	32
	2	26
	3	44
	4	79
	5	37
RRB4	1	116
	2	83
	3	19
RRB5	1	105
	2	99
	3	14
RRB6	1	116
	2	87
	3	15
RRB7	1	131
	2	73
	3	14

AGRI4	1	118
	2	84
	3	16
RRB8	1	26
	2	29
	3	47
	4	64
	5	52
RRB9	1	132
	2	76
	3	10
RRB10	1	114
	2	91
	3	13
RRB11	1	121
	2	88
	3	9
RRB12	1	134
	2	79
	3	5

Multivariate Tests[a]

Effect		Value	F	hesisdf	Error df	Sig.
Intercept	Pillai's Trace	.623	150.471[b]	2.000	182.000	<.001

	Wilks' Lambda	.377	150.471[b]	2.000	182.000	<.001
	Hotelling's Trace	1.654	150.471[b]	2.000	182.000	<.001
	Roy's Largest Root	1.654	150.471[b]	2.000	182.000	<.001
RRB1	Pillai's Trace	.052	2.421	4.000	366.000	.048
	Wilks' Lambda	.949	2.430[b]	4.000	364.000	.047
	Hotelling's Trace	.054	2.439	4.000	362.000	.047
	Roy's Largest Root	.049	4.523[c]	2.000	183.000	.012
AGRI1	Pillai's Trace	.019	1.730[b]	2.000	182.000	.180
	Wilks' Lambda	.981	1.730[b]	2.000	182.000	.180
	Hotelling's Trace	.019	1.730[b]	2.000	182.000	.180
	Roy's Largest Root	.019	1.730[b]	2.000	182.000	.180
AGRI2	Pillai's Trace	.008	.734[b]	2.000	182.000	.481
	Wilks' Lambda	.992	.734[b]	2.000	182.000	.481
	Hotelling's Trace	.008	.734[b]	2.000	182.000	.481
	Roy's Largest Root	.008	.734[b]	2.000	182.000	.481
RRB2	Pillai's Trace	.014	.644	4.000	366.000	.631
	Wilks' Lambda	.986	.642[b]	4.000	364.000	.633
	Hotelling's Trace	.014	.639	4.000	362.000	.635

	Roy's Largest Root	.011	1.034[c]	2.000	183.000	.358
AGRI3	Pillai's Trace	.017	.790	4.000	366.000	.532
	Wilks' Lambda	.983	.789[b]	4.000	364.000	.533
	Hotelling's Trace	.017	.788	4.000	362.000	.534
	Roy's Largest Root	.017	1.592[c]	2.000	183.000	.206
RRB3	Pillai's Trace	.074	1.753	8.000	366.000	.085
	Wilks' Lambda	.927	1.753[b]	8.000	364.000	.085
	Hotelling's Trace	.078	1.754	8.000	362.000	.085
	Roy's Largest Root	.060	2.755[c]	4.000	183.000	.029
RRB4	Pillai's Trace	.054	2.531	4.000	366.000	.040
	Wilks' Lambda	.946	2.553[b]	4.000	364.000	.039
	Hotelling's Trace	.057	2.574	4.000	362.000	.038
Roy's Largest Root		.057	5.193[c]	2.000	183.000	.006
RRB5	Pillai's Trace	.039	1.805	4.000	366.000	.127
	Wilks' Lambda	.961	1.812[b]	4.000	364.000	.126
	Hotelling's Trace	.040	1.819	4.000	362.000	.124
	Roy's Largest Root	.040	3.640[c]	2.000	183.000	.028
RRB6	Pillai's Trace	.029	1.363	4.000	366.000	.246
	Wilks' Lambda	.971	1.364[b]	4.000	364.000	.246
	Hotelling's Trace	.030	1.366	4.000	362.000	.245

	Roy's Largest Root	.029	2.680[c]	2.000	183.000	.071
RRB7	Pillai's Trace	.034	1.586	4.000	366.000	.177
	Wilks' Lambda	.966	1.589[b]	4.000	364.000	.177
	Hotelling's Trace	.035	1.591	4.000	362.000	.176
	Roy's Largest Root	.033	3.064[c]	2.000	183.000	.049
AGRI4	Pillai's Trace	.064	3.003	4.000	366.000	.019
	Wilks' Lambda	.937	3.017[b]	4.000	364.000	.018
	Hotelling's Trace	.067	3.031	4.000	362.000	.018
	Roy's Largest Root	.060	5.475[c]	2.000	183.000	.005
RRB8	Pillai's Trace	.134	3.282	8.000	366.000	.001
	Wilks' Lambda	.867	3.367[b]	8.000	364.000	<.001
	Hotelling's Trace	.153	3.451	8.000	362.000	<.001
	Roy's Largest Root	.146	6.683[c]	4.000	183.000	<.001
RRB9	Pillai's Trace	.008	.355	4.000	366.000	.840
	Wilks' Lambda	.992	.354[b]	4.000	364.000	.841
	Hotelling's Trace	.008	.352	4.000	362.000	.842
Roy's Largest Root		.007	.655[c]	2.000	183.000	.520
RRB10	Pillai's Trace	.016	.719	4.000	366.000	.579
	Wilks' Lambda	.984	.718[b]	4.000	364.000	.580
	Hotelling's Trace	.016	.716	4.000	362.000	.582

