

European Journal of Social Sciences

ISSN: 1450-2267

Volume 44 No 4 October, 2014

Editors-in-Chief

Lillie Dewan, National Institute of Technology

Co-Editors

Chanduji Thakor, Gujarat Technological University

Claudio Urrea Oñate, University of Santiago

Editorial Board

Maika Mitchell, Columbia University Medical Center

Prabhat K. Mahanti, University of New Brunswick

Parag Garhyan, Auburn University

Morteza Shahbazi, Edinburgh University

Jianfang Chai, University of Akron

Sang-Eon Park, Inha University

Said Elnashaie, Auburn University

Subrata Chowdhury, University of Rhode Island

Ghasem-Ali Omrani, Tehran University of Medical Sciences

Ajay K. Ray, National University of Singapore

Mutwakil Nafi, China University of Geosciences

Felix Ayadi, Texas Southern University

Bansi Sawhney, University of Baltimore

David Wang, Hsuan Chuang University

Cornelis A. Los, Kazakh-British Technical University

Teresa Smith, University of South Carolina

Ranjit Biswas, Philadelphia University

Chiaku Chukwuogor-Ndu, Eastern Connecticut State University

M. Femi Ayadi, University of Houston-Clear Lake

Emmanuel Anoruo, Coppin State University

H. Young Baek, Nova Southeastern University

Dimitrios Mavridis, Technological Educational Institute of West Macedonia

Jerry Kolo, Florida Atlantic University

Mohamed Tariq Kahn, Cape Peninsula University of Technology

Publication Ethics and Publication Malpractice Statement

Duties of Editors

Confidentiality—Editors of the journal must treat received manuscripts for review as confidential documents. Editors and any editorial staff must not disclose any information about submitted manuscripts to anyone other than the corresponding author, reviewers, other editorial advisers, and the publisher.

Equal Treatment—Editors of the journal must evaluate manuscripts for their intellectual content and their contribution to specific disciplines, without regard to gender, race, sexual orientation, religious belief, ethnic origin, citizenship, or political philosophy of the authors.

Disclosure and Conflicts of Interest—Editors of the journal and any editorial staff must not use materials disclosed in a submitted manuscript (published or unpublished) for their own research without the author’s written authorization.

Integrity of Blind Reviews—Editors of the journal should ensure the integrity of the blind review process. As such, editors should not reveal either the identity of authors of manuscripts to the reviewers, or the identity of reviewers to authors.

Publication Decisions—Editors of the journal are responsible for deciding which of the manuscripts submitted to the journal should be reviewed or published. However, editors may consult other editors or reviewers in making such decisions.

Cooperative involvement in investigations—Editors of the journal should conduct a proper and fair investigation when an ethical complaint (concerning a submitted or published manuscript) is reported. Such process may include contacting the author(s) of the manuscript and the institution, giving due process of the respective complaint. If the complaint has merits, a proper action should be taken (publication correction, retraction, etc.). Besides, every reported action of unethical publishing behavior should be investigated even if it is discovered years after publication.

Duties of Reviewers

Confidentiality—Reviewers must consider all received manuscripts for review as confidential documents. Received manuscripts must not be seen by or discussed with others, except as authorized by the journal editors or authorized editorial staff.

Objectivity—Reviewers should conduct their reviews objectively. Criticism of the author’s personality or the topic is unprofessional and inappropriate. Reviewers should explain their recommendations clearly and explicitly and provide rational support and justification. Editors Recommendations could be one of the following:

- Accept the publication of the manuscript after compliance with the reviewers’ recommendations.
- Consider the publication of the manuscript after minor changes recommended by its reviewers.
- Consider the publication of the manuscript after major changes recommended by its reviewers.
- Reject the publication of the manuscript based on the reviewers’ recommendations

Fast-Track Reviews—Reviewers are requested to complete their reviews within a timeframe of 30 days. Reviewers also are free to decline reviews at their discretion. For instance, if the current work load and/or other commitments make it impossible for reviewers to complete fair reviews in a short timeframe (e.g., few days for fast-track review), reviewers should refuse such invitations for review and promptly inform the editor of the journal.

Qualifications—Reviewers who believe that they are not qualified to review a received manuscript should inform the journal editors promptly and decline the review process.

Disclosure—Information or ideas obtained through blind reviews must be kept confidential and must not be used by reviewers for personal benefits.

