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Impact of Rural Development Support on Livelihoods and Poverty in South Serbia

Jelena Jalic
International Development Studies

Declaration

I, Jelena Jalic, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature: .... Date: ....

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Abstract

Poverty represents a major problem in rural areas in Serbia. Agriculture households in South Serbia fall into the category of regions with difficult conditions for agriculture such as the lack of connection between the new technologies and users, low population density, small plots, lack of information, difficult access to counselling services, low level of initiatives and the absence of local administrative capacity and technical assistance in agricultural production. There is a huge potential in these rural areas, represented in terms of natural resources, agricultural land, water, forests, biodiversity, the potentials for renewable energy, mineral resources, as well as numerous recreational and tourism potentials that have increasing importance and value. In order to stimulate the development of the region there has been a great number of programs coming from the national and international level.

The purpose of the study is to explore the effects of developing funds on reducing poverty and livelihood of the agricultural households in South Serbia. The study is focusing on analysing the effect of funds on households income and effects on their social position. The study applied quantitative research approach. The ninety two households were interviewed with semi-structured questionaire. Results of the study indicate that the funds helped in reducing the poverty level.

Contents

List of Tables and Figures

Figures

LIST OF ABBREVIATIONS

SIEPA   Agency For Foreign Investment And Export Promotion

RFFA Regional Fund For Agricultural Development
          Cloteafrb Credit Line Of The European Agency For   Reconstruction, Brussels
SDC   Swiss Agency for Development and Cooperation

SIDA   Swedish International Development Agency

DFORS   Development Funds of Republic of Serbia

ADA   Austrian Development Agency

CAP   The Common Agricultural Policy

DFID   Department for International Development

EAFRD   European Agricultural Fund for Rural Development

EFSE   European Fund for Southeast Europe

EIB   European Investment Bank

FAO   Food and Agriculture Organization

GDP   Gross domestic product

HCS   Household Consumption Surveys

IBRD   International Bank for Reconstruction and Development

IFAD   International Fund for Agricultural Development

IPA   Instrument for Pre-Accession Assistance

IPARD   Instrument for Pre-Accession Assistance for Rural Development

LFA   The Less Favoured Areas

SLF   Sustainable Livelihood Framework

OECD   Organisation for Economic Co-operation and Development

SLS   Serbian Living Standard Surveys

USAID   United States Agency for International Development

CHAPTER ONE

Introduction

1.1. Background

According to Stamenkovic and Petrovic (2010) in the 1990s in Serbia were set apart by the economic decay caused by the wars in the Balkan Peninsula and the worldwide financial sanctions. However, since the end of the 1990s, the Serbian economy has consistently been developing as far as GDP (4.4 annual average) and GDP per capita (4.7 annual average). Expanding export actions have been one of the actuators of the financial recuperation. Additionally, the worldwide economic crisis that has struck Serbian economy has decreased GDP in 2009 by 3 per cent.[1] Inflation had a bounce back and moved to the upper end of the target resilience band built up by the National Bank of Serbia in participation with the government. Nevertheless, the unemployment rates have remaind high when contrasted with other transition economies of the area.

In both urban and rural territories, poverty in Serbia decreased in the period from 2002 (14%) to 2007 (7%). By monitoring per capita GDP it can be noticed that it is 2 times larger in Belgrade than in Vojvodina, 2.5 times larger than in Šumadija and West Serbia and 3 times larger than in South and East Serbia. The regional income disparities emerge principally due to the distinctions in the type of economic exercises. The poorer areas by and large have a greater share of their resources dedicated to agriculture.

After the political and social changes in 2000, the long-awaited Agricultural Policy Reform has started. One of its most important goals has been to increase the volume of production, that was at quite a low level after the long years of confinement. Furthermore, principle instruments of support were related to the production (premiums and direct payments connected to crops) and also the reimbursements for the inputs that were utilized. On account of these incentives, production and export has essentially expanded in such a brief period of time. The high customs

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[1] Stamenkovic, S. and P. Petrovic, Serbian post-crisis economic growth and development model 2011-
2020. USAID, The Economic Institute MAT and The Faculty of Economy-FREN, Belgrade,
2010.

duties for the specific products were the primary instruments of market policy in order to increase the competitiveness and to export subsidies. On the other hand, price support policy and the market intervention purchase was not utilized.

Substantially, the government adopted the Agriculture Development Strategy in 2005, which was replaced in 2010 by the Agriculture Development Strategy for 2010-2020. Moreover, the strategy is implemented through the National Agricultural Programme of the Republic of Serbia (2010-2013) and the National Rural Development Programme of the Republic of Serbia 2011-2013 (Berkum and Bogdanov, 2012).[2]

Furthermore, the budgets for agriculture has changed essentially over the previous years, and this has been an indication that agricultural policy has had no long-term framework or structure. The absence of steady arrangements, unmistakably characterized inclinations and instruments for their usage, brought about by both wasteful aspects and general strategy impacts that were underneath the normal and unbiasedly conceivable level. Despite the fact that the adjustments at support level were difficult to cope with for some agricultural producers, the radical changes in the sort and type of payment were maybe considerably more hazardous. An arrangement of enlistment of property was presented in 2004, and it has, step by step, turned into an essential part of the utilization of public support. However, the terms of qualification for support turned out to be more and more intricate and they were, indubitably, to the upside of the large companies and chains rather than small agricultural households. The capriciousness of the support networks has given agricultural producers a feeling of insecurity, which debilitates them from putting resources into the activities on their farm.

1.2. Problem Statement

South Serbia represents the poorest region in Serbia. The long-term trend of declining population in rural areas especially in the south and east of the country, led to imbalances in development between urban and rural areas. Furthermore, the reasons for the underdevelopment and poverty of rural areas in Southern Serbia include turbulent history, unfavorable demographic and educational structure of the population, inter-regional demographic differences and fragmentation of community in underdeveloped areas. In addition to the economic value, this region has also an important role in terms of cultural and scientific research because of the great potential including preserved nature, rich landscape and traditional values such as traditional crafts, handicrafts, national customs, etc. Utilization of these resources would lead to an improvement of the economic status and repopulation, the retention of younger population in rural areas and generally improve livelihood. South part of the country is mosty dependent on agricultura production and improvement and fomentation of agricultural production would lead to the development of economics activities and ultimately to elimination of poverty. One of the ways of encouraging development of the south part of the country are developing funds which include different types of financing like credits, subsidies and grants and they are coming from national and international sources.

The main reasons this study was taken is to explore did this funds did what they are supposed to, did they had any impact on the financial and social position? Did they managed to improve livelihood of the farmers, is the poverty level reduced?

1.3. Objectives of the Study and research questions

The overall objective was to analyze the structure and characteristics of the agricultural households in 13 municipalities in Southern Serbia and the impact of different development funds on livelihood, poverty reduction and income equality in the region. In order to accomplish this objective, I used the following research questions:

1. What comprises livelihoods of the agricultural households?
2. How are the development funds utilized by households?
3. What determines access and the amount of development funds received?
4. What are the factors that determin the dependence of different households on various income sources?

11

5. What does affect income diversification?
6. What is the affect of development funds on poverty reduction and income equality among agricultural households?
7. What is the impact of the funds on social position?

Hopefully, all of the objectives and research questions of the study will be thoroughly analyzed and discussed in order to make a contribution to the current knowledge about the socio-economic situation of rural households in Southern Serbia.

1.4.Scope of the study

The study has aimed to discover the effect of funds on the livelihood and poverty reduction of small rural agricultural households in Serbia. The research was limited to Southern Serbia, because it has been the most undeveloped part of the country for the past few decades. Moreover, Southern Serbia, consisting of 13 municipalities of Jablanica and Pcinja districts, fall into the category of regions with difficult conditions for agriculture, and yet, agricultural production in this region is quite traditional.

Literature review will focus on sustainable livelihood and analysis of poverty in order to explain the impacts of financial capital on rural entrepreneur's livelihood.

1.5.Organization of the Study

The study will be introduced in five chapters:

Chapter One will present background, general introduction regarding political and social changes in Serbia that have affected the economic situation of the country, problem statement, objectives, research question and scope of the study.

Chapter Two studies the theoretical framework and reviews related literature concerning the thesis. In this chapter, the emphasis is on defining sustainable livelihood, diversisfication of livelihood, measuring poverty, strategies and policies that deal with poverty reduction. Furthermore, it gives an explanation of the factors affecting vulnerability and poverty in Southern Serbia including human capital, demographic composition, household size, low levels of assets, employment, geographic location of the household, weather shocks, technology and equipment, access to markets, and dependence on agricultural income.

Chapter Three explains the research process and the methods that are utilized for collecting and analyzing the data as well as limitations and challenges of the study.

Chapter Four deals with analysis of the data, data findings and presentation.

Chapter Five presents a conclusion and recommendations of the study.

CHAPTER TWO

Literature review and theoretical framework

Susan Johnson and Ben Rogaly in their book „*Microfinance and poverty reduction*" discussed the ways in which poor people use financial survices to support their livelihood. If the poverty is understood as a low level of income, then reducing poverty would mean raising the average income, but focusing only on annual income can disregard the fluctuation in the income during the year. Providing microfinance should help poor people to protect their livelhood against shocks and create diversity. Emphasis is on the flexibilie program of services that can be adapted to meet different needs or poor people. Intervention in the local market should consider the ways of maintaining and developing livelihood and contribute to their further improvement. Recent experiences suggested that poor people can take and repay the loans if the repayments are following the flow of their income. Evidence shows that microfinance can increase income and contribute to livelihood security and change the social live for better but that is not always the case. The poorest are often facing the needs for primar health care, education and employment possibilities. They argued that the most effective combination depend of the nature of poverty in a specific contest. Although microfinansing is reaching greater sustainability and usefulness but still the search for better practice continues.

Shahidur R. Khandker, Hussain A. Samad „Dynamic effect of microcredit in Bangladesh" (Development Research group, World Bank 2014) represented a paper based on a long panel data survey spanning over 20 years at three points 1991/21, 1998/9, 2010/11 in 87 villages in Bangladesh. They used a dinamic panel model in order to find out does the credit effect decline over time, does market saturation and villages diseconomies are taking place, does multiple program membership benefit to the borrowers. Overall, the results of the paper suggested that microcredit programs continued to benefit the poor by raising household wealfare.