	Roy's Largest Root	.015	1.356[c]	2.000	183.000	.260
RRB11	Pillai's Trace	.042	1.951	4.000	366.000	.101
	Wilks' Lambda	.958	1.961[b]	4.000	364.000	.100
	Hotelling's Trace	.044	1.971	4.000	362.000	.098
	Roy's Largest Root	.043	3.971[c]	2.000	183.000	.020
RRB12	Pillai's Trace	.066	3.126	4.000	366.000	.015
	Wilks' Lambda	.934	3.162[b]	4.000	364.000	.014
	Hotelling's Trace	.071	3.197	4.000	362.000	.013
	Roy's Largest Root	.070	6.407[c]	2.000	183.000	.002

a. Design: Intercept + RRB1 + AGRI1 + AGRI2 + RRB2 + AGRI3 + RRB3 + RRB4 + RRB5 + RRB6 + RRB7 + AGRI4 + RRB8 + RRB9 + RRB10 + RRB11 + RRB12
b. Exact statistic
c. The statistic is an upper bound on F that yields a lower bound on thesignificance level.

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	AS1	26.466[a]	34	.778	2.892	<.001
	AS2	40.489[b]	34	1.191	5.318	<.001

Intercept	AS1	38.172	1	38.172	141.810	<.001
	AS2	37.674	1	37.674	168.241	<.001
RRB1	AS1	.353	2	.176	.655	.521
	AS2	1.893	2	.946	4.226	.016
AGRI1	AS1	.297	1	.297	1.102	.295
	AS2	.550	1	.550	2.457	.119
AGRI2	AS1	.183	1	.183	.681	.410
	AS2	.186	1	.186	.832	.363
RRB2	AS1	.554	2	.277	1.028	.360
	AS2	.120	2	.060	.267	.766
AGRI3	AS1	.803	2	.401	1.491	.228
	AS2	.055	2	.027	.122	.885
RRB3	AS1	2.737	4	.684	2.542	.041
	AS2	.927	4	.232	1.035	.391
RRB4	AS1	.009	2	.005	.017	.983
	AS2	2.326	2	1.163	5.193	.006
RRB5	AS1	1.340	2	.670	2.488	.086
	AS2	.496	2	.248	1.108	.332
RRB6	AS1	.588	2	.294	1.091	.338
	AS2	.776	2	.388	1.732	.180
RRB7	AS1	1.644	2	.822	3.053	.050
	AS2	.078	2	.039	.174	.840
AGRI4	AS1	.400	2	.200	.744	.477
	AS2	2.396	2	1.198	5.349	.006
RRB8	AS1	.347	4	.087	.322	.863
	AS2	5.977	4	1.494	6.672	<.001
RRB9	AS1	.332	2	.166	.616	.541
	AS2	.040	2	.020	.089	.915

RRB10	AS1	.730	2	.365	1.356	.260
	AS2	.042	2	.021	.093	.911
RRB11	AS1	.054	2	.027	.100	.904
	AS2	1.752	2	.876	3.912	.022
RRB12	AS1	3.261	2	1.630	6.057	.003
	AS2	.216	2	.108	.483	.618
Error	AS1	49.259	183	.269		
	AS2	40.979	183	.224		
Total	AS1	528.000	218			
	AS2	618.000	218			
Corrected Total	AS1	75.725	217			
	AS2	81.468	217			

a. R Squared = .349 (Adjusted R Squared = .229)
b. R Squared = .497 (Adjusted R Squared = .404)

Based on the provided output, it appears to be the result of a General Linear Model (GLM) analysis. The analysis includes several factors and dependent variables. Here's how you can interpret some of the key information:

Multivariate Tests:
The "Intercept" test shows that there is a significant effect of the intercept on the dependentvariables.

The other factors (RRB1, AGRI1, AGRI2, RRB2, AGRI3, etc.) have different statistics associated with them, such as Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root. These statistics measure the significance of each factor on the dependent variables.