Conflict of Interest —Reviewers should refuse the review of manuscripts in which they have conflicts of interest emerging from competitive, collaborative, or other relationships and connections with any of the authors, companies, or institutions connected to the manuscripts.

Substantial Similarity—Reviewers should inform editors about significant resemblances or overlap between received manuscripts and any other published manuscripts that reviewers are aware of.

Proper and Accurate Citation —Reviewers should identify relevant published work that has not been cited by the authors. Statements that include observation, derivation, or argument (currently or previously reported) should be accompanied by a relevant and accurate citation.

Contribution to Editorial Decisions—Reviewers assist editors in making editorial publication decisions, and also assist authors in improving their submitted manuscripts, through the editorial communications with authors. Therefore, reviewers should always provide explicit and constructive feedback to assist authors in improving their work.

Duties of Authors

Originality—Authors submitting manuscript to the journal should ensure that this submission is original work and is neither currently under consideration for publication elsewhere, nor has been published as a copyrighted material before. If authors have used the ideas, and/or words of others researchers, they should acknowledge that through proper quotes or citations.

Plagiarism—Plagiarism appears into various types, such as claiming the authorship of work by others, copying and paraphrasing major parts of others research (without attribution), and using the results of research conducted by other researchers. However, any type of plagiarism is unacceptable and is considered unethical publishing behavior. Such manuscripts will be rejected.

Authorship of Manuscripts—Authorship of a manuscript should be limited to authors who have made significant contributions and the names of authors should be ranked by efforts. The corresponding author must ensure that all listed coauthors have seen and approved the final version of the manuscript (as it appeared in the proofreading copy) and agreed to its publication in the journal. Authors can permit others to replicate their work.

Multiple or Concurrent Publication— Authors should not publish manuscripts describing essentially the same research in more than one journal. Submitting the same manuscript to more than one journal concurrently constitutes unethical publishing behavior and is unacceptable. This action leads to the rejection of the submitted manuscripts.

Acknowledgement of the Work of Others—Authors should always properly and accurately acknowledge the work of others. Authors should cite publications that have significant contribution to their submitted manuscripts. Unacknowledged work of others contributing to manuscripts is unethical behavior and is unacceptable. Such manuscripts will be rejected.

Reported objectives, discussions, data, statistical analysis, and results should be accurate. Fraudulent or knowingly inaccurate results constitute unethical behavior and are unacceptable. Such manuscripts will be rejected.

Data Access and Retention— Authors may be asked to provide the raw data in connection with manuscripts for editorial review, and should be prepared to provide public access to such data if possible. However, such authors should be prepared to retain data for a reasonable time after publication.

Hazards and Human or Animal Subjects— If a research study involves chemicals, procedures or equipment that have any unusual hazards inherent in their use, the author(s) must clearly identify these in the submitted manuscript. Authors should also inform participating human subjects about the purpose of the study.

Conflicts of Interest—In their manuscript(s), authors should disclose any financial or other substantive conflict of interest that might influence the results or interpretation of their manuscript.

Copyright of Accepted Manuscripts—Authors of accepted manuscripts for publication in the journal agree that the copyright will be transferred to journal and all authors should sign copyright forms. However, those authors have the right to use of their published manuscripts fairly, such as teaching and nonprofit purposes.

Substantial errors in published Manuscripts—When authors discover substantial errors or inaccuracy in their own published manuscripts, it is the authors' responsibility to promptly inform the journal editors or publisher, and cooperate with them to correct their manuscripts.

Acknowledgement of Indirect Contributors and Financial Supporters—Authors should acknowledge individuals whose contributions are indirect or marginal (e.g., colleagues or supervisors who have reviewed drafts of the work or provided proofreading assistance, and heads of research institutes, centers and labs should be named in an acknowledgement section at the end of the manuscript, immediately preceding the List of References). In addition, all sources of financial support for the research project should be disclosed.

Disclaimer

Neither the editors nor the Editorial Board are responsible for authors' expressed opinions, views, and the contents of the published manuscripts in the journal. The originality, proofreading of manuscripts and errors are the sole responsibility of the individual authors.

All manuscripts submitted for review and publication in the journal go under double-blind reviews for authenticity, ethical issues, and useful contributions. Decisions of the reviewers are the only tool for publication in the journal and will be final.

