Vol 3 Issue 12 Sept 2014

ISSN No : 2249-894X

Monthly Multidisciplinary Research Journal

Review Of Research Journal

Chief Editors

Ashok Yakkaldevi A R Burla College, India Flávio de São Pedro Filho Federal University of Rondonia, Brazil

Ecaterina Patrascu Spiru Haret University, Bucharest Kamani Perera Regional Centre For Strategic Studies, Sri Lanka

Welcome to Review Of Research

RNI MAHMUL/2011/38595

ISSN No.2249-894X

Review Of Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

Advisory Board

	Marisony Doura				
Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Delia Serbescu Spiru Haret University, Bucharest, Romania	Mabel Miao Center for China and Globalization, China Ruth Wolf University Walla, Israel			
Kamani Perera Regional Centre For Strategic Studies, Sri Lanka	Xiaohua Yang University of San Francisco, San Francisco				
Ecaterina Patrascu Spiru Haret University, Bucharest	Karina Xavier Massachusetts Institute of Technology (MIT), USA				
Fabricio Moraes de AlmeidaFederal University of Rondonia, Brazil	May Hongmei Gao Kennesaw State University, USA	Pei-Shan Kao Andrea University of Essex, United Kingdom			
Anna Maria Constantinovici AL. I. Cuza University, Romania	Marc Fetscherin Rollins College, USA	Loredana Bosca Spiru Haret University, Romania			
Romona Mihaila Spiru Haret University, Romania	Liu Chen Beijing Foreign Studies University, China	Ilie Pintea Spiru Haret University, Romania			
Mahdi Moharrampour Islamic Azad University buinzahra Branch, Qazvin, Iran	Nimita Khanna Director, Isara Institute of Management, New Delhi	Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai			
Titus Pop PhD, Partium Christian University, Oradea,	Salve R. N. Department of Sociology, Shivaji University, Kolhapur				
Romania J. K. VIJAYAKUMAR King Abdullah University of Science & Technology,Saudi Arabia. George - Calin SERITAN	P. Malyadri Government Degree College, Tandur, A.P.	Jayashree Patil-Dake MBA Department of Badruka College Commerce and Arts Post Graduate Centre (BCCAPGC),Kachiguda, Hyderabad			
	S. D. Sindkhedkar PSGVP Mandal's Arts, Science and Commerce College, Shahada [M.S.]	Maj. Dr. S. Bakhtiar Choudhary Director,Hyderabad AP India.			
Postdoctoral Researcher Faculty of Philosophy and Socio-Political Sciences	Anurag Misra DBS College, Kanpur	AR. SARAVANAKUMARALAGAPPA UNIVERSITY, KARAIKUDI,TN			
Al. I. Cuza University, Iasi	C D Balaii	VMAHALAKSHMI			

REZA KAFIPOUR Panimalar Engineering College, Chen Shiraz University of Medical Sciences Shiraz, Iran Bhavana vivek patole PhD, Elphinstone college mumbai-32

Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur

Panimalar Engineering College, ChennaiDean, Panimalar Engineering CollegeBhavana vivek patoleS.KANNAN

Ph.D , Annamalai University

V.MAHALAKSHMI

Awadhesh Kumar Shirotriya Secretary, Play India Play (Trust),Meerut (U.P.) Kanwar Dinesh Singh Dept.English, Government Postgraduate College, solan

More.....

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.ror.isrj.net

C. D. Balaji

Review Of Research Vol. 3 | Issue. 12 | Sept. 2014 Impact Factor : 2.1002 (UIF) ISSN:-2249-894X

Available online at www.ror.isrj.net



1

COST OF PRODUCTION OF TAMBAQUI FISH (COLOSSOMA MACROPOMUM s.p) IN CAPTIVITY INTO RONDONIAN AMAZON ESPECIALLY IN PIMENTA BUENO CITY, STATE OF RONDONIA - BRAZIL

ORIGINAL ARTICLE

Cleberson Eller Loose¹, Clodoaldo De Oliveira Freitas² and Anderson Soares Martins³

 ¹Professor and Researcher of Accounting Sciences at Federal University of Rondônia – UNIR Cacoal (Brazil)
 ² Professor and Researcher of Fishing Engineering at Federal University of Rondônia – UNIR Médice (Brazil)
 ³Bachelor degree in Accounting Sciences by Federal University of Rondônia – UNIR Cacoal (Brazil)

Abstract:

The present study aimed to identify the costs wrapped on tambaqui (colossoma macropomum s.p, Cuvier, 1818) production in tanks dug in the rural area of Pimenta Bueno – State of Rondonia (Brazil). The municipality that belonging to the state of Rondonia, which has natural vocation for fish farming, because this area of province has seven river basins and 42 sub-basins distributed throughout the State of Rondonia, which represents a hydric availability of 16.000m³, potential this well leveraged, which allowed the State of Rondonia to become the largest producer of freshwater fish in Brazil, with a production 65 thousand tonnes of fish in the year 2013. Because of these characteristics the survey was carried out in three properties that are producing of tambaqui in tanks dug in the rural area of municipality, in the period between April and May 2014, because the objective was to verify the costs of production of this species in captivity; the study refers to the cycle of growth and fattening that oscillates between 10 (ten) and 12 (twelve) months. In order to obtain the data was used interview applied to producers; in the interview the producers informed about the aspects of production, which allowed raise the expenses relating to the production of tambaqui, being labor, ration, fingerlings and depreciation of equipment used in the activity. This information enabled the cost of production of the tambaqui in captivity in the municipality of Pimenta Bueno, where it was found that the property "A" the kilo of tambaqui cost U\$ 1.50 (one and a half dollars); the property "B" cost U\$ 1.51 (one dollar and fifty one cents) and the property "C" the cost per kilo was U\$ 1.66 (one dollar and sixty six cents).

KEYWORDS:

costs, pisciculture, Rondonia.