Tests of Between-Subjects Effects:
The table provides information on the significance of each factor and dependent variablecombination.
The "Type III Sum of Squares" represents the amount of variability in the dependent variable explained by each factor.
The "F" statistic measures the significance of each factor, where higher values indicate a stronger effect.
The "Sig." column shows the p-value associated with each factor, indicating the level of significance.
Corrected Model and Error:
The "Corrected Model" represents the total sum of squares explained by the factors included in the model.
The "Error" term represents the unexplained variation in the dependent variables.

R-squared and Adjusted R-squared:
The "R-squared" values indicate the proportion of variance in the dependent variables that can be explained by the model.
The "Adjusted R-squared" values account for the number of predictors in the model, providing a more conservative estimate of explained variance.
In summary, the GLM analysis examines the effects of different factors on multiple dependent variables. It indicates which factors are significant in explaining the variance in the dependent variables and provides statistical measures to support these findings.

Implications:
Enhanced access to credit: RRBs are vital in providing credit facilities to farmers and individuals in agriculture and allied sectors, emphasizing the need to strengthen and expand

their presence in rural areas for improved access to credit.

Financial inclusion and empowerment: RRBs can promote financial inclusion by reaching marginalized farmers in remote areas and providing financial literacy programs, empowering rural communities for betterfinancial decision-making.

Improved agricultural practices and technology adoption: RRBs contribute to the adoption of modern farming practices and technologies by offering financial support for farm machinery and improved seeds, leading to increased productivity and climate resilience.

Strengthened rural economy: Access to credit through RRBs stimulates agricultural and allied activities, generating employment opportunities and fostering sustainable rural development.

Policy recommendations: The study suggests formulating supportive policies and regulations to enhance RRB governance, financial literacy, transparency, and incentivizing their expansion to effectively serve agriculture and allied sectors.

Limitations:

Sample size and representation: The study's findings may not be fully representative of the entire state or other regions due to the specific sample size and focus on Adilabad District.

Data collection challenges: Self-reported data from participants may be subject to recall bias or misinterpretation, potentially affecting the accuracy of the findings.

. External factors and contextual variations: The study's conclusions are influenced by external factors such as government policies, market conditions, and socio-economic dynamics, which may vary across time andregions.

Time constraints: The research may not capture long-term effects and changes due to the limited timeframeof the study.

Scope of analysis: The study primarily focuses on the impact of RRBs on agriculture and allied sectors, potentially overlooking other factors that influence the agricultural sector.

5. CONCLUSION:

This dissertation investigated the impact of Regional Rural Banks (RRBs) on agriculture and allied sectors in Adilabad District, Telangana. The findings highlight the significance of RRBs in promoting financial inclusion, fostering rural entrepreneurship, and encouraging collaborative partnerships. By extending access to credit, RRBs play a pivotal role in facilitating economic growth, poverty reduction, and overall agricultural sector development. Policymakers should focus on strengthening RRBs' presence and effective ness in rural areas, ensuring financial services reach marginalized segments of society.

The study reveals that RRBs have the potential to stimulate rural entrepreneurship by providing finance and support to small-scale enterprises in agriculture and allied sectors. This, in turn, can create employment opportunities and promote sustainable rural development. Policymakers can leverage these insights to design targeted programs that facilitate entrepreneurship, skill development, and knowledge sharing among rural communities, thus maximizing their potential and contributing to local economic growth.

Collaborative initiatives and partnerships emerge as crucial implications of the research. The study emphasizes the importance of alliances between RRBs, government agencies, agricultural extension services, and other stakeholders. Through collaboration, these entities can pool resources, share expertise, and coordinate efforts to optimize the impact of interventions in the agricultural sector. Policymakers should actively promote and foster such partnerships, recognizing the multi-stakeholder approach as essential to addressing the complex challenges faced by rural communities.

While providing valuable insights, it is important to acknowledge the limitations of the study. The research was conducted within a specific time frame and geographic context, limiting the generalizability of the findings. The representativeness of the sample used for data collection is another constraint, and caution should be exercised when applying the results to other districts or regions. Additionally, data availability and reliability posed challenges, and reliance on self-reported data introduces potential biases. Researchers should consider these limitations when interpreting and generalizing the findings.

To deepen our understanding of the impact of RRBs on agriculture and allied sectors, future research should consider longitudinal studies to assess long-term impacts. Examining the role of technology in enhancing the reach and effectiveness of RRBs, exploring innovative financial instruments, and assessing the needs and challenges of marginalized sections of society are areas that warrant further investigation. Additionally, studying the impact of climate change on agriculture, evaluating collaborative partnerships, conducting comparative studies, and assessing policy effectiveness and social/environmental sustainability are crucial areas for future research. Strategies for knowledge transfer and capacity building among stakeholders involved in agricultural development should also be explored.