According to Hege Gulli „Microfinance and poverty: Questioning the conventional wisdom" microfinance can play an important role in reducing poverty but only as a partial tool. Reducing

poverty through microfinance should combine targeted programs to assist poor with broad steps to build competetive and sustainable financial system. The book exphasize that in necessary to access the actual constrains that poor are facing.

Based on the „ Farming systems and poverty: improving farmers livelihoods in a changing world" by John A. Dixon, David P. Gibboson, Aidan Guliver most of the people in developing countries from rural areas are dependent on agriculture for their livelihoods. Their focus is on analyzing the farming systems that can provide the right strategies for reducing poverty. Household livelihood can significantly vary between farming system and also between systems in the same area. One of their suggestion is creating appropriate policy, which might imply handing over the leadership of rural development to the the poor farmers and their communities.

The Niels Hermens study „ Does microfinance effect income inequality?", published in Applied Economics Journal, addresses the question of participation of the poor in microfinance and it's contribution to reducing a country's level of income inequality. The data were used from 70 developing countries, and they showed that higher levels of microfinance participation are associated with a reduction of the income gap between rich and poor people. They also showed that the effects of microfinance on reducing income inequality are relatively small. The results of this study showed that the impact of microfinance improve the relative income position of the poor, but this improvement is modest.

2.1. Rural household livelihood and poverty

2.1.1. Measuring poverty

„Poverty consists of many interlocked dimensions. First, although poverty is rarely about the lack of one thing, the bottom line is lack of food. Second, poverty has important psychological dimensions such as powerlessness, voicelessness, dependency, shame, and humiliation. Third, poor people lack access to basic infrastructure (roads), transportation and clean water. Fourth, poor people realize that education offers an escape from poverty. Fifth, poor health and illness are dreaded almost everywhere as a source of destitution. Finally, the poor people rarely speak of income, but focus instead on managing assets (physical, human, social, and environmental),

as a way to cope with their vulnerability. In many areas this vulnerability has a gender dimension (Narayan, Patel, Schafft, Rademacher, Koch-Schulte, 2000)$^{\text{"}3}$

There are many approaches to definining poverty such as absolute, relative and objective approach. First absolute approach argues that the poverty line must be set in absolute terms, where poverty is a situation of deprivation of some basic goods and services that are necessary for achieving physical existence. Here, a poverty line corresponds to the income that is necessary for achieving the most basic needs.

Second relative approach states that the line of poverty should be set at some percentage of average household income or at some point of distribution of incomes, for instance, at some percentage of the median income or the lowest decile.

Third „subjective" approach include suitable weighting that can be employed to achive poverty levels which represent the mix of different views. However, viewing poverty line like this assumes that the general society can assess poverty in the best way and this is not objective enough. Furthermore, the comparison of different countries is very difficult, if not impossible (the Wye group handbook, 2011).[4]

Poverty can be measured by several indexes such as headcount index, poverty gap index, squared poverty gap index, Sens and Sen-Shorrocks-Thon index.

The headcount index (P0) is simple to construct and easy to understand and it measures the proportion of the poor population. Here, Np is the number of poor population and (N) is the total population (or sample). Furthermore, (I) is an indicator function that takes on a value of 1 if the bracketed expression is true, and 0 if not. So if expenditure (yi) is less than the poverty line (z), then (I) equals 1 and the household would be regarded as poor.

$$P_0 = \frac{1}{N} \sum_{i=1}^{N} I(y_i \leq z) = \frac{N_p}{N}$$

Source: Measures of Poverty, Haughton, Khandker, World Bank 2009

However this index has some flaws. For instance, it does not measure intensity of poverty as well as how poor the poor population is and the poverty of each individual, only for households.

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[3] Narayan, Deepa with Raj Patel, Kai Schafft, Anne Rademacher and Sarah Koch-Schulte, Voices of the Poor: Can Anyone Hear Us? New York, N.Y.: Published for the World Bank, Oxford University Press 2000
[4] The Wye Group Handbook, Statistics on Rural Development and Agricultural Household Income, United Nations, FAO 2011

The poverty gap index adds up the extent to which individuals on average fall below the poverty line, and expresses it as a percentage of the poverty line. More precisely, define the poverty gap (Gi) as the poverty line (z) less actual income (yi) for poor individuals and the gap is considered to be zero for everyone else. The index function proclaims:

Gi = (z – yi) × I(yi < z)

and than the poverty gap index (P1) can be written as:

$$P_1 = \frac{1}{N} \sum_{i=1}^{N} \left(\frac{G_i}{z} \right),$$
Source: Measures of Poverty, Haughton, Khandker, World Bank 2009

The squared poverty gap index is used by some researchers to construct a measure of poverty that takes into account inequality among the poor. Significantly, by squaring the poverty gap index, the measure puts more weight on observations that fall well below the poverty line.

$$P_2 = \frac{1}{N} \sum_{i=1}^{N} \left(\frac{G_i}{z} \right)^2.$$
Source: Measures of Poverty, Haughton, Khandker, World Bank 2009

Sen (1976) created an index that tries to combine the effects of the number of poor, the depth of their poverty, and the distribution of poverty within the group. We should also mention modified version of Sen's index, Sen-Shorrocks-Thon index which represents a combination of the headcount index, the poverty gap index (applied to the poor only), and the Gini coefficient of the poverty gap ratios for the whole population.

However, in developing countries, where outright poverty is much more predominant, particularly in rural agricultural areas, the policy approach has a tendency to be on absolute poverty line that can be connected with the idea of fundamental needs.

For practical use numerous countries utilize a poverty line in their general well-being arrangements and its viable execution may include measuring the cost of a single parameter, for example, the required expenditure of household on food and extrapolating from this to total income that is necessary to cover all purposes at the poverty level. Furthermore, poverty is difficult to assess when the incomes of households are not stable. The variations in agricultural incomes, especially in developing countries are common, for instance due to the weather conditions. Other diffilulties in measuring poverty can include the absence of the basic

data, because of the low numer of national studies and researches (the Wye group handbook, 2011).[5]

On the other hand, the percentage rate of poverty (not the total number of poor population in all countries) has decreased steadily during the past thirty years worldwide, an achievement that can be credited largely to economic growth (World Bank, 2008).

2.1.2. Sustainable livelihood

Sustainable livelihood represents an important aspect for developing countries. According to Chambers and Conway (1992) livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. They also pointed out that livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.

The SLA could recognize vulnerable people's access to a range of assets, and how this access varies within and between households and communities, and between women and men and it could also include impact of external factor on household livelihoods (Haidar, 2009).

2.1.3. Poverty reduction

Economic development is a key component in a poverty reduction strategies and it implies securing the individuals who are either cleared out behind by total development or whose position is strongly exacerbated by it. The utilization of safety nets represents an important part of a system used to provide help at targeted groups, which represens population beneath the poverty line. World Bank (2000) recognizes seven primary sorts of safety nets:

- Pensions and other forms of old-age assistance
- Unemployment benefits
- Health insurance
- Employment or 'workfare' programs;
- Social funds
- Microfinance schemes

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[5] The Wye Group Handbook, Statistics on Rural Development and Agricultural Household Income, United Nations, FAO 2011

- Cash transfers (including commodity subsidies)

The first three forms of safety nets are used in richer countries, but the poorer countries mostly use social funds and microfinance. Social funds are organizations that fund small ventures that have been recognized by poor groups which ordinarily execute the tasks and projects by themselves. A few funds have been set up in light of particular calamities, however current intuition infers that they can be utilized to finance a scope of exercises from infrastructure to group and social advancement. Ordinarily they endeavor to focus on the poor through their selection of activities and land areas and the screening of recipients. Regarding micro-finansing there is a important initiative over last 15 years in order to meet poor people needs in a sence of smoothing comsumption and building up productive assets. Cash transfers out an exacting sense are not often utilized as a part of safety nets because of the danger of debasement and spillage to the non-poor (Potts, Ryan, Toner, 2003). [6]

Agriculture is still the fundamental economic action in most developing and low-income countries, and generally the primary livelihood strategy in most rural settlements. Additionally, it has been distinguished as being of prime significance in accomplishing development achievements at both national and international level.Therefore, agriculture is at the at the front line of molding the idea of of sustainable development. However, agriculture alone is not sufficient to pull out low-income communities out of poverty. These countries will have to shift from a mainly agriculture oriented economy to the economy that is more industry and services based. Moreover, in the more developed countries, agriculture assumed a key part in these processes by giving a steady premise from which rural agricultural households could wander into different areas of the economy, while keeping up the security of their farm base. In spite of the continuous urbanization, still there are over 70 per cent of the world's poor population living in rural areas (IFAD 2001). Production decisions at farm household level determine the current availability of agricultural produce (food security objectives according to Roetter and Van Keulen 2007), as well as future production potentials (sustainability objectives according to Verhagen et al. 2007). Therefore, the solution to poverty reduction lies in rural agricultural households. Overall, Roetter, Van Keulen, and Kuiper argue that agriculture plays three specific roles in future rural development and poverty reduction in providing:

1. Solid base for changing livelihoods

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[6]David Potts, Patrick Ryan, Anna Toner, Development Planning and Poverty Reduction, Palgrave Macmillan, New York 2003

2. Production of high quality affordable food

3. Environmental services.[7]

Agricultural development and poverty reduction are more likely to be achieved with little farms rather than large agricultural households. Small households are normally guided by poorer individuals who utilize a lot of labor, both from their own family units and from their similarly financial standing neighbors.

In addition, when little rural households spend their incomes, they have a tendency to spend them on privately delivered merchandise and services, and in this manner stimulating the rural non-farm economy and making extra jobs

Accroding to Brooks (2005) in developing countries, small farmers frequently support the national economy, still they confront deliberate modification weights as an important culmination of the development procedure. Technology and innovations are enhancing and more productive utilize being made of rare assets, including the abuse of scale economies, small farmers that don't take an interest in sectoral cost changes unavoidably confront weight on their livelihoods. However, governments can shield small farms from this weight, or they can help them adjust to it, either by helping them to be more competitive, getting earnings from different sources, or by discovering occupations outside their sector. [8]

2.1.4. Livelihood diversification

Rural households in developing countries with low incomes build their livelihoods in a very difficult environment. However, according to Frank Ellis (2005) these difficulties can be decreased by diversifying livelihoods. [9] The difference can be made with alternatives for income generation between minimally viable livelihoods and poverty. Furthermore, negative effects are related to the withdrawal of the consequential labour inputs from the agricultural activities and positive effects include the alleviation of credit constraints and reducing the risk of innovation. On the one hand, the positive impacts of diversification include:

[7] R.P. Roetter, H. Van Keulen, M. Kuiper, J. Verhagen and H.H. Van Laar (eds.), Science for Agriculture, and Rural Development in Low-income Countries, Springer 2007
[8] Jonathan Brooks (ed.), Agricultural Policies for Poverty Reduction, OECD Publishing 2012
[9] Frank Ellis, Rural Livelihoods and Poverty Reduction Policies, Routledge Studies in Development Economics 2005

- Seasons can cause peaks and troughs in labour usage on the farm, as well as creating food uncertainty because of the confound between unequal farm income streams and consistent utilization necessities. That is regularly called the 'labour smoothing' or 'consumption smoothing' problems. In addition, diversification can add to diminishing the damaging impacts, by using labour and creating new sources of income in off-peak periods.