INTRODUCTION

Fish farming in Brazil is an activity in expanding. This growth is due to the potential for Brazilian

Title: "COST OF PRODUCTION OF TAMBAQUI FISH (COLOSSOMA MACROPOMUM s.p) IN CAPTIVITY INTO RONDONIAN AMAZON ESPECIALLY IN PIMENTA BUENO CITY, STATE OF RONDONIA - BRAZIL", Source: Review of Research [2249-894X] Cleberson Eller Loose¹, Clodoaldo De Oliveira Freitas² and Anderson Soares Martins³ yr:2014 | vol:3 | iss:12

fish that account with 5.5000.000 hectares of blade d'freshwater , which provides conditions for the development of activity (SANTANA *et al.*, 2011), and also because the government incentives, the activity has been developed in a remarkable way in the state of Rondonia, but this growth is not the result of current efforts. In a study published by the ministry of development, industry and foreign trade (MDIC), goes off when performing on some positions. by Superior Institute of Administration and Economy (ISAE) in partnership with the Getulio Vargas Foundation (FGV) and the Superintendence of the Manaus Free Trade Zone (SUFRAMA), in the year of 2003, Rondonia already stood out as a producer of fish in the northern region. Second MDIC (2003), in 2003, the production in Rondonia revolved around , 2.400t /year of tambaqui, average production was around 4t/ha/year, and the estimate of the number of producers was 800 farmer fish.

In this context, know the costs incurred in the production process, as well as the feedback obtained by the activity is of fundamental importance. Information about costs, revenues, expenses, profit, facilitates decision-making and management of resources to improving the production. This information also serve to support the deployment and the planning of new strategies to increase production with quality in order to reduce costs and increase profits.

In spite of all the efforts for the development of the activity, the productive chain of fish in Rondonia faces problems, such as: disorganization, technical assistance deficient, high cost of production, which can makes - there little competitive (MDIC, 2003).

In order to mitigate these problems, the government of the state of Rondonia through the Office of the Secretary of state for agriculture, production and the economic and social development - SEAPES/RO, together with the Association of technical assistance and rural extension of Rondonia- EMATER and the Support Service for Small and Medium-sized Enterprises in Rondonia- SEBRAE- develop a project in the south central area of the state to diversify the production of fish in the State.

The Living Water Project was created with the aim of developing a sustainable fish farming and improve the income of farmers, small and medium-sized producers. This project benefited the farmers of this region with courses, lectures, fairs and technical advice, offered by SEBRAE, SEAPES and EMATER, when learning a new form of management of the business and the diversification in production. The producers were encouraged to produce more than one species and to use alternative foods, leaving to use only industrialized ration, which represents a large part of the costs of production of fish, among the alternatives suggested by the technicians to the main was to use cereals of the region in fish feeding, only in the final stage the fish would use100% ration industrialized. The results were satisfactory. According to the information obtained in the survey, MDIC (2007, p. 01), the production has increased by 46% after the implementation of the program and the costs with power were reduced by 27% (MDIC, 2007).

The aquiculture (production of aquatic organism) is a profitable business and expanding, especially the consumption of fish that have grown considerably, according to data from the United Nations Organization for Food and Agriculture. The fisheries sector is responsible for the livelihood of 540 (five hundred and forty million people which represents 8% of the world's population (SEBRAE, 2012).

In Brazil, the consumption of fish has grown in the last few years, and we are approaching the goal of the world health Organization- WHO, which considers 12 (twelve) kg/hab. Year consumption ideal. In Brazil in 2009 there was an average of 9 (nine) pounds per person. A consumption 40% higher than in 2006, when it was only 6.46 pounds.

This growth is caused by an increased awareness of the need for change in eating habits, and also by the policies adopted by the government for the development of fisheries and aquaculture, in addition to the increase in the average income of Brazilians (MPA, 2011).

To achieve the overall objective was to check the costs of production of tambaqui (Colossoma macropomum *s.p* (Cuvier, 1818)), in tanks dug in the municipality of Pimenta Bueno, Rondonia, Brazil, because according to Menezes (2010), the municipality of Pimenta Bueno is one of the main producers of tambaqui in the state of Rondonia.

2THEORETICALFRAMEWORK

2.1 Costs

The costs in general are target of study in every type of organization, because knowing the expenses incurred in the process of production of a good, goods or service is of fundamental importance to the success of the business (MOTA, 2002).

The studies of costs occurred with the emergence of industry in the 18th century. The determination of costs began the need non-accountability inventories of industrial companies, which could not be done in

the same way that companies profiteering. In a manufacturing company, the efforts of production, raw

2

materials and labor must appear on the final price of the product, different companies profiteering of season that had previously recorded their stocks only on the basis of the cost of acquisition (MARTINS, 2003; MOTA, 2002).

However, the costs in the production process and/or the provision of services has become part of fundamental importance within organizations, with this appeared classifications to define the structure of spending within the companies, which is presented by Martins (2010) as follows:

a)Spent: Purchase of a product or service that generates financial sacrifice for the entity (disbursement), sacrifice this represented by delivery or promise of delivery of assets (usually money);

b)**Disbursement:** Payment resulting from the acquisition of the good or service. You can occur before, during, or after the entry of the usefulness purchased, therefore lagged or not after they expense;

c)Investment: Spent activated as a function of its useful life or of benefits attributable to future periods, the entire sacrifice employed in the acquisition of a good or service, which is stored becomes an investment;

d)**Cost:** are spent for goods or services used in the production of other goods or services. The cost is also an expense that is only recognized as cost at the time of use of the factors of production (goods and services), for the manufacture of a product or a service. Example: a raw material is purchased then we have an expense, at the time that this raw material is used for the production of a well, we will have a cost of raw material.

e)Expenditure: Good or service consumed directly or indirectly to the achievement of revenue, for example, the vendor's commission is an expense that becomes immediately an expense. The equipment used in the factory, which is an expense transformed into investment and, subsequently, considered partially as cost, it becomes, in the sale of the product, an expense.

The costs are divided into groups, the direct and indirect and also fixed and variable.

f)Direct costs are those that are easily attributable to a particular good or service. Ex.: Raw materials, direct labor, these costs are applied directly in the production process.

g)Indirect costs are those costs which are of benefit to the whole production of a good or service. Are all costs of production, except the direct materials and direct labor, Ex.: Rent, depreciation, wages of supervision, are expenses that do not incorporate directly to production, but are appropriate to the final price of the products.

h)Fixed costs are those that are independent of the volume of production or sale. Represent the installed capacity that the company has to produce and sell goods or services. Ex.: depreciation, rent. In this case in terms of unit costs the higher the volume of production or sale lower will be the cost, on the other hand producing or not the company will have these costs periodically.

i)Variable costs are those that are directly related to the volume of production or sale. Ex.: Raw material, MOD. These costs vary according to volume of production.

j)**Loss:** Good or service consumed in abnormal and involuntary. This item is not to be confused with expenditure and much less with costs by its characteristic abnormal and involuntary. It is not an effort to obtain revenue, is something unexpected occurs as, for example, a fire .

