Determinants and Pattern of Saving Behaviour in Rural Households of Western Odisha



A Thesis Submitted for the Partial Fulfillment of the Master Degree in Development Studies

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DECLARATION

I hereby declare that the work embodied in this dissertation entitled

"Determinants and Pattern of Saving Behaviour in Rural Households of

Western Odisha" carried out under the supervision of Prof. Narayan Sethi is an

original research work carried by me within the full period prescribed under M.A

ordinances of the National Institute of Technology.

I declare to the best of my knowledge that no part of the thesis was earlier

submitted for the award of research degree of any University or Institute.

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CERTIFICATE

This is to certify that Miss. Subhashree Nayak has carried out the research embodied in the present dissertation entitled "Determinants and Pattern of Saving Behavior in Rural Households of Western Odisha" under my supervision for the award of the master degree in Development Studies of National Institute of Technology, Rourkela. This dissertation is an independent work and does not constitute part of any material submitted for any research degree or diploma here or elsewhere.

(DR. NARAYAN SETHI) Research Supervisor

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Abstract

Saving is an important macroeconomic variable to be studied under the purview of the economic arena on an individual as well as household basis. In a country like India, the income standard is almost uncertain and leads to more consumption rather than saving which has now been a central problem. If the saving is low, then the investment will also be low leading to low capital formation. The present study analyzes the determinants and patterns of saving behaviour in rural household of western Odisha. The determinants and patterns of saving differ from rural to urban region. In rural areas, the marginal propensity to consume is more rather than the marginal propensity to save. The study is conducted through primary survey with 300 households drawing a sample from rural villages of Sundergarh district of Odisha. These 300 households from Sundergarh district are selected and a cross-sectional primary data is collected by personal interview method. The determinants of saving are analyzed empirically by a linear regression method. The income, level of expenditure, consumption pattern and saving behaviour is taken as the criteria for drawing the samples. The present study reveals that the APC and MPC of the rural households varies in terms of the distribution of income and occupation i.e. in other words, the lowest income groups (the agricultural labours and the non- agricultural labours) have the highest marginal propensity to consume which leads to lowest marginal propensity to save as compared to the other occupational groups. The study finds that most of the rural households have low educational status which is resulting in less awareness of the people towards the benefits of saving. They are even careless towards their health standard as the consumption of local liquor is very prominent in these households which in a way or the other detoriating the health as well as the financial condition of these households.

Chapter-I

Introduction and Design of the Study

1.1. Introduction

India is a developing country where, there has been a consistent increase in the national saving rate after the independence period, though with considerable fluctuations from year to year. In international standpoint of view, India has had a high saving rate compared to other developing countries, except those in East Asia. To study on rural savings in India need to look into four aspects namely the determinants of savings, the composition of savings, the methods of measuring savings, and the pattern of saving. The present study tries to analyze the determinants and pattern of saving behaviour in rural household in Odisha. Saving is an important variable for every country to be studied for the economic growth and development of any country. Saving is an important macroeconomic variable to be studied under the purview of the economic arena on an individual as well as household basis. According to classical economists like Adam Smith, David Ricardo and J.S.Mill, "saving is an important determinant of economic growth". Saving components can be based on an individual or on household basis which proves to be the well being. As for an individual saving becomes the cushion for the future's intercourse of the unforeseen and upcoming as well as the uncertain circumstances of life. Saving is the part of the income earned by the individuals. For the higher economic growth for the country, marginal propensity to save should be higher but it helps to the multiplier process. The determinants and patterns of saving differ from rural to urban region. In rural areas, the marginal propensity to consume is more rather than the marginal propensity to save which seems to be vice-versa in urban areas where the marginal propensity to save is more than that of the marginal propensity to consume. According to Lewis (1954), the central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing four or five percent of its national income changes into an economy where voluntary saving is running at about twelve to fifteen percent or more of the national income. According to Rao (1980) saving constitutes the basis for capital formation, and capital formation constitutes a major determinant of economic growth. In the developed countries, the income is generated at a higher rate which encourages people to have more savings which opines to more

investment leading to more capital formation. But in a country like India, the income standard is almost uncertain and leads to more consumption rather than saving. On average East Asia saves more than 30 percent of gross national disposable income while Sub-Saharan Africa saves less than 15 percent. Regional differences have been rising: over the past three decades saving rates have doubled in East Asia and stagnated in Sub-Saharan Africa and in Latin America and the Caribbean. By a hike in aggregate saving, the social value of saving can exceed its private value in many developing countries, mainly in the poorer countries with India to be one of them. In India, as in many developing countries, most households are poor and do not save. Here, there is a requirement of mobilization of rural saving for financial growth. Aggregate saving in any economy depends on a number of determinants. In the Indian economy, the household sector contributes a lion's share of the total saving which needs to be stepped up.

Odisha is positioned in the north-eastern section of the Indian peninsula. It is bounded on the north by Jharkhand, on the west by Chhattisgarh, on the north-east by West Bengal, on the south by Andhra Pradesh and on the east by Bay of Bengal. The primary occupation of this state is agriculture where around 80 percent of the total population of Odisha is engaged. Odisha is a state which is rich in natural resources and it is also counted among the poorest states of the country. According to the National Human Development Report (2010), Odisha lies far below the national level of development in every aspect.

The present study focuses to examine the main determinants of the saving pattern in the rural population of Odisha especially in the context of aggregate saving behaviour. India is fast losing its status as a country of big savers. According to RBI Annual Report (2011), "The persistence of inflation at a high average rate of about nine per cent during 2011-12 further atrophied to stave off the downward pressure on their real consumption or lifestyle". The changing pattern of Indian household savings is the result of a number of factors. The household savings in India has experienced a variety of changes over the past one or two decades as due to the changes in lifestyles and consumption models in a developing country like India. Indian economy has noticed a lot of rises and falls in the household savings rate. This might have resulted due to the variable composition of savings over the passage of time.

Today's saving mainly in rural areas consists of the assets in form of animals, metals and also due to some awareness about the saving institutions available nearby encourages people to save as to opt the rate of interest from the amount saved from time to time. The sources of income of the households are accounting to be diversified. In most of the households, the only source of income has been resulting in originating from various other sources also. From due to these varied scope of income generated, the saving portion is also generated to some extent.

1.2. Types of Savings

The types of saving are mainly based on the income available to the household, firm and corporate bodies. The saving type can be classified on the basis of the sectors accounting for the saving distribution. It can be broadly classified under three headings namely, (a) household sector saving, (b) private sector saving and (c) public sector saving. The categories of savings are discussed below:

1.2.1. Household Sector Saving

The savings done or accrued by the individual members in a household consists of household sector saving. The household saving contributes to a larger share in the Indian economy which comprises of the individuals saving behavior at a larger scale including the financial as well as the financial assets. The individuals at the household level make a share to the national income computation of a country.

1.2.2. Private Corporate Sector saving

The savings made in the private owned corporations are called as the private sector corporations. The private corporate sector comprises of (i) non-government non-financial companies, (ii) commercial banks and insurance companies working in private sector, (iii) co-operative banks, credit societies and non-credit societies and (iv) non-banking financial companies in the private sector.

1.2.3. Public Sector Saving

The public sector's savings are constituted into (i) government savings, and (ii) savings generated by the public sector undertakings in the form of internal resources. One process of

estimating public sector saving is to scrutinize the relationship between public savings and the consolidated returns shortage of government which is an alternative measure of government savings.

1.3. Nature of Saving

Savings can be known as the cash or physical products set aside for future use. People in rural and other low-income communities can save when they are guided and encouraged by the Government and financial institutions. The people in rural region, savings are made through traditional credit rotation groups, or purchase of domestic animals (goats, pigs, chickens or cows). Gradually, the traditional way of saving in rural region has been abolished; the people shifted their saving pattern to save in form of physical assets, like gold, land and durable goods and financial assets like shares, stocks, and bonds.

The Micro Finance Institutions (MFIs) and micro-enterprises are playing a major role in recent years in rural region by encouraging the people to save more. MFIs need to inject capital or funds which may be the owner's of money or loan. When a loan is used, it is someone else who has done the saving. Micro enterprises, like other businesses, convert savings (of the owners and of others) into investment, in the creation of wealth. Variations in the saving pattern is mostly found in different societies, as there exists, a difference in environmental, social, economic and cultural contexts. Human wants get transformed as the society grows and in turn cause substantial changes in the outlook of the people towards saving. In low-income communities, the ability to save is low and often is in cash or kind. Saving in cash is cheap and convenient. Variations in saving is visible in different communities as there exists difference in income levels, consumption pattern, awareness of the saving benefits, family size, investment opportunities, etc. Human attitude towards saving has been changed through decades as in the remarkable growth in the society.

1.4. Determinants of Savings Rate

The rural household's decision to consume present or in the future is influenced by the current or permanent income. The significance of 'incentives' as a determinant of savings is that although there has been a long footing fright about the effects of the level of per family income upon

proportion of income that is saved, there has been no comparable concern about the effect of variation in the relative prices of new income streams upon savings and investment. There are number of factors which determine the saving rate in an economy. Some of the important determinants are discussed below:

1.4.1. Real Per Capita Income

The real per capita income of the individuals proves to be a foremost determinant of saving rate. When the income of an individual increases the consumption pattern improves which in the sense some part is left out which goes to saving as to secure one's unforeseen future. As rightly pointed out by the neoclassical growth model (Solow, 1956) that higher savings rate will lead to higher steady situation levels of income (or output) per capita, while the endogenous growth theory models imply that higher savings rates would lead to higher levels of growth of income per capita. Thus in common, both the variables should be well thought-out. The real (in stable domestic prices) Gross Domestic Product (GDP) per capita is used as an estimation of real income. These two indicators rightly give an outlay to the saving pattern.

1.4.2. Demographic Features

The saving can be most often determined by the demographic features like the sex ratio, the age distribution, and the rate of dependant population. Saving is highly determined by whether the female's contribution towards saving is more or the male is contributing to its highest level and again if the problem of the age distribution in the family contributing to the saving is optimum then the saving rate is determined in a different perspective. Aggregate savings is exaggerated by the age distribution of the population if the carve up of dependent population is high than the income earning groups, the savings ratio will be low. According to the life-cycle hypothesis a larger working population next of kin to the older population contributes to raise the savings rate. In an instance if the income earning population is comparably high to that of the dependant population then the saving rate will experience a hike which is in some way will lead to income propagation in a country in a long term basis.

1.4.3. Share of Agriculture to GDP

India is an agriculture dominant country where most of the people are engaged in agricultural activity in which the concentration of the rural population is more. As because of some way or the other the production level decides the fate of the individual farmers which sometimes experiences a high production level will have more income and will automatically encourage the people to save more and if the production is less than the income will have a fall resulting in a sharp fall in the saving rate. The rural or agricultural sector of the economy can display different savings behaviour than the urban/industrial sector, especially in the case of developing countries, with large agricultural sectors. The agricultural sector could have a different savings rate due to a lower access to the banking system and because of lower and unbalanced incomes in the agricultural sector and sometimes due to lack of access to other financial institutions nearby also determines the saving rate. Proper awareness and education is needed to have a proper understanding of the saving rate of a country with a remarkable share in the GDP.

1.4.4. Real Interest Rates

Every banking institution including other financial institutions encourages people to save with an expectation of giving a considerable amount of rate of interest on the saving amount. This rate of interest determines the saving rate of the individuals on a view to encourage people towards saving. When the rate of interest is high people are more interested to save rather than invest and when the rate of interest is less people are less inclined towards saving rather than they are likely to invest more in an expectation of getting more rate of return. There is a negative and an inverse relationship between savings and rate of interest. Critically, an increase in interest rates will have an indefinite effect on savings because of a positive substitution effect towards future consumption and a negative income effect due to increased real proceeds on saved wealth.

1.4.5. Social Barriers

The society we live in is full of constrains likely due to variations and distinctness in the age, sex, culture, tradition, social taboos, and many more which by playing an important role determines the saving behaviour of any region, state or country. Income plays a major role in identifying the saving distinctness among different groups but income cannot always remove all the barriers for availing the opportunities because of the variations offered in the context of

culture, gender, class etc. People belonging to diverse ethnic groups can have a refutation to the equal admittance to education, employment, and other basic services by the social and financial institutions as well as the investment opportunities available.

1.5. Structure of Savings in India

In India domestic savings originate from three principal sectors namely: (i) household sector, (ii) Private-corporate sector and (iii) public sector. The household sector comprises of individual, non-corporate business and private collectives like temples, educational institutions and charitable foundations. The saving can be held in the form of increases in (a) Liquid assets like currency bank deposits and gold (b) Financial assets like shares, securities and insurance policies and physical assets. The corporate sector includes joint stock companies in the private business sector, industrial credit and Investment Corporation etc., and cooperative institutions. Saving of the corporate sector is represented by the retained earnings of this sector. Government sector consists of the central and state government, the local authorities and various government and department undertakings; hence the saving of this sector relates to the budgetary surplus on current account of the central government, state government, local authorities, the current surplus of various government departments and retained projects of government undertakings.

1.6. Salient Demographic Features and Social Scenario of Odisha

Odisha is one of the major states of the Indian Union, with a population of 36.71 million in 2001. The population is predominantly Hindu (94.67 percent). It has the third lowest population density (236 persons per sq. km in 2001) among the major states of India, ahead of only Rajasthan and Madhya Pradesh. However, there is significant inter-district variation [coefficient of variation (CV): 64.20 per cent in 2001] within the state in this regard, with the district of Khurda having a population density of 666 persons per sq. km at one end, and Kandhamal district with a population density of only 81 persons per sq. km at the other end. This has meant massive spatial concentration of the population. Coastal Odisha accounts for some 52 per cent of the population of the state with an area share of 25 per cent. The rate of growth of population in Odisha during the decade 1991–2001 was 15.94 per cent as against 21.34 per cent for all-India. This is the third lowest rate of growth of population among the major states of India, with only Kerala (9.42 per cent) and Tamil Nadu (11.19 per cent) having lower rates. This has been the

result of a rather peculiar demographic regime—relatively low and steadily declining birth rate going hand in hand with relatively high and very slowly declining death rate, something that does not really fit into any of the three stages of the standard theory of demographic transition. The rate of urbanization in Odisha at 14.91 per cent is the lowest among the major states of India and is rising very slowly. But there is significant inter-district variation (CV: 73.29 per cent in 2001) in this respect, with the district of Khurda in central—coastal Odisha having an urbanization rate of 42.93 per cent at one end and Boudh in south-central Odisha, having an urbanization rate of only 4.82 per cent at the other.

The sex ratio of Odisha's population was 971 in 1991, the third highest among major Indian states, lower than only Tamil Nadu (986) and Kerala (1058). The aggregate sex ratio of Odisha in 1991 is, in fact, lower than the 0–14 year's age group sex ratio of 978. This implies that there is no upward bias towards aggregate sex ratio due to greater make out-migration as compared to that of females. About 23 per cent of the population comprises the indigenous tribal population, mostly concentrated in the north-western and south-western districts of the state with traditional means of livelihood. They have a heavy dependence on forests for their livelihood. The north-western districts (Sundargarh, Keonjhar, and Mayurbhanj) account for 35.3 per cent of Odisha's tribal population and the south-western districts (Koraput, Kalahandi, Phulbani, and Balangir) account for another 39.4 per cent. The forces of modernization have largely bypassed them. The processes of modernization have largely marginalized them in economic terms, threatening their livelihood security. Alienation of tribal's for various reasons is emerging as a social problem.

The population belonging to Scheduled Caste constitutes a little more than 16 per cent of the state's population. Unlike the tribal population, they are mostly concentrated in the four (undivided) coastal districts of Balasore, Cuttack, Ganjam, and Puri, which together account for 53.8 per cent of the state's SC population. It is also worth mentioning that Odisha is the only state in which no major communal riot has occurred since 1975. Open and violent caste conflicts are also uncommon (Odisha Human Development Report, 2004).

1.7. Odisha's Human Development Index

There are three measurable indicators of human development: Human Development Index (HDI), Gender Development Index (GDI), and Reproductive Health Index (RHI). HDI is based on three dimensions of human development that are considered to be fundamental, namely, longevity, knowledge, and a measure of necessary income. GDI brings in an additional dimension, namely gender, which is of fundamental significance for the concept of human development. Finally, the RHI focuses on the reproductive health component of the gender dimension.