- Risk reduction related with risk across activities. For example climate conditions that make risks for one income source do not make risks for another source.

- Higher incomes can be accomplished by improving utilization of accessible assets and abilities and by exploiting spatially scattered income gaining opportunities.

- Asset improvement through setting assets for profitable utilize.

- Environmental benefits can be achieved with diversification in two ways. The first one is by generating resources that are later invested in enhancement of the quality of the natural resource base. The second one is by giving alternatives in exploiting natural assets.

- Gender benefits, in terms of creating the independent income of women and thusly, enhancing the care and healthful status of of kids since a high extent of cash income contorlled by women has a tendency to be spent on family well-being. For this to happen, exercises should be advanced in the rural zones that are available to women, which implies, typically, found near destinations of home and relating with sorts of work to which women have equivalent or preferred get to capabilities over men.

On the other hand according to Ellis (2000) negative impacts of the diversification analyzed in observational studies are:

- Income distribution. Diversification can be connected with augmenting inconsistencies between the livelihoods of the rural poor and the better-off. This happens in light of the fact that the better-off can differentiate in more beneficial labour markets than poor people, and this thus reflects resource destitution particularly concerning their capital.

- Farm output. A few types of diversification may cause stagnation on the rural household. This commonly happens when there is inaccessible labour markets for male labour.

- Adverse gender effects. When the male labour is principally ready to exploit diversification possibilities, then women might be much more consigned to the household circle and to subsistence food generation.[10]

Diversification of agriculture is as an important technique to overpass the difficulties which most of the developing countries are confronted. Diversification of agriculture could imply building up a bigger number of crop blends and crop mixing for high value and more profitable results. It could have different structure, for example, boosting farm incomes with non farm incomes, expanding the quantity of crops grown and types of livestock owned by household.

Furthermore, diversification has been used by numerous nations as an approach to enhance the long-term sustainability of agriculture by upgrading the productivity and general stability of the agricultural sector. The move to different fields has not been a simple project, especially for small rural household. Government help with more steady approaches and better infrastructure in expansion of diversification projects. Furthermore, globalisation is empowering trade and diversification of agriculture managed to provide chances for expending the scope of agricultural products that that can be advertised in other countries (Ghosh, Sarkar, Bidhan, 2015).[11]

Unfortunately, diversification sometimes is not a choise, but a necessity. In most cases poor rural population engage in multiple activities in order to reduced vulnerability and provide food security. The more resources and assets the family has the less vulnerable they will be to negative impacts of the trends and shocks and the security of their livelihood will be less uncertain. According to Sustainable Livelihood Approach (Morse, McNamara,2013) there are five types of assets or capital that every household needs in order to make a living:

- Human capital includes skills, knowledge, the ability to work, good health and physical capability.

- Social capital includes the social resources, networks, social claims, social relations, affiliations and associations, such as relationships with either more influential people (vertical connection) or with others like themselves (horizontal connection), or a membership in certain organisations. These are relationships of trust, reciprocity and

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[10] Frank Ellis, Rural Livelihoods and Diversity in Developing Countries, OUP Oxford, 2000
[11] Madhusudan Ghosh, Debashis Sarkar, Bidhan Chandra Roy, Diversification of Agriculture in Eastern India, Springer India 2015

exchange that the poor population can use in times of need and that lower the expenses of working gainfully together.

- Natural capital includes the natural resource stocks that people can use for their livelihoods, including land, forests, water, air, soil, genetic resources and environmental services such as hydrological cycle, pollution, etc.

- Physical capital includes the basic infrastructure (buildings, roads), as well as the tools and equipment.For example, transport and communication systems, shelter, water and sanitation systems and energy.

- Financial capital includes savings, in every form, access to financial services, and regular inflows of money including cash, credit/debt and other economic assets.[12]

Furthermore, Frank Ellis argues that rural poverty reduction policies, henceforward, should be better educated about the interactions between poverty, farm productivity, income distribution, environmental conservation and gender relations. For instance, it is generally widely known that the poor diversify in less invaluable labour markets than the better-off, for example, part-time and incompetent labour contrasted with all day work or substantive independent work. These discoveries are identified with the poor population status of assets (for example low human capital) and obstructions because of low resources (requirement for skills, capacity to manage bureaucratic obstacles).

Generally, a capacity to diversify is gainful for rural family units at or underneath the poverty line. Significantly, the existence of different options for income generation may create a difference between livelihoods. On the other hand, diversification does not have impact on on overall rural incomes. Moreover, better-off households are commonly more able to diversify in more auspicious labour markets than poor rural households. Total income and the share of income got from non-farm activities are regularly decidedly correlated. Diverse income sources can have unequivocally varying effects on rural disparity. For instance, unequal land

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[12] Stephen Morse, Nora McNamara auth. Sustainable Livelihood Approach A Critique of Theory and Practice, Springer 2013

proprietorship may imply that a strategy concentrated on product income supports the rich over poor people (Ellis, 1999).[13]

2.2. Rural households and poverty in Southern Serbia

According to Serbian Living Standard Surveys (SLS) 2002 and 2003 there are a couple of components that may have been responsible for expansion or rural poverty Serbia, such as the drought in 2003 which decreased agricultural productivity by 5.7% and left concequences on rural communities. The current policy approach may have had an unfavourable and repeating impact on rural incomes, e.g., a real exchange rate and price control may have kept the cost of agricultural products falsely low even amid the dry season. Around 60 percent of rural family units portray their budget as dire. It is intriguing to mention that while around 60 percent of both urban and rural families saw their economical situation as unfavourable in 2002, there is extensive contrast in urban and rural view of their economic situation in 2003, just under 50 percent of urban family units in 2003 recognize their situation as bad. Furthermore, equivalent consumption expenditure per adult is significantly higher in urban than in rural territories and the pattern continued in 2003, maybe augmenting urban-rural gap between them even more. It is intriguing to think about the relative commitment of poverty and risk to general vulnerability. Human capital, such as the level of education, is one of the main factors which increases poverty and vulnerability. Additionaly, factors like demographic composition, household size, low levels of assets, employment, geographic location of the household, weather shocks, technology and equipment, access to markets, and dependence on agricultural income have a major impact on poverty and vulnerability. According to these factors, rural households in Southeast Serbia are 32% more vulnerable than agricultural households in other rural regions in Serbia (Ersado, 2006).[14] According to the Statistical Office of the Republic of Serbia, households that are exposed to the risk of poverty and material deprivation are least represented in Belgrad and in densely-populated areas and the most vulnerable are the households from South and East Serbia.[15]

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[13] Frank Ellis, Rural livelihood diversity in developing countries: Evidence and policy implications, in: Natural Resource Perspectives, Number 40, Overseas Development Institute 1999

[14] Lire Ersado, Rural Vulnerability in Serbia, Human Development Network Europe and Central Asia Region, The World Bank Policy Research Working Paper 4010, 2006

[15] Statistical Office of the Republic of Serbia. 2015. Income and Living conditions in the Republic of Serbia - 2013. Final Report. Belgrade, Republic of Serbia: Statistical Office, Published in 2015

Another survey was conducted in 2007, Household Consumption Surveys (HCS) carried out by the Republic Statistical Office, which has indicated that all the households with consumption under 72 EUR per consumer per month, are part of the poor population. The consumption of 6.6% of the Serbian population lies below this level, which means that approximately 490,000 resident of Serbia were regarded as poor, with the highest percentage of poor population in the east and south regions (Kovacs, Szep, Katona, 2009).[16]

When analyzing total acreage of agricultural land and the manner of its use, Jablanica district has favorable conditions for development of agricultural production of the Pcinja District. Furthermore, in terms of agri-environmental potential the city Leskovac stands out. Accroding to the Regional Spatial Plan of the South Morava,due to the strong heterogeneity of natural factors, which inevitably reflect the economic, social and infrastructural conditions for development of agriculture and other economic activities, in the region of South Morava four rural areas stand out:

1) 200-350 m – hilly terrain, with low hills, valleys and includes about 740 km² of the total territory, all in Jablanica District

2) 350-600 m - hilly, with the higher valleys and includes 1,227.5 km² the total area of the territory (Jablanica district - 581.3 km², Pčinjski district 646.2 km²)

3) 600-800 m - subalpine or hilly includes 1,376.1 km² total territory (Jablanica district - 145 794.5 km², Pčinjski district 581.6 km²)

4) Over 800 m - mountain includes 2,946.6 km², Pčinjski district 2292.3 km²).[17]

In accordance with the predominantly mountainous character of the area, the average share of intensive crops (arable land and gardens around 170 thousand ha, orchards, about 17 thousand hectares of vineyards and about 7 thousand ha) of the total surface is relatively low (about 30%) and permanent grassland and forests high (25% and 39%). Given the close interdependence of the basic factors of agricultural production (land, capital and human), fenced farms located mostly above 600 meters above sea level, which is about 63% of total agricultural land of the South Morava, have faced with the threat of diminishment of agricultural production, and

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[16] Péter Kovács, Katalin Szép, Tamás Katona (editors), Challenges for Analysis of the Economy, the Businesses, and Social Progress, Universitas Szeged Press 2009
[17] Regional spatial plan of the South Morava, the Republic Agency for Spatial Planning, 2015

reduced number of cattle such as less than half, while the total number of sheep also is below the potential of the feed base (Regional Spatial plan of South Morava).[18]