The concepts presented are used to separate the items of expenditure in the production process and/or the provision of services, with the aim of highlighting the differences between costs and expenditure, because the word cost is only used to spending on consumption in production and administration expenses and sales are denominated as expenditure.

2.1.1 The importance of costs for management of business

As Callado and Callado (1999), within a rural company there are several purposes for the determination of the costs, but the priority is to bring relevant information on its various products and services or operational activities. The producer can make use of this information as auxiliary element of its administration to choose the creations and the agricultural practices that should be adopted in the coming periods.

For the managers of a company, get to know the cost of the activity is paramount to the success of the business, because the costs serve as support in the most important decision-making, in a general way the goal of the organization is to remain ahead of its competitors, increase sales, reduce costs, meet new customers be ahead of any future event that can influence the result of the activity and the cost appears as fermentation management (OLIVEIRA *et al.*, 2008).

In this way, we can say that about all the costs it is essential for management of the business, it is the business of any nature. In rural activity, is no different it is important that the rural producer has information about the composition and behavior of its costs to develop strategies for actions based on

3

reliable data, and to seek the best possible alternatives, in addition to allowing the prediction of the restrictions and difficulties imposed by changes in the levels of market price and cost components rural (CALLADO; CALLADO, 1999).

For a rural enterprises, as well as for other entities, accounting is a tool to support the management, not only in financial aspects, but also on other issues of great importance, it became used as a means to better serve the productive purposes and social and environmental company (CALLADO; CALLADO, 1999).

2.1.2 The accounting as a tool for cost control

Accounting is a science that studies of general or specific, in order to meet all the needs of the entity and the segments of the economy, each sector has its distinctions to be observed oblied in order to achieve greater effectiveness in accounting purpose. Thus, the main purpose of accounting is to assess the economic and financial condition of the entity and also assist in deductions of future trends (RATKO, 2008).

All rural activity, no matter how small, needs effective controls, since the decision will directly affect the profitability. However it is common for the rural administrators leave accounting records. For more simple that they can be, thus, data is lost of great importance for understanding the results and they are to assist in the formation of the selling price or the decision to design new investments (RATKO, 2008).

Another point to be observed in respect of rural administration is the control unit. Often the costs are confounded with private spending, creating difficulty in time to ascertain the profit of the activity. On the other hand, if the administrator know to make use of the information correctly, you will have in your hands a powerful instrument of work that will enable us to know the real situation of their activity and make decisions based on real data (RATKO, 2008).

The purpose of accounting of cost is the sorting, grouping, control and allocation of costs, and that the determination of costs serves for measuring profit and evaluation of inventories, also provides information to the administrators for the control of the company's operations and activities. This information will contribute to the planning of direction and decision-making (MOTA, 2002). The profitability, according to Sabbrag et al. (2007), is the index that indicates the proportion of gross income that is in profit after the coverage of costs.

2.2 Pisciculture as Fish Farming

According to Silva (1988), fish farming is the branch of aquaculture that is dedicated to creation of fish. There was more than 3,000 years and originated in China. Being the precursor to the activity of fish farming, china is the largest producer of fish in the world. In the year of 2009, the Chinese production accounted for more than 56% of world production of fish (SIDONIO *et al.*, 2012).

The Law No. 1861, art. 1 (1), section II, defines the fish as activity of cultivation of fingerlings or fish in natural environments and artificial with the purposes economic, social or scientific. Being a person who explores creation activity of fish is known as parent breeds (RONDONIA, 2008).

For Garutti (2003 p. 75), "Fish Farmer is the natural person or legal entity that is dedicated to the cultivation or the creation of commercial bodies that has water in its normal or more frequent habitat". Thus, the fish is the activity of breeding fish in captivity and is an aspect of aquaculture which encompasses not only the farming of fish, but also other crops, predominantly water, such as the frog breeding, rabbit breeding, shrimp farming among others (SIDONIO *et al.*, 2012).

Second MDIC (2003, p. 03), "The tambaqui is a native species fish of the rivers Amazonas, Orinoco and its tributaries. In nature, reaches maximum size around 100 cm and above 30 kg of weight". Their eating habits are very large. In nature the tambaqui feeds on almost everything that falls into the water , fruit seeds and others. He is predominantly grazing, but also can feed on small fish and snails. Very much on account of these eating habits, relatively simple, the creation of tambaqui in captivity is possible and successful.

As a result, the creation of tambaqui in tanks dug it presents itself as an excellent option to meet the demand for fish, because second Andreoni and Torres s (2013 p.02), "The planet consumes more fish and seafood than any other type of meat from the 50".

2.2.1 Panoramas of pisciculture, Brazil, Rondonia and Pimenta Bueno

According to Sidonio et al., (2012), Brazil has more than 12% of all fresh water on the planet, and

4

a coastline of over 8,000 kilometers and a favorable climate for the practice of aquaculture. This makes

Brazil a country with enormous potential, however there is little explored. In 2009, Brazil was only the 16^{TH} largest producer of fish, indicating that their potential is not being exploited in the best way possible, but even so, Brazil became the front of countries traditionally producers of fish such as Taiwan and South Korea. The variety of species of fish, along with this immense potential, can lead Brazil to another level as a producer of fish (SIDONIO *et al.*, 2012).

The Brazilian production of fish in 2011 was little more than 1.4 million tonnes. This production, taking into account the natural fisheries, fish of the rivers and seas, and also production in captivity, which was a little over 628 thousand tons, very little before the immense potential for Brazilian fish farming (MPA, 2013). As for the consumption of fish in Brazil, in 2009, the average was 9 kg/h. /year next to recommend by the World Health Organization (WHO), which is 12kg/h. /year In Brazil consumption varies considerably from one region to another. In Amazonas state that is consuming most fish in Brazil the consumption reaches 30kg/h. /year. Goias, the Brazilian state that less consumes fish, with a consumption of just over 1.2kg/h. /year. In Rondonia, in the year 2008, the consumption represented 3.58kg/h. /year (SIDONIO *et al.*,2012).

