Vol II Issue VI Dec 2012

Impact Factor : 0.1870

ISSN No :2231-5063

Monthly Multidisciplinary Research Journal

Golden Research Thoughts

Chief Editor
Dr.Tukaram Narayan Shinde

Publisher
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor
Dr.Rajani Dalvi

Honorary
Mr.Ashok Yakkaldevi

IMPACT FACTOR : 0.2105

Welcome to ISRJ

RNI MAHMUL/2011/38595 **ISSN No.2230-7850**

Indian Streams 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.

International Advisory Board

Flávio de São Pedro Filho
Federal University of Rondonia, Brazil

Kamani Perera
Regional Centre For Strategic Studies, Sri Lanka

Janaki Sinnasamy
Librarian, University of Malaya [Malaysia]

Romona Mihaila
Spiru Haret University, Romania

Delia Serbescu
Spiru Haret University, Bucharest, Romania

Anurag Misra
DBS College, Kanpur

Titus Pop

Mohammad Hailat
Dept. of Mathmatical Sciences, University of South Carolina Aiken, Aiken SC 29801

Abdullah Sabbagh
Engineering Studies, Sydney

Catalina Neculai
University of Coventry, UK

Ecaterina Patrascu
Spiru Haret University, Bucharest

Loredana Bosca
Spiru Haret University, Romania

Fabricio Moraes de Almeida
Federal University of Rondonia, Brazil

George - Calin SERITAN
Postdoctoral Researcher

Hasan Baktir
English Language and Literature Department, Kayseri

Ghayoor Abbas Chotana
Department of Chemistry, Lahore University of Management Sciences [PK]

Anna Maria Constantinovici
AL. I. Cuza University, Romania

Horia Patrascu
Spiru Haret University, Bucharest, Romania

Ilie Pintea,
Spiru Haret University, Romania

Xiaohua Yang
PhD, USA

Nawab Ali Khan
College of Business Administration

Editorial Board

Pratap Vyamktrao Naikwade
ASP College Devrukh,Ratnagiri,MS India

R. R. Patil
Head Geology Department Solapur University, Solapur

Rama Bhosale
Prin. and Jt. Director Higher Education, Panvel

Salve R. N.
Department of Sociology, Shivaji University, Kolhapur

Govind P. Shinde
Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai

Chakane Sanjay Dnyaneshwar
Arts, Science & Commerce College, Indapur, Pune

Awadhesh Kumar Shirotriya
Secretary, Play India Play (Trust),Meerut

Iresh Swami
Ex - VC. Solapur University, Solapur

N.S. Dhaygude
Ex. Prin. Dayanand College, Solapur

Narendra Kadu
Jt. Director Higher Education, Pune

K. M. Bhandarkar
Praful Patel College of Education, Gondia

Sonal Singh
Vikram University, Ujjain

G. P. Patankar
S. D. M. Degree College, Honavar, Karnataka

Maj. S. Bakhtiar Choudhary
Director,Hyderabad AP India.

S.Parvathi Devi
Ph.D.-University of Allahabad

Sonal Singh

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

R. R. Yalikar
Director Managment Institute, Solapur

Umesh Rajderkar
Head Humanities & Social Science YCMOU, Nashik

S. R. Pandya
Head Education Dept. Mumbai University, Mumbai

Alka Darshan Shrivastava
Shaskiya Snatkottar Mahavidyalaya, Dhar

Rahul Shriram Sudke
Devi Ahilya Vishwavidyalaya, Indore

S.KANNAN
Ph.D , Annamalai University,TN

Satish Kumar Kalhotra

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.isrj.net

Golden Research Thoughts
Volume 2, Issue. 6, Dec. 2012
ISSN:-2231-5063

Available online at www.aygrt.net

ORIGINAL ARTICLE

GLOBALIZATION OF INDIAN COMMODITY DERIVATIVE EXCHANGE IPSTA AND BCE: AN ANALYTICAL STUDY OF ITS PERFORMANCE

DEVAJIT MAHANTA

Vice President
Benzcom Consulting Pvt. Ltd.