A small number of cattle, as well as low productivity caused by extensive nutrition, poor animal husbandry and its poor racial composition appears as a problem in 80% of villages in the region. In 80% of the villages in the region the current declining trend appears in the number of livestock production due to unprofitability. Although they dispose with more than 80% of the available surface area of meadows and pastures, the villages 600 meter above sea level have less than half of the total number of cattle of the region, while their share in the total number of sheep is also below the potential of the available forage base. Moreover, insufficient, primitive production of fodder in the mountainous parts of the region is one of the key obstacles for intensifying livestock production, although production of perennial legumes (clover, lucerne) and collecting hay from natural meadows is the basis of crop production in the region. After centuries of going backwards in the mechanization of production processes, in recent years, the equipment for forage is improved. The equipment is most commonly secondhand, but it facilitates the work and reduces the consumption of human labor, which is in a strong decline in the countryside (Regional Strategy for Rural Development Jablanica and Pcinja district).[19]

Types of services, transport and other sectors (especially tourism) are not sufficiently developed. The region is dominated by small and medium-sized enterprises, and micro enterprises and entrepreneurs with a small number of employees (5,700 small and medium enterprises and 18,900 entrepreneurs in 2007). The straggle in their level of development is noticeable compared to the average value in the Republic of Serbia. Most municipal centers have conditional areas designated for industrial zones (available around 84 ha of the 530 ha that was planned former) with different sizes and modest infrastructure equipment (in the majority of municipalities there are no conditions to activate them due to unresolved property and legal relations, changes or conflict in planning purposes as well as lack of equipment and infrastructure). The economical situation is very unfavourable, the lack of highly qualified personnel, increase in unemployment, low capacity utilization, difficulty in marketing products and services, lack of investment, lack of foreign direct investment and absence of functional

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[18] Regional spatial plan of the South Morava, the Republic Agency for Spatial Planning, 2015
[19] Regional Strategy for Rural Development Jablanica and Pcinja Districts 2013-2017, The Centre for the Development of the Jablanica and Pcinja Districts, Regional Development Agency

cooperation among businessmen (Regional Strategy for Rural Development Jablanica and Pcinja).[20]

2.3. Development funds

The term developmet funds includes financial support in form of grants, loans, subsidies that are comming from national and international level. The following information are obtained from the official site of the Government of Republic of Serbia (pks.rs). Their main purpose is to encourage economics activities and production.

The list of existing developing funds in Republic of Serbia:

1. *Development Fund Of The Republic Of Serbia*

    Purpose of the loan:

    - Lending establishment, commencement of operations and development of small and medium enterprises and independent shops.
    - Investments in new programs in the reconstruction and modernization of existing plants, as well as the financing of permanent working capital.
    - Lending independent production, craft shops and service businesses.
    - Lending program, which provides better competitiveness of the domestic economy. Funding for these purposes is done through long-term and short-term lending.
    - Investing in programs that ensure the implementation of innovative technologies.

    a) S*hort term loans* - used for encouraging competitiveness and liquidity of domestic economy. Credit funds will be granted under the following conditions:
    - The interest rate is 3% per annum, with the application of the clause at the middle exchange rate on the payment date, the amount returned loans cannot be less than the nominal amount of the released loans
    - Repayment period is from 3 to 12 months

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[20] Regional Strategy for Rural Development Jablanica and Pcinja Districts 2013-2017, The Centre for the Development of the Jablanica and Pcinja Districts, Regional Development Agency

b) *Investment loans* - The interest rate is 2.8% per annum, if the collateral for the loan guarantee is the billof exchange of commercial banks, and in other cases 4.5% per annum, with the application of the clause. Repayment period up to 5 years. The estimated value of the investment will be accepted only new investments are made no later than six months before the date of applying for the loan, with the submission of the proof of the investments made previously.

2. *Loans From The Credit Line Of European Fund For South East Europe*

Purpose of the loan is capital financing, export financing, financing of inventory, receivables financing and other. Loan conditions: Currency: RSD with currency clause in EUR. Interest rate: for loans with repayment period up to 12 months: 10.5% per annum, for loans with repayment period from 13 to 36 months: six-month EURIBOR + 9pp, not less than 10.5% annually. Repayment period: 36 months from the date of loan disbursement, possiible to use only one time. Grace period: up to 3 months. Loan repayment: for loans with repayment period up to 12 months in monthly installments. For loans with repayment period 13-36 months in monthly installments. Course: NBS middle exchange rate for loan disbursement, repayment of principal and interest calculation. Loan amount: depending on the client's credit worthiness, minimum loan amount is EUR 1,000.00, maximum loan amount is EUR 100,000.00 in dinars.

3. *European Agricultural Fund for Rural Development*

European Agricultural Fund for Rural Development aims to strengthen the European rural development policy and simplify its implementation. In particular, it improves the management and control of rural development policies. The Fund is financed by the Common Agricultural Policy (CAP), and contributes to achieving the objectives of the Europe 2020 Strategy by promoting sustainable rural development throughout the European Union. Contributes to environmental and territorial balance, protection of climatic conditions and the introduction of innovation in the agricultural sector. Program funds can be used for agriculture, economic operators, agricultural organizations, associations and trade unions, environmental organizations, organizations that provide services in the culture of the community, including the media, women's organizations, farmers, foresters and youth.

Purpose:

- Fostering knowledge transfer and innovation in agriculture, forestry and rural areas
- Enhancing the competitiveness of all types of agriculture and enhancing the sustainability of the economy
- Promoting food chain organization and risk management in agriculture
- Restoration, preservation and promotion of organic dependence on agriculture and forestry
- Promoting resource efficiency and a shift towards support to low levels of carbon dioxide and climate adaptive Agriculture, Food and Forestry
- Promoting social inclusion, poverty reduction and economic development of rural areas

4. Austrian Development Agency

For all developing countries, ADA provides the following aid instruments:

- Initiatives funded under country and regional strategies - In its priority countries and key regions, Austrian Development Cooperation supports governments in implementing national development plans or regional strategies. Increasingly important factors are implementation through national systems, programme-based approaches and funding agreements with organisations and institutions in partner countries.
- Civil Society International provides funding for projects and programmes of Austrian Civil Society Organisations (CSOs) aiming to sustainably improve the standard of living and development prospects of population in partner countries.
- Development Communication and Education in Austria provides funding for projects of Austrian Civil Society Organizations (CSOs) aiming to raise awareness of development-policy issues and global linkage within Austrian society.
- Business partnerships - are funding projects for enterprises from Austria or the European Economic Area (EEA) that provide long-term investments in developing countries and take active measures to improve local social, ecological or economic conditions.

- Humanitarian measures are funded in the aftermath of disasters worldwide with finance from the Austrian government's "Foreign Disaster Aid Fund".

5. *Swiss Agency for Development and Cooperation*

Swiss Agency for Development and Cooperationis within the Swiss Agency for International Cooperation the Federal Department of Foreign Affairs. Immediately after the political changes in October 2000, the Swiss government has launched a bilateral cooperation program (support for transition). Switzerland contributes to international efforts to help Serbia, and that is partly because Serbia and Switzerland participate in the same group of the World Bank and the International Monetary Fund. There is a program called The Development of the Private Sector in Southern Serbia. The project is funded by SDC and implemented in Pcinja and Jablanica District and the municipalities of Presevo, Trgoviste, Bujanovac, Pcinjski district Vranje and Leskovac in the municipality of Jablanica district. The target group of the project are predominantly women and youth.

6. *The USA Agency for International Development*

USAID works with selected partners in government, non-governmental organizations, international donors and other agencies of the United States of America in order to improve economic reforms that will contribute to the growth of the economy. USAID strengthens the capacity of municipalities to stimulate economic development at the local level and respectively enhances the competitiveness of the private sector, especially in economically underdeveloped areas.

USAID's Business Enabling Project (BEP) is a seven-year initiative to help the Government of Serbia (GoS) increase the competitiveness of the Serbian economy and its private sector by streamlining the business enabling environment, improving public financial management, and strengthening financial markets. Project activities are based on priorities identified by the private sector and the GoS.

USAID's Sustainable Local Development Project (SLDP) is a six-year initiative supporting local governments, businesses and civil society to increase economic growth through Inter-Municipal Cooperation (IMC). The project's core activities are focused on supporting inter-

municipal partners to add jobs and reduce unemployment in 32 municipalities clustered in eight regions.

CHAPTER THREE

Methodology

3.1. Research methodology

Research methods include technics for collecting the data of information intended by a researcher (Bryman 2008). Quantitative research method was used in a study. Quantitative research deals with accessing number while qualitative deals with words (Berg and Lune 2012).

In this chapter the emphasis is on research methodology which was utilized and it incorporates study area, targeted population, research design, data collection methods and data analysis techniques, and also impediments and limitations on the research.

3.2. Study area and community

Southern Serbia, consisting of 13 municipalities of Jablanica and Pcinja district, is one of the least developed areas of Serbia. Furthermore, 10 out of 13 municipalities of Jablanica and Pcinja fall into the category of regions with difficult conditions for agriculture. Agricultural production in South Serbia is quite traditional. The impact of new technologies is limited due to the lack of connection between the new knowledge and users. The economy of the area is characterized by the dominance of agricultural activities and industry, which is mainly concentrated in regional centres (Regional Strategy for Rural Development Jablanica and Pcinja).[21]

According to the criteria of the OECD (Organisation for Economic Co-operation and Development) rural areas are considered to be one of the areas where the population density is below 150 inhabitants per square kilometre. Therefore, rural areas in Serbia occupy 85% of the

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[21] Regional Strategy for Rural Development Jablanica and Pcinja Districts 2013-2017, The Centre for the Development of the Jablanica and Pcinja Districts, Regional Development Agency

territory and more than half of the total population (55%), with an average population density of 63 inhabitants per square kilometre. Southern Serbia has 13 municipalities of Jablanica and Pcinja district, which are among the least developed areas of Serbia. According to the OECD classification, Southern Serbia is considered to be a typical rural area. Furthermore, 10 out of 13 municipalities of Jablanica and Pcinja fall into the category of marginal areas or areas with difficult conditions for agriculture.