Second Menezes (2010), the potential of Rondonia for fish farming is immense. The state has seven river basins and 42 sub-basins distributed throughout the state, which represents a hydric availability of 16.000M³. In the year 2006 had around 1000 producers of fish in the state and the production this year was 4,041 tonnes and the area used corresponded to 1000 ha of water depth. Pimenta Bueno appears between the major producers both in fattening of fish as in fish fry (MENEZES, 2010).

The State government is developing actions to take advantage of this potential for fish farming, In accordance with Decree Law no. 17,136 the state incentive with ICMS zero selling internal and interstate pirarucu and tambaqui created in captivity in Rondonia. To support the production of tambaqui in captivity, the State is generating new sources of income, strengthening the economy and helping to fix the man in the field (ALVES, 2012).

The incentives have attracted businesses to the state, the company MAR E TERRA (sea and land) specializing in the international sale of fish out side Brazil, with its headcenter in Itaporã - MT, maintains a branch office in Pimenta Bueno - RO, where it acquires every week between 6 and 8 thousand kilos of tambaqui produced in the central region - southern state, which subsequently are transported to Mato Grosso, where the company is preparing for this fish in special cuts, which are exported to Europe, where the tambaqui is much appreciated because of its delicate flesh and mild flavor (ALVES, 2012).

Second Alves (2012), the veterinary doctor and producer Carlindo Pinto Son says that the production of pirarucu, painted, silver catfish, alimentary and tambaqui in captivity, typical species of the Amazon, will strengthen the position of Rondonia collaborating to make the State environmentally sustainable.

For this, the state government has worked with the producers of fish. Second Alves (2012), the state set the goal produce until 2014, eighty (80) thousand tonnes of fish per year. For this to happen the same has been encouraging small and medium-sized farmers, especially those of Family Farming . The exemption of the ICMS, the charlatan of entidadescomo EMATER and SEBRAE, are some of the ways to encourage these small producers.

2.2.2 Fish Farms, and the environmental concern

Consumers are becoming increasingly demanding, therefore, good management practices need to be adopted in fish farming in order to get a quality fish and that meets the expectations of consumers. Actions, such as: water quality control, correct management of ration given to fish, cleaning and maintenance of facilities to maintain a good animal created (MDIC, 2003). But there is another very important issue to be found that is in compliance with environmental laws. Consumers are becoming conscious about the environmental issues, such as the concern about the origin of what has consumed. This is one of the reasons for the producers are aware of legislation and seek to legalize their activities (MPA, 2010).

Daily, we hear it in the media or in informal conversations about the environmental issues. They also guide the fish, the major concern is the unpredictable workings of man that causes changes often disastrous to the environment (GARUTTI, 2003).

The environmental impacts are still in the process of deployment of fish farming, at the time it is removed the natural vegetation for excavation of tanks, the erosion caused by excavation, and the stage of operation. A big problem is the insertion of exotic fish in the wild from tanks designed. (DOTTI *et al.*, 2012 *apud* PEREIRA; BORGHETTI, 2000) In addition to these problems, other major impacts are also caused by this activity in accordance with Andreoni and Torres (2013, p.02), "aquaculture destroys mangroves,

5

dumps chemicals into the sea and spreads antibiotics that can become more resistant to these drugs".

The fish to be an activity considered as polluting and causing damage to the environment, this shall be subject to the requirement of environmental licensing, not being carried through the licensing or contrary to the rules that govern the fish will fit to penalize that range from a simple warning to the downtime partial or full of activities, "including the penalties provided for in the Law of Environmental Crimes (LAW 9,605 / 98) with imprisonment from one to six months, or a fine, or both penalties cumulatively" says (DELL'Orto, 2012 p. 10).

Even Dell'orto (2012 p. 10), "In addition to the legal obligation, the license is a requirement for obtaining funding and certification of products for both the internal and the external", it also makes it easier if the producer need to finance the activity.

2.2.3 Governmental Actions

The Brazilian government has been mobilizing all Brazil a large producer of fish for this has supported producers with subsidies, ease to finance the activity, reduction in taxes on revised specialist technical support among others. In the year 2012, the federal government launched the plan harvest of fisheries and aquaculture. This plan aims at a more effective economic policies and social voted for fishery yield and promote a sustainable development (MPA, 2012). To achieve these goals, the federal government made 4.1 billion in credits for investments in the sector, to acquire it the producer must fit into a line of credit, family agriculture, small and medium-sized producers, since the government has prioritized this credit for these classes. With this support the government hopes to be producing up to 2014, two (02) millions of tons of fish (MPA, 2012).

In Rondonia, the program productive water created by the state government along with the state department of economic and social development - SEATS- and developed by EMATER has benefited many producers in the central region of the state. The program benefits the producers with hours/machine with value well below the practiced (RESSUTTI, 2012). According to Ressuti (2012), the EMATER says that this incentive the state government has contributed in the provision of fish for the local and regional market, state and interstate.

3 METHODOLOGY

The research is characterized as exploratory, with qualitative approach with quantitative aspects, because it deals with only raise quantitative data without greater depth of analysis, and the data obtained by means of bibliographic research and the completion of interview. The data were collected and analyzed on the basis of the absorption costing.

The research was conducted in the months of April and May in the municipality of Pimenta Bueno, on three properties, being a located in line 07 (airport road) and two other properties located in line 55 (road of production).

The calculation of the cost of labor was adopted as the basic time/man worked specifically in the activity. The costs of the tanks and equipment used in the production process were found through the survey of depreciation in accordance with the useful life.

The supply of fish in accordance with Santana *et al.*, (2011), is the most important item representativeness on the total cost of the activity. This item was calculated on the basis of the price paid by producers and prorated according to consumption. The Fingerlings were calculated on the basis of the acquired volume; the liming and fertilizing as the expenses reported by producers and to reach the cost of cleaning (maintenance) of the tanks was considered the daily work which was informed by fish farmers.

The data were analyzed with the aid of electronic tools, and the results arranged in figures for best viewing and understanding. Being that the analyzes and comparative support the understanding of the behavior of costs incurred in the activity.

4 RESULTS AND DISCUSSION

In this section, will be presented and discussed the research data, such as cost, revenue, profitability and the results obtained in the creation of tambaqui in tanks dug in the municipality of Pimenta Bueno - RO. It'll be also presented the comparative result of activity with the results of other agricultural activities, also in comparison with results obtained with other species of fish.