The value of HDI (Human Development Index) for the state as a whole turns out to be 0.579. This may be regarded as a somewhat medium level of human development. Of the three components of HDI, the education index has the highest weight (0.723) whereas the health index has the lowest weight (0.468) and the income index (0.545) lies in between. On the whole, interdistrict disparity in HDI values is rather low [coefficient of variation (CV): 16.95]. This is essentially because there is a bunching of 13 districts in terms of their HDI values (lying between 0.5 and 0.6) around the state mean (0.579).

The value of GDI (Gender Development Index) for the state as a whole is seen to be 0.546; in this, the equally distributed education index has a much greater weight than either the health or income index, as in the case of overall HDI. The highest five and lowest five districts in terms of GDI values mostly correspond to the same in terms of HDI values. As in the case of HDI, interdistrict disparity in GDI values is low (CV: 17.16) and this is again because of bunching of the GDI values of 13 districts (lying between 0.5 and 0.6) around the state mean value of GDI (0.546). The proportionate difference between HDI and GDI values becomes a simple yet sensitive indicator of basic gender inequity.

The mean value of RHI (Reproductive Health Index) for the state as a whole turns out to be 0.55. This suggests, as in the cases of HDI and GDI, a somewhat medium level of reproductive health status of Orissa. Overall, the three measures of human development suggest a low average attainment, which is essentially due to the fact that a majority of districts have values of HDI/GDI/RHI close to the mean value for the state as a whole. Therefore, the challenge of

human development in the context of Orissa is to focus not only on the districts at the bottom end but also on a large number of districts that are average performers (Odisha Human Development Report, 2006).

1.8. Statement of the Problem

Saving is a very important component which is responsible for combating or meeting any emergency accrued by the individuals or the households or any corporate agencies. Saving is more of meant for meeting contingencies but sometimes it also acts as a form of investment. But sometimes people are not inclined towards saving and the very delicate reason is lack of awareness. The present study can be a relevant one to know the reason of dissaving and if saving occurs then what are the determinants which are responsible for saving. Aggregate saving in any economy is dependent on a number of variables. For effective economic planning, the planners should have an idea regarding the volume of saving of different groups of people and the method by which saving can be improved more over in a better way. To advocate appeals for saving, there is a need to know about the saving motives of the individuals. An understanding of the saving preferences also helps in calculating the saving instruments which can efficiently arouse saving. Odisha is a state having a very poor access to the saving need which really has made a great interest in the minds of looking at the perspective as a whole.

Right now, saving more and spending more simultaneously has become the basic and conflicting factor for the economy. The present influence of the households in Odisha should experience total saving, which helps to step up the saving in the economy. Thus, there is an immediate need to carefully understand the determinants of both the household saving rate and the saving pattern in the rural households of Odisha.

1.9. Conceptual Frame work

Household: A social unit living together where all the individuals share a common kitchen.

Savings: The share of disposable income not spent on consumption of consumer goods but accumulated or invested straight in capital equipment or in paying off a home mortgage, or not directly throughout purchase of securities.

Financial institutions: Private (shareholder-owned) or public (government-owned) organizations that, generally speaking, act as a waterway between savers and borrowers of funds (suppliers and consumers of capital).

Consumer spending pattern: Good and services bought by households in the fulfilment of their needs and wants. It includes non-durables such as food, semi-durables such as clothing, and durables such as refrigerators etc.

Average Propensity to Save: Fraction or percentage of disposable (after tax) personal income not spends for consumer goods. It in general varies with the intensity of income.

Net worth: It is defined as the total market value of all assets, such as home equity, stocks and bonds, and savings accounts, minus all debts, such as mortgages, school loans, and automobile loans. It is a theoretically important measure because it reflects the aptitude to have met consumption desires in the past (net worth will be positive if income has been higher than expenditures up to that point in one's life), as well as the ability to finance upcoming consumption by depiction upon accumulated possessions.

1.10. Significance of the Study

There are not many studies conducted or available relating to the determinants of saving pattern of the rural people of Odisha at the micro level. There are less good publications on the state of the Rural Masses. This is because the NSSO and other related organizations or the official agencies that collects such data for the whole country, does not generally publish data separately for rural areas especially in the context of individual households. Most of the studies on saving pattern of rural people are based on secondary data which sometimes does not prove to be adequate for the study. Most of the data available does not serve the needs of Odisha in a ground level prospective. While studies conducted on the saving and income expenditure among rural and urban households for various expenditure classes, little effort has been made to study the saving pattern related to the individual's behaviour towards saving within rural sector. The study on pattern of saving behaviour in rural areas provides an important indicator for economic

development of the country. This study can also help to define the factors influencing the saving pattern and to analyze certain constraints in the saving attitude in the rural areas.

1.11. Objectives of the Study

The present study examines the determinants and pattern of saving behaviour in rural households of western Odisha. The specific objectives are:

- 1. To examine and identify the determinants of the saving behaviour in rural households of Sundargarh district of Odisha.
- 2. To examine the changing pattern of saving behaviour in rural households of Sundargarh district of Odisha.

1.12. Methodology of the Study

The study is focused on collection of primary data from the field. The secondary data is used to draw a general background and over all scenario in a cross states context. Constraint of time did not allow a census mode by visiting every household. A proportionate sample was drawn based on principle of stratification on random basis giving weight age to physical, social and demographic factors. Cross-sectional primary data were collected by interview method from household level and used in this study. Main variables of interest related to households includes; education level of respondent, occupation, dependency ratio, the various expenditures, income from various sources, land size owned, deposit and lending rates, incomes, transport costs to financial institutions of saving, service charges by financial institutions, savings/deposits and credits/loans.

The study was conducted with 300 households drawing a sample from rural villages of Sundergarh district. 300 households from Sundergarh district is selected ensuring balanced representation of the elements in universe. The income, level of expenditure, consumption pattern and saving behaviour is taken as the criteria for drawing the samples.

The analysis of the saving behaviour of the individuals with the other independent variables is given through a linear regression analysis by the following equation:

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Where, Y=Income of the individuals, GEN=Gender, AGE=Age of the Respondents, MAR_STA =Marital Status, EDU=Educational Qualification, PR_OCCU=Primary Occupation, FA_MEM=Family Members, HS_TP= House Type and LAND= Details of Land Acres.

1.13. Organization of the Thesis

The present study is organized into five chapters including the present one. The present chapter introduces the study, giving an overview idea of the determinants of saving behavior and spells out the scope and objectives, methodology, data sources and the period of study. The second chapter includes related theories of saving and studies conducted on the saving behavior in both the rural and urban households in India and other countries of the world. This section also divides the review part in two distinct areas i.e. reviews relating to the change in the pattern of saving behavior and determinants of saving in rural households.

The third chapter discusses the socio-economic characteristics and determinants of saving of rural households in Odisha. This chapter includes the introduction with demographic factors of saving, different occupation groups and savings, age groups, dependency ratio and saving, male, female and children's saving, number of earners and saving, education of the household and saving, income inequalities and saving, asset, income and saving, and motivation of saving. The fourth chapter includes the pattern of saving in rural household of Odisha containing the introduction followed by financial saving, physical saving, and financial and physical saving among different occupational groups. The pattern of physical saving among occupational groups, income level and pattern of saving, financial saving of income groups and the level of education and financial pattern of saving are discussed under this chapter. The last chapter that is the fifth chapter of the paper includes the summary and the conclusion including some suggestions on policy implications.

Chapter-II

Review of Literature and Theoretical Framework

The present chapter discusses the earlier theoretical and empirical literature relating to saving behaviour. Saving is considered as an important determinates of investment and growth of an economy. The determinants and the pattern of saving behaviour have been significantly changing due to the globalization, introduction of technology in financial sector in last few decades. There are few hypotheses like life cycle hypothesis (LCH) by Modiglani and Miller, permanent income hypothesis (PIH) by Keynes and relative income hypothesis (RIH) by Duesen Berry related the determinants of saving behaviour.

2.1. Introduction

The income is the important function of saving. But rate of interest determines the saving behaviour. In India, the saving behaviour plays an important role to influence the standard of living, social security, and social welfare. There is historic scenario of pattern saving behaviour in India both rural and urban household. This is chapter classifies the review of literature into two sections as:

- 1. studies relating the pattern of saving behaviour in rural household and
- 2. studies relating to the determinants of saving behaviour in rural household.

2.2. Studies Relating the Pattern of Saving Behaviour in Rural Household

Jappelli and Pagano (1997) examined productivity growth, in the progress of credit and insurance markets, and the changes in the social security system. They used a series of recurring cross-sections data from the Survey of household income and wealth in order to check if the macroeconomic explanations for the turn down in saving are consistent with microeconomic data or not. This paper focused on the Italian experience and the behaviour of the Italian saving rate. The factors that in the Italian experience deserve the closest analysis that they have taken are (i) the stage of development of its credit and insurance markets; (ii) the changes in the social security system, and (iii) the sharp demographic change of Italian society in the last two decades.

In view of the fact that differences in growth and in fiscal policy cannot explain the facts fully, what other factors may explain the high Italian saving rate of the 1960s and 1970s and its quick decline in the 1980s and 1990s has been taken into report. The time-series and cross-country verification suggests a strong positive connection between growth and aggregate saving. Based on that indication the yield slowdown, together with the retiring de-regulation of the credit and insurance markets and the changes in the social security system surveyed appears as the main candidate to account for the changes of the Italian private saving rate. This study predicted a positive correlation between total saving and growth; they have quite different predictions about the correlation between individual saving rates and growth.

Issahaku (2011) identified the age composition and assets do not have a major effect on saving. The factors that make household investment are occupation, expenditure, assets and saving. Any assessment or policy pertaining to finance and development by government, the private sector or financial institutions geared towards improving saving and investment in Nadowli must integrate these factors. Primary data were collected from the households of Nadowli. Interviews and discussions were vigorously pursued with sample households and this was mainly geared towards resulting appropriate responses to some of the frequently asked questions about saving and investment. This paper studied on a microeconomic approach of estimating the determinants of financial saving and investment in one of the most underprivileged district capitals in Ghana, the Nadowli in the Nadowli District of the Upper West Region. Two separate compound linear regression models were fixed for saving and investment. The variables used saving, investment, household income, dependents, assets, educational status as the determinants of saving. The paper found that age composition and assets do not have a significant effect on saving. The factors that constrain household investment are occupation, expenditure, assets and saving. In view of the untold of saving and investment potentials in Nadowli, the government, financial and non-financial institutions and other corporate bodies have a part to play to obtain advantage of these potentials and opportunities.

Chandra and Long (2003) examined the determinants of household saving in the process of economic development, in the beam of the Taiwanese experience for the duration of the period 1952–99. They found that the household saving rate rises with both the intensity and the rate of

augment of household disposable income and that the real deposit rate has a significant affirmative impact on saving. Public saving they revealed seems to throng out private saving, but less than proportionately and that while both old- and young-dependency in population have a off-putting impact on the saving rate, the level of the impact of the former is far greater than with the intention of the latter. As a final point, they concluded that improved accessibility of social security provisions and improved credit availability in addition appear to cut saving.

Employing an active section study of the determinants of the household saving rate in China using a life cycle model and section data on Chinese provinces for the 1995-2004 period from China's household survey, Horioka and Wan (2007) established that China's household saving rate has been high and rising and that the main determinants of variations overtime and over space are the lagged saving rate, the income growth rate, the real interest rate and the inflation rate. However, they found that the variables relating to the age structure of the population usually do not have a significant impact on the household saving rate. These results they claimed provide mixed support for the life cycle hypothesis as well as the permanent income hypothesis, and that they (the results) are consistent with the existence of inertia or persistence, and imply that China's household saving rate will remain high for some time to come.

Nga (2007) examined a general idea of household saving in South Africa intended for the phase 1983 to 2003. She identifies the main factors responsible for the lack of a commitment to saving which are particularly relevant in the case of poor households. The major factors are: lack of income (due to unemployment), inadequate income, over-consumption (due to obvious consumption, procedural rationality and the bandwagon effect) and market failures, such as unfinished or even no information, lack of financial literacy, cultural and political factors. The study incorporated an overview of the existing literature and it is both quantitative and qualitative. A qualitative analysis is used to infer secondary data and a typology case study was presented. The major findings of all these theories are that savings is that part of income that is not spends or consumed. Income was found to be the main determinant of savings for a multiplicity of purposes such as precautionary and bequest motives. The fundamental reasons or importance and role of households to save were highlighted. Experiential investigations carried

out to date also appear to support these broad propositions acknowledged for developing economies.

Schultz (2005) considered this research as lifetime savings as an alternate for children, and model the causes for the turn down in fertility which changes the age compositions and possibly will there by account for savings and growth in Asia. This study anticipated scale of active aggregate relationship which appeared to be insignificant than reported, and responsive to the choice of econometric methods used to describe it. Moreover, studies of savings behaviour at the household level do not find adequate life cycle variations in savings to report for these alleged aggregate relationships.

Nair examined the impact of financial sector liberalization actions on household sector saving rate in India by constructing a continuous time series financial sector liberalization index. The shock of the index, along with the other determinants of household sector savings in India is estimated using a universal model. The results advocates a significant negative impact of the index on household saving rate, which gives an indication of the increased credit availability owing to financial sector liberalization leading to amplified consumption rather than savings. Among the other determinants, absolute income is the major significant and positive determinant of household sector saving rate in India in the period of the study. Inflation rates, interest rate, young and old dependency ratio are the determinants of saving taken.

Bayoumi (1993), used an overlapping generation model analyzes the impact of financial liberalization on household savings in the lifecycle framework. Aforementioned to financial liberalization, the young are unable to finance their preferred level of consumption in the face of borrowing constraints while they are able to use capital markets to smooth consumption over their middle to old age. Since consumption was lower than desired in the young age, normally the consumption will be higher in their middle and old age. Financial liberalization increases the competition between providers of financial intermediation and it reduces liquidity constraints of consumers. This has a temporary and a permanent effect. The initial temporary effect is the increase in aggregate consumption by the young consumers, which will wane over time. However, the consumption of old consumers is not immediately affected as they are still affected

by their inability to borrow when they were young. The permanent effect of financial liberalization is that as young consumers are no longer credit constrained, they will smooth their consumption. As a result, the saving of a young consumer becomes sensitive to wealth, real income and other demographic and macroeconomic factors.

Komicha (2007) examined to understand and explain farm household economic behaviour with reference to saving, credit and production efficiency under imperfect financial market conditions based on data obtained from farm household survey conducted in two districts of south-eastern Ethiopia from September 2004 to January 2005. Data was analyzed using stochastic frontier analysis and limited dependent variable econometric tools where farm household saving behaviour and its determinants were studied. Factors like the interest rate, loan processing time, type of loan, credit information and loan size, significantly affected this borrowing behaviour of the farm households. The study used farm household survey data collected using structured questionnaire, which covered crop and livestock production, off-farm and non-farm activities, income, consumption, saving and borrowing activities of the farm households. The farm households were randomly selected from six Farmers Associations (FAs), based on agroecological zones of the two districts - four from Merti and two from Adamitullu-Jido-Kombolcha. As evident in this Article, about 62% of the farm households had savings in financial and physical assets but almost all farm households (about 90%) had savings held informally. This was explained more by problems of incentives and opportunities to save than by their ability to save. It suggested that financial institutions with easy access, low transaction costs, higher real returns on savings and convenient withdrawal of savings may provide incentives for those who hold financial savings informally to channel their savings into the formal institutions.

Kraay (2007) analyzed a variety of statistical issues that cloud the measurement of aggregate and household saving in China, and provides new empirical evidence on the importance of intertemporal considerations in explaining inter-provincial variation in household saving in China. The provided a description of trends in aggregate and household saving in China, and discussed on the measurement issues. This paper presented new evidence on determinants of household saving in China using a panel of province-level data from China's household survey. It

concluded with a discussion of the policy implications and directions for further research. A brief appendix provided additional information on the household survey as well as. The empirical evidence on the determinants of household saving presented here reflected favourably on two complementary explanations (expectations of future income growth and the role of subsistence consumption), these factors captured only a small fraction of the cross-provincial variation in household saving rates.