The Map of Southern Serbia districts (*Source: New World Encyclopedia*)

13 municipalities of Jablanica and Pcinja Districts
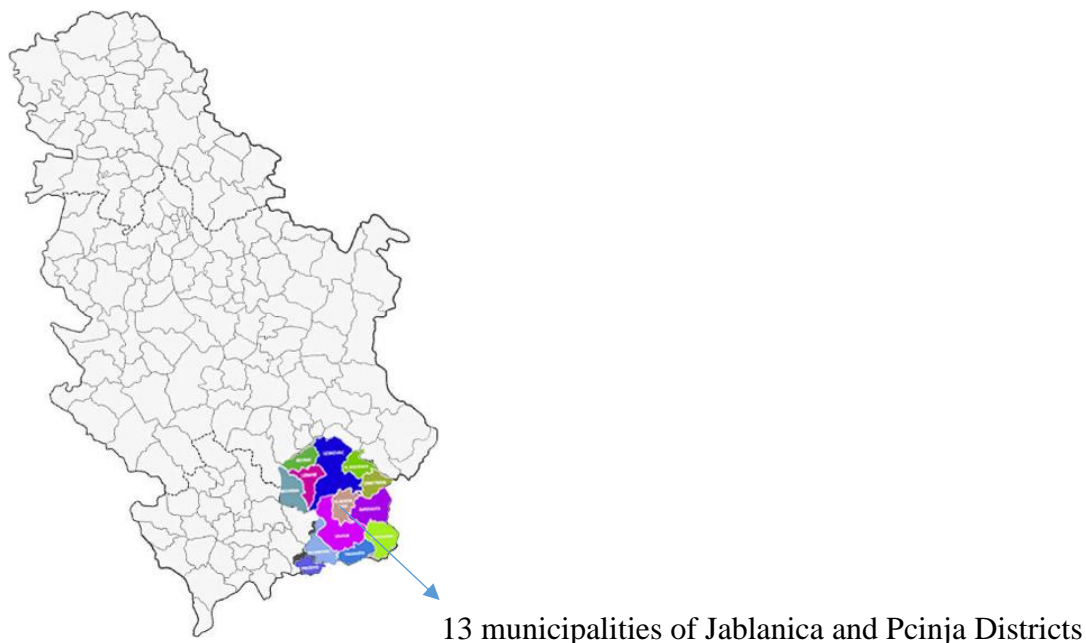
Jablanica and Pcinja districts are located in the extreme southeastern part of Serbia and in the central part of the southern Balkans. The north borders are Nis, Toplica and Pirot, the Republic of Bulgaria in the east, the Republic of Macedonia in the south and the Autonomous Province of Kosovo and Metohija in the west. According to the census from 2002, within these districts there are 699 settlements with 468,613 inhabitants. Settlements are under the administeration of 13 municipalities, with a total area of 6,289 km2 (approximately 7% of the territory of the Republic of Serbia):

a) Municipality Jablanica District (3.520km2): Leskovac, Lebane, Crna Trava, Vlasotince, Bojnik and Medvedja

b) Municipalities of Pcinja District (2,769 km2): Vranje, Bosilegrad, Trgovište, Surdulica, Vladicin Han, Bujanovac and Preševo

The surface of the municipalities ranges from 264 km2 to 1,024 km2, as the city of Leskovac, which is the largest municipality of the Republic of Serbia (Regional Strategy for Rural Development Jablanica and Pcinja).[22]

3.3. Sample method and sample size

According to Bryman (2008) „sample is the segment of population that is selected for a research". The purposive sampling method was used in the study. Purposive sampling is a non-random sampling. According to the first plan interviews will be conducted in 13 municipalities of Jablanica and Pcinja by interviewing members of rural agricultural households in selected villages, at least 10 rural households per village (minimum 130 households in total), but due to lack of cooperation of the local community and individual households itself the sample size reached the number of 92 households in 13 municipates. Households that received the funds more than a 12 months form the moment of interviewing are included. Individual households were selected based on the records from the local offices in individual municipaty.

3.4. Data collection instruments

Data were collected in a period from 15th of august until 17th of october 2016. Instruments used in data collection were questionnaire and interview. The questionnaire contains background information like age, education, number of household members, information about farm characteristic like size and type and information about income. Structured question with multiple answer choice and unstructured question were used in order to investigate the opinion of the respondent. Occasionaly respondents had a wish to share more information during the filling out the questionaire. All information obtained beside questionnaire were noted.

Key informant technique is "an ethnographic research method which was originally used in the field of cultural anthropology and is now being used more widely in other branches of social science investigation" (Marshall 1996, p. 92). Two key informants were interviewed. They are

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[22] Regional Strategy for Rural Development Jablanica and Pcinja Districts 2013-2017, The Centre for the Development of the Jablanica and Pcinja Districts, Regional Development Agency

members of the local offices in Vranje municipaty, assistant of advisor for local development and agriculture ingenior. Face to face interview was conducted.

3.5. Limitations and challenges to the study

People in villages were particularly skeptical and they thought that the data would be used for the wrong purposes, even though it was pointed out that the survey is totally anonymous and that the only purpose of the survey was writing of master thesis. I have identified myself with student card but some of the respondents thought the survey was a type of a check of the financial status by non-governmental organizations that might have political intentions or by the banks itself. This situation had an effect on the number of respondents, it was planned 130 households, 10 in each municipaty, but only 92 respondents were interviewed.

One of the obstacles is the fact that some of the farmers don't know the exact numbers, for example the amount of meat or milk produced last year, the exact amount of sold livestock or the amount of crops, in some cases the respondents were using rough numbers.

CHAPTER FOUR
Results and Analysis

4. 1. Structure and socio-economics characteristic of households

In order to provide better understanding of the situation in South Serbia structural and socio-economics characteristic of the households are presented. Following characteristic are presented: farm type, farm size, number of members, age, level of education, other sources of income, does households product for selling or for their own use and what type of fonds they received.

Table 1.1.Farm type

Farm type	frequency	percent
Livestock	19	20.7
Non livestock	31	33.7
Mixed	42	45.7
Total	92	100

As shown on the Table 1.1. most of the farms 45.7% are mixed, according to respondents answer mixed farm include chicken, pigs, cows and paprika, potato, onion and garlic as their main products. The next one are non live stock farms with 33.7%, based on the respondents answers this farms include production of potato, paprika, cabbage, carrot, onion, apples, pears and raspberries. Live stock farm with 20.7% holds the last place and their production is mainly focused on pigs, goats, chicken and thurkey.

Table 1.2.Farm size

Farm size	frequency	percent
Small	52	56.5
Medium	29	31.5
Large	11	12
Total	92	100

Structure of the farm in South Serbia is a result of the bad economic situation that has been going on for years. Lack of money led to inability of buying more land and selling the existing own. Table 1.2. indicates that most of the farm are small size. It should be mentioned that there is a thendency that the farm are in possession of the same family for generations.

Table 1.3. Number of members

Number of household members	frequency	percent
1-3	44	47,8
4-6	45	48,9
7-10	3	3.3
Total	92	100

As shown on the Table 1.3. most of the households 48.9 % have 4-6 member. There is a thendency in rural areas of South Serbia that different age groups live together, for example children with parents and grandparents and other relatives live in the same household partly because of the culture partly because of the economics situation.

Table 1.4. Age of the head of the household

Age	frequency	percent
20-25	2	2.2
26-30	9	9.8
31-35	11	12
36-40	27	29.3
41-50	36	39.1
51-60	6	6.5
61-70	1	1.1
Total	92	100

Based on the collected data, the biggest part of 39.1% represets age group 41-50 years while 29.3% belong to a age group between 36-40 years old. Respondents answers indicated that most of the younger population left the rural areas for pupose of studying or finding jobs in cities while parents are staying in the vilages and small cities for the purpose of running the household together with older family members like grandmothers, grandfathers and other relatives. Most of the respondents are engaged in agricultural production for years, some of them for generations and they have good experience, but they lack knowlegde in other areas such as new techniques and technologies. In some of the households older members categorically refuse to apply the new technologies, because of their believe that tradition should be cherished.

Table 1.5. Education of the head of the household

Education	frequency	percent
Elementary	23	25.0
High school	60	65.2
Bachelor	9	9.8
Total	92	100

Table 1.5. shows that the biggest part of the respondents 65.2 % have high school, 25% have elementary school and 9.8% have a bachelor. This information indicates that education in rural areas in South Serbia is in the low level. Education is one of the factor of human capital wich can significantly effect poverty. Education also plays important role in running business and it can effect possibilities for growth and development. Based on the previous two tables responedents in age group 41-50 are moslty with highschool education.

Most of the farms have basic conditions for production, access to water have 81.5% and access to electriticity 88% and only 21.7% of the farms is fragmented.

Table 1.6. Other source of income beside agriculture

Other source of income	frequency	percent
No	14	15,2
Yes	78	84,8
Total	92	100

Table 1.6. indicates that 84,8% of households have other source of income. Based on the respondents answers other source of income is coming from pensions from older family members, salaries of the household members that are working, income form small stores and income from renting the property and social help.

Table 1.7. Production for selling

Production for selling	frequency	percent
No	36	39.1
Yes	56	60.9
Total	92	100

Table 1.7. indicates that the bigger part of households 60.9% is producing for sale while 39.1% is producing only for their own needs. Selling of the product is mostly engaged in the small local markets and stores.

Table 1.8. Fond type

Fond type	frequency	percent
DFROS	53	57.6
EFSE	21	22.8
EAFRD	3	3.3
ADA	5	5.4
SDC	5	5.4
USAID	5	5.4
Total	92	100

The biggest part is DFROS - Development funds of Republic of Serbia with 57.6% and after that EFSE with 22.8%. Main reasons for such small percent of other funds is the fact that other funds have high demands and conditions for approving the funds and complicated procedures. Financial and business plans of the clients represents the category that many of the households could not provide and this mainly referes to the non returnable funds. Lack of information from the government about specific program is something that is present in Serbia. Many of the respondents were not informed about programs and funds and that is also one of the reasons why most of the households decide to take funds in form of loans from the banks. Furthermore, rural households with a bad credit history have difficulties to obtain a loan or any type of financial support, especially under acceptable conditions, because a bad credit history is an indicator that the particular household is a high-risk client.

4.2. Utilization of funds

In order to answer how are finances utilized and used the percentages and frequency is calculated for variable Use of funds. It should be mentioned that Table 1.9. represents the purposes for which funds are mostly used.

Table 1.9. Use of funds

Use of funds	frequency	percent
Machinery	27	29,3
Seeds	17	18,5
Protection of seeds	10	10,9
Irrigation	8	8.7
Buying land	6	6.5
Buying live stock	24	26.1
Total	92	100

Based on the Table 1.9. the biggest part of respondents 29.3% used the funds for buying machinery, after that is buying live stock 26.1% and buying seeds 18.5%. Based on respondents answers some of machinery includes tractors, threshers, plow, disc harrow. Regarding live stock respondents were mostly buying cows, pigs, sheep, chicken, thurkey and ducks. All of the fruit, vegetables and live stock that is mentioned represents the classic products for the South Serbia.