4.1 Location of Research

The municipality of Pimenta Bueno was created by State Law no. 6,448 of October 11, 1977, it

6

received its name in honor of the distinguished man publico Francisco Antonio Pimenta Bueno. Pimenta Bueno was the second city originated from the passage of the Marechal Rondon in the region. In 1912, at the confluence of the Rivers Apidiá and Commemoration, today Rivers Pimenta Bueno and Baron of Santiago, was installed a Telegraph Station, under the command of then Colonel Candido Mariano da Silva Rondon. There are references in 1926, the village had a population of 24 people. Until the 1940s, the small village lived in function of telegraph and the economy revolved around the extraction of rubber and prospecting for diamonds. It is located in the southeast region of the State of Rondonia, occupying an area of 6,258.0 Km2. Is limited to the north by the municipalities of Cacoal and lug of the West; to the west by the municipalities of Cacoal, Rolim de Moura, Spring in Rondonia, are Felipe and Parecis; to the south, with the municipalities of Chupinguaia and Vilhena and, to the east, with the municipality of Vilhena. Geographical Coordinates; Longitude: 11 40' 21" e Latitude: 61 11' 35" with a height of 195 meters above sea level (IBGE, 2010).

According to data from the last Census, carried out in 2010, the municipality of Pimenta Bueno has a population of 33,754 (thirty-three thousand, seven hundred and fifty-four) inhabitants. Therefore is the 10th most populous city in Rondonia and the 97th most populous of the Northern Region of Brazil. Of these, 29,358 (twenty-nine thousand, three hundred and fifty-eight) living in the city, which represents 86.98% of the total population of the municipality and 4,396 (four thousand three hundred and ninety-six) living in the countryside, representing: 13.02% of the population and the population density of 5.39 inhabitants per km2.

The economy of the city is like a basis activities of Agriculture, Industry and Services, and the services sector has the highest participation in the generation of Gross Domestic Product - GDP of the municipality. Secondly, in the generation of wealth is the industry, which highlights the production of ceramics and clothing and, finally, in the generation of wealth, it is possible to have a livestock production (IBGE, 2010).

It was observed that in the properties surveyed in the activity of fish farming is created in addition to the tambaqui also painted, however, in this research the target study was only the tambaqui. In addition to this activity are developed other activities. The property "A" has an area of 1,936 (one thousand nine hundred and thirty-six) hectares, with 435 (four hundred and thirty-five acres of pasture used in creation of dairy cattle and cut, in fish farming the property account with 02 (two) hectares of water depth available for activity. The property "B" account with145 (one hundred and forty-five) hectares, being 108 (one hundred and eight acres of pasture used in creation of dairy cattle and cut 01 (a) hectare of water depth used in fish farming. The property "C" has a total area of 48 (forty-eight) hectares, being 36 (thirty-six) hectares of pastures to which this lease, and also has a minhocario, that is the creation of earthworms for commercial purposes and the area for fish farming is 01 (a) ha.

4.2 Costs in Production of Tambaqui

The costs involved in the process of creation/production of tambaqui in tanks dug in the municipality of Pimenta Bueno, according to the survey are formed by various inputs, such as labor, manual labor employed directly in production.

The property "A" activity is developed by an employee, which receives monthly remuneration of U\$ 378.15 (three hundreds and Seventy eigh dollars and fifiteen cents). For the results of the research were considered only the hours worked effectively in fish farming, being this property 2h daily. This item represented 15% of the cost . The Properties "B and C" labor is familiar, i.e., developed by the owner and his family. For these properties, was considered as remuneration the U\$ 378.15 on a monthly basis in order to obtain the cost of the labor, because this value was informed in research as being the value commonly paid by the exercise of this activity and were also considered the hours spent specifically with the activity, where submitted an expense of 2h for property "B" which represented 13% of the total cost and to property "C" 1h30 min. cost with labor was 19% in the property "C".

The equipment and utensils used in the activity are common tools, such as hoe, scythe and hoeing, mainly used in cleaning the surroundings of the tanks. It is also used a trawler to perform biometry of the fish, which is to examine the growth of fish and thus determine the quantity and size of the ration provided. The trawler is also used on to slaughter Another item of cost is the amount paid for fingerlings, whose acquisition is by lot of one thousand pieces (in portuguese milheiro).

The supply of fish is the item of greater representativeness on the production costs, represents on average 72% of the total cost, as shown in table 01. The food supplied to fish is the appropriate ration. Has categories that vary according to the size of the fish (thus was informed by producers in the search). At the stage of fingerlings in which the fish is around 10 to 20 (ten to twenty) grams is used to ration with 40% protein, with 2 to 3 (two to three) mm in size ration is changed. When the fish reaches around 50 grams goes

7

to 36% of protein and size of 3 to 4 (three to four) mm. The ration is changed again when the fish reaches 100 (one hundred) grams to juvenile stage, starting to receive ration with 32% protein and the size 6 to 8 (eight) mm. With 200 (two hundred) grams this fattening in initial and the ration given is composed of 28% protein and size from 8 to 10 (8 to 10) mm. The ration is only changed again when the fish reaches 500 (five hundred) grams. At the stage of fattening ration continues with 28% of protein changes only the size that passes for 13 to 15 (13 to 15 mm, and this is maintained until the slaughter.

Liming and fertilization, this item has small representation in the cost of production, since the properties searched is done twice a year and represents 1% of the total cost. The liming is the act of playing limestone in the tank, which is used to adjust the pH (hydrogenionic potential) of water. In this region, typically, the ph of the untreated water is below recommended levels for fish which slows down the development of the fish . Ideal for fish farming is between Ph7 and 8 (seven and eight), and properly regulated, the Ph enters the chemical fertilizer known as super phosphate that simple objective green water process for which the same make photosynthesis and produce oxygen essential for the survival of fish (SANTANA et al., 2011). The cleaning of the tanks is usually done twice a year, this cleaning consists in the removal of algae and herbs that grow within and outside of the tanks.

With regard to the cost of depreciation, it has been the depreciation of the tank as a result of its loss in production capacity caused over the periods, depreciation of equipment and utensils used in the activity of fish farming. But the process of depreciation of the tanks is extremely slow due to its characteristics, since it is a "hole in the ground" which has life of 50 (fifty) years (IZEL; MELO, 2004), already the depreciation of equipment happens very quickly, because their life expectancy is only 05 (five) years (IZEL; MELO, 2004).