Buragohain (2009) discussed the trend and pattern of savings in general and household sector savings in particular and assessed the major determinants of household sector savings based on fundamental theory. The time series data consisting of four elements corresponding to (a) seasonal fluctuations, (b) cyclical variations, (c) systematic trend and (d) residual. In an annual time series, seasonal fluctuations are automatically eliminated in the aggregating/averaging of weekly/monthly/quarterly income, consumption and savings. Three or five yearly moving averages of annual values eliminated the transitory component corresponding to short-run cyclical element, leaving only trend and residual components of the series has used as the methodology. In this study an attempt is made to test similar hypotheses based on fundamental theories of savings and investment and to identify some variables which by intervention can increase savings and investment in India.

Muradoglu and Taskin (1996) aimed at examining the differences in household savings behaviour in developing and industrial countries from a cross-country perspective. The purpose of the present study was to learn more about the differences in the nature of the household savings behaviour in industrial versus developing countries. Income, wealth, rate of returns, inflation, foreign savings, and demographic variables was taken as the determinants of saving. This study is the second that used household data from the U.N. System of National Accounts to estimate savings, and is the first that compared the savings behaviour of developing and industrial countries using the same data set. Since the data set used did not include government and corporate savings it is a theoretically correct measure of household savings. The main conclusion of the study is that the determinants of household savings behaviour for industrial countries are not valid for developing countries and vice versa.

Delafrooz and Paim (2011) discussed the relationship of savings behaviour and financial problems to financial literacy, financial stress and financial management practice in a sample of 2246 Malaysia workers. The findings revealed that (1) Financial management practices and financial stress significantly predicted financial problems; (2) Financial management practices and financial literacy significantly predicted saving behaviour; (3) There was no significant relationship between financial literacy and financial problems; and (4) There was no significant relationship between financial stress and saving behaviour. These findings highlighted the need for financial education programs for workers to be directed at facilitating changes in financial management practices and reduce financial stress and improving financial knowledge. The main objective of this study was to gain a better understanding of the determinants of saving behaviour and financial problems among Malaysia private and public sectors' workers. The study employed structural equation model to examine the degree to which financial literacy, financial management practices and financial stress influenced financial problems and saving behaviour. This study highlighted several important findings. First, the importance of financial management practice in predicting both financial problems and saving behaviour suggests that financial education and counselling should address the workers' attitudes towards saving behaviour and financial management practices. Second, the finding that there was significant relationship between saving behaviour and financial literacy highlights the need to increase awareness among workers to financial problems and the potential benefits of seeking professional financial assistance. Finally, the finding that there was significant relationship between financial problem and financial stress proof the need to improve workers' financial problem by reducing financial stress.

Akpan et al. (2011) determined factors that affect household saving of rural agro-based firm workers in the south-south region of Nigeria. Two-stage least squares method of simultaneous equation model was used in the analysis. Cross-sectional data were collected from 250 randomly selected workers of five agro-based firms in the study areas. The results of the analysis revealed that income, tax, job experience, education, family size and membership of a social group influence saving attitude of workers. To promote household savings among agro-based workers in Nigeria, policies aim at periodic increase in worker's salary and reduction in tax rate in line with the changing pattern of macro-economic variables in the country were advocated. The study

was conducted in Calabar Municipality, Odukpani, and Akamkpa Local Government Areas of Cross River State, Nigeria. The three local government areas cover the operational areas for most productive rubber estates in the southern part of Nigeria. Primary data were collected with the aid of a well structured questionnaire and interview scheduled. Five rubber estates in the study areas were used for data collection. Two hundred and fifty (250) workers in the different estates payrolls were randomly selected from the various operational areas of the agro based firms.

Ersado et al. (2000) analyzed the effect of asset holding position, agro-climatic and demographic factors on household savings and dis-savings behaviour and the effectiveness of the latter in addressing economic shocks brought by drought and macroeconomic adjustments in the 1990s Zimbabwe by examining changes in savings behaviour before and after the economic shocks. Specifically, the paper intended to analyze changes in consumption and savings behaviour before and after economic shocks, examined the role of transfers and remittances in consumption smoothing and investigated the effectiveness of household savings as means of cushioning the impacts of covariant shocks. Zimbabwe in 1990/91 and 1995/96 are the sources of two comparable data sets for current paper. The surveys were undertaken by the Central Statistical Office (CSO) and contain data on socio-demographic characteristics, incomes, receipts from households including agriculture, consumption and other expenditures on a weekly basis, and for some durable and semi-durable items, on a monthly or yearly basis. This paper analyzed changes in consumption and saving behaviour before and after the droughts and structural adjustments.

Abdelkhalek et al. (2009) analyzed microeconomic factors which elucidates the household savings behavior in Morocco by means of a new survey. Household saving functions are anticipated in order to test households' responses to income, monetary or non-monetary wealth and socio-demographic variables in urban and rural areas. Their results confirm that current income strongly affects the saving level whatever the home place. The results suggested that the self financing of rural household activities may be due to the lack of contact to formal financial intermediaries. The paper focused on a core set of repressors selected on the basis of analytical significance however, they also examined the empirical role of a number of less-standard saving determinants like livestock and lands in rural area. The result could be explained by the fact that

in the poor rural area, an additional member does not really change the household living and working conditions. The findings also indicate that Moroccan women save more than men.

Turner and Manturuk (2012) examined how individual, institutional, and structural determinants impact the decision-making processes that guide participants' savings behaviour. Results showed that individual factors such as obligation to family, upbringing, and employment experiences affect participants' attitudes toward savings and their confidence in their ability to save. Institutional factors such as incentives, disincentives, and organizational culture shape participants' trust in financial institutions and their attitudes towards participating in savings programs was studied. This study used in-depth interview data collected from 48 people who participated in save NYC in 2009. At the time that people signed up for the program, they were asked if they would be willing to be contacted later for a survey about their participation. Of the 879 participants who agreed to be contacted. This study sought to understand the experiences of participants in a unique matched savings account program in the specific context of New York City.

Rehman et al. (2010) investigated the determinants of households saving in Multan district of Pakistan. Data of 293 respondents were drawn through field survey in 2009-2010 by adopting stratified random sampling technique. Questions were asked directly from head of household about their education level, family status, age, region of residence, assets, income etc. Sample contains information about rural and urban households. To observe households saving behaviour in Pakistan especially in Multan district, they have practiced Multivariate regression model. The study analyzed the determinants of household savings based on data collected from Multan district through stratified random sampling technique in 2009-2010. They have found that their study supported life cycle hypothesis. Age has positive relationship and square of age is negatively related to household savings. Education of household head, children's educational expenditures, family size, liabilities, marital status and value of house are significantly and inversely affecting household savings.

Burney and Khan (1992) examined the effects of various socio-economic and demographic factors on household savings in Pakistan. The authors used Primary data of total 16580 households out of which 7443 were urban and 9104 were rural households. Data was taken from Household Integrated Economic Survey (HIES) in 1984-85. Ordinary Least Square Method was employed as estimation technique. The study concluded that income, earning status of household head, occupation of household head and age square of household head were found to be positively related; and inverse of household income, dependency ratio, education levels of household head, employment status of household head, secondary earners in household and age of household were found to have negative relationship with households saving in urban as well as in rural Pakistan. It was also concluded that value of Marginal Propensity to save was 0.22 in urban Pakistan and 0.37 in rural Pakistan.

Hasnain et al. (2006) evaluated the determinants of household saving in the process of economic development in the light of Pakistan's experience during the period 1972-2003. They used data arranged by State Bank of Pakistan, Economic Survey of Pakistan, and World Development Series during the years 1980-2003. Johansen Multiple Co-integration and Error Correction Model were utilized to estimate long run and short run relationships. The study found that Growth rate per capita income, per capita income and interest rate were positively affecting; young dependency ratio, old dependency ratio and inflation rate were negatively influencing public saving in the long run as well as in the short run. Error Correction term was found -0.05 suggesting that model would be converged towards long run equilibrium by taking 5% adjustment annually.

Fasoranti (2007) evaluated influence of rural saving mobilization on economic development of rural dwellers. Primary data through questionnaire were collected of 100 respondents from 5 villages of Nigeria. Ordinary Least Square Method was used for estimation. Results showed that Income, Human Capital, Investment and Assets were positively contributing to total savings. It was also concluded that 98 percent variation in total savings was explained by Income, Human Capital, Investment and Assets. It was also suggested that rural dwellers should be properly mobilized to join co-operative societies.

Newman et al. (2008) investigated the determinants of household savings in rural Vietnam. Cross Sectional data of 2324 households from 12 provinces of Vietnam were taken by Vietnam Access to Resources Household Survey (VARHS) in 2006. They did percentage analysis on collected data and concluded that wealthier households were more likely to save; negative effects of age of household head were found; no education effects were found; financial savings were low and share of formal savings were relatively small in rural Vietnam. It was suggested that Govt. should improve savings institutional framework.

Gedela (2012) examined the determinants of the saving behavior of the tribal and rural households in the district of Visakhapatnam. The data of 120 sample households has been collected from both tribal and rural households by using interview schedule. This study has been used the Multiple Regression Model and Logistic Regression Model for finding out the determinants of saving behavior of households situated in tribal and rural areas. The results ultimately revealed that the age of the head of the household, sex, dependency ratio, income and medical expenditure are significantly influencing the saving behavior in the entire study area. In the tribal area, dependency ratio and medical expenditure has severely affected of household savings. Income is the most crucial factor of the saving behavior in the entire study. The study found that male headed households save more than female headed households.

Bakshi et.al (2012) demonstrated that household incomes surveys showing no reliable large-scale sources of data on household incomes. A methodological framework has been developed for the estimation of rural household incomes of India. Income distribution based on findings from eight village surveys is conducted using the approach outlined. The two main findings from the study were that, (a) household incomes were underreported in rural areas, and (b) household incomes were lower than the aggregate of consumption and savings.

Agrawal et.al (2007) discussed about the individual country analysis of the savings behaviour in five main South Asian countries, namely India, Pakistan, Bangladesh, Sri Lanka and Nepal, using modern time series procedures. They studied the impact of the real interest rate on savings to be minor and inconclusive in direction. Further, the direction of causality is primarily from income or growth to the savings rate in South Asia. A modern time series analysis of savings

behaviour in South Asia was provided in this paper which is a useful contribution to the literature. The savings rate in South Asia lies in the low to medium range and is comparatively lower than in some other developing countries, particularly China and in countries of East/South East Asia where the savings rates are in the range of 30 to 40 %. Savings Rate (GDSY), Real Income per Capita (RYPC) and GROWTH Rate, Demographics (DEPEND), Foreign Savings as Share of GDP (FSY), Share of Agriculture in GDP (AGRY), Financial variables and Savings Rate, Bank Branch Density (BOPM), Financial Sector Development (M2Y), Real Interest Rates (RD), Inflation Rate (INFY), are the following determinants of saving revealed by the study.

Athukorala and Sen (2001) examined the determinants of private saving in the process of economic development, in the light of the Indian experience during the period 1954 - 1998. The methodology involved the estimation of a saving rate function derived within the life cycle framework while paying attention to the structural characteristics of a developing economy. It was found that the saving rate rises with both the level and the rate of growth of disposable income and the magnitude of the impact of the former is smaller than that of the latter. Terms of Trade changes and inward remittances by expatriate Indians seem to have a negative impact on the saving rate. There is also a clear role for fiscal policy in increasing total saving in the economy, with the private sector considering public saving as an imperfect substitute for its own saving.

2.3. Theoretical Frame work

Saving decisions are at the heart of both short- and long-run macroeconomic analysis (as well as much of microeconomics). In the short run, spending dynamics are of central importance for business cycle analysis and the management of monetary policy. And in the long run, aggregate saving determines the size of the aggregate capital stock, with consequences for wages, interest rates, and the standard of living. Aggregate savings for an economy is a predominant component. The problem of savings behaviour can be taken up both at the micro and macro level. The following two of the approaches are now well established by the Relative Income Hypothesis by Duesenberry (1949), the Permanent Income Hypothesis by Friedman (1957) and the Life Cycle Hypothesis by Ando and Modigliani (1963). These main theories that currently exist on the determinants of savings behaviour can be explained as:

2.3.1. The Life-Cycle Hypothesis (LCH) is an economic theory that pertains to the spending and saving habits of people over the course of a lifetime. The concept was developed by Franco Modigliani and his student Richard Brumberg. LCH presumes that individuals base consumption on a constant percentage of their anticipated life income. An example supporting the hypothesis is that people save for retirement while they are earning a regular income (rather than spending it all when it is earned). This simple theory leads to important and non-obvious predictions about the economy as a whole, that national saving depends on the rate of growth of national income, not its level, and that the level of wealth in the economy bears a simple relation to the length of the retirement span., the life-cycle hypothesis remains an essential part of economists' thinking. With population growth, there are more young people than old, more people are saving than are dissaving, so that the total dissaving of the old will be less than the total saving of the young, and there will be net positive saving. If incomes are growing, the young will be saving on a larger scale than the old are dissaving so that economic growth, like population growth, causes positive saving, and the faster the growth, the higher the saving rate. In fact, it doesn't much matter whether it is population growth or growth in per capita incomes, what matters for saving is simply the rate of growth of total income. The relationship between saving and the age-structure of the population is also a current topic of debate. Cross-country regressions regularly find that aggregate saving rates are lower when the population share of the elderly is high and when the population share of children is high, predictions that are in accord with the life-cycle theory if saving takes place in middle-age when earnings are high, after the child-rearing ages, but prior to retirement.

$$C = (1/T) W + (R/T) Y$$

2.3.2. Relative income hypothesis states that the satisfaction (or utility) an individual derives from a given consumption level depends on its relative magnitude in the society (e.g., relative to the average consumption) rather than its absolute level. It is based on a postulate that has long been acknowledged by psychologists and sociologists, namely that individuals care about status. In economics, relative income hypothesis is attributed to James Duesenberry, who investigated the implications of this idea for consumption behaviour in his 1949 book titled Income, Saving

and the Theory of Consumer Behaviour. At the time when Duesenberry wrote his book the dominant theory of consumption was the one developed by the English economist John Maynard Keynes, which was based on the hypothesis that individuals consume a decreasing, and save an increasing, percentage of their income as their income increases. This was indeed the pattern observed in cross-sectional consumption data: At a given point in time the rich in the population saved a higher fraction of their income than the poor did. However, Keynesian theory was contradicted by another empirical regularity: Aggregate saving rate did not grow over time as aggregate income grew. Dues senberry argued that relative income hypothesis could account for both the cross-sectional and time series evidence. Duessenberry claimed that an individual's utility index depended on the ratio of his or her consumption to a weighted average of the consumption of the others. From this he drew two conclusions: (1) aggregate saving rate is independent of aggregate income, which is consistent with the time series evidence; and (2) the propensity to save of an individual is an increasing function of his or her percentile position in the income distribution, which is consistent with the cross sectional evidence. Relative income hypothesis has also found some corroboration from indirect macroeconomic evidence. One of these is the observation that higher growth rates lead to higher saving rates, which is inconsistent with the lifecycle/permanent-income theory since the lifetime resources of an individual increases as growth rate increases. The RIH is formulated as:

Ct/Yt=a-b (Yt/Y0)

2.3.3. The permanent income hypothesis was formulated by the Nobel Prize winning economist Milton Friedman in 1957. The hypothesis implies that changes in consumption behaviour are not predictable, because they are based on individual expectations. This has broad implications concerning economic policy. Under this theory, even if economic policies are successful in increasing income in the economy, the policies may not kick off a multiplier effect from increased consumer spending. Rather, the theory predicts there will not be an uptick in consumer spending until workers reform expectations about their future incomes. A theory of consumer spending which states that people will spend money at a level consistent with their expected long term average income. The level of expected long term income then becomes thought of as the level of "permanent" income that can be safely spent. A worker will save only if his or her current income is higher than the anticipated level of permanent income, in order to

guard against future declines in income. PIH divides income into permanent income and transitory income:

$$Y = YP + YT$$

2.4. Conclusion

In the conclusion of the above theories and literature, we found that the savings does not depend upon income alone rather on the consumption pattern of the individuals also. The relative and permanent income hypothesis holds that the relationship between consumption and income is proportional whereas the relationship of the life cycle hypothesis is non-proportional. By the above theories it is clear that when the income grows the population is encouraged to save and the dis-saving occurs with the old generation as due to no or less income. The relationship between saving and the age-structure of the population is also a current topic of debate.