Abstract:

IPSTA and BCE as an exchange has all the potential to be a major international marketplace for pepper and castor oil as it is the only exchange in the world engaged in trading of derivative, exclusively in pepper and castor oil. However both the international exchanges in the Indian commodity derivative market were not been able to globalize properly as they were unable to attract adequate number of overseas traders or even the existing domestic players. The comparison of market parameters like trading systems, processes and procedures of IPSTA and BCE with the US system are no inferior. When markets are deep, business rules and processes are fair and transparent along with an appropriate regulation the demarcation between a domestic and an international exchange will cease to exist.

KEYWORDS:

BCE, Castor oil, Globalize, IPSTA, Pepper

I.INTRODUCTION

After the Indian economy embarked upon the process of liberalization and globalization in 1990, the Ministry of Civil Supplies, Consumer Affairs and Public Distribution, Government of India set up the Kabra Committee (Ministry of Consumer Affairs, Food & Public Distribution, 1993) to review the operations of forward markets and to assess the role of the Forward Markets Commission to effectively regulate the functioning of futures trading. The Committee strongly recommended that the Forward Contracts (Regulation) Act, 1952, be amendments to enable the up gradation of two existing exchanges, namely, India Pepper and Spices Trade Association (IPSTA) Kochi and the Bombay Commodity Exchange (BCE) Limited, Mumbai. The recommendation was made under the expectation that these exchanges would emerge as major international derivative markets in highly export oriented commodities like pepper and castor oil.

II.CONTEXTUAL BACKGROUND AND REVIEW OF LITERATURE

On the recommendations of the Kabra committee, in February 1996, Government set up a Steering Committee (Ministry of Civil Supplies, Consumer Affairs and Public Distribution, 1996) under the Chairmanship of Secretary (Civil Supplies) to expedite and operationalise International Pepper Futures Exchange at IPSTA, Kochi.

For operationalise the International Pepper Futures Contract, it was necessary to issue Notifications under Sections 15 and 17 of the Act. Two Notifications have been issued on 31 October 1996.

Title:GLOBALIZATION OF INDIAN COMMODITY DERIVATIVE EXCHANGE IPSTA AND BCE: AN ANALYTICAL STUDY OF ITS PERFORMANCESource:Golden Research Thoughts [2231-5063] DEVAJIT MAHANTA yr:2012 vol:2 iss:6
.

Notifications under Section 15 of the Act regulates future contract in Black-Pepper in the State of Kerala and Notification under Section 17 of the Act prohibits it in the rest of India except for Kerala. The future contracts covered by these two Notifications include forward contracts where one or both the parties to the contract may be foreign participants. The Ministry of Commerce issued a Notification placing import and export of Black Pepper under open General License.

The notification recognizing IPSTA, International Commodity Exchange for conducting international futures contract in pepper was issued by the Central Government on November, 1996. Trading in the International Futures Contract in Pepper began in November 1997 at IPSTA (ICE), Kochi, Kerala. IPSTA (ICE) board consists of 15 directors constituted five committees to look into different aspects of the exchange management. These committees are

1Ring Committee
2Clearing House Committee
3Daily Rates Committee
4 Arbitration Committee
5 Vigilance/Enquiry Committee

The BCE launched international contracts in castor oil in May 1999. First special grade castor-oil has been chosen as the basic/underlying variety for the international futures with an option to deliver commercial grade at a discount. The number of delivery contracts would be six in a year and the unit of trading has been denominated at 5 metric tonnes. The unit of price quotation was fixed at 10 kilogram. The exchange finalized Prime Commodity Clearing Corporation of India (PCCCI) to guarantee the performance of futures contract in terms of both settlement and payment of clearing dues as well as eliminate the counter-party risk of default. As per the Indian Express financial bureau (1998) the total potential for castor-oil futures in the international exchange is of the order of Rs. 22,560 crore of which Rs. 15000 crore will account for the Indian production. The Indian crop of castor seeds is about 8 lakh tonnes which produces around 3 lakh tonnes of castor oil. This is 2/3rd of the total world supply of castor oil of 4.7 lakh tonnes. While commenting on the new crop prospect Bureau stated that the country will be able to easily achieve the official target of 270 lakh tonnes of oilseeds production fixed for the oil year 1998-99 (November to October). Bureau also expressed concern at the growing demand of edible oils in the country and said that even with such a large projected output, there will still remain a considerable gap between demand and supply which will have to be met through imported oils.