The rural activity needs effective controls, since the decision will directly affect the profitability, however, with the research it can be observed that in the properties surveyed administrators leaving rural accounting records losing data of great importance for understanding the results, and these data leave to assist in training the selling price or the decision to design new investments. With regard to cost control in the properties surveyed it was observed that there is no control of this nature, which reinforces the importance of this research.

Before all the items previously described, more production data in the period, it is the result, where the total costs for each kilo of fish on the property "A" was US 1.50 (R\$ 3.58), the property "B" this cost was 1,51 (R\$ 3.60) and "C" the cost per kilo was R\$ U\$ 1.66 (R\$ 3.97) as can be seen in table 01.

Cos	t of production of	roduction of absorption costing methodology				
Categories	Property A. 9,000 kg Fish/year	%	Property B. 10,800kg Fish/year	%	Property C. 4,375kg Fish/year	%
	(US \$)		(US \$)		(US \$)	
Depreciation pools 2% by	94.54	1	113.45	1	84.03	1
year	54.54	1	113.45	1	84.03	1
Labor	1,966.05	14	2,050.08	13	1,411.51	20
Depreciation of Equipments 20% by year	107.73	1	107.48	1	108.15	1
Aquisição de Alevinos	315.13	2	378.15	2	157.56	2
Alimentação Ração	9,964.08	74	12,236.12	74	4,883.61	67
Calagem e Adubação	989.58	7	1,373.92	8	545.21	8
Limpeza dos Tanques	84.03	1	84.03	1	100.84	1
Total	13,521.13	100	16,343.24	100	7,290.92	100

Table 01 Cost of production of Tambaqui

Source: Data from the survey (2014)

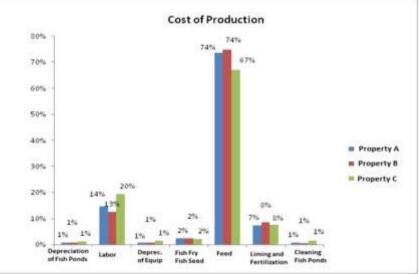
On the basis of the survey data, it can be observed that the power of the fish have greater representation in the total costs. The property "A", the cost to power represents by 74% of the costs of the activity. The property "B", this item represents 74 % of the costs. The property "C" revealed a cost of 67 % with power. The second item with greater representation in total costs was labor, where the property "A", this item represents 14 % of total costs. The property "B", the cost of labor is 13 %, while that on the property "C", the cost of labor is 20 % of the total costs.

The rest of the items represent a impact as well in lower costs as can be seen. The depreciation of the tanks represents 1 % of the production costs in the three properties surveyed, as well as the depreciation of equipment represents small portion of costs 1 % in all properties surveyed, and also cleaning the tanks

8

represents only 1 % of the costs of the activity on the properties surveyed, already the liming and present themselves as being the third highest cost of activity. The property "A" this item represents 7 % of the cost. The property "B", this item represents 8 % of the cost of the activity. The property "C", the cost was 8 % as shown in figure 01.





Font: The authors, Pimenta Bueno – State of Rondonia - Brazil (2014).

When comparing the cost of production of the tambaqui with other activities of agricultural production, we see that the item labor is representative in relation to the total cost of production, because, according to the research it is clear that the cost of labor is oscillating between 13% and 20%, approaching other activities, as shown by Light; Shinzato and Silva (2007) which highlighted the fact that the cost of labor in the production of tomatoes represents 23.3%, being the item more burden on the total cost of production, as highlights Santos (2010).

When comparing the costs of production of tambaqui with other species of fish we have, according to Sabbag et al. ,(2011), in a study carried out on the production of lambari-of-tail yellow in the state of Sao Paulo, the cost with labor represented 25.8%, having been shown to be superior to that obtained in this study in the municipality of Pimenta Bueno Rondonia. Thus, it can be said that in spite of the fact that production of tambaqui require little time of application of labor their representativeness in total cost is relevant. The cost to power the lambari-of-tail yellow represented 63%, a result very close to that obtained in the data of this research on the tambaqui in captivity. In the production of tilapia, the cost to power represented 83% of the costs (SABBAG *et al.*, 2007).

According to Izel and Melo (2004) researchers from EMPBRAPA, the productive cycle of tambaqui is 08 (eight) months and feed conversion is 1.2 kg of ration to produce 01 kg of fish. However, the data from the survey you can observe different results from those obtained by researchers from EMBRAPA, because the productive cycle in properties surveyed is 12 (twelve) months and feed conversion was 1.87 kg of ration to produce 01 (a) kg of fish.

4.3 Confrontation Between Revenues and Costs of Production

The revenues from the fish in the properties surveyed is presented as follows: The property "TO" the tambaqui is sold to the value of R\$ 5.00 (five reais) per kilo. The property "B" property and "C" the value reported for revenue also was of R\$ 5.00 (five reais) per kilo.

When comparing the values of revenue with the cost of production is as follows: the property "A", the cost of 3.58 (three dollars and fifty-eight cents) to be deducted from the cost of revenue, will have a gross profit of 1.42 (one real and forty- two cents). This value represents a profitability of 28.4%, while the

property "B", the cost was 3.60 (three dollars and 60 cents). The gross profit was 1.40 (one real and forty

9

cents) profitability is 28 %. AND in the property "C", the cost was 3.97 (three dollars and ninety-seven cents) to deduzirmos this cost of revenue is 1.03 (one real and three cents) a profitability of 20.6 %. A result less than in other properties surveyed. Because according to Sabbrag *et al.*, (2007), the profitability index (IL) indicates the proportion of gross income that is in profit after the coverage of costs.

When comparing the results of profitability obtained in this study with the results obtained by other activities of fish farming, as the tilapia in the state of Sao Paulo, for example, the profitability index was 22.57 % (SABBAG *et al.*, 2007). In this case, it can be observed that the indexes are close together, or is, therefore, it is evident that the creation of Tambaqui in the municipality of Pimenta Bueno presents itself as attractive as the other species of fish, including in other localities.

5 FINAL CONSIDERATIONS

With the information obtained from the fish and the proposed objectives were achieved, because it was possible to reach the expected result. Costs were obtained from the data of activity of each property, being found through the survey of depreciation in accordance with the life of the tanks and equipment used in the production process. Were also raised the cost of labor, power, liming and fertilizing, cleaning (maintenance) of the tanks and the cost with the fingerlings.

Even if the result, where the total costs for each kilo of fish on the property "A" was R\$ 3.58 (three reais and fifty-eight cents), the property "B" this cost was R\$ 3.60 (three reais and sixty cents and property) and the "C" the cost per kilo was R\$ 3.97 (three and real and ninety-seven cents), as can be seen in table 01.