Contents

- The Role of Women in Isaan Culture under a Capitalist Society**..... 363-385
Arunee Sriruksa, Niyom Wongpongkham and Homhuan Buarabha
- Technical Efficiency and Interest Rate Spread in the Indonesian Banking Industry** 386-392
Nury Effendi, Rina Indrastuti, Taslim Z. Yunus and Maman Setiawan
- Assessment of MEHR Housing Policy in Iran by using SWOT Technique (Case Study: Khoram Abad city)**..... 393-403
Mahdi Garavand, Iraj Kalhor, Fatemeh Olfaty and Kourosh Khodayari
- Poverty Measures with Entropy Weight Methods**..... 404-421
Melvi Elizabeth Romero Castillo, Eduardo GutiérrezGonzález, Olga V.Panteleeva and Sergio Raúl Jiménez Jerez
- Theoretical Evaluation of Afghanistan's New Constitution Law in Terms of Democracy** .. 422-432
Poopak Dehshahri
- The Islamic Banking System: A New Economic Competitive System** 433-443
Mahmoud Ababneh
- Framing within Critical Discourse Analysis**..... 444-450
Haleh Mojarrabi Tabrizi and Biok Behnam
- Rethinking Nigeria's Strategic Relationship with its Immediate Neighbours**..... 451-463
Sheriff F. Folarin, Lady A. Ajayi and Faith O. Olanrewaju
- The Extent of the Application of Transparency in Administrative Disciplinary Decisions for Students at King AbdulAziz University from the Viewpoint of Students**..... 464-473
Najat Mohammad Saeed Al Saigh
- Evaluating the Economic Return to Participatory Commune Cultural Post Offices in Viet Nam - An Endogenous Switching Regression Model Approach** 474-487
Truong Tuan Linh, Teruaki Nanseki and Yosuke Chomei

The Role of Women in Isaan Culture under a Capitalist Society

Arunee Sriruksa

*Faculty of Fine and Applied Arts, Khon Kaen University
Nai Muang, Muang, Khon Kaen 40002 Thailand*

Niyom Wongpongkham

*Associate Professor Faculty of Fine and Applied Arts
Khon Kaen University
Nai Muang, Muang, Khon Kaen 40002 Thailand*

Homhuan Buarabha

*Associate Professor Faculty of Humanity and Social Sciences
Khon Kaen University
Nai Muang, Muang, Khon Kaen 40002 Thailand*

Abstract

The aims of this research are 1) studying the role of women in Isaan Culture 2) studying the role of women in the Isaan culture under a capitalist society. This research is the study from both the documents and the observations from the field study, interviews, and focus group discussions from three different target groups of 40 people which consist of 1) academics, experts, knowledgeable people from the related field, 2) working women, and 3) students from the undergraduate level. The tools used in this research consist of observation forms by using participatory and non-participatory observation, interview forms, and focus group discussion. This research had found the following results;

The study of the role of women in Isaan culture under a capitalist society is divided into three dimensions; the cultural dimension, the economic dimension, and the social dimension. The findings from this research are as followed; the role of women in Isaan culture in the past was the results from the social structure of agriculture which determined the working role between men and women. The role of women was within the cultural dimension within the family jurisdiction; the process of socialization, passing on, and remaking through teachings, beliefs, ceremonies, and traditions. Society had designated the role of men outside of the family jurisdiction both within the economic dimension and the social dimension which had given men the experiences, skills, and power. Somehow, the role of Isaan women today is the result from the structure of the capitalist society that focuses on the economic dimension which had pushed women to raise their own statuses. Part of the effort depends on the education and other part on generating income for their families by becoming part of the labor systems within the urban area. This had caused women to feel the increase in their own values and the pride for themselves and their families; and also give them more acceptances within the society. The changes in the role of women between a certain age groups by stepping more into the economic dimension and the social dimension affect the acceptance by the society and men as well as building the negotiating power and power to make decisions in the economic base which can be considered as the maintenance the balance in living together within today's society.

While women try to adjust their roles in entering the economic and social dimension, the cultural dimension is being rapidly affected by the receiving of new culture into the society from traveling into the urban area for education, work, or living. The spreading of certain cultures had caused the socialization process within the society both in the content and format aspects. There has been a clear fade out of the cultural content from the past because what had been passed on is not relevant to the reality with today's society. The spreading of the culture from people traveling in to settle down within the cities or on the outskirts of the cities or returning from to their hometown help hasten the spreading of way of life within the city in the thoughts, beliefs, and practice to a broader area. That means that the traditional cultural dimension is fading and might eventually fade away in the future.