Chapter-III

Socio Economic Characteristics and Determinants of Saving Behaviour of Rural Households in Odisha

The present chapter analyses the socio economic characteristics and the pattern of saving behaviour of rural households in Odisha. The saving pattern of the rural households in Odisha depends upon the income, occupation, consumption expenditure, family size and other demographic characteristics. The saving rate also depends upon the availability and easy access of the financial institutions nearby. Many of the social characteristics like education, religion, tradition, superstitious beliefs and gender ratio affect the saving rate of the rural households. Most of the rural households have very less income for which they are incapable of saving. Almost 50 percent of the total rural population doesn't save because of low income and lack of awareness about the saving opportunities and facilities available to them.

3.1. Introduction

The setting of livelihood in the rural areas is to a great extent reflected in the socio economic factors of households, which in turn persuade the households' economic behaviour. Social institutions and government policies need to adapt to changing saving trends to cater for an ever increasing demand for the needs of the present economic situation. However, together with income trends, the saving behaviour of the population is increasingly seen as an important component of the demographic profile and a gradually changing pattern in the income and saving structure warrants thorough investigation of the saving population, as well as the long term implications of these trends.

3.2. Demographic Characteristics

The demographic characteristics include the income, consumption and saving pattern of the society. A number of factors affect these characteristics. The population, number of dependents, education, occupation, the size of the family, income, age composition etc has a direct impact on the saving pattern of the society or community as a whole. The importance of saving reveals that it is important for children's education, children's marriage, medical expenses, scarcity of grains, social security purpose, precaution for natural calamity like flood, drought etc.

The present study has been conducted by taking the sample of 300 households from the selected villages like Bartoli, Jabapanposh, Dalposh, Jamsera, Jagitoli, Bijadahi, Tankitoli, Pugrabahal, Lahanda, Semerta, Kadalibahal, Gariabahal and Langkoi from Jamsera, Ankurpali and Santoshpur panchayats of Sundergarh district of Odisha. Each of these villages consist of their own socio-economic, cultural, religious and traditional or ethnicity conditions. Hence, the samples selected also tell about the socio-economic features and these features or specifications are shown in the following table.3.1.

Table.3.1: Socio-Economic Indicators of the Sample Villages

Village Name	Gram Panchayat	District	Block	Population (Head Count)	Literacy Rate	Main Occupation
Jamsera	Jamsera	Sundargarh	Bisra	152	34%	Non- Agricultural Labour
Dalposh	Jamsera	Sundargarh	Bisra	256	42%	Non- Agricultural Labour
Bartoli	Jamsera	Sundargarh	Bisra	92	26%	Non- Agricultural Labour
Jabapanposh	Jamsera	Sundargarh	Bisra	358	22%	Non- Agricultural Labour
Jagitoli	Jamsera	Sundargarh	Bisra	69	19%	Non- Agricultural Labour
Bijad ihi	Jamsera	Sundargarh	Bisra	567	39%	Agricultural Labour
Tankitoli	Jamsera	Sundargarh	Bisra	352	41%	Non- Agricultural Labour
Pugrabahal	Santoshpur	Sundargarh	Bisra	230	30%	Non- Agricultural Labour
Se merta	Ankurpali	Sundargarh	Nuagaon	198	29%	Non- agricultural labour
Lahanda	Ankurpali	Sundargarh	Nuagaon	532	25%	Non- agricultural labour
Gariabahal	Ankurpali	Sundargarh	Nuagaon	735	38%	Agricultural labour
Kadalibahal	Ankurpali	Sundargarh	Nuagaon	780	48%	Agricultural labour

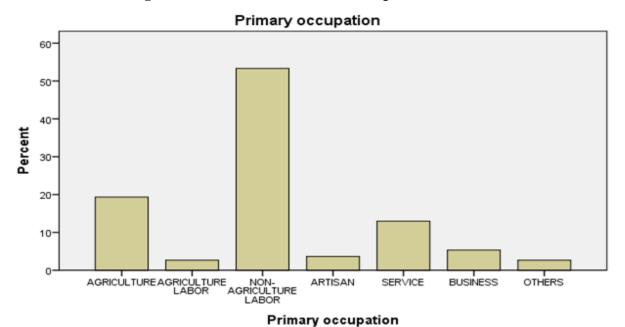
Langkoi	Ankurpali	Sundargarh	Nuagaon	369	35%	Non-
						agricultural
						labour

Source: Survey Data

3.2.1. Occupation Groups

The selected sample represented the total population including different occupational groups where there are agricultural labours, non-agricultural labours or daily wage workers, artisans, salaried and petty traders or business persons as shown in the chart 3.2. The study showed that the main occupation consists of agriculture and daily labours. The occupation of the head of the household is considered as the main occupation of the family as many of the occupation category lies by the ancestral occupation like mostly the agriculture. Around 19.3 percent of the households are engaged in agricultural sector but maximum of the household's ie-53.3 percent work as daily wage labors, 13 percent are engaged in service sector, 5.3 percent are doing business and 3.7 percent are artisans.

Chart 3.2: Percentage of Households in Different Occupation

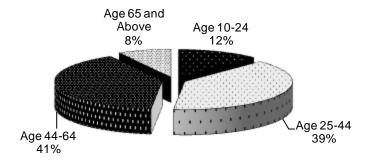


Source: Survey Data and Author's Calculation

3.2.2 Age Groups

The average size of the family is 43.31. 45 percent of the head of the household falls under the age group of 60. There are the dependent populations mostly falls in the age group of 60 and above and below 15 years who are mostly considered as the unproductive population. The age groups falling between 15 – 60 years are considered as the productive or earning population. Around 41 percent of the population belongs to the age group of 44-65 years, 39 percent belong to the age group of 25-44 years, 12 percent belong to 10-24 age group and only 8 percent of the population belong to 65 and above age groups as shown in chart 3.2.

Chart 3.3: Percentage the Head of the Households under Different Age Groups



Source: Author's Calculation

3.2.3. Religion

Religion plays an important role in determining the saving behaviour of the rural households. The different religious groups engage in different occupation amounting to different income in fact with a different attitude or tendency towards saving. Christians merely have the positive attitude towards saving as their consumption pattern is different than that of Hindus as they spend more in case of performing rituals and different festivals. The study reveals that 47.7 percent of the households belong to Christian community and around 52.3 percent of the households belong to the Hindu community as shown in chart 3.4.

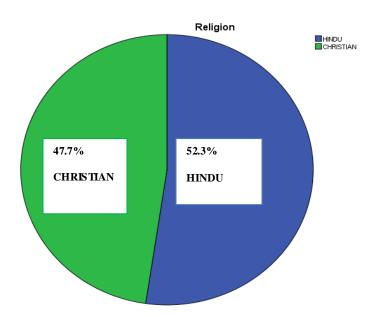


Chart 3.4: Percentage of People in Different Religion

Source: Author's Calculation

3.2.4. Number of Income Earners and the Dependants

Number of earners and the dependents also plays a major role in determining the saving behaviour of the rural households. If the earning population in different households is high as compared to the number of dependents then there is a chance of high saving because the consumption expenditure is less than the income which goes for saving. If the unproductive or the dependent population becomes more than that of the productive or the income group then the probability of saving becomes low. Especially in rural areas where the income level is very low as because of the unavailability of employment opportunities tends to the number of earning persons influencing the income level and the saving behaviour. In many of the families in rural areas have one or two income earning persons with five or more dependents tends the income and the saving pattern to be low. Around 88 percent of the households accrue the income above Rs. 2000 monthly but does not range above Rs. 5000 monthly.

Table 3.5: Monthly Per capita Income Category

Income of the Individuals				
Income category	No. of household	Percentage		
500-1000	9	3.0		
1000-2000	27	9.0		
2000 &	264	88.0		
above				
Total	300	100.0		

Source: Author's Calculation

3.2.5. Level of Education

The level of education of the head of the household and other members of the family also influences the saving behaviour of the rural households. The education of the head of the household determines the occupation standard of the households. The education of the female member in the household also signifies or justifies the saving preference of the household. As the level of education is one of the deciding factors of the employment in which one is engaged in. In general, those who are engaged in lower employment have low educational qualifications where as those with higher education are engaged in higher income occupations. Among the different occupation groups, the paid group has more edification compared to the groups with having primary education and those of illiterates. Some of those who are employed in self-employment activities in non-farm sector have primary education. Almost 57.7 percent of the households are illiterate, 16 percent have achieved secondary education, 11.7 percent have attained primary education, 5.3 percent have attained education upto seventh class, 4 percent have done intermediate and around 5.3 percent of the households are graduates as shown in table 3.6.

Table 3.6: Educational Qualification

Educational qualification			
Level of education No. of Percentag			
	Households		
Illiterate	173	57.7	
Primary	35	11.7	
Secondary	48	16.0	
Up to Seventh	16	5.3	
Intermediate	12	4.0	
Graduate	16	5.3	
Total	300	100.0	

Source: Author's Calculation

3.2.6. Sex of the Individuals

Out of the sample households taken for the study 54% are male and 46% are female. The sex of the head of the household emphasizes the impact of saving as it is shown that the male population are more and suppose to involve themselves in different occupational stratus are inclined to save more. The sex of the population determines the income to as larger extent as the wage paid to male population is more than that of female population which is again reveals the differences in the saving behaviour of the population. The consumption of liquor also signifies the differences in saving.

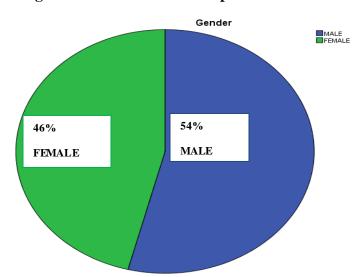


Chart 3.7: Percentage of Male and Female Respondent

Source: Author's Calculation

3.2.7. Family Type

Most of the households in rural areas are ought to bonded up in a joint family structure but with a change in the family structure, the emergence of nuclear family has paved a way to the savings behaviour of the households. With the nuclear family setup the income and the consumption of the people have been changing giving rise to more saving. The study shows 76% are nuclear families and 24 percent have the joint family system.

Family type

24%

JO INT FAMILY

76%

NUCLEAR FAMILY

Chart 3.8: Family Type

Source: Author's Calculation

3.2.8. Size of Land Holding

The land holding signifies the economic system as it acts as an economic unit for any physical asset to be considered. The land reflects the accumulated saving, capital transfer and revaluation of assets. Land is considered as the biggest asset for the rural households as it can be accumulated in terms of money and productive asset at the time of financial emergency. According to the study the average size of the land holding is 2.81 acres. Most of the rural households do not posses any land which can be used as a liquid asset at the time of emergency and earning the livelihood. The size of the land holding of the sample households is shown in table 3.8.

Table 3.9: Details of Land Acres

Details of Land Acres			
Size of Land Holding	No. of	Percentage	
(in acres)	Households		
0	125	41.7	
1	37	12.3	
2	50	16.7	
3	9	3.0	
4	5	1.7	
5	17	5.7	
6	8	2.7	
7	15	5.0	
8	4	1.3	
9	9	3.0	
10	12	4.0	
15	4	1.3	
22	4	1.3	
40	1	.3	
Total	300	100.0	

Source: Author's Calculation

3.2.9. Marital Status of the Respondents

The marital status of the respondents and the head of the households also determine the saving behaviour of the rural households. The married population is subjected to more liabilities which discourage them to save more as the income of the individuals is spent on the family's consumption. The unmarried or the widowed population saves a significant amount from their income. The saving behaviour of this group plays an important role in the model of saving pattern.

Table 3.10: Marital Status

Marital Status				
Marital Status	No. of Households	Percentage		
Unmarried	31	10.3		
Married	240	80.0		
Widowed	26	8.7		
Divorced	3	1.0		
Total	300	100.0		

Source: Author's Calculation

3.2.9. The Size of the Family

The size of the family is also an important determinant of the saving behaviour of the rural households. Large family size is very prominent in the rural areas. The average family size is 5.45 which are much more than that of the urban areas. The large family size leads to low savings as because of the maximum part of the income is spent on the consumption of the family. Small family size leads to more inclination of the family members towards savings. Around 27.7 percent of the households consist of the family size of five members and the lowest that is two members constitute 10.3 percent of the population. Families having 15 members constitute 3.3 percent and families with maximum of 10 members constitute 6.7 percent of the population.

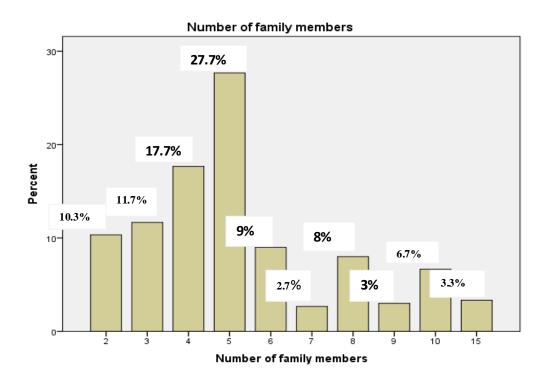


Chart 3.11. Size of the Family

Source: Author's Calculation

3.3. Income and Saving Pattern of the Households

Income is an important determinant of the saving behavior of the rural households. Income is a positive factor that analyses the savings of a country or a household. The rural households experience a very low level of income as many of the rural families earn their livelihoods from the agriculture, many are daily wage workers, petty traders and other self-employed activities. The level of income is very low but the marginal propensity to consume is very high among these categories of people. So, the saving rate of those households are very low. Or many people do not save at all. To know the saving behavior and the saving pattern of these households, data from 300 households are taken on different aspects of savings to estimate the level and awareness of savings of these people.

3.3.1. Loans Taken by the Individuals

Most of the households do not accrue a sufficient level of income which makes on their part to borrow some amount of money to sustain their livelihood. But the amount taken is from the neighbors but very less people often take loans from the financial institutions. Out of fear and incapability of repaying the loan most of the households do not take any loans. As the study shows that 94.75 percent of people have not taken any loans from any financial institutions and only 5.3 percent of the households have taken loan.

Table 3.12: Percentage of Households Availing Loan

No. of Households	Percentage
16	5.3
284	94.7
300	100.0

Source: Author's Calculation

3.3.2. Change in Savings

Savings contributes a positive relation with the income of the households. If the income increases the savings also increases and vice versa. There may be a lot of fluctuations experienced in the savings, investment and in owing the physical and financial assets of a household. The rate of fluctuations in these components can be illustrated by the trends showing

by the year 2012. Investments in unincorporated business, professional practices, farms or rental properties including major improvements, for example land improvements and share in the case of partnership, increase or decrease in cash held in accounts in banks, trust or loan companies, and cash in hand in form of savings, increase or decrease in money owed to households by Persons outside household, increase or decrease in money deposited in banks and other institutions for future security are estimated to examine the change in the savings rate as shown in tables 3.13, table 3.14, table 3.15, and table 3.16.