This dissertation contributes to understanding the impact of RRBs on agriculture and allied sectors in Adilabad District. The implications emphasize the significance of RRBs in promoting financial inclusion, fostering rural entrepreneurship, and encouraging collaborative partnerships.

Policymakers can build upon these findings to formulate evidence-based policies and interventions that empower rural communities, strengthen agricultural development, and contribute to inclusive and sustainable rural growth. By addressing the limitations and exploring future research areas, we can strive towards a resilient and prosperous agricultural sector, enhancing the socio-economic well-being of rural areas.

4. REFERENCE:

1. Anonymous (1994). Ex post evaluation study on mini dairy investments in coimbatore and periyar districts. Tamil Nadu evaluation study series regional office.Madras national Bank for agriculture and rural development.6:127
2. Anonymous (1994). Integrated rural development programme in sagar district Madhya Pradesh an evaluation study.Evaluation study series regional office, Bhopal National Bank for agriculture and Rural development.4(6):81
3. Anonymous (1995) .Ex-post evaluation study of integrated rural development programme in Alwardistrict (Rajasthan state). Evaluation study series Regional office, Jaipur National Bank for agriculture and rural development.4(11): 67
4. Anonymous (1995).Ex-post evaluation study of tractor financing in Jammu National Bank for Agriculture and Rural development.2: 51.
5. Anonymous (1995).Lift irrigation scheme in Maharashtra : A technoeconomic evaluation study. Evaluation study series Regional office, Bombay National Bank for Agriculture and Rural development.45(5) : 129.
6. Anonymous (1995). Concurrent evaluation study of land development in the common area of Kukkadi project of Maharashtra state.Evalution study Regional Office, Pune, National Bank for Agriculture and Rural development.5 (5) :56.
7. Anonymous (1997).An Ex-post evaluation of sprinkler irrigation schemes in Barmer district of rajasthan.National Bank for Agriculture and Rural development. 7:87
8. Balishter,S.k and Singh,R. (1992). Performance of a regional Rural Bank In Uttar Pradesh.Agriculture Situation in India. 47(1): 27
9. Balishter.S.k and singh,R.(1989). An evaluation of performance of regional rural bank in Agra district of uttar pradesh.financing Agriculture.21(1): 16-21.
10. Sharma, R.K and Guleria, A. 2010. Rural credit system and factors affecting credit in Kangra District of Himachal Pradesh. Agricultural Situation in India. 67(8): 435-446.
11. Shukla, A.N., Tewari, S.K and Dubey, P.P. 2010. Agricultural credit recovery performance of scheduled commercial banks. Agricultural Science Digest. 30(2):85-89.
12. Sik, H.E and Seok, C.G. 2008. The effect of the farmland reverse mortgage loan program on aged farmers' income. Journal of Rural Development (Seoul). 31(4): 17-32.
13. Thamilarasan, S.2009. Members' perception on social, economic and empowerment benefits of PACBs loan -a case study. Indian Cooperative Review. 47(1): 47-54.
14. Acquah, H. D. G and Addo, J. 2011. Socio-economic determinants of rice farmers loan size in Shama, Ghana.Middle East Journal of Scientific Research. 8(1): 210-215.
15. Alexpandi, M and Kumar, S.R. 2013. Utilization and repayment of agricultural credit -the case of Madurai district, Tamil Nadu.Journal of Rural Development(Hyderabad). 33(2): 147-159.
16. Asodiya, P. S., Dhandhukia,R.,Parmar, V. K and Makadiya, J. J. 2014. Impact of primary agricultural cooperative societieson farmer's economy of Panchmahal District of Middle Gujarat, India Journal of Agricultural Science (Toronto). 6(6): 195-204.
17. Babu, D., Rai, J andMeena, G. L. 2007. Rural credit scenario in District Kanpur Dehat,
18. U.P. Agricultural Science Digest. 27(4): 251-254.
19. Bansal, V., Suhag,K.S and Hasija, R.C. 2003. Over dues of agricultural credit in Primary Agricultural Credit Societies (PACS) of Punjab. Environment and Ecology. 21(1): 207-209.
20. Bharathi, R.A andBadiger, C 2009. Constraints and suggestions of self help groups under the project empowerment of women in agriculture. Karnataka Journal of Agricultural Sciences. 22(2): 457-459.
21. Bhaskaran, R. 2008. Beyond waivers: need to redesign the bank loans and offer effective hedge products. Indian Journal of Agricultural Economics. 63(2): 159-168.