The available statistics with Forward Markets Commission show that (table-1) trade in international commodity derivative contracts has evoked only limited response among the existing as well as the prospective overseas traders.

Table-1: The profile of international exchanges

Member	Active Member				Commodities Traded	Volume in Lakh Tonnes (Value in Rs. Crore)					
	1999	2000	2001	2002		1997	1998	1999	2000	2001	2002
IPSTA	-	3	7	8	Pepper Domestic	NT	0.007	0.04	0.02	NT	NT
	55	42	31	31	Pepper International	1.56	1.73	1.24	1.29	0.81	1.28
BCE	3	2	2	NT	Castor Oil	NT	NT	0.04	0.01	0.008	NT

Source: Annual reports of IPSTA & BCE, 2003
IPSTA: India Pepper and Spice Trade Association, BCE: Bombay Commodity Exchange Ltd., NT: No Trade.

The international segment in IPSTA has 8 members while BCE operates for 2 registered members in its international segment. The volume of trade in this segment remains abysmally low. The total value of international pepper derivative contracts during 2000 amounts to only Rs.0.02 crore as against Rs.1.29 crore in the domestic segment. The corresponding figures are Rs.0.40 crore as against Rs.1.24 crore during

1999 and Rs.0.007 crore as against Rs.1.73 during 1998. No trade has been reported for the year ended in March 2001 and March 2002. Similarly, the value of international castor oil derivative contracts during the year 2001 amounts to only Rs. 0.008 crore as compared to Rs.0.01 crore during 2000 and Rs.0.04 crore during 1999-00.

Most of the members who engage in trade in domestic segment of IPSTA are primarily exporters of spices and hence are shying away from international segment in spite of initiatives of the exchange to deliver the best quality product. It has specified the best quality black pepper (Both MLS, ASTA and VB ASTA varieties) as the basis quality for delivery at five major export locations viz., Bangkok (Thailand), Belem (Brazil), Kochi (India), Kuching (Malaysia), Panjang (Indonesia) and Singapore. Originally, all contracts were denominated in Indian rupee which failed to attract any overseas trading interests as overseas trading agent were averse to holding contracts in a weak currency as compared to US dollar. On September 2000, the Reserve Bank of India has cleared a dollar-denominated trading at the IPSTA, the promoter of International Commodity Exchange (ICE) for futures trading in pepper. It was thought that such a step would create a conducive atmosphere for overseas players, including the other producing countries like Indonesia, Malaysia and Sri Lanka to participate in IPSTA-ICE. Besides, following that, the expectation was that pepper exchange's operations will become free from the violent fluctuations in the rupee rates, and hence attract international players (Haridas 2000).

IPSTA as an exchange has all the potential to be a major international marketplace for pepper derivatives. The United Nations Conference on Trade and Development in 1995, on the feasibility of worldwide pepper derivative contract has identified IPSTA as ideal exchange for conducting international derivative trading in pepper (UNCTAD, 1995). It is the only exchange in the world engaged in trading of derivative, exclusively in pepper. Moreover, Kerala being the largest producer of pepper in around in India (around 95 percent) and Cochin being the port city where majority of pepper exporters are operating, IPSTA can have a legitimate aspiration of emerging as a major international market.

However on the flip side, the UNCTAD, (1995) report warns of establishing an international pepper derivative exchange next to the existing domestic pepper market as existing market users will rather prefer to remain in the more liquid domestic market then shift to the international derivative market. The existing traders show no interest to shift to international segment which requires them to open US dollar current account with one of the designated clearing banks.

One primary reason for the limited success of IPSTA`s international segment is that the exchange cannot operate simultaneously in the domestic as well as in the international derivative market. This is because it is too costly for a domestic trader to switch over international segment for dollar denominated trade.

Besides they are averse to shifting to a far more complex trading environment where they are exposed to exchange rate fluctuations is quite obvious. The shifting from the open-outcry mode to on-line trading in 2003, had failed to correct the situation. Although the United States, European Union and Singapore share close to 65 percent of total world imports of pepper, IPSTA has not installed warehouse for delivery in any of the importing countries except Singapore. This is despite the fact that it has designated delivery locations in major export centers including Bangkok, Belem, Kochi, Kuching, Panjang and Singapore.