Table 3.13: Percentage of Household Invests in Unincorporated Business, Professional Practices, Farms or Rental Properties

No. of Households	Percentage
287	95.7
13	4.3
300	100

Source: Author's Calculation

Table 3.14: Increase or Decrease in Cash Held in Accounts in Banks, Trust or Loan Companies, and Cash in Hand in form of Savings

Increase or Decrease	No. of	Percentage
	Households	
Not applicable	25	8.3
An increase	180	60
A Decrease	95	31.7
Total	300	100

Source: Author's Calculation

Table 3.15: Increase or Decrease in Money Owed to the Households by Persons outside the Household

Increase or Decrease	No. of	Percentage
	Households	
Not applicable	239	79.7
An increase	45	15.0
A decrease	16	5.3
Total	300	100.0

Source: Author's Calculation

Table 3.16: Increase or Decrease in Money Deposited in Banks and Other Institutions for Future Security

Increase or Decrease	No. of	Percentage
	Households	
Not applicable	201	67.0
An increase	88	29.3
A decrease	11	3.7
Total	300	100.0

Source: Author's Calculation

3.3.3. Mode of Savings of the Individuals

Most of the rural people have a discouraging attitude towards saving. Saving may be in form of physical or financial. In rural areas people save in different ways. Some people save in form of liquid asset or cash in hand, some save in form of gold, silver, and other precious metals, some save in form of paddy or cereals measured in terms of sack, saving in terms of animals like goats, pigs, cows, buffaloes, ox and in form of assets like cycle, scooter, radio, chair etc are done. The study shows 86.7 percent people save in form of cash in hand and 4 percent people save in form of paddy or cereals measured in terms of sack and 7 percent people save in form of animals.

Table 3.17: Mode of Savings

Form of Saving	No. Of	Percentage
	Households	
Liquid Assets (Cash in	260	86.7
Hand)		
De 14 Come la Manage d	10	1.0
Paddy or Cereals Measured	12	4.0
In Terms of Sack		
Animals like goats, pigs,	21	7.0
buffalos, ox, etc.		
In form of assets like cycle,	7	2.3
scooter, radio, chair, etc.		
Total	300	100.0

Source: Author's Calculation

3.3.4. Savings done by the Individuals (Individuals preference)

The study conducted on the villages show an incredible availability of the financial institutions where the rural people save. A number of financial institutions like commercial banks namely United Bank of India, State Bank of India, Union Bank of India, Overseas Bank, local banks like Mini bank and Jena bank are available. Most of the people save in post offices, Life Insurance Corporation (LIC), Sahara India, Micro Finance and SHGs. Around 41.3 percent people save in commercial banks, 12.3 percentage people save in local banks, 1.7 percentages of people save in corporate banks, 37.7 percentage people save at home and 7 percentage people save in post office.

Table 3.18: Preference of Saving in Financial and Non-Financial Institutions

Preference of Saving	No. of Households	Percentage
Commercial banks	124	41.3
Localbanks	37	12.3
Corporate banks	5	1.7
At home	113	37.7
Post-office	21	7.0
Total	300	100.0

Source: Author's Calculation

3.3.4. Percentage of Income towards Savings

Income is an important determinant of saving. Income is positively related with savings. When the income of the individuals increases, savings also increases and when the income of the individuals decreases the rate of savings also decreases. The change in income signifies the changing growth rate in savings. The present study revealed that rupees 802 is the average amount that an individual saves out of his related income. The more the amount, the more is the standard of savings. Most of the people are able to save Rs. 500 on a monthly basis out of their changing income.

Table 3.19: Income towards Saving

Income Towards Saving (In Rupees)	No. of Households	Percentage
0	34	11.3
100	3	1.0
200	60	20.0

300	27	9.0
400	8	2.7
500	65	21.7
600	9	3.0
700	4	1.3
800	4	1.3
1000	44	14.7
1500	7	2.3
1800	12	4.0
2000	1	.3
3000	11	3.7
5000	9	3.0
7000	1	.3
10000	1	.3
Total	300	100.0

Source: Author's Calculation

3.3.5. Savings and Accounts Available at the Financial Institutions Where People Save

The financial institutions available nearby encourages the people to save where the preference of saving over a year signifies short term, middle term and on a long term basis where short term saving accounts to daily, monthly and quarterly and medium term saving accounts to half yearly, yearly and more than one year where as long term saving are applied on a two year, five year and on a above five year basis. The peoples interest and preference towards the amount of saving in different period is below rupees 5000.

Table 3.20: Types of Account Available in Banks or Financial Institutions according to Earners Preference

Savers Preference of Accounts	No. of	Percentage
in Financial Institutions	Households	
Not applicable	114	38.0
Current account	7	2.3
Savings account	136	45.3
Fixed deposit	36	12.0
Recurring deposit	7	2.3
Total	300	100.0

Source: Author's Calculation

3.3.6. Savings and Earners Expectation of Future Earnings Over the next Five Years

The rural people are mostly engaged in agricultural and non agricultural activities mainly on a daily wage basis. So their income is not fixed as many socio economic factors are responsible for the fluctuation in their income. Around 47 percent of people expect their income to be decreased in the next five years because of the growing age of the working population, 32.7 percent of the population feel their income will keep pace with inflation, 8.3 percent people expect their income can outstrip inflation in a certain period of time and around 12 percent of the population expect there to fluctuate in the next five years.

Table 3.21: Expectation of Future Earnings over the Next Five Years

Expectation of future savings	No. of Households	Percentage
Expect income to decrease	141	47.0
Expect income to keep pace with inflation	98	32.7
Expect income to outstrip inflation	25	8.3
Expect income to fluctuate	36	12.0
Total	300	100.0

Source: Author's Calculation

3.4. Conclusion

In the present chapter we have examined and analyzed the different determinants of saving behaviour of the rural households and we have analyzed the pattern and distribution of savings related factors like the mode of saving, amount preferred for saving, attitude preferred for saving, type of saving, expectation for the future savings and we have also discussed about how age, sex, religion, marital status, educational qualifications, occupation, size of land holding affects or determines the saving rate of the rural households at a larger basis. We have found that the lower income groups incline to save less and the households having large family size also found to save less. The agricultural and the non agricultural labour households show a high propensity to consume with low or no savings.

Chapter- IV

Determinants and Pattern of Saving Behaviour in Rural Household of Western Odisha: An Empirical Investigation

4.1. Introduction

The present chapter examines determinants of saving behavior in rural household of western Odisha by using the linear regression method. The result of estimated linear regression model of the saving behavior of the rural households in the selected study area is elaborately discussed in this chapter. This analysis has been carried out for the entire sample of 300 observations collected from thirteen villages of the rural areas of Sundergarh district of Odisha. The study selected eight independent variables such as Land acres, Marital status, Gender, House type, Number of family members, Primary occupation, Age and Educational qualification regressed with one dependent variable i.e saving.

4.2. Relationship between Saving and Income

The present study empirically examines the relationship between saving, income and consumption showing a positive relationship between saving, income and consumption. As the income of the individual increases, consumption increases and simultaneously saving also increases. Economic studies have shown that income is the primary determinant of consumption and saving. Rich people save more than poor people, both absolutely and as a percent of income. The very poor are unable to save at all. Instead, as long as they can borrow or draw down their wealth, they tend to save. That is they tend to spend more than they earn reducing they're accumulated saving or going deeper into debt. So we can say that there is a deep relationship between consumption, income and saving and they all affects to each other which can be shown with the equation:

C=f(Y)

Y=C+S

S=Y-C

Here,

C=Consumption

S=Saving

Y=Income

Here, the analysis of the saving and income of the individuals with the other independent variables are given through a linear regression analysis. This can be given through the following description:

 $Y=f(GEN,AGE,MAR_STA,EDU,PR_OCCU,FA_MEM,HS_TP,LAND)$ $Y=\alpha_0+\alpha_1GEN+\alpha_2AGE+\alpha_3MAR_STA+\alpha_4EDU+\alpha_5PR_OCCU+\alpha_6FA_MEM+\alpha_7HS_TP+\alpha_8LA$ ND

Here,

Y=Income of the individuals

GEN=Gender

AGE=Age of the Respondents

MAR_STA = Marital Status

EDU=Educational Qualification

PR_OCCU=Primary Occupation

FA_MEM=Family Members

HS_TP= House Type

LAND= Details of Land Acres

Y= 4.113+ (-.033) GEN+ (-.005) AGE+ .039MAR_STA+ .033EDU+ (-.055) PR_OCCU+ .055 FA_MEM+ (-.005) HS_TP+.008 LAND

't' Statistics= 21.678+ (-.655) GEN+ (-2.655) AGE+ .698 MAR_STA +1.345 EDU+ (-2.425)

PR_OCCU + .550 FA_MEM + (-.157) HS_TP+ .988 LAND

Table 4.1: Saving Behaviour and Income of the Individuals

Dependent Variable: Income of the individuals					
Independent Variable	Coefficient	Std. Error	't' statistics	Significant	
(Constant)	4.113	.190	21.678	.000	
Gender	033	.051	655	.513	
Age	005	.002	-2.655	.008*	
Marital status	.039	.056	.698	.486	
Educational qualification	.033	.025	1.345	.180	
Primary occupation	055	.023	-2.425	.016*	
Number of family members	.005	.009	.550	.583	
House type	005	.034	157	.876	
Details of land acres	.008	.008	.988	.324	

Note: *: significant at 1 percent level

The above table 4.1 examines the relationship between the savings and income and with the other independent variables i.e., Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the income and savings is highly significant as the income increases; savings of the individual also increases. The result also shows the relationship of the income of the individuals with other independent variables as Gender (male and female) is negatively related to income of the individuals showing an insignificant relation, the age of the members of the household is negatively significant. Marital status and educational qualification of the respondents has a positive relationship with the income of the individuals but is insignificant. Primary occupation has a negative relation with the income but is significant. The number of family members and the possession of the land acres have a positive relationship with the income of the individuals but it is insignificant. The house type (kutcha, pucca, and semi-pucca) is negatively insignificant with the income of the individuals.

4.3. Saving Behavior of Household and Change in Savings

Many people fail to save what they need to for retirement (Munnell, Webb, and Golub-Sass 2009). In economics, the life-cycle hypothesis (LCH) is a concept addressing individual consumption patterns. The life-cycle hypothesis implies that individuals both plan their consumption and savings behavior over the long-term and intend to even out their consumption in the best possible manner over their entire lifetimes. The key assumption is that all individuals

choose to maintain stable lifestyles. This implies that they usually don't save up a lot in one period to spend furiously in the next period, but keep their consumption levels approximately the same in every period. This result in the change in savings if the individuals which are explained by the following equation:

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.116+ .002 GEN+ .001 AGE+ .042MAR_STA+ (-.055) EDU+ (-.024) PR_OCCU+ .017 FA_MEM+ .056 HS_TP+ (-.012) LAND

't' Statistics= 4.282+ .022 GEN+ .316 AGE+ .546 MAR_STA +(-1.643) EDU+ (-.771)

PR_OCCU + 1.347 FA_MEM + 1.202 HS_TP+ (-1.194) LAND

Table 4.2: Saving Behaviour and Cash Held in Accounts

Dependent Variable: Saving in Banks and Non Banks (Trust or Loan Companies and					
-	Cash	in Hand)		-	
Independent Variable	Coefficients	Std.	't' Statistics	Significant	
		Error			
(Constant)	1.116	.261	4.282	.000	
Gender	.002	.069	.022	.982	
Age	.001	.003	.316	.752	
Marital status	.042	.076	.546	.585	
Educational qualification	055	.034	-1.643	.102	
Primary occupation	024	.031	771	.441	
Number of family	.017	.013	1.347	.179	
members					
House type	.056	.047	1.202	.230	
Details of land acres	012	.010	-1.194	.234	

The above table 4.2 examines the relationship between the savings and saving in banks and non-banks (trust or loan companies and cash in hand) and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the saving in banks and non-banks (trust or loan companies and cash in hand) and savings is highly significant. The result also shows the relationship of the saving in banks and non-banks (trust or loan companies and cash in hand) with other independent variables as Gender (male and female), age, marital status, number of family members, and house type

(kutcha, pucca and semi-pucca) shows a positive and insignificant relationship with the saving in banks and non- banks (trust or loan companies and cash in hand) where as educational qualification, primary occupation and the possession of the land acres results a negative and insignificant relationship with the saving in banks and non- banks (trust or loan companies and cash in hand).

4.4. Saving Behaviour of Household and Money Owed to the Households

Understanding how people save in particular, knowing whether certain people are more vulnerable financially because of their saving choices financial preparedness for retirement and anticipate their economic well-being thereafter. In recent years, employer pension schemes have shifted from defined benefit to defined contribution plans, and interest in reforming part of the Social Security retirement system has increased. Thus pension plans and Social Security are becoming or may become more like individual saving. Research on how people save is needed to help gauge the economic security of future retirees, inform the current debate on Social Security reform, and prevent inequalities in wealth from being perpetuated. This relation between the savings of the individuals and the money owed to the households outside the households with the other given independent variables can be given in the following equation:

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= .679+ (-.037) GEN+ (-.004) AGE+ .043MAR_STA+ .028EDU+-.015 PR_OCCU+ (- .048) FA_MEM+ (-.098) HS_TP+.032 LAND

't' Statistics= 2.957+ (-.611) GEN+ (-1.678) AGE+ .637 MAR_STA +.952 EDU+ .549 PR_OCCU + (-4.259) FA_MEM + (-2.389) HS_TP+ 3.432 LAND

Table 4.3: Saving Behaviour of Household and Money Owed to the Households

Dependent Variable: Money Owed to The Households by Persons Outside the Household					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	.679	.230	2.957	.003	
Gender	037	.061	611	.542	
Age	004	.002	-1.678	.095*	
Marital status	.043	.067	.637	.525	
Educational qualification	.028	.030	.952	.342	
Primary occupation	.015	.028	.549	.583	
Number of family members	048	.011	-4.259	.000**	
House type	098	.041	-2.389	.018*	
Details of land acres	.032	.009	3.432	.001*	

Note: *: significant at 1 percent level

The above table 4.3 examines the relationship between the savings and money owed to the households by persons outside the household and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the money owed to the households by persons outside the household and savings is significant. The result also shows the relationship of the money owed to the households by persons outside the household with other independent variables as Gender (male and female) is negatively insignificant with the money owed to the households by persons outside the household where as age, number of family members and the house type (kutcha, pucca and semi-pucca) have a negative but significant relationship with the money owed to the households by persons outside the household. The marital status, educational qualification and primary occupation shows a positive but insignificant relationship with the money owed to the households by persons outside the household and the possession of the land acres shows a positive significant relationship with the money owed to the household.

4.5. Saving Behaviour and Money Deposited in Banks

Sometimes people think they are doing finances well when those money-saving behaviours are really compromising the security of their savings. A budget and regularly depositing money into a saving account will build up a nice buffer in case fall on hard times, but also doing these things

^{**:} Significant at 5 percent level

can potentially put a big hole in that safety net. Poor is not that relational in depositing in banks because of less income. This can be established with the equation given:

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= .923+ .014 GEN+ (-.002) AGE+ (-.029) MAR_STA+ .106EDU+ (-.127) PR_OCCU+ (-.007) FA_MEM+ (-.111) HS_TP+.011 LAND

't' Statistics= 4.062+ .229 GEN+ (-.830) AGE+ (-.428) MAR_STA +3.616 EDU+ (-4.662)

PR_OCCU + (-.618) FA_MEM + (-2.716) HS_TP+ 1.245 LAND

Table 4.4: Saving Behaviour and Money Deposited in Banks

Dependent Variable: Money Deposited in Banks and Other Institutions for Future				
	Sec	curity		
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant
(Constant)	.923	.227	4.062	.000
Gender	.014	.061	.229	.819
Age	002	.002	830	.407
Marital status	029	.067	428	.669
Educational qualification	.106	.029	3.616	.000*
Primary occupation	127	.027	-4.662	.000**
Number of family members	007	.011	618	.537
House type	111	.041	-2.716	.007*
Details of land acres	.011	.009	1.245	.214

Note: *: significant at 1 percent level

The above table 4.4 examines the relationship between the savings and money deposited in banks and other institutions for future security and with the other independent variables i.e. land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the money deposited in banks and other institutions for future security and savings is highly significant. The result also shows the relationship of the money deposited in banks and other institutions for future security with other independent variables as Gender (male and female) and possession of the land acres have a positive and insignificant relationship with the money deposited in banks and other institutions for future security where as age, marital status and the number of family members have shown a negative and insignificant relation with the money deposited in banks

^{**:} Significant at 5 percent level

and other institutions for future security. The primary occupation and the house type show a negative but significant relationship with the money deposited in banks and other institutions for future security.