The activity of fish farming in the state of Rondonia has been growing over the periods due to the vocation of the state for its development. Not only the natural vocation can be presented as the reason for its growth, because the profitability, option of employment, the source of healthy food, the demand for fish among other factors leveraged the activity.

The state of Rondonia became in 2013 the largest producer depescado freshwater in captivity of the country, with a production of approximately 65,000 tonnes, of which roughly 90% of production is of tambaqui. The activity grew by 300% in only 03 (three) years, and it is possible due to government incentives, such as: allowance in the construction of tanks, policies focused on the production of fish in captivity as a source of income for the man of the field, and with the inclusion of fish in school meals (SNA/RJ, 2014).

In this context, it is evident that the activity of fish presents itself as an excellent option for income for the families that live in rural areas of the state of Rondonia, because actions of the state government are contributing to the growth of the activity. Example of this is the inclusion of fish in school menu, which guarantees the producer a minimum guaranteed market for your product, thus contributing to the maintenance man in the field.

REFERENCES

1.ALVES, José Luiz. Produtores de tambaqui e pirarucu estão isentos de ICMS. Departamento de Comunicação do Estado de Rondônia –DECOM 2013. Disponível em: http://www.decom.ro.gov.br. Acesso em: 13 nov. 2013.

2.ANDREONI, Manuela; TORRES, Bolívar. Produção de peixes em cativeiro ultrapassa a de carne bovina. Disponível em: http://oglobo.globo.com. Acesso em: 26 nov. 2013.

3.CALLADO, Antônio André Cunha; CALLADO, Aldo Leonardo Cunha. Custos: um desafio para a gestão no agronegócio. Congresso Brasileiro de Custos – 1999. Disponível em:

<www.biblioteca.sebrae.com.br>. Acesso em: 12 fev. 2014.

4.DELL'ORTO, Maria Silvinez Marques; RODRIGUES, Maria Silvania Marques. Cartilha Licença ambiental de projetos de piscicultura em águas de domínio da União no Estado da Bahia. --2. ed. - - Salvador: SEBRAE Bahia, 2012. Disponível em: <www.biblioteca.sebrae.com.br>. Acesso em: 30 dez. 2013.

5.DOTTI, A.; VALEJO, P. A. P.; RUSSO, M. R.. Licenciamento ambiental na piscicultura com enfoque na pequena propriedade: uma ferramenta de gestão ambiental. Revista Ibero-Americana de Ciências Ambientais, Aquidabã, v.3, n.1, p.6-16, 2012. Disponível em: http://www.arvore.org.br. Acesso em: 27 dez. 2013.

6.GARUTTI, Valdener. Piscicultura ecológica / ValdenerGarutti. São Paulo:Editora UNESP, 2003. Disponível em: <www.editoraunesp.com.br/>br/>>. Acesso em: 08 jan. 2014.

7.IBGE, Senso 2010. Disponível em: <www.ibge.gov.br>. Acesso em: 23 jun. 2014.

8.IZEL, Antônio Cláudio Uchôa; MELO Luiz Antelmo Silva. Criação de tambaqui

(Colossomamacropomum) em tanques escavados no Estado do Amazonas. Manaus: Embrapa Amazônia