I.Weakness of IPSTA and BCE

As per the World Bank report (World Bank, 1996) the scope of IPSTA and BCE is limited because most of the exchanges are associations of members who retain trading rights and ownership which are integrated in the membership right. This mutual setup with inter wind interests of the promoters poses serious threat to the integrality of exchanges. Ideally, the management structure must ensure separation of ownership rights from trading rights for the members of the exchange. Many leading exchanges in the world including Chicago Mercantile Exchange (CME); London Metal Exchange (LME); International Petroleum Exchange (IPE), London; New York Mercantile Exchange (NYMEX) are demutualised organizations wherein trading rights are segregated from ownership rights. The membership in clearing house requires capital contribution in the form of equity, security deposit, admission fee, registration fee, guarantee fund contribution in addition to net worth requirement depending on its organization structure.

To guaranteeing the performance of transactions, IPSTA and BCE should set-up Trade Guarantee Fund which should be solely out of the contribution by IPSTA and BCE promoters. All the members who are involved in trading (not the associations trading member) have to pay a onetime contribution to the Trade Guarantee Fund. Ordinary members who are admitted to the membership of IPSTA and BCE international division have to pay contribution at such rates determined by the Committee of IPSTA and

BCE. The contributions made by present and future members of IPSTA and BCE to the Trade Guarantee Fund shall not be refundable.

IPSTA is a registered company under section 25 of the Companies Act, 1956 and is prohibited from declaring any dividend or extending any direct or indirect benefit to the members. Also IPSTA is a charitable organization duly registered under section 12 A of the Income Tax Act, 1961. To make IPSTA as a normal company entitled to earn, retain and distribute profit whose shares can be freely transferable in a stock exchange, IPSTA has to first change its Memorandum and Articles of Association and then apply for the cancellation of the license issued by the Government of India, under section 25 of the Company's Act, 1956 besides changing its name appropriately to add the word "Limited".

Another challenge facing both the exchanges was the unofficial market where unauthorized futures trading were being conducted. Players in the black market are not only subject to an absence of regulatory discipline, margin, daily clearing, capital investment, but also to lack of documentation and non tax compliance. In this regard Shadevan, (2005) pointed that IPSTA-ICE and BCE should determine to wean players away from the unauthorized deals and bring them into the mainstream of organized futures trading. Both the exchange will have to show the potential players sufficient business opportunity in the organized sector on reasonably attractive terms. The exchange will have to become a low-cost service provider while maintaining utmost reliability.

As far as clearing corporation is concerned BCE chose to have a separate independent clearing corporation while IPSTA relies on the services of an outside agency for handling clearing and guarantying of all derivative transactions in the respective exchanges. Prime Commodities Clearing Corporation of India (PCCCI) Limited is the designated authorized clearing house for BCE and the First Commodities Clearing Corporation of India (FCCCI) Limited operates as the authorized clearing house of IPSTA. All contracts traded in these exchanges are fully guaranteed by the respective clearing corporations with no default risk left to the traders. For example, in the BCE the minimum capital requirement for membership in its clearing house as applicable to trading-cum-clearing members is Rs. 50000 each towards equity and security deposit, Rs.500 as annual subscription and additionally members are required to have net worth of Rs.3 lakhs. The IPSTA requires a trading cum clearing member to have minimum of Rs. 1 lakh and institutional clearing member to have minimum of Rs. 10 lakh towards equity contribution in FCCCI.

These two exchanges have certain common deficiencies in terms of infrastructure for delivery. Although IPSTA has approved delivery centers, ensuring physical delivery, if any of the prescribed basis quality pepper would be difficult unless necessary institutional support for testing and surveying is created. It is not clear how the exchange deals with cases of discounts / premiums arising out of variations if any at the time of contracts mature for delivery. The exchange has only indicated that the quality would be certified by internationally renowned independent testing agency. BCE ensures that the seller who tenders delivery submits surveyors certificate regarding quantity and quality of delivery from the exchange approved surveyors.