4.3. *Funds and assets*

The next step in the analysis is to determing relation between total net income, wealth indicator, fund amount and socio-economics characteristic of households, multivariate regression was used. It should be emphasized that annual repayment rate for funds on individual household level was computed by dividing the total amount of fund by the number of year that indivudual fund were approved.

If we look at the Table 1.10. the model with total net income we can se that R Square is 0.581 or in percents 58.1% of total variability in net income is explained by model. Sig is .000[b] which mean that we got the model with explanatory power. But if we look at all independen variables we can see that variables with Sig. coefficient less than 0.05 are size of fond for the last 12 months, age of the head of the household, agricultural income and farm size and this variables have a siginicance for the model and a predictive ability on the dependend variable.

Table 1.10. Regression for total net income as a dependent variable

	Std. Error	t	Sig.	Coeff.
(Constant)	1730.024	2.801	0.006	
Wealth indicator	0.007	0.279	0.781	-0.033
Funds	0.028	5.934	0.000	.491**
Age of hhh	26.290	-2.372	0.020	-0.101
Education	108.499	0.885	0.379	0.047
Number of hh members	199.758	1.476	0.144	-0.028
Agr. Income	0.142	7.555	0.000	.512**
Farm size	221.932	-3.603	0.001	-.225*

The mean difference is significant at the 0.10 level

  R= 0.762[a]   R Square= 0.581   Sig.= .000[b]

Pearsons coefficient can vary from -1 til 1, the closer the coefficient is to 0 the variation of the line of the best fit is greater. Pearson coefficient tell us that there is a positive medium strenght relationship between size of funds and total net income, this fact leads to a conclusion that funds contribute to higher income. There is a weak negative corellation between total net income and age which means that variables are going in the opposite direction. Medium positive correlation between dependent variable and agricultural income, which means that both variables are going in the same direction. Coefficient for the farm size shows us that there is a weak negative correlation with dependent variable. Based on the represented results we can conclude that smaller farms with younger head of the household generate more income. The question is why? Do they have more income sources? To answer this question Anova test was done between variable Farm size and Number of income sources and the Sig. level of 0.427 tells us that there is no siginifcant relation between this two variables.

The fact that the smaller farms generate more income could be explained with reverse productivity. According to Ellis (1988) and Griffin (et al.200) the riverse relation between farm size and productivity could be explained by the fact that the price of land, labour and capital are diffrerent for large and small farms.

It is argued that productivity on larger farms is lower because of less efficient labour supervision, compared to smaller farms that use a higher proportion of family labour.[23]

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[23] Philip Woodhouse, Beyond Industrial Agriculture? Some Questions about Farm Size, Productivity and Sustainability, Journal of Agrarian Change, 2010.

According to Ellis (1988) in economies with more labour and less land and capital and where the cost of labour are low and cost of capital high the investment pattern of smaller farms is more 'socially optimal'.

The possible answer for negative correlation between total net income and age of the head of the household could lie in the fact that farms with younger head of the household could be more adaptable to changes and easier apply new technologies or that they are not oriented to traditional production and have better management of resources.

Table 1.11. Regression for wealth indicator as a dependent variable

	Std. Error	T	Sig.	Coeff.
(Constant)		2.953	0.004	
	25224.301			
Funds	0.427	-0.507	0.614	-0.081
Farm size	3341.109	1.338	0.185	0.143
Age of hhh	394.232	0.673	0.502	0.086
Eduction	1655.609	0.545	0.587	0.073
Num.of hh members	3038.736	-0.617	0.539	0.035

The mean difference is significant at the 0.10 level

R= 0.194[a]   R Square= 0.037   Sig.= 0.647[b]

It should be mentioned that wealth variable include the values of all household objects, machinery, tools and all vehicles and that value is determined by rough numbers of the indivudual respondents. The wealth indicator did not include the value of the land. Table 1.11. indicated that there is no statistically significant relation between dependent and independent variable, R Square is 0.037 which means that model explains 3.7% variability of the response data. There is no significant relation between total net income and wealth indicator.

Table 1.12. Regression for size of funds as a dependent variable

	Std. Error	T	Sig.	Coeff.
(Constant)	1983.762	3.582	0.001	
Wealth indicator	0.008	-0.256	0.799	-0.090
Farm size	263.872	-3.303	0.001	-.280**
Age of hhh	31.017	-2.144	0.035	-.211*
Education	126.813	0.465	0.643	0.033
Num. of members	232.656	1.781	0.079	-0.011
Agr. income	0.554	0.414	0.680	0.015
Total net income	0.536	-0.144	0.886	0.039

The mean difference is significant at the 0.10 level

R= 0.410[a]   R Square= 0.168   Sig.=0.026[b]

R Square is 0.168 wich means that model explains 16.8% of the variability of the funds received for the last 12 months. Since the Sig. is less than 0.10 the model has explanatory power. If the look at the significance level in the Table 1.12. we can see that farm size, age of the head of the household and number of members have a significance level less than 0.10. Pearsons coefficient has the weak strenght and it is negative wich means that variables are going in opposite directions. If we increase the farm size, age of the head of the household and the number of members the amount of fund will decrease. This fact imposes a conclusion that bigger amount of funds goes to smaller farms with less number of houshold members and with younger head of the household.

Small agriculutral households represents a category that requires specific approach and agriculutral policy. According to the National Strategy for Agriculutral Development, there are only 1.9% of external exployees on the farm, the 98.1% of the permanent employees on the farms are the owners itself. Labour distribution is unbanlanced across the regions, the biggest number of permant emprloyees in agriculuture is in central and west Serbia, while south Serbia is in the last place, this situation imposes a necessity for action and enqouraging employees to seek jobs in agricultural sector. Demographics trend in Serbia are u nfavourable, in south and south-east Serbia the population has decreased for 19% for the last nine years and the age structre is showing a trend of decreasing of young population in rural areas especialy from 2002-2011. National Plan for Agricultural development suggest different ways of stimulating

the undeveloped parts of the country by investing funds that are coming from national and international level[24].

Based on the regression results and National Strategy Plans we can conclude that the funds are going to the targeted .

The next step in analysis is dividing funds into groups based on the source, national and international, and based on form, grants and loans in order to find out is there siginificant differences between this categories and total net income, wealth indicator and other households characteristic. Group called 0 funds represents the funds that were received more than a year from the moment when the interview was conducted. In the Table 1.13. mean values for zero, national and international fund is represented.

Table 1.13. Mean values of national, international and zero funds

Variable	0 funds	National	International
Total net inc.	1988	2325	2076
Wealt.ind.	110342	97656	101091
Agric.dep.	0.47	1.24	0.54
Age of hhh	4.36	4.04	4.36
Education	3.00	2.85	2.85
Farm size	2.00	1.60	1.49

The mean difference is significant at the 0.10 level

In order to find out if there is significant differences between main values the Anova test was done. Significance between national, international and zero fund group is represented in the Table 1.14. and we can see that there is statistically significant difference in total net income category and farm size. To explore further the Post Hoc Tukey test is done and it showed that there is significant difference beween total net income in category of zero and national funds, when it comes to farm sizes there is significant difference between zero and international funds. The category of zero funds include fuds that are coming from national and international level both in form of grant and loan. Possible reasons for difference in total net income could be explained by the fact that national funds are in form of loan and require higher income for approving the loans. Zero funds were mostly approved to small farm.

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[24] kombeg.org.rs

Table 1.14. Anova test for national, international and zero funds

Variables	Sig.
Total net income	0.021*
Wealth indicator	0.409
Agr.income dependency	0.336
Age of hhh	0.654
Education	0.580
Farm size	0.077*

The mean difference is significant at the 0.10 level

In the next Table 1.15. diffeneces in means between grants, loans and zero funds is represented. In the Table 1.16. we can see that there is statisticaly significant difference between the means total net income and farm size. Tukey test showed that there is differences between zero fonds and grants in total net income category and also between zero fonds and grants when is comes to farm size. The biggest part of zero funds are coming from national level and have a form of loan which requires higher level of income then grant. Zero funds were mostly financing medium size farms.

Table 1.15. Mean values of zero funds, grants and loans

Variable	0 funds	Grants	Loans
Total net inc.	1988	1860	2307
Wealth ind.	110342	112716	95803
Agric.dep.	0.47	0.32	1.09
Age of hhh	4.36	4.22	4.16
Education	3.00	2.94	2.82
Farm size	2.00	1.39	1.59

Table 1.16. Anova test for zero funds, grants and loans

Variable	Sig.
Total net income	0.010
Wealth indicator	0.110
Agr.income dependency	0.352
Age of hhh	0.872
Education	0.314
Farm size	0.049

The mean difference is significant at the 0.10 level

4.4. Income dependency

To provide deeper understanding of the effect of funds on the household income the next step in the analysis is to determin income dependency of the households.

Table 1.17. Destriptive statistics for different sources of income

	Min.	Max.	Mean	Std.Deviation
Agr.income	-471	6091	1966.75	1631.549
Non-agr. inc.	0	2500	623.64	542.284
Fund income	0	12400	4104.39	2561.336

Table 1.18. Income dependency

	Agr.income	Fond income	Non-agr.income
%	29.4%	61.3%	9.3%

In order to determin the income dependency, agricultural income, income outside of agriculture and fond amount for the last 12 months is divided by the the total net income. The results show that funds have the biggest share with 61.3 %, agriculture contributed with 29.4% and non agricultural income derived 9.3% of the total income. We can conclude that households are significantly rely on funds and it represent a big part of their income.

Table 1.19. Fund dependency as a dependent variable

	Std. Error	t	Sig.	Coeff.
(Constant)	0.208	3.010	0.003	
Farm size	0.027	-1.763	0.081	-0.218[*]
Age of hhh	0.003	-0.714	0.477	-0.13
Education	0.013	-0.813	0.419	-0.064
Wealth indicator	0.000	-0.198	0.843	-0.075
Num. of members	0.023	1.358	0.178	0.001
Total net income	0.000	3.154	0.002	0.378[**]

The level of significance is set to 0.10
R = .433[a]   R Square = .188   Sig.= .006[b]

Based on the Table 1.19. we can conclude that factors that affect fund dependency are farm size and total net income. Farm size have negative correlation which means that with increasing the dependency on funds the farm size is going down, which support the results from Table 1.12. that states that bigger amount of funds goes to smaller farms and therefor the fund dependency of the small farms is greater. Total net income has a positive correlation with fund dependency which is expected regarding the fact that funds represents the biggest part of total net income.