4.6. Saving Behaviour and Household Investments

The investments made by the households in different sectors are subjected to high income and more savings. The rural households have very less income and high consumption as their marginal propensity to consume is high and they are subjected to save less which significantly puts an impact on their investment pattern. Investments in unincorporated businesses and farms or rental properties are no where applicable for these communities. The following equation shows the relationship of saving behaviour, household's investments with other affecting independent variables.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= .186+ .025 GEN+ (-.005) AGE+ (-.011) MAR_STA+ (- .017) EDU+ .002 PR_OCCU+ (-.015) FA_MEM+ (-.040) HS_TP+.015 LAND

't' Statistics= 2.127+ 1.074 GEN+ (-.025) AGE+ (-.421) MAR_STA + (-1.479) EDU+ .229 PR_OCCU + (-3.593) FA_MEM + (-2.550) HS_TP+ 4.252 LAND

Table 4.5: Saving Behaviour and Household Investments

Dependent Variable: Households Having Investments in Unincorporated Business,						
Professi	Professional Practices, Farms or Rental Properties					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant		
(Constant)	.186	.087	2.127	.034		
Gender	.025	.023	1.074	.284		
Age	005	.001	025	.980		
Marital status	011	.026	421	.674		
Educational qualification	017	.011	-1.479	.140		
Primary occupation	.002	.010	.229	.819		
Number of family members	015	.004	-3.593	.000**		
House type	040	.016	-2.550	.011*		
Details of land acres	.015	.003	4.252	.000**		

Note: *: significant at 1 percent level

^{**:} Significant at 5 percent level

The above table 4.5 examines the relationship between the savings and households having investments in unincorporated business, professional practices, farms or rental properties and with the other independent variables i.e. Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between households having investments in unincorporated business, professional practices, farms or rental properties and savings is significant. The result also shows the relationship of households having investments in unincorporated business, professional practices, farms or rental properties with other independent variables as Gender (male and female) and primary occupation are positively insignificant with the households having investments in unincorporated business, professional practices, farms or rental properties. Age, marital status, and educational qualification have negative insignificant relationship with the households having investments in unincorporated business, professional practices, farms or rental properties where as number of family members and the house type (kutcha, pucca and semi-pucca) has negative but insignificant relationship with the households having investments in unincorporated business, professional practices, farms or rental properties and the possession of the land acres have positive and significant relationship with the households having investments in unincorporated business, professional practices, farms or rental properties.

4.7. Saving Behaviour and Income Groups

Different income groups have different saving patterns like, the high income groups have a significant high saving behaviour and the low income groups have an insignificant saving behaviour. The saving behaviour of different income groups show a relevant positive or negative implication which is shown in the following equation:

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

=> Y= 1.985+ (-.016) GEN+ (-.004) AGE+ .022MAR_STA+ .100EDU+ .006 PR_OCCU+ (-.016) FA MEM+ (-.322) HS TP+.079 LAND

't' Statistics= 7.329+ (-.228) GEN+ (-1.271) AGE+ .272 MAR_STA +2.854 EDU+ .183 PR_OCCU + (-1.238) FA_MEM + (-6.633) HS_TP+ 7.274 LAND

Table 4.6: Saving Behaviour and Income Groups

Dependent Variable: Income Groups				
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant
(Constant)	1.985	.271	7.329	.000
Gender	016	.072	228	.819
Age	004	.003	-1.271	.205
Marital status	.022	.079	.272	.786
Educational qualification	.100	.035	2.854	.005*
Primary occupation	.006	.032	.183	.855
Number of family members	016	.013	-1.238	.217
House type	322	.049	-6.633	.000**
Details of land acres	.079	.011	7.274	.000**

Note: *: significant at 1 percent level **: Significant at 5 percent level

The above table 4.6 examines the relationship between the savings and income groups and with the other independent variables i.e. Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the income groups and savings is highly significant. The result also shows the relationship of the income groups with other independent variables as Gender (male and female), age and the number of family members are negatively insignificant with the income groups. The marital status and the primary occupation show a positive and insignificant relation with the income groups where as the educational qualification and the possession of the land acres have a positive and insignificant relationship with the income groups.

4.8. Saving Behaviour and Mode of Savings

The mode of saving in different forms as the rural people do in form of liquid asset, metals, paddy, animals and different assets shows the income behaviour of the individuals. Mostly the rural people have the savings inform of paddy and liquid asset. The relationship between the saving behaviour and the established mode of saving is explained in the following equation:

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.286+ (-.025) GEN+ .000 AGE+ .011MAR_STA+ (-.065) EDU+ (-.080) PR_OCCU+ .026 FA_MEM+ .169 HS_TP+.004 LAND 't' Statistics= 2.629+ (-.192) GEN+ (-050) AGE+ .075 MAR_STA+ (-1.022) EDU+ (-1.356) PR OCCU + 1.086 FA MEM + 1.924) HS TP+ .218 LAND

Table 4.7: Saving Behaviour and Mode of Savings

Dependent Variable: Mode of Savings					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	1.286	.489	2.629	.009	
Gender	025	.130	192	.848	
Age	.000	.005	050	.960	
Marital status	.011	.143	.075	.940	
Educational qualification	065	.063	-1.022	.308	
Primary occupation	080	.059	-1.356	.176	
Number of family members	.026	.024	1.086	.278	
House type	.169	.088	1.924	.055	
Details of land acres	.004	.020	.218	.828	

The above table 4.7 examines the relationship between the savings and mode of savings and with the other independent variables i.e. Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the mode of savings and savings is significant. The result also shows the relationship of the mode of savings with other independent variables as Gender (male and female), age, educational qualification, and primary occupation of the individuals show a negative and insignificant relationship with the mode of savings. The marital status, number of family members and the possession of the land acres show a positive and insignificant relationship with the mode of savings where as the house type (kutcha, pucca and semi-pucca) shows a positive and significant relationship with the mode of savings.

4.9. Saving Behaviour and Preference for Saving in

The rural communities have a very less income which supposes them to save less and even if they save they prefer the savings account through which they can have easy way of transaction at any point of time and they save a very less amount in the financial institutions showing a significant result of saving.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 5.303+ .503 GEN+ .031 AGE+ (-.618) MAR_STA+ (-.317) EDU+ (-.356) PR_OCCU+ .071 FA_MEM+ (-.322) HS_TP+ (-.214) LAND

't' Statistics= 5.546+ 1.976 GEN+ 3.215 AGE+ (-2.204) MAR_STA + (-2.559) EDU+ (-3.108)

PR OCCU + 1.522 FA MEM + (-1.876) HS TP+ (-5.586) LAND

Table 4.8: Saving Behaviour and Preference For Saving

Dependent Variable: Preference For Saving in				
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant
(Constant)	5.303	.956	5.546	.000
Gender	.503	.255	1.976	.049
Age	.031	.010	3.215	.001**
Marital status	618	.280	-2.204	.028*
Educational qualification	317	.124	-2.559	.011*
Primary occupation	356	.115	-3.108	.002**
Number of family members	.071	.046	1.522	.129
House type	322	.171	-1.876	.062*
Details of land acres	214	.038	-5.586	.000**

Note: *: significant at 1 percent level

The above table 4.8 examines the relationship between the savings and preference for saving and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the preference for saving and savings is highly significant. The result also shows the relationship of the preference for saving with other independent variables as Gender (male and female) and age of the individuals is positive and significant. Marital status, Educational qualification, Primary occupation, House type and Details of land acres have a negative but significant relationship with the preference for saving. The number of family members shows a considerable positive but insignificant relationship with the preference for saving.

^{**:} Significant at 5 percent level

4.10. Saving Behaviour and Income Towards Saving

The income towards saving for the rural people is very less as the ample part of the income goes for the consumption and the rural families are large in number where the income earning person is one which shows a negative relation of income towards saving with the saving behaviour.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1060.374+ (-60.102) GEN+ (-5.273) AGE+ 101.096MAR_STA+ (-42.687) EDU+187.361 PR_OCCU+ (-64.532) FA_MEM+ (-367.160) HS_TP+184.850 LAND 't' Statistics= 2.884+ (-.614) GEN+ (-1.411) AGE+ .938 MAR_STA +(-.897) EDU+ 4.250 PR_OCCU+ (-3.613) FA_MEM+ (-5.569) HS_TP+ 12.564 LAND

Table 4.9: Saving Behaviour and Income Towards Saving

Dependent Variable: Income Towards Saving				
Independent Variables	Coefficient	Std. Error	't' Statistics	Significa
				nt
(Constant)	1060.374	367.637	2.884	.004
Gender	-60.102	97.890	614	.540
Age	-5.273	3.738	-1.411	.159
Marital status	101.096	107.743	.938	.349
Educational qualification	-42.687	47.580	897	.370
Primary occupation	187.361	44.090	4.250	.000**
Number of family members	-64.532	17.862	-3.613	.000**
House type	-367.160	65.934	-5.569	.000**
Details of land acres	184.850	14.713	12.564	.000**

Note: *: significant at 1 percent level

The above table 4.9 examines the relationship between the savings and income towards saving and with the other independent variables i.e. Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the income towards saving and savings is highly significant. The result also shows the relationship of income towards saving with other independent variables as Gender (male and female), age and the educational qualification shows

^{**:} Significant at 5 percent level

a negative and insignificant relation with the income towards saving. The marital status of the individuals shows a positive but insignificant relationship with income towards saving. The primary occupation and the possession of land acres have a positive and significant relationship with income towards saving where as the number of family members and the house type (kutcha, pucca and semi-pucca) has a negative but significant relationship with income towards saving.

4.11. Saving Behaviour and Saving Preference over the Year

Mostly the short term saving are preferred by the rural communities because they are subjected to save a less amount of capital at a point of time and frequently draw the deposited amount for their savings for meeting their day to day expenses. For these rural people it is very difficult to go for long term saving opportunities.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.440+ (-.056) GEN+ (-.007) AGE+ .281MAR_STA+ (-.156) EDU+ .125 PR_OCCU+ (-.036) FA_MEM+ (-.149) HS_TP+.092 LAND

't' Statistics= 4.992+ (-.730) GEN+ (-2.410) AGE+ 3.320 MAR_STA +(-4.165) EDU+ 3.602 PR_OCCU + (-2.564) FA_MEM + (-2.877) HS_TP+ 7.938 LAND

Table 4.10: Saving Behaviour and Saving Preference

Dependent Variable: Saving Preference Over the Year				
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant
(Constant)	1.440	.289	4.992	.000
Gender	056	.077	730	.466
Age	007	.003	-2.410	.017**
Marital status	.281	.085	3.320	.001**
Educational qualification	156	.037	-4.165	.000**
Primary occupation	.125	.035	3.602	.000**
Number of family members	036	.014	-2.564	.011*
House type	149	.052	-2.877	.004*
Details of land acres	.092	.012	7.938	.000**

Note: *: significant at 1 percent level

^{**:} Significant at 5 percent level

The above table 4.10 examines the relationship between the savings and saving preference over the year and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between saving preference over the year and savings is highly significant. The age of the individuals, the number of family members, the educational qualification and the house type shows a negative significant relationship with the saving preference over the year. The marital status, primary occupation and the possession of land acres are positively significant with the saving preference over the year and the gender shows a negative insignificant relation with the saving preference over the year.

4.12. Saving Behaviour and Type of Saving Mostly Encouraged

The rural poor communities mostly prefer the daily or monthly saving as it is the most convenient way of saving for them. Whatever is earned by them daily or monthly is consumed but some part is made to save. The daily earning of those people is around on an average Rs.130 out of which Rs20 probably goes for the saving.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LAND$ $Y = 2.637 + (-.402) GEN + (-.021) AGE + .585MAR_STA + (-.438) EDU + .321 PR_OCCU + (-.030)$ $FA_MEM + (-.062) HS_TP + .123 LAND$ $\text{`t' Statistics} = 2.964 + (-1.698) GEN + (-2.347) AGE + 2.051 MAR_STA + (-3.804) EDU + 3.006$ $PR_OCCU + (-.683) FA_MEM + (-.391) HS_TP + 3.441 LAND$

Table 4.11: Saving Behaviour and Type of Saving Encouraged

Dependent Variable: Type of Saving Mostly Encouraged				
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant
(Constant)	2.637	.890	2.964	.003
Gender	402	.237	-1.698	.091*
Age	021	.009	-2.347	.020*
Marital status	.535	.261	2.051	.041*
Educational qualification	438	.115	-3.804	.000**
Primary occupation	.321	.107	3.006	.003**
Number of family members	030	.043	683	.495
House type	062	.160	391	.696
Details of land acres	.123	.036	3.441	.001*

Note: *: significant at 1 percent level

^{**:} Significant at 5 percent level

The above table 4.11 examines the relationship between the savings and type of saving mostly encouraged and with the other independent variables i.e. Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between types of saving mostly encouraged and savings is significant. The result also shows the relationship of type of saving mostly encouraged with other independent variables as Gender (male and female) and age are negatively significant. Marital status, primary occupation and possession of land acres have a positive significant relationship with type of saving mostly encouraged. The house type (kutcha, pucca, and semi-pucca) and the number of family members have a negatively insignificant relationship with type of saving mostly encouraged and the educational qualification is negatively significant with type of saving mostly encouraged.

4.13. Saving Behaviour and Amount of Saving in Different Period

The primary occupation of the rural people is daily wage labour or agriculture which is mostly seasonal. These occupations reveal a very low income or wage which amounts them to save a very less amount in a particular period of time.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.454+ (-.185) GEN+ (-.008) AGE+ .208MAR_STA+ (-171) EDU+ .149 PR_OCCU+ (-.037) FA_MEM+ (-.065) HS_TP+.058 LAND

't' Statistics= 4.392+ (-2.101) GEN+ (-2.317) AGE+ 2.147 MAR_STA + (-4.002) EDU+ 3.752 PR_OCCU + (-2.278) FA_MEM + (-1.091)) HS_TP+ 4.353 LAND

Table 4.12: Saving Behaviour and Amount of Saving in Different Period

Dependent Variable: Amount of Saving in Different Period					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	1.454	.331	4.392	.000	
Gender	185	.088	-2.101	.036	
Age	008	.003	-2.317	.021	
Marital status	.208	.097	2.147	.033	
Educational qualification	171	.043	-4.002	.000	
Primary occupation	.149	.040	3.752	.000	
Number of family members	037	.016	-2.278	.023	

House type	065	.059	-1.091	.276
Details of land acres	.058	.013	4.353	.000

Note: *: significant at 1 percent level **: Significant at 5 percent level

The above table 4.12 examines the relationship between the savings and amount of saving in different period and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between amount of saving in different period and savings is highly significant. The result also shows the relationship of amount of saving in different period with other independent variables such as Gender (male and female) and age of the respondents are negatively significant. Marital status, primary occupation and possession of land acres have a positive significant relationship with amount of saving in different period. Educational qualification and the number of family members have a negative significant relation with amount of saving in different period and the house type (kutcha, pucca, and semi-pucca) has a negative insignificant relation with the amount of saving in different period.

4.14. Saving Behaviour and Type of Accounts Available In Banks or Financial Institutions The financial institutions or the banks offer a variety of saving schemes out of which the current account, the saving account, the fixed deposit account and the recurring deposit account are available. The rural people mostly prefer to have a savings account and the fixed deposit account is preferred by the farmers in the sense of acquiring yearly income at large but less in number.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.569+ (-.230) GEN+ (-.015) AGE+ .151MAR_STA+ .182EDU+ (-.012) PR_OCCU+ (-.055) FA_MEM+ .135 HS_TP+.061 LAND

't' Statistics= 3.187+ (-1.752) GEN+ (-3.005) AGE+ 1.043 MAR_STA +2.854 EDU+ (-.208) PR OCCU + (-2.305) FA MEM + 1.529 HS TP+ 3.082 LAND

Table 4.13: Saving Behaviour and Type of Accounts Available

Dependent Variable: Type of Accounts Available In Banks or Financial Institutions				
As According To Earners Preference				
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant
(Constant)	1.569	.492	3.187	.002
Gender	230	.131	-1.752	.081*
Age	015	.005	-3.005	.003**
Marital status	.151	.144	1.043	.298
Educational qualification	.182	.064	2.854	.005**
Primary occupation	012	.059	208	.836
Number of family members	055	.024	-2.305	.022*
House type	.135	.088	1.529	.127
Details of land acres	.061	.020	3.082	.002**

Note: *: significant at 1 percent level **: Significant at 5 percent level

The above table 4.13 examines the relationship between the savings and the type of accounts available in banks or financial institutions and with the other independent variables i.e. Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the type of accounts available in banks or financial institutions and savings is significant. The result also shows the relationship of the type of accounts available in banks or financial institutions with other independent variables as Gender (male and female) and age are negatively significant with the type of accounts available in banks or financial institutions. Marital status is positively insignificant with the type of accounts available in banks or financial institutions. Educational qualification of the respondents has a positive relationship with the type of accounts available in banks or financial institutions and is significant. Primary occupation has a negative relation with the type of accounts available in banks or financial institutions and is insignificant. The number of family members is negatively significant, the possession of the land acres is positively significant and the house type (kutcha, pucca, and semi-pucca) is positively insignificant with the type of accounts available in banks or financial institutions.