However, this institutional inadequacy has no implications as long as physical delivery is not mandatory and financial settlement of all open positions at the end of the contract is allowed. Internationally, it is mandatory that all contracts which remain open until maturity end in physical delivery. Financial settlement is allowed only in cases where positions are closed out before maturity.

II.INTERNATIONAL PRACTICES

The commodity derivative industry in the US currently hosts 13 major commodity derivative futures exchange which are regulated by Commodity Futures Trading commission (CFTC). The volume of commodity futures crossed 850 million contracts in the US as against 2300 million in the non-US exchanges by the end of 2010. By 2010, four leading futures exchanges CME, CBOT, NYMEX and NYBOT together shared almost 40 percent of the world volume of commodity derivative futures trade. Their share came down to 27 percent by after the growth of Korean Stock Exchange (KSE) which alone accounted for more than a quarter of the world's total derivatives contracts. The commodity derivative segments in most of the leading exchanges in the US are the world's leading commodity exchanges. The CBOT leads in agricultural commodity futures trade with 49.021 and 48.48 million respectively in 2009 and 2010. The corresponding figures of others exchanges are 12.309 and 13.613 million contracts in NYBOT; 7.428 and 6.979 million contracts in CME; 2.357 and 2.428 million contracts in Kansas City Board of Trade (KCBT) and 0.969 and 0.958 million contracts in Minneapolis Grain Exchange (Boado S. 2001).

The continued strength and vitality of the commodity derivative industry in the US relies on the confidence of the investing public in the integrity of the marketplace. The National Futures Association

(NFA) registered with CFTC as an industry-wide self regulatory organization (SRO) established in 1982 has played a vital role in developing marketplaces which follow high level of business ethics and financial integrity during the past ten years, customer's complaints in the US have decreased 60 percent, while the volume of futures trading has almost doubled (Sahadevan, 2003). In the table-2 compares the trading systems and practices that are being followed in the international exchanges in the US in general and in IPSTA and BCE in India.

Table-2: International Exchanges: A comparison between IPSTA, BCE and the US

Markets Parameters	The US System	IPSTA	BCE
Ownership of Exchanges	Mostly demutualised and for profits entities. Ownership and trading rights are segregated.	Mutual: trading rights and ownership are integrated in the membership right.	Mutual: trading rights and ownership are integrated in the membership right.
Cash Settlement	Daily marking to market, all gains and losses are credited for charged to customers account day following the close of trading.	Daily marking to market, hitech clearing banks facilitate swift transfer of funds.	Margin depends on value of net open positions. No margin for net exposure upto Rs. 10 Lakhs. Charges delivery period margin and special margins.
Clearing House	Matching and clearing of trade take place daily.	Matching and clearing of trade take place daily.	All trades are operated in every 15 minutes and matched ones are handed over to clearing house same day.
Delivery System	Method of settlement at maturity clearly specified. All contracts which remain open until maturity have to be settled by physical delivery.	Mixed system followed. Open positions at the end of the contracts	Mixed system followed. Open positions at the end of the contract can be settled by cash differences or physical delivery. Physical settlement is not mandatory.
Capital Requirements	All traders/Brokers must own and maintain sufficient capital to meet their financial obligations to its customers. The capital requirements are subject to continuous audit and stringent enforcement. CFTC/NFA has the authority to determine compliance on a daily basis. In a volatile market, clearing house can demand additional capital on one hours notice.	Members are required to register with FMC. The exchange charges only entrance fee, annual subscription & security deposit. No mandatory net-worth requirements prescribed. Membership in clearing house requires net owned funds and equity contribution, in addition to admission fee and annual fee. Required to maintain only variation margins with one day notice.	The exchange charges only admission fee, annual subscription & security deposit. In addition the clearing house membership requires equity participation, security deposits, annual subscription and minimum net worth criteria. No regulatory check to ensure compliance to these capital requirements.
Segregated Accounts	Traders/brokers maintain customers funds and margin deposits in bank accounts which are separate from their own. Such funds can be used only for the purposes the customers intended. CFTC ensures security of customers money and takes immediate action if not complied with.	Margin deposits of registered non-members are maintained separately. No specific FMC guidelines on the security of customers money held by the trader/broker.	Margin deposits of registered non-members are maintained separately. No specific FMC guidelines on the security of customers money held by the trader/broker.
Transfer of Market positions	Customers are free from the risk arising out of failure of trading/broking firm. Adequately margined positions with a troubled firm will not be liquidated at a time when the customer may not wish for them to be liquidated.	In case of insolvency of a member/trader, the outstanding positions will be closed out. The designated clearing house doesn't gurantee the financial obligations of any member trader to his client and no gurantee for delivery, title, genuineness or validity of any documents passing through the clearing house.	The financial performance of all contracts registered with the clearing house is guaranteed. The designated clearing house doesn`t gurantee the financial obligations of any member trader to his client.
Regulation	CFTC plays an oversight role. Self regulation is effective and continuous. NFA and exchanges have responsibility for auditing and enforcing compliance with industry rules.	FMC plays a mechanical role as defined by an old legislation FCRA, 1952. Self regulatory system is weak. No industry association to promote self regulation and market integrity.	FMC plays a mechanical role as defined by an old legislation FCRA, 1952. Self regulatory system is weak. No industry association to promote self regulation and market integrity.