Table 1.20. shows that the number of household members has a significance for the model and it's negatively correlated to the agricultural dependency. The less number of members the bigger dependency on agricultural income. The reason is that households with larger number of members include family member that have other sources of income and therefore they are not dependent only on agricultural income.

Table 1.20. Agricultural income dependency as a dependent variable

	Std. Error	T	Sig.	Coeff.
(Constant)	23.000	0.144	0.886	
Farm size	2.945	1.260	0.211	-0.003
Age of hhh	0.337	-1.042	0.300	-0.104
Education	1.405	1.310	0.194	0.085
Wealth indicator	0.000	-0.249	0.804	-0.015
Num. of members	2.579	-2.118	0.037	-0.147
Total net income	0.001	0.743	0.460	0.074

The level of significance is set to 0.10

R= .269[a]   R Square = .072   Sig. = .373[b]

Table 1.21. Non-arg.income dependency as a dep.variable

	Std. Error	T	Sig.	Coeff.
Constant	9.230	-1.709	0.091	
Farm size	1.182	-1.225	0.224	-0.158
Age of hhh	0.135	3.096	0.003	0.262
Education	0.564	0.650	0.518	0.105
Wealth indicator	0.000	-0.154	0.878	-0.019
Num.of members	1.035	0.774	0.441	0.003
Total net income	0.000	3.046	0.003	0.306

The level of significance is set to 0.10

R = .454[a]   R Square = .206   Sig. = .003[b]

Based on the Table 1.21. we can conclude that age variable is positively correlated, if we increase the age the dependency of other sources of income is bigger. The reason is that older family members receive pensions, social help and other sources of income and therefore cause a bigger dependency level.

4.5.   Diversification

In order to determin income diversification of the households Simpson index of diversification is used and total net income is devided into 7 subgroups. The SID takes into consideration both the number of income sources as well how evenly the distribuistions of the income between the different sources are (MINOT et al., 2006; JOSHI et al., 2003).

$$D = 1 - \sum_{i=0}^{n} \left(\frac{ai}{A}\right)^2$$

a_i is the income from source in a n number of sources and A is the total income.

Simpson index of diversity is in a range from 0 to 1, where value 0 represent no diversification, as the index moves closer to 1 the income is more diversified. Computing the Simpsons index required that few negative values were set to 0. In order to find out what causes diversity of income the regression of the Simpson index is done.

Table 1.22. Regression with Simpson index as dependent variable

	Std. Error	T	Sig.	Coeff
(Constant)	0.139	2.355	0.025	
Age of hhh	0.002	0.614	0.544	.205*
Education	0.010	0.607	0.548	-0.122
Farm size	0.019	-0.664	0.511	-0.132
Num.of hh members	0.016	0.129	0.898	-0.206
Wealth indicator	0.000	-0.688	0.496	0.01
Livestock inc.	0.000	3.031	0.005	.310*
Non-livestock income	0.000	1.602	0.119	.362**
Non-agr.income	0.000	3.893	0.000	.354**
Fonds	0.000	-1.508	0.141	-0.222

The mean difference is significant at the 0.10 level

R=.726[a]   R Square= .527   Sig= .002[b]

Based on R Square we can conclude that the model explains 52.7% of variability of the dependent variable. Sig. on the level of the .002[b] means that the model has explanatory power. Table 1.22. indicates that livestock income and income outside agriculture have statistically significance for the model. Both of the variables have a medium strengh possitive Pirsons coefficient wich means that both dependent and independent variable are going into the same direction. If we increase the livestock income and income outside agriculture the diversification is going to increase also. We can conclude that income increases with diversification. Livestock income represents the biggest part of agricultural income while the income outside of agriculture include five different sources like wages, rent, social help, income from stores and pensions.

4.6. Income distribution

In order to explore the income distribution i have used Gini coefficient as one of the measures of income inequality. Gini coefficitent is in a range from 0 - 1, where 0 represents perfect equality and 1 represents perfect inequality. I have used Gini coefficient to make comparation on total net income and wealth indicator with and without the amount of fonds received in the last 12 months.

Table 1.23. Gini coefficient

	Gini for total net income without fond amount	Gini for total net income with fonds for last 12 months	Gini for wealth indicator without fond amount	Gini for wealth indicator with fonds for last 12 months
Households N = 92	0.42	0.34	0.18	0.15

As we can see in the Table 1.23. amount of fonds received for the last 12 months slighlty reduced the coefficients and we can conclude that fonds have small effect in reducing inequality of total net income and wealth distribution. Gini coefficitent decreased for 0.08 when the amount of fonds that is received is included in the total net income value and also Gini coefficient decreased for 0.03 when the amount of fonds received last 12 months is included in wealth indicator. The amount of received fonds slightly reduced inequality in income and wealth distribution.

In the Table 1.24. the total amount of 92 households is divided on subsamples starting from the households with the lowest 20% of income until top 20% households with the highest income. The category of total net income include the amount of fonds received for the last 12 months and the fonds received for more that a last 12 months. In total there are 5 subsamples. For each of this subsamples i have calculated the mean values for wealth indicator, household size, education, age and fond amount. In order to explore if there is significant differences between quartiles Anova test was done and it showed that there is statisticaly significant diferences in means between quertiles in a category of fond amount. The biggest amount of fonds goes to top 20% income earners. Further analysis of distribution includes using Kuznets ratio. It represent a ratio of income for highest 20 % earining of population and income of lowest 20% earning where perfect equality is defined as 1. Table 1.24. shows that there is a significant inequality in fond amount category.

Table 1.24. Mean values of the quertiles and Anova

	bottom20%	b-m	middle 20%	m-t	top20%	Sig.	Kuzn.ratio
Total net income	5204	9501	17699	21081	24807		4.77
Wealth in.	91702	105641	100758	91553	105964	0.439	1.16
Farm size	2.7	3.3	2.9	3.1	3.3	0.515	1.22
Age hhh	41.7	42.3	39.6	40.5	41.4	0.894	0.99
Education	11.4	10.9	11.2	11.8	11.1	0.714	0.98
Fonds	3766	7297	16567	18884	21160	0.000	5.62

4.7. Poverty line

According to the official records of the Republic Institut for Statistics, the minimum amount of money necessary per month for the year 2016 is 286.4 euro or 35.402,67 serbian dinars, euro:rsd = 1:123,6 (mtt.gov.rs). In order to dertermine the position of the households, based on the relative approach of poverty, the mean of the total net income for 92 households is calculated and compared to the national poverty line before and after received fonds. Before receiving fonds the number of the household under the official poverty line was 68 (73.9%). The number of the household under the poverty line significanlty decreased to 18 (19.56%) households after receving fonds. We can conclude that fonds significantly contributed to poverty reduction if we look only the income aspect of the poverty.

Table 1.25. Poverty index

	Without fonds	With fonds
Head count ratio	73.9%	19.56%
Per capita income gap	0.2846	0.1046
Poverty distribution/inequality index	0.1609	0.0736

Poverty gap tell us how far are the poor household from the poverty line, as we can see after the fond are received there is a decrease. In order to determing the effects of fonds on poverty, the poverty index is computed before and after receiving the fonds. The poverty index is significantly lower after receiving the fonds.

Poverty index = head count ratio*per capita income gap*poverty distribution

Poverty index before fonds = 0.73913*0.2846*0.1609 = 1.1846

Poverty index after fonds = 0.19565*0.1046*0.0736 = 0.3738

Table 1.26. Comparation of mean between poor and non-poor without funds

	Sum of squares	Df	Mean Square	f	Sig.
Wealth indicator	21560595.48	1	21560595.48	0.022	0.884
Farm size	0.08	1	0.08	0.05	0.824
Age of hhh	36.969	1	36.969	0.508	0.478
Education	8.177	1	8.177	1.863	0.176
Number of hh members	0.522	1	0.522	0.256	0.614
Agr.dep.index	1.252	1	1.252	3.103	0.082
Total inc.of livestock	24542246.12	1	24542246.12	15.378	.000
Total inc.of non-livestock	9423.554	1	9423.554	0.041	0.84
Total income outside agriculture	2728900.322	1	2728900.322	10.22	0.002

The mean difference is significant at the 0.10 level

In order to investigate the diffrences between means for poor and non-poor category without funds Anova tests was done. Table 1.26. indicates that there is a significant difference in means in categories of agricultural dependency index, total income outside of agriculture, total income of livestock.

The next Table 1.27. shows differences in means between poor and non poor with funds. There is significant difference in means of number of household members, agricultural dependence index, income of livestock, income of non live stock, income outside of agriculture and funds.

Based on the previous two tables we can conclude that funds significantly increased differences in income between poor and non-poor.

Table 1.27. Comparation of mean between poor and non-poor with funds

	Sum of Squares	Df	Mean Square	F	Sig.
Wealth indicator	1030225048	1	1030225048	1.04	0.311
Farm size	2.369	1	2.369	1.5	0.223
Age of hhh	172.373	1	172.373	2.42	0.124
Education	1.267	1	1.267	0.28	0.596
Num.of members	6.61	1	6.61	3.36	0.07
Agr.dep.index	2.02	1	2.02	5.12	0.026
Fond.dep.ind	0.009	1	0.009	0.37	0.543
Total inc.of livestock	16274367.58	1	16274367.58	9.37	0.003
Total inc.of non-livestock	862852.57	1	862852.57	3.96	0.05
Total income outside agriculture	1377311.732	1	1377311.732	4.88	0.03

The mean difference is significant at the 0.10 level

In order to complete analysis done so far percent and frequency of social position and improvement of the life style of the respondents is represented. Table 1.28. shows subjective answers and adittutes of the respondents about social position and improvement of life style and well-being in general.

Table 1.28. Social position and general well-being after receiving funds

Social position after funds	frequency	percent
Better	23	25
Worse	30	32.6
No chage	39	42.4
Total	92	100

Table 1.28. shows us that most of the respondents 42.4% said that their social position and life style did not changed. The respondents considered their social position in society did not changed based on the possibility to buy products of better quality, better health care,

possibilities for better school or univesity, possibility to buy a car or have better clothes. While 32.6% of the respondents consider that their position is worse, they expressed their unsatisfaction with repayment program, according to respondents answers seasonal fluctuations in production and weather conditions can significantly effect their production and income and the repayment program does not consider this as a problem, which had a consequences of cutting costs. Respondents dealt with this problem differently, some of the respondents had to fire employees, apply strict measures of saving, some gave up celebrations like birthdays and anniversaries, vacations, selling machinery and vehicles. Based on the respondents answers we can correlate the social position and live style with well-being.