COST OF PRODUCTION OF TAMBAQUI FISH (COLOSSOMA MACROPOMUM s.p) IN CAPTIVITY
Deidental, 2004. Disponível em: <www.infoteca.cnptia.embrapa.br>. Acesso em: 10 jan 2014. D.LUZ, José Magno Queiroz;SHINZATO, André Vinícius; SILVA,Monalisa Alves Diniz da. COMPARAÇÃO DOS SISTEMAS DE PRODUÇÃO DE TOMATE CONVENCIONAL E ORGÂNICO EM CULTIVO PROTEGIDO. Biosci. J., Uberlândia, v. 23, Abril./Junho, 2007. Disponível em:</www.infoteca.cnptia.embrapa.br>
<www.seer.ufu.br>. Acesso em: 11 jun. 2014. 10.MARTINS, Eliseu. Contabilidade de custos / Martins, Eliseu. 9. ed.São Paulo : Atlas, 2003 11.MINISTERIO DA PESCA E AQUICULTURA. Consumo de pescado no Brasil aumenta 23,7% em dois</www.seer.ufu.br>
nos. Brasília, 2011. Disponível em: <http: www.mpa.gov.br="">. Acesso em: 18 nov. 2013. 2.MINISTÉRIO DO DESENVOLVIMENTO, INDÚSTRIA E COMERCIO EXTERIOR . P r o j e t c</http:>
otencialidades regionais estudo de viabilidade econômica. Brasília, 2003. Disponível m: <http: www.suframa.gov.br="">. Acesso em: 04 dez. 2013. 3.MINISTÉRIO DO DESENVOLVIMENTO, INDÚSTRIA E COMERCIO EXTERIOR. Plano de</http:>
esenvolvimento preliminar, arranjo produtivo local da piscicultura de Pimenta Bueno – RO. Brasília, 007. Coordenadora: Maria Dolores dos Santos Costa. Disponível em: http://www.mdic.gov.br . Acesso n: 03 dez. 2013.
4.MINISTERIO DA PESCA E AQUICULTURA.Brasil se aproxima da metada OMS de consumo de eixe por ano. Brasília 2013. Disponível em:< www.mpa.gov.br>. Acesso em: 18 nov. 2013.
5.MOTA, Antonio Gustavo da.Noções de contabilidade de custos. Cacoal, Rondônia 2002. Disponível m: <www.faculdadeunica.edu.br>. Acesso em: 03 fev. 2014. 6.MENEZES, Jenner T. Bezerra de. Projeto Peixamento: uma experiência de piscicultura familiar em um</www.faculdadeunica.edu.br>
ssentamento rural em Rondônia. Macapá, 2010 Disponível em: <http: www.cpafap.embrapa.br="">. Acesso m: 30 jan. 2014. 7.MINISTERIO DA PESCA E AQUICULTURA. Boas práticas de manejo na aqüicultura. Brasília, 2010.</http:>
Disponível em: <http: www.mpa.gov.br="">. Acesso em: 13 jan. 2014. 8.MINISTERIO DA PESCA E AQUICULTURA. Plano Safra da Pesca e Aqüicultura. Brasília 2012.</http:>
Disponível em: <http: www.mpa.gov.br="">. Acesso em: 26 nov. 2013. 9.OLIVEIRA, Elyrouse Cavalcante de; SILVA, Carina Maria Burgos da.;CAMPELO, Karina Simões; ILVA, Alexandre César Batista da. Utilização da Gestão de Custos para Tomada de Decisão: Um Estudo</http:>
m Hotéis de Porto de Galinhas no Município de Ipojuca-PE, 2008. Disponível em: <congressocfc.org.br>. .cesso em: 16 jun. 2014 0.RATKO, Alice Terezinha. Contribuições da contabilidade rural paraPropriedade Agrícola de pequenc</congressocfc.org.br>
orte. Trabalho de conclusão de curso. Pato Branco, Paraná 2008 Disponível em: <revistas.utfpr.edu.br>. Acesso em: 31 jan. 2014. 1.RESSUTTI, Wania. Água produtiva incentiva produtores para atividade licenciada. Associação de</revistas.utfpr.edu.br>
ssistência técnica e extensão rural de Rondônia – EMATER, 2012. Disponível em: http://www.emater-o.com.br . Acesso em: 04 dez. 2013.
 2.RONDONIA - LEI N°1861, DE 10 DE JANEIRO DE 2008. Disponível em: http://www.sedam.ro.gov.br>. Acesso em: 13 jan. 2014. 3.SOCIEDADE NACIONAL DE AQÜICULTURA. Piscicultura é tratada como novo agronegócio de
Rondônia ao crescer 300% em 3 anos. Rio de janeiro 2014. Disponível em: <sna.agr.br>. Acesso em: 21 jun. 014 4.SABBAG, Omar Jorge; ROZALES, Rafael dos Reis; TARSITANO, Maria Aparecida Anselmo;</sna.agr.br>
SILVEIRA, Alexandre Ninhaus. Análise econômica da produção de tilápias (Oreochromisniloticus) em um modelo de propriedade associativista em Ilha Solteira/SP. São Paulo, 2007. Disponível em: <www.custoseagronegocioonline.com.br>. Acesso em: 11 jun. 2014.</www.custoseagronegocioonline.com.br>
25.SABBAG, Omar Jorge; TAKAHASHI, Leonardo Susumu; SILVEIRA, Alexandre Ninhaus; ARANHA, Aline Sampaio. Custos e Viabilidade Econômica da Produção de Lambari-do-Raboamarelo em
/Ionte Castelo/SP: Um Estudo de Caso. Bol. Inst. Pesca São Paulo, 2011. Disponível em: <ftp.sp.gov.br>. Acesso em: 11 jun. 2014. .6.SANTANA, Alex Fabiano Bertollo;AFONSO,Paulo Sérgio Lima Pereira; FAGUNDES, Jair Antonio;</ftp.sp.gov.br>
AMOS, Diego Rafael Perazzoli; VIEIRA, Josimar Evair. Custeio Pelo Método de Absorção na Produção e Uma Atividade de Piscicultura da Espécie Tambaquí – Estudo De Caso. Urupá, Rondônia. 2011. Disponível em: <www.otoc.pt>. Acesso em: 03 jun. 2014.</www.otoc.pt>
7.SANTOS, Glauber dos. Idicadores Economicos em Fazendas leiteiras com alta produção diária em Inas Gerais. Lavras, MG. UFLA, 2010. Disponivel em: <livrosgratis.com.br>. Acesso em: 14 jun. 2014.</livrosgratis.com.br>

Minas Gerais. Lavras, MG. UFLA, 2010. Disponivel em: livrosgratis.com.br>. Acesso em: 14 jun. 2014. 28.SEBRAE. BOLETIM DO SERVIÇO BRASILEIRO DE APOIO ÀS MICRO E PEQUENAS EMPRESAS: Aqüicultura: um negócio rentável.Oportunidades&Negócios. Junho 2012. Disponível em: <www.biblioteca.sebrae.com.br>. Acesso em: 15 nov. 2013.

29.SIDONIO,Luiza; Cavalcanti, Isabel; Capanema, Luciana; Morch, Rafael; Lima, Jaldir; Magalhães,

11

Gabriela; Burns, Victor; Alves Júnior, Antonio José; Mungioli, Rafael. Panorama da aqüicultura no Brasil: desafios e oportunidades. BNDS setorial 35, p. 422. Disponível em: http://www.mpa.gov.br>.Acesso em: 15 nov. 2013.

30.SILVA, José William Bezerra e, Outros Sistemas de Cultivo em Piscicultura. Piscicultura intensiva e semi-intensiva. Organização das Nações Unidas Para a Agricultura e Alimentação: Departamento Nacional de Obras Contra as Secas. Brasília, 1988.Disponível em:http://www.fao.org. Acesso em: 09 jan. 2014.



Cleberson Eller Loose, M.B.A

Master of Administration - FEAD - Minas Gerais (Brazil). Graduated in Accounting Science. Actually works at Department of Accounting Science as Researcher Professor of Financial Costs, Federal University of Rondonia - UNIR Cacoal (Brazil).

Doctor Student in Administration by Universidad Nacional de Missiones, (Argentina).



Clodoaldo Oliveira de Freitas, M.B.A

Master of Administration – FEAD – Minas Gerais (Brazil). Graduated in Mathematics and Accounting Science. Actually works as professor of Maths and Accounting join to Department of Fishing Engineering, Federal University of Rondonia – UNIR Médice (Brazil).

Doctor Student in Administration by Universidad Nacional de Missiones (Argentina).



Anderson Soares Martins, B.CPA.

Bachelor degree in Accounting Science by Federal University of Rondonia – UNIR Cacoal (Brazil). He's currently working with agribusiness companies in Pimenta Bueno City – RO (Brazil)

Review Of Research | Volume 3 | Issue 12 | Sept 2014

12

Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper,Summary of Research Project,Theses,Books and Books Review for publication,you will be pleased to know that our journals are

Associated and Indexed, India

- Directory Of Research Journal Indexing
- * International Scientific Journal Consortium Scientific
- ★ OPEN J-GATE

Associated and Indexed, USA

- DOAJ
- EBSCO
- Crossref DOI
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database

Review Of Research Journal 258/34 Raviwar Peth Solapur-413005,Maharashtra Contact-9595359435 E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com Website : www.ror.isrj.net