Source: http://www.cftc.gov; http://www.nfa.futures.org and Bye-Laws of IPSTA and BCE

CONCLUSION

After the Indian economy embarked upon the process of liberalization and globalization in 1990, the Government of India has assigned international status to India Pepper and Spices Trade Association (IPSTA) Kochi and the Bombay Commodity Exchange (BCE) Limited, Mumbai to deal in international futures derivative contracts in black pepper and castor oil respectively.

IPSTA as an exchange has all the potential to be a major international marketplace for pepper derivatives as it is the only exchange in the world engaged in trading of derivative, exclusively in pepper. Moreover Kerala being the largest producer of pepper in around in India (around 95 percent) and Cochin being the port city where majority of pepper exporters are operating, IPSTA can have a legitimate aspiration of emerging as a major international market.

However both the international exchanges in the Indian commodity derivative market were not been able to globalize properly as they were unable to attract adequate number of overseas traders or even the existing domestic players, despite ten years of existence. Exposure to exchange rate fluctuations inhibits domestic traders from foraying into the international segment. Besides absence of demutualization, also poses a serious question regarding the integrity of exchanges with reference to conflict of interest.

The comparison of market parameters like trading systems, processes and procedures of IPSTA and BCE with the US system are no inferior. When markets are deep, business rules and processes are fair and transparent along with an appropriate regulation the demarcation between a domestic and an international exchange will cease to exist.

REFERENCES:

1.Boado, S. (2001) 'Overview of the World's Commodity Exchanges, 2001', United Nations Conference on Trade and Development Secretariat, Geneva.
2.Haridas, A. (2000) 'Pepper Exchange gets nod to trade in dollars', The Hindu, 25 September, 2000.
3.Financial Bureau. (1998) 'Oilseeds exchange finalizes norms for castor oil futures trade', The Indian Express Newspaper, October1, 1998.
4.Ministry of Consumer Affairs, Food & Public Distribution (1993) Report of the Committee on Forward Market, Government of India.
5.Ministry of Consumer Affairs, Food & Public Distribution (1996) Report of the Expert Committee to study on Agricultural Commodity prices, Government of India.
6.Sahadevan, K. G. (2003) 'Commodity Derivative and Futures Trading: A study of the sources of market failure and policy options for its revival', A study report submitted to Forward Markets Commission, Mumbai, August 2003.
7.Sahadevan, K. G. (2005) 'Globalization of Indian Commodity Futures markets: Some lessons from international experience', A Study paper submitted to Indian Society of Agricultural Marketing, Mumbai, October 2005.
8.UNCATD (1995) 'Feasibility study on a worldwide pepper futures contract', UNCTAD/COM64, UNCTAD Secretariat, Geneva.
9.World Bank and UNCTAD. (1996) 'Managing Price Risks in India's Liberalized Agriculture: Can Futures Markets Help'? Report No. 15453, Washington D.C.

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 of publication,you will be pleased to know that our journals are

Associated and Indexed,India

- International Scientific Journal Consortium Scientific
- OPEN J-GATE

Associated and Indexed,USA

- EBSCO
- 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

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