According to Edward Diener and Eunkook M. Suh (2000) subjective well- being includes components like life satisfaction, financial satisfaction, pleasant affect and absence of unpleasan affects. Subjective well-being alows people to jugde their own lives instead assestments made by „experts". They pointed out that financial satisfaction is more closely corrrelated to income than is life satisfaciton and argued that life satisfaction depends more on needs and desires. They also argued that beside people's objective income, factors like personality and life curcumstances can more strongly pedict financial situation, people's feeling about their lives can be more important predictior of their satisfaction then objective income. They found out that personal goals can affect wheter they were satisfied with certain level of income. Coulture and expentations plays an important role in people's subjective well-being.

According to Ferrer Ada-i-Carbonell (2005) individual well-being depends on the subjective perception whether income is adequate to satisfy one's needs, individual income is perception of own situation in the past as well as the perception of own income compared with the income of other people.

Household memeber could have expectations that higher income could provide them better social status and better class position, but the it is necessary to accumulate income during the longer period of time to provide enough capital in order to rise in the society and class.

Maybe one of the explanations for the high number of unsatisfied household we can find in Easterlin (1995) quoatation: "...happiness or subjective well-being, vloaries directly with one's own income and inversely with the incomes of others".

According to Helson (1947) individuals adapt to new situations by changing their expectations. People will move to other goals once when they achieve a certain level of material wealth (Inglehart 1990). There is a possibility that household had too big expectations regarding the

amount of income or the speed that the income is increasing which led to high level of unsatisfaction or maybe did not considered the possibiliy of side effect like natural disasters or changing the interest rates which is not a surprise in economicaly unstable economies like Serbia.

CHAPTER FIVE

5.1. Conclusion

The focus of the study was to explore the socio-economic situation of rural households in South Serbia after receiving different forms of development funds. Furthermore, the emphasis was on exploring how did funds affected poverty level, income and social position. The limitations were related to lack of cooperation and the general skepticism of the population, one can assume due to the turbulent history of the country and the current political situation.

The study represented a household structrue and impact of funds on households income, livelihood and reducing poverty . Findings of the study suggest that livelihood of the households in South Serbia did had changes after receiving funds. There is a rise of total income and significant reducing of the poverty line. Funds had a small effect on the distribution of income and wealth and for the biggest part of respondents did not led to development of other investments. The biggest part of funds went to the group of smaller farms with younger head of the household. The results showed that funds are following the plans of National Strategy for Development. The funds succeed to furfill one of their tasks and that is to reduce poverty level, but they lack in encouraging of economics activities and providing development of the rural agricultural areas.

Developing funds have contribution to the achievement of the proposed measures, however, their bigger contribution can be expected after acquiring the Serbia's membership status in the European Union.

Overall, the findings of this study and the recommendations will hopefully raise more awareness of the importance of investment in rural agricultural households in order to improve

agricultural production, improve the competitiveness and provide better living conditions in the regions of South Serbia.

5.2. Recommendations

The resources of the rural areas of Jablanica and Pcinja represent a good basis for the overall economic and social development of these rural communities. With the application of programs for rural development, the population can enable this region to be more productive and more attractive to work and live in it. One of the ways of solving the proglem is regulating the social status of the agricultural employees that would make this sector more attracitve to work in.

It is necessary to provide better coordination between national and regional levels which will include raising the administrative capacity of local communities to track the sources of financing, planning, operational management and monitoring use of EU and national funds and building financial capacity to absorb funds from the national and international sources through the establishment of a regional credit fund.

In order to stimulate the economy and improve the living standards it is necessary to make policy framework that will fit better to the needs of the agriculture households, more interaction and feedback between institutions and farmers, providing advisory services and better conditions for approving the funds.

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APPENDICIES

Appendix 1: Household interview questionnaire

Household Questionnaire

Interviewer: No:

                                                                   Place:

INFORMATION ABOUT THE HOUSEHOLD

1.Your household belongs to what type of a farm?

_____

2.The size of agricultural household: _____ hectares

3. Is the surface of your land fragmented?

a) True

Plot number	Size	Use	HH rights	Crops grown	Investment (value)
1					
2					
3					
4					
5					
6					
7					
8					

b) False

4. Access to water for irrigation: a) Yes, (river/well) b) No

5. Do you have fallow land and if you do, how much? a) Yes, _____ hectares b) No

6. Access to electricity: a) Yes b) No

7. Access to the road network: a) Yes b) No

8. Objects that are in the possession and their number and value in RSD (eg. buildings, barn, car, warehouse, etc.):

Type of asset	Number	Value

9. List the machinery owned by your household and their value in RSD.

Type of machinery	Number	Value

10. Dwelling:

Type	Number	Value
Building or structure locally		
Building or structures elsewhere		

11. Tools on the farm for other jobs outside agriculture, their number and their value in RSD (e.g. for a trade or other services):

Type of tool	Number	Value

12. Information about the household members:

Household members	Sex (m/f)	Age	Education (without education, elementary, craft, college, university…)	Main occupation	Secondary occupation	Other occupation
1						
2						
3						
4						
5						
6						
7						
8						

13. Information about the livestock:

Animal type	A year ago (No.)	Total value	Sold		Bought		Slaugh-tered	Born	Given out	Died	Received	Today (number)	Total value today
			No	Cost	No	Cost							
Cows													
Bulls													
Horses													

Goats															
Sheep															
Pigs															
Chicken															
Turkey															
Duck															
Other															

14. Information about the livestock products:

Meat production from cattle last year:

Season	Period	Number of cattle slaughtered	% of meat sold	Income from one animal	Total income from meat sales
1					
2					
3					
4					

Meat production from goats last year:

Season	Period	Number of goats slaughtered	% of meat sold	Income from one animal	Total income from meat sales
1					
2					
3					
4					

Milk production from cows last year:

Season	Period	Number of milk cows	Production litres/day	% of milk sold	Price (mean) in litre

1					
2					
3					
4					

Milk production from goats last year:

Season	Period	Number of goats	Production litres/day	% of meat sold	Price (mean) in litre
1					
2					
3					
4					

Other livestock income last 12 months:

Type	Total produced	Total sold	Total cash income
Butter			
Eggs			
Hides			
Other			

15. Inputs associated with livestock the past year:

Type of input	Total cost
Medicine/veterinary service	
Dipping	
Herding	
Motorised transportation	
Licks	
Fodder (including husks)	

Renting of land (including stubble)	
Other (including fines and taxes)	

16. Production of crops:

Type of crop	Total production		Sold			
	Unit	No	Unit	No	Price	Income

17. Inputs regarding crop production the past year:

Input (for seed specify crop)	Total cost
Seed	
Seed	
Seed	
Seed	
Seed	
Seed	
Seed	
Seed	
Fertilizers	

Pesticides	
Other inputs	

18. Are the products produced for commercial purposes or only for self-consumption?
_____

19.Does your household have any financial assets/savings and if it does is it every month or per year?

a) No b) Yes, savings per month _____RSD; savings per year_____RSD:_____RSD total

20. Does your household have debts and if it does write the value in RSD?

_____ RSD per month; _____RSD per year; _____RSD total

21. Hiring of labour for cultivation the past year:

Activity	Number	Total man-days	Total payment

22. Hiring of equipment past year:

Type of equipment	Activity	Number	Total payment

23. What type of wage labour did members of the household engage in during the past year?

HH member	Type of work	Employer	Period	Wage	Total income

24. Did the household have income from other businesses during the past year?

HH member	Type of business	Total net income

25. Income from forest and woodlands the past year:

Type	Unit	Sold	Bought	Price/ unit	Total Net Income
Charcoal					
Firewood					
Fodder					
Poles					
Vegetables					
Honey					
Licks					
Water					
Other					

26. Were there other income sources available during the past year?

Source	Where/to whom?	Total net income
Support funds		
Remittances		
Sale of non-agricultural products		

Rent		
Other		

INFORMATION ABOUT THE FINANCIAL FUNDS

1.How would you rate from one to five the overall incentives you receive for agricultural production?

  1 2 3 4 5

2. How well are you informed about such possibilities? a) I am informed b) I am not informed

3. If you are informed, where did you get the information?

TV_____, Internet_____, Phone_____, Radio_____ Advisory services_____, Community_____, Other_____

4. Have you ever taken or considered taking out a loan to invest in your current production?

a) Yes b) No

5. Have you ever taken or considered taking out a loan to invest in the start up of new production?

a) Yes b) No

6. How satisfied are you with the services provided by the local / state government?

a) Very satisfied   b) Somewhat satisfied c) Neither satisfied nor dissatisfied d) Somewhat dissatisfied e) Very dissatisfied f) No opinion

Explain why? _____

_____

7. How satisfied are you with the funds provided by the international organizations and governments?

a) Very satisfied   b) Somewhat satisfied c) Neither satisfied nor dissatisfied d) Somewhat dissatisfied e) Very dissatisfied f) No opinion

Explain why? _____

_____

8. In your opinion from one to five, what are the biggest obstacles to the use of the funds in general?

a) Paperwork 1 2 3 4 5

b) Lack of information 1 2 3 4 5

c) Technical issues of mechanization 1 2 3 4 5

d) Size of the households 1 2 3 4 5

e) Other required standards_____

9. Name the funds that you have applied for.

_____

_____

10. Name the funds that you have applied for and did not recieve support and what were the obstacles?

_____

_____

11. Name the funds from which you have received external funding or other types of support.

_____

_____

12. When did you received the support and what was the duration of the support for each fund?

_____

_____

13. Name the type of support that you have received from each fund, as well as the use of the support and value in RSD.

_____

_____

14. What are the terms and the conditions for the repayment for each fund?

_____

_____

15. Besides the selection criteria and terms, did you have any other associated duties to perform?

_____

_____

16.What funds do your neighbours and local citizens recommend and why?

_____

_____

17.What funds would you recommend to the others and why?

_____

_____

18. Name the funds for which you have heard of and that colud be helpful for your farming operations, but you have never applied for and explain why?

_____

_____

19. How would you rate your financial situation after receiving funds?

Better – worse – no change

20. How would you rate your social situation after receiving funds?

Better - worse - no change

21. Is there changes in your life style?

Better - worse – no change

22. How would you rate experiences with using funds?

Good – bad – no opinion

Key informants interview

1. What are external factors that can effect the use of funds?
2. How can this factors effect the use of funds?
3. Is there a way to reduce the potential negative effect of this factors?