4.15. Saving Behaviour and Problems Relating to Saving

In the saving of the rural poor communities there lies a lot of problem like less income, more consumption, large family size, no saving opportunities available, lack of availability of the banks and the other financial institutions for which they are reluctant to save.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

=> Y= 1.181+ (-.022) GEN+ (-.002) AGE+ (-.024) MAR_STA+ (-.147) EDU+ .204

PR_OCCU+ .029 FA_MEM+ (-.059) HS_TP+.127 LAND

't' Statistics= 2.295+ (-.160) GEN+ (-.372) AGE+ (-.157) MAR STA +(-2.206) EDU+ 3.313

PR OCCU + 1.142 FA MEM + (-.638) HS TP+ 6.194 LAND

Table 4.14: Saving Behaviour and Problems Relating To Saving

Dependent Variable: Problems Relating To Saving					
Independent Variables	Coefficient	Std. Error	Std. Error 't' Statistics		
				t	
(Constant)	1.181	.514	2.295	.022	
Gender	022	.137	160	.873	
Age	002	.005	372	.710	
Marital status	024	.151	157	.876	
Educational qualification	147	.067	-2.206	.028*	
Primary occupation	.204	.062	3.313	.001**	
Number of family members	.029	.025	1.142	.254	
House type	059	.092	638	.524	
Details of land acres	.127	.021	6.194	.000**	

Note: *: significant at 1 percent level

**: Significant at 5 percent level

The above table 4.14 examines the relationship between the savings and the problems relating to saving and with the other independent variables i.e. Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the problems relating to saving and savings is significant. The result also shows the relationship of the problems relating to saving with other independent variables such as Gender (male and female) is negatively related to the problems relating to saving showing an insignificant relation. The age of the members of the household and the marital status is negatively insignificant. Educational qualification of the respondents is negatively significant with the problems relating to saving. Primary occupation has a positive relation with the problems relating to saving and is significant. The number of family members has a positive but insignificant relationship with the problems relating to saving. The possession

of the land acres have a positive significant relationship with the problems relating to saving. The house type (kutcha, pucca, and semi-pucca) is negatively insignificant with the problems relating to saving.

4.16. Saving Behaviour with Parental or Own Savings

The properties like house, land and some assets like gold and silver are owned by the rural individuals from their forefathers and ancestors. These movable and immovable properties are regarded as savings of these rural people but, as most of the rural people are poor their savings are mostly very meagre and in monetary form. The savings like hose and land can be considered as their parental savings.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.922+ (-.003) GEN+ (-.006) AGE+ (-.014) MAR_STA+ .018EDU+ .053 PR_OCCU+ (-.025) FA_MEM+ .046 HS_TP+.023 LAND

't' Statistics= 9.352+ (-.046) GEN+ (-2.750) AGE+ (-.230) MAR_STA +.664 EDU+ 2.146 PR_OCCU + (-2.507)FA_MEM + 1.242 HS_TP+ 2.782 LAND

Table 4.15: Saving Behaviour and Existing saving parental or own

Dependent Variable: Existing saving is parental or own savings					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	1.922	.205	9.352	.000	
Gender	003	.055	046	.964	
Age	006	.002	-2.750	.006	
Marital status	014	.060	230	.819	
Educational qualification	.018	.027	.664	.507	
Primary occupation	.053	.025	2.146	.033	
Number of family members	025	.010	-2.507	.013	
House type	.046	.037	1.242	.215	
Details of land acres	.023	.008	2.782	.006	

Note: *: significant at 1 percent level **: Significant at 5 percent level

The above table 4.15 examines the relationship between the savings and parental or own savings and with the other independent variables i.e. Land acres, marital status, Gender, House type,

Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the income and savings is highly significant. The result also shows the relationship of parental or own savings with other independent variables as Gender (male and female) has a negatively insignificant relation with parental or own savings; the age of the members of the household is negatively significant. Marital status has a negatively insignificant relationship with the parental or own savings. Educational qualification has a positive insignificant relationship with parental or own savings. Primary occupation has a positive significant relation with parental or own savings. The number of family members has a negative and significant relationship with parental or own savings. The possession of the land acres have a positive relationship with parental or own savings and are significant. The house type (kutcha, pucca, and semi-pucca) is positively significant with parental or own savings.

4.17. Saving Behaviour in Household and Cheated by Unorganized Financial Institutions

Many of the rural people sometimes become the victims of those unorganized financial institutions as these institutions make fool of these poor people. But, the study reveals that a very less number of people are subjected to cheating from those unorganized financial institutions.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.829+ (-.001) GEN+ .000 AGE+ (-.015) MAR_STA+ .015EDU+ .004PR_OCCU+ .008 FA_MEM+ .029 HS_TP+.003 LAND

't' Statistics= 21.728+ (-.066) GEN+ .326 AGE+ (-.624) MAR_STA +1.415 EDU+ .376 PR OCCU + 1.847 FA MEM +1.910 HS TP+ .789 LAND

Table 4.16: Saving Behaviour and Got Cheated

Dependent Variable: Anytime Got Cheated From Any of the Institutions					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	1.829	.084	21.728	.000	
Gender	001	.022	066	.947	
Age	.000	.001	.316	.752	
Marital status	015	.025	624	.533	
Educational qualification	.015	.011	1.415	.158	
Primary occupation	.004	.010	.376	.707	

Number of family members	.008	.004	1.847	.066
House type	.029	.015	1.910	.057*
Details of land acres	.003	.003	.789	.431

Note: *: significant at 1 percent level **: Significant at 5 percent level

The above table 4.16 examines the relationship between the savings and got cheated and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between got cheated and savings is highly significant. The result also shows the relationship of got cheated with other independent variables as Gender (male and female) is negatively related to got cheated showing an insignificant relation, the age of the members of the household is positively insignificant with got cheated. Marital status has a negative relationship with got cheated and is insignificant. Primary occupation and the educational qualification have a positive relation with got cheated but is insignificant. The possession of the land acres has a positive relationship with got cheated but is insignificant. The number of family members and the house type (kutcha, pucca, semi-pucca) is positively significant with got cheated.

4.18. Saving Behaviour and Willing to Save

The saving behaviour of the rural people has been experienced as a 'bull without horn' as for the rural or the poor people their savings can only be their defender and protector as the horn of the bull protects the bull from many hazards. But, due to less income and more consumption because of a large family, they are subjected to save less and this situation makes them to compel them to low will to save.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.505 + (-.127) GEN+ (-.005) AGE+ .154MAR_STA+ .094EDU+ .056 PR_OCCU+ .025 FA_MEM+ (-.331) HS_TP+.073 LAND

't' Statistics= 4.779+ (-1.510) GEN+ (-1.593) AGE+ 1.671 MAR_STA +2.316 EDU+ 1.456 PR_OCCU + 1.650 FA_MEM + (-5.870) HS_TP+ 5.760 LAND

Table 4.17: Saving Behaviour and Wish to Save in Each Month

Dependent Variable: Wish to Save Each Month					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	1.505	.315	4.779	.000	
Gender	127	.084	-1.510	.132	
Age	005	.003	-1.593	.112	
Marital status	.154	.092	1.671	.096	
Educational qualification	.094	.041	2.316	.021	
Primary occupation	.056	.038	1.486	.138	
Number of family members	.025	.015	1.650	.100*	
House type	331	.056	-5.870	.000**	
Details of land acres	.073	.013	5.760	.000**	

Note: *: significant at 1 percent level

The above table 4.17 examines the relationship between the savings and the earners wish to save each month and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the earners wishes to save each month and savings is highly significant. The result also shows the relationship of the earners wish to save each month with other independent variables as Gender (male and female) is negatively related to the earners wish to save each month showing an insignificant relation, the age of the members of the household is negatively insignificant. Marital status and educational qualification of the respondents has a positive relationship with the earners wish to save each month and is significant. Primary occupation and the number of family members has a positive insignificant relationship with the earners wish to save each month. The possession of the land acres have a positive relationship with the earners wish to save each month and are highly significant. The house type (kutcha, pucca, and semi-pucca) is negatively significant with the earners wish to save each month.

4.19. Saving Behaviour and Target Amount of Capital the Earner Wish to Achieve

Every person expects or targets to achieve at some point where he can fulfill all his demands and wishes. He puts some target for saving a particular amount of money according to his capacity and requirement. But, the people who have no savings at all in the present how and what expectation they will keep or target to achieve in future.

^{**:} Significant at 5 percent level

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.311+ (-.010) GEN+ .002 AGE+ .012MAR_STA+ (-.108) EDU+ .035 PR_OCCU+ .012 FA_MEM+ .158 HS_TP+(-.009)LAND

't' Statistics= 7.268 + (-.210) GEN+ 1.172 AGE+ .233 MAR_STA +(-1.616) EDU+ 1.610 PR_OCCU + 1.371 FA_MEM + 4.886 HS_TP+ (-1.260) LAND

Table 4.18: Saving Behaviour and Target Amount of Capital

Dependent Variable: Target Amount of Capital The Earner Wish to Achieve					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	1.311	.180	7.268	.000	
Gender	010	.048	210	.834	
Age	.002	.002	1.172	.242	
Marital status	.012	.053	.233	.816	
Educational qualification	108	.023	-4.616	.000**	
Primary occupation	.035	.022	1.610	.108	
Number of family members	.012	.009	1.371	.171	
House type	.158	.032	4.886	.000**	
Details of land acres	009	.007	-1.260	.209	

Note: *: significant at 1 percent level

The above table 4.18 examines the relationship between the savings and the target amount of capital the earner wish to achieve and with the other independent variables i.e. Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the target amount of capital the earner wish to achieve and savings is highly significant. The result also shows the relationship of the target amount of capital the earner wish to achieve with other independent variables such as Gender (male and female) is negatively related to income of the individuals showing an insignificant relation, the age of the members of the household is positively insignificant with the target amount of capital the earner wish to achieve. Marital status has a positive relationship with the target amount of capital the earner wish to achieve but is insignificant. Educational qualification shows a negatively significant result with the target amount of capital the earner wish to achieve Primary occupation and the number of family members have a positive relationship with the target amount of capital the earner wish to

^{**:} Significant at 5 percent level

achieve but is insignificant. The house type (kutcha, pucca, and semi-pucca) is positively significant with the target amount of capital the earner wish to achieve and the possession of the land acres has a negatively insignificant relationship with the target amount of capital the earner wish to achieve.

4.20. Saving Behavior and Emergency Fund

Savings in done for the purpose of three motives i.e. transactionary motive, precautionary motive and speculative motive was said by J.M. Keynes. Savings is done in order to meet the future unseen forces but the people who have low income, save less. So, they acquire a very less fund or savings for meeting their emergency needs.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 4.249+ (-.285) GEN+ (-.020) AGE+ .344MAR_STA+ .092EDU+ .086 PR_OCCU+ .055 FA_MEM+ (-.819) HS_TP+.125 LAND

't' Statistics= 7.989+ (-2.012) GEN+ (-3.637) AGE+ 2.204 MAR_STA +1.332 EDU+ 1.351

PR_OCCU + (-2.135) FA_MEM + (-8.584) HS_TP+ 5.880 LAND

Table 4.19: Saving Behavior and Emergency Fund

Dependent Variable: Emergency Fund to Provide for Unexpected Expenses					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	4.249	.532	7.989	.000	
Gender	285	.142	-2.012	.045	
Age	020	.005	-3.637	.000**	
Marital status	.344	.156	2.204	.028*	
Educational qualification	.092	.069	1.332	.184	
Primary occupation	.086	.064	1.351	.178	
Number of family members	055	.026	-2.135	.034*	
House type	819	.095	-8.584	.000	
Details of land acres	.125	.021	5.880	.000	

Note: *: significant at 1 percent level and **: Significant at 5 percent level

The above table 4.19 examines the relationship between the savings and the emergency fund to provide for unexpected expenses and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the emergency

fund to provide for unexpected expenses and savings is highly significant. The result also shows the relationship of the emergency fund to provide for unexpected expenses with other independent variables such as Gender (male and female) is negatively related to the emergency fund to provide for unexpected expenses showing a significant relation, the age of the members of the household is negatively significant. Marital status has a positively significant relationship with the emergency fund to provide for unexpected expenses. Primary occupation and educational qualification are positively significant with the emergency fund to provide for unexpected expenses. The number of family members and the house type (kutcha, pucca and semi-pucca) has a negative relationship with the emergency fund to provide for unexpected expenses but is highly significant. The possession of the land acres is highly positively significant with the emergency fund to provide for unexpected expenses.

4.21. Saving Behaviour and Expectation of Future Earnings

Many of the households have very less saving at the present but as many of them are daily wage labours and agricultural workers they have no higher expectation regarding their future earnings. Many individuals belong to the above 50 years of age which makes them expect a fall in their income level and expect their income to keep pace with the inflation.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND

Y= 1.298+ (-.236) GEN+ (-.013) AGE+ .174MAR_STA+ .195EDU+ .135 PR_OCCU+ (-.056) FA_MEM+ .215 HS_TP+.030 LAND

't' Statistics= 3.246+ (-2.220) GEN+ (-3.311) AGE+ 1.489 MAR_STA +3.760 EDU+ 2.810 PR_OCCU + (-2.873) FA_MEM + 3.002 HS_TP+3.130 LAND

Table 4.20: Saving Behaviour and Expectation of Future Earnings

Dependent Variable: Expectation of Future Earnings Over The Next Five Years					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	1.298	.400	3.246	.001	
Gender	236	.107	-2.220	.027**	
Age	013	.004	-3.311	.001**	
Marital status	.174	.117	1.489	.138	
Educational qualification	.195	.052	3.760	.000**	

Primary occupation	.135	.048	2.810	.005**
Number of family members	056	.019	-2.873	.004**
House type	.215	.072	3.002	.003**
Details of land acres	.050	.016	3.130	.002**

Note: *: significant at 1 percent level **: Significant at 5 percent level

The above table 4.20 examines the relationship between the savings and the expectation of future earnings and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the expectation of future earnings and savings is highly significant. The result also shows the relationship of the expectation of future earnings with other independent variables as Gender (male and female) is negatively related to income of the individuals showing a significant relation, the age of the members of the household is negatively significant. Marital status of the respondents has a positive relationship with the expectation of future earnings but is insignificant. Primary occupation and educational qualification of the individuals has a positive relation with the expectation of future earnings and is significant. The number of family members has a negative relation with the expectation of future earnings but is significant where as the possession of the land is positively significant with the expectation of future earnings of the individuals.

4.22. Saving Behaviour and Current Financial Situation

The poor people have a situation of less saving which absurd's them being in the competition with the rich. The financial situation amounts to no growth in the present if compared to the past savings as most of them have never experienced any growth in their in their earnings the current financial situation shows a significant trade of taking no loans. Many of them are debt free.

 $Y = \alpha_0 + \alpha_1 GEN + \alpha_2 AGE + \alpha_3 MAR_STA + \alpha_4 EDU + \alpha_5 PR_OCCU + \alpha_6 FA_MEM + \alpha_7 HS_TP + \alpha_8 LA$ ND $Y = .792 + .014 \ GEN + .000 \ AGE + .091 MAR_STA + (-.007) \ EDU + .012 \ PR_OCCU + (-.010)$

FA_MEM+ .032 HS_TP+.008 LAND

't' Statistics= 9.207+ .616 GEN+ (-.363) AGE+ 3.593 MAR_STA +(-.611) EDU+ 1.154

PR_OCCU + (-2.489)FA_MEM + 2.071 HS_TP+ 2.231 LAND

Table 4.21: Saving Behaviour and Current Financial Situation

Dependent Variable: Current Financial Situation					
Independent Variables	Coefficient	Std. Error	't' Statistics	Significant	
(Constant)	.792	.086	9.207	.000	
Gender	.014	.023	.616	.538	
Age	.000	.001	363	.717	
Marital status	.091	.025	3.593	.000**	
Educational qualification	007	.011	611	.542	
Primary occupation	.012	.010	1.154	.250	
Number of family members	010	.004	-2.489	.013*	
House type	.032	.015	2.071	.039*	
Details of land acres	.008	.003	2.231	.026*	

Note: *: significant at 1 percent level **: Significant at 5 percent level

The above table 4.21 examines the relationship between the savings and the current financial situation of the individuals and with the other independent variables i.e- Land acres, marital status, Gender, House type, Number of family members, Primary occupation, and Age and Educational qualification. The result shows that the relationship between the current financial situation of the individuals and savings is highly significant. The result also shows the relationship of the income of the individuals with other independent variables as Gender (male and female) is positively related to the current financial situation of the individuals showing an insignificant relation; the age of the members of the household is negatively insignificant. Marital status of the respondents has a positive relationship with the current financial situation of the individuals but is highly significant. The educational qualification reveals a negatively insignificant relationship with the current financial situation of the individuals. Primary occupation has a positive relation with the current financial situation of the individuals but is insignificant. The number of family members is negatively affecting the current financial situation of the individuals but is significant. The possession of the land acres and the house type (kutcha, pucca, and semi-pucca) is positively significant with the current financial situation of the individuals.

4.23. Conclusion

The study on different determinants of saving behaviour has shown a considerable significance and non-significance of different variables which helped in analyzing the determinants of the saving behaviour in the rural households of the Sundergarh district of Odisha. The different variables like the gender, age, primary occupation, educational qualification, possession of land, house type, number of family members and the marital status of the individuals has been analyzed by showing a relationship with different determinants affecting saving behaviour like change in savings, income of the individuals, income groups, mode of savings, future expectations of saving, income towards saving, type of savings, amount of savings, problem relating to saving, types of accounts available in banks, parental or own savings, wish to save each month and anytime got cheated from any financial institutions.

Chapter 5

Summary and Conclusion

India is a country full of diverse culture, tradition and ethnicity. Since India has achieved independence there has been experienced a lot of variations in the social religious and economic situations. A lot of governmental policies have been affecting the economic and social status of the country India. Since the five year plans has been working in the economy focusing or targeting to achieve capital formation, balanced economy, eradication of poverty, improving infrastructural facilities, improving social status by erasing the standard of living and lots more. Despite all the efforts of the policies and plans of the Indian government we find that even now these conditions still continue to be underneath and unsuccessful. The socio economic status of the country is still marginalized which hinders the development process of the country. In the present context the rural dominated society is experiencing mass poverty, unemployment, low income, low saving and low occupational status. In this context the present study has made an attempt to analyze the socio economic background and the saving pattern determinants of the rural households in the Sundargarh district of Odisha. The findings on various aspects of savings and recommendations of the study are given in this chapter. It is found that the educational status of the rural households is lower than the general households. The MPS of the rural communities is very nominal as compared to the general households as because of less income and more consumption. The rural communities of the study area concentrate on more of the tribal communities, SCs than the general cast communities. If we look into the saving pattern of these communities we find that savings are accounted to be very low as because of their low occupational status and low income. All of the income is spent on consumption and it's very insufficient to feed the larger family groups. Some groups are accounted to save but although it is very less and meagre to obtain the needs for a shorter period of time.

Although the study has found that there has been a significant change in the levels and density of savings pattern of the rural households because of the increase in saving opportunities available with a convenient bar. The increase in the financial institutions

like banks, micro finance institutions, SHGs and other local banks provided an opportunity to the rural people to save more. The increase in awareness among the people for their future security as through the unforeseen cases like sudden death of a family member, medical emergency and any other financial crisis, education of their children, marriage of a family member has made people inclined to save. The degree of change in savings as compared to urban communities of the rural households are not much but still has brought a revolution in the pattern of savings of the rural households. The present studies found that most of the rural communities or the rural households are subjected to no savings at all. Most of the rural households are engaged in agriculture and they have their own land which forms an asset for them during any emergency. Even though they contain a small patch of land but it works as a financial component to them by means of mortgaging or selling it. Large percentage of the rural mass are poor having a low economic and social status. The dependency ratio (the percentage of children and old age population) is increasing day by day which is subjecting the rural people to save less as the consumption goes on increasing. Most of the rural households have low educational status which is resulting in less awareness of the people towards the benefits of saving. They are even careless towards their health standard as the consumption of local liquor (Handia) is very prominent in these households which in a way or the other detoriating the health as well as the financial condition of these households. An efficient wage act policy should be implemented by the government as many of the rural people are the daily wage worker amounting them to proper ways which can meet the consumption needs and some portions of the income can be saved. A rigorous health check up should be provided which can raise their free health standards and reduce the medical expenses. The financial institutions should amount to high interest rates provided on savings which can motivate the rural people to save in these institutions mostly in post offices, banks etc rather than keeping at home. There must be a proper channel of agents who can advise or council these people regarding saving.

Limitations of the Study

The major limitations of the study is accounting to the changing pattern of savings of the rural households of the Sundergarh district of Odisha. The estimation of saving pattern

depends on the reliability of the data collected on each determinant of savings due to the inconvenience of the respondents. Some of the respondents living in large families and mostly uneducated failed to give the correct data on their income expenditure pattern and the head on consumption. Due to lack of the availability of the head of the family as many of them are mostly out for work, the data received from the family members are inadequate and invalid. There also exists errors in the data collected because of the lack of cooperation among the respondents and also some respondents hesitate to give exact details of their savings as because of their conservative attitude. The evasion of information, overstatement, and understatement also leads to distortion of data taken. In the analysis of the determinants of saving behaviour. The saving pattern varies in size, age structure, dependency ratio, gender ratio, income groups, and expenditure pattern of the sample households. These differences lies between the saving pattern and the different variables affect the result. By nature many people hesitate to give the exact information about their income which results in biasness in the data collected and do not give 100 percent true result. The APC and MPC of the rural households varies in terms of the distribution of income and occupation i.e. in other words, the lowest income groups(the agricultural labours and the non-agricultural labours) have the highest marginal propensity to consume which leads to lowest marginal propensity to save as compared to the other occupational groups. The life cycle hypothesis (LCH) is purely applicable to the study but the other theories are partially supporting the saving theories. The study demonstrated that when the income of the individuals rises, the consumption also raises simultaneously i.e. the consumption of liquor. This leads to less saving. There are some other indicators like religion, caste, tradition, social attitude, beliefs, family decision making, income; consumption affects the saving behaviour or attitude of the rural people. The necessaries for the urban people are the luxuries for the rural people i.e. maintaining good health, eating healthy fruits and vegetables, maintaining sustainable standard of living. This makes a varied difference in the saving attitude of the people. The family size also affects the households saving pattern. For the effective study there need a comparison between the previous income, consumption and savings with the present day income, consumption and saving analysis but the respondents fail to give the correct information regarding the past income which made the study more distortive?

Some of the rural people do not save anything and they have a very poor standard of living which is again a problem for the study.

Scope for further research

This is a preliminary study of the saving pattern of the households in Odisha. There is a need of further research to identify the government policies, prices of the commodities (durable and non- durable goods) especially for the state Odisha where there is unequal distribution of income and a problem related to allocating of the resources. There should be proper policies of the banks and other financial institutions in the rural areas. The price effect and the income effect policy should be introduced for the changes in the saving pattern in these areas. The interest rate policies of the financial institutions should be made more polished for the proper and effective implementation of the programmes and policies of the government making the rural people more inclined towards saving.

BIBLIOGRAPHY

Abdelkhalek Touhami, Arestoff Florence, de Freitas Mekkaoui and Mage Sabine (2009), "A Micro econometric Analysis of Households Saving Determinants in Morocco", Laboratoire d'Economie de Dauphine (LEDA), Chaire Dauphine-Ensae-Groupama, *Université Paris Dauphine Place du Maréchal de Lattre de Tassigny 75775 Paris cedex 16 France*.

Agrawal Pradeep, Sahoo Pravakar and Dash Ranjan (2008), "Savings Behaviour in South Asia", Working Paper Series No. E/289/2008.

Ahmad Mohsin Hasnain, Atiq Zeshan, Alam Shaista and S. Butt Muhammad (2006)," The Impact of Demography, Growth and Public Policy on Household Saving: A Case Study of Pakistan", Asia-Pacific Development Journal Vol. 13, No. 2, December 2006.

Akpan Sunday, Udoh Edet and Aya Ebirigor (2011), "Analysis of Savings Determinants among Agro-based firm Workers in Nigeria: a Simultaneous Equation Approach", *Research on Humanities and Social Sciences*, www.iiste.org, Vol.1, No.3.

Andersen Ronald and Newman John (2005), "Societal and Individual Determinants of Medical Care Utilization in the United States", The Milbank Quarterly, Vol. 83, No. 4, 2005 (pp. 1–28).

Athukorala Prema-Chandra and Sen Kunal (2001), "The Determinants of Private Saving in India", Forthcoming in Economic Development and Cultural Change.

Bakshi Aparajita, Rawal Vikas, Ramachandran V.K. and Swaminathan Madhura (2012), "Household Income Surveys in India: Lancunae and Illustrations from Village Surveys", Paper Prepared for the 32nd General Conference of the International Association for Research in Income and Wealth, Session 8D: Measuring Economic Performance in China and India II.

Buragohain Tarujyoti (2009), "Household Savings in India: An Econometric Assessment", National Council of Applied Economics Research New Delhi, *The Journal of Income and Wealth*, Vol. 31, No. 1.

Burney Nadeem and Khan Ashfaque (1992), "Socio-Economic Characteristics and Household Savings: An Analysis of the Households Saving Behaviour in Pakistan", The Pakistan Development Review, 31:1(spring 1992), Pp. 31-48.

Delafrooz Narges and Hj Paim Laily (2011), "Determinants of Saving Behavior and Financial Problem among Employees in Malaysia", *Australian Journal of Basic and Applied Sciences*, 5(7), University Putra Malaysia, Malaysia.

Ersado Lire, Alwang Jeffrey and Alderman Harold (2000), "Changes in Consumption and Saving Behavior before and after Economic Shocks: Evidence from Zimbabwe", *Paper presented at International Food and Agribusiness Management Association Conference*, Chicago June, 2000.

Falahati Leila and Paim Laily (2012), "Gender Differences in Saving Behavior Determinants among University Students", *Journal of Basic and Applied Scientific Research*, www.textroad.com.

Fisher Patti (2010), "Gender Differences in Personal Saving Behaviors", *Journal of Financial Counseling and Planning*, Vol. 21, (1), 2010.

Gedela Surya Prakasa (2012), "Determinants of Saving Behavior in Rural and Tribal Households: An Empirical Analysis of Visakhapatnam District", *International Journal of Research in Social Sciences*, http://www.ijmra.us, Vol. 2, (8).

Hoos Karin (2010), "Saving Behavior in Cebu City: Contribution to the Livelihoods of Urban Poor Households", Master Thesis, *International Development Studies*.

Issahaku Haruna (2011), "Determinants of Saving and Investment in Deprived District Capitals in Ghana -A Case Study of Nadowli in the Upper West Region of Ghana", Wilolud Journals, Continental J. Social Sciences 4 (1): 1 - 12, 2011.

Jappelli Tullio and Pagano Marco (1997), "The Determinants of Saving: Lessons from Italy", Paper prepared for the Conference on "Determinants of Domestic Savings in Latin America", organized by the *Inter-American Development Bank*, Santafè de Bogotà.

Jayaraman T K (1979), "Savings Behavior in Gujarat", Margin, Vol. 12, No. 1.

K. Veena, Kaur Jaspreet, Saxena Khushboo and Nijhara Mitesh (2010), "Impact Of Membership Of Financial Institutions On Rural Saving: A Micro-Level Study", *International Business & Economics Research Journal*, Vol. 9 (10).

Kelley Allen and Williamson Jeffrey (2009), "Household Saving Behavior in the Developing Economies: The Indonesian Case", *The University of Chicago Press*, Vol. 16, No. 3 (Apr., 1968), pp. 385-403.

Kibet Lawrence, Mutai Benjamin, Ouma Desterio, Ouma Shem and Owuor George (2009), "Determinants of Household Saving: Case Study of Smallholder Farmers, Entrepreneurs and Teachers in Rural Areas Of Kenya", *Journal of Development and Agricultural Economics*, Vol. 1(7).

Komicha Hussien (2007), "Farm Household Economic Behaviour in Imperfect Financial Markets", Doctoral thesis, Acta Universitatis Agriculturae Sueciae, 2007: 78.

Kraay Aart (2007), "Household Saving in China", World Bank Economic Review.

Loayza Norman and Shankar Rashmi (2000), "Private Saving in India", *The World Bank Economic Review*, Vol. 14, No. 3.

Mary Fasoranti, "The Determinants Of Consumption Pattern Among Rural Dwellers Of Ondo State (Case Study Of Akoko North West Local Government)", European Scientific Journal March edition vol. 8, No.6.

Masson Paul, Bayoumi Tamim, and Samiei Hossein, (2005), "International Evidence on the Determinants of Private Saving", *The World Bank Economic Review*, Vol. 12, No. 3: 483–501.

Multistate North Central Research Project 1013. (2007), "Survey Instrument: The Economic and Psychological Determinants of Household Savings Behavior", http://lgu.umd.edu/lgu_v2/homepages/attachs.cfm?trackID=3374.

Muradoglu Gulnur and Taskin Fatma (1996), "Differences In Household Savings Behavior: Evidence From Industrial and Developing Countries", *The Developing Economies*, XXXIV-2.

Nair Lekshmi, "Financial Sector Liberalization and Household Savings in India", M. Phil Thesis submitted to the Jawaharlal Nehru University.

Nasir Shahbaz and Khalid Mahmood (2004), "Saving-investment Behaviour in Pakistan: An Empirical Investigation", *The Pakistan Development Review*, Vol. 43 (4), pp. 665–682.

Nga Marie (2007), "An Investigative Analysis into the Saving Behaviour of Poor Households in Developing Countries: With Specific Reference to South Africa", Research Report prepared in partial fulfillment of the requirement for the degree of Masters in Economics.

Rehman Hafeez, Faridi Muhammad and Bashir Furrukh (2010), "Households Saving Behaviour in Pakistan: A Case of Multan District", *Pakistan Journal of Social Sciences (PJSS)*, Vol. 30, No. 1, pp. 17-29.

Rehman Hafeez and Ahmed Saima (2008), "An Empirical Analysis of the Determinants of Bank Selection in Pakistan", *Pakistan Economic and Social Review*, Volume 46, No. 2 (Winter 2008), pp. 147-160.

Rehman Hafeez, Faridi Muhammad and Bashir Furrukh (2010), "Households Saving Behaviour in Pakistan: A Case of Multan District", *Pakistan Journal of Social Sciences (PJSS)*, Vol. 30, No. 1 (September 2010), pp. 17-29.

Salam Abdus and Kulsum Umma (2000), "Savings Behavior in India: An Empirical Study", *The Indian Economic Journal*, Volume 50, No.1, pp.78-80.

Schultz Paul (2005), "Demographic Determinants of Savings: Estimating and Interpreting the Aggregate Association in Asia", *ADB Discussion Paper No.* 1479.

The Planning Commission, Government of India, New Delhi (2001), "Report of The Working Group on Domestic and Foreign Saving for The Tenth Five Year Plan", Report of the Working Group on Savings, *TFYP Working Group Serial No. 87/2001*.

Turner Kea and Manturuk Kim (2012), "Individual, Institutional, and Structural Determinants of Household Savings Decisions", *Utrecht University*, Working Paper: April 2012.