Additional findings that might become another important factor which can affect the changes in the roles, perceptions, beliefs, and the acceptance of the society are the taking of the opportunities in using the benefit from the Thai Women Empowerment Funds effectively by focusing on the movement within the social dimensions within the youth and the working women who will eventually become the core mechanic in the society, the creation of the continuous networking, and providing a space for women to participate in the development of the city in order to keep up with the changes that will come with the ASEAN community in the near future, which should be the right direction to development which will benefit women and the society as a whole.

Keywords: Role of Women, Isaan Culture, Capitalist Society

1. Introduction

When we talked about economy, society, and culture, we cannot avoid taking about the role of those who had created the culture and society. Both women and men have equal and important role. Society had placed the role of women as mothers, wives, and daughters under the cultural frame of a household which goes along the expectation of the society in the past while men have roles as fathers and husbands, who are the leader within a family whose job is to find income to raise his family. The changes within the roles of men and women depend on the culture in each period of time. When the social status changed, the expectation towards these roles was also changed due to those factors.

As for the roles of women within Thai society, The Department of Fine Arts (1972) had mentioned that ever since the Sukhothai period, the roles of women and men with Thai society were not equal. Although within a family institution, men had power over women. That can be seen from the placement of roles and responsibilities towards the society. It was also a value and belief that women have inferior status than men.

In Ayutthaya period, under the feudal system, the inequality in social classes within the system had led to gender inequality. Most women in a higher society and commons are only limited to the cultural dimension in housework while men monopolized the power in other dimensions such as economy, politics, and culture. Women sometimes entered into the roles in other dimensions; for instance, in the Ayutthaya period, Queen Suriyothai had laid down her life to protect King Maha Chakkraphat from the enemy. She was revered as the Thai Historic Heroine. However, the previous example cannot represent the overall role of most women's role within the society due to the differences in the social status of each different era.

In the Rattanakosin period, women did have roles in fighting to protect their homeland; such as Thao Thep Kasattri, Thao Sri Sunthon, as well as Thao Suranari. However, most women stayed behind the scene in different aspects. In the Rattanakosin period, women seemed to have more roles in the economy dimension. For example, during the reign of Rama II, it was found that women had more opportunities to be in the position of "kamnan talad or market tax collector", which is the only type of tax that had women as the collector, whose job is to collect tax. In the time of Rama III, women still

maintain the role of market tax collectors in many provinces. (Suwit Theerasasawat, 1982 as cited in Manatchaya Rojanaphaitoonthip, 2002). Apart from this, some women did get the opportunity to study the course on governing as men did. Towards the end of Rama V, a magazine called "Kunlasatri" was published in order to spread the knowledge, especially on housework, to women. It was also a starting point for the new concept of looking at women's role. In addition, that was the first time that women had analyzed the discrimination of labor work in terms of gender injustice as well as the demand for schools for women. The problem in terms of women's status therefore started to get better. In the time of Phra Bat Somdet Phra Poramentharamaha Vajiravudh Phra Mongkut Klao Chao Yu Huaor King Rama VI, he had enacted the Primary Education Act in the year 1921, in which both boys and girls between the age of 7-14 are required to go attend primary school. He also established Chulalongkorn University as a university level educational institution for both man and women in general. After that, there had been many changes that helped close up the gap in the gender inequality. In the 1960s, the demand for women's right in the international level had caused Thai women to become more aware, as well as the higher level of education. From the changes in the economy and social, women began to work outside of the house more and, thus, led to the changes in the roles of women (Fasai Viseskul, 2002). After the year 1932, women gained more rights through the constitution, which talked about the equality between men and women. Many kinds of works were developed for women since the year 1962 in accordance with the National Economic and Social Development Plan of Thailand. This became even clearer in the third plan during the year 1972-1976. The United Nation had also declared 1975 as the International Women year. Many organizations on women had been concretely established in Thailand both on the policy as well as the implementation plan since the creation of National Commission on Woman's Affairs, which is a national level organization. Women's long-term development plan was initiated during the year 1992-2011 in order to put the plan into action (Sodsri Sriratdeejarus, 2006). Today, the state is placing more importance in improving women's role which is reflected in the immediate policy with the goals of being developed into the Thai Women Empowerment Fund. The project itself is still ongoing today.

From what was mentioned above, the changes in the roles of women and men are the results of the expectation from the society and culture towards the role of people in general. If culture was said to be the determinant of the thoughts, feelings, and behaviors of people within the society and was passed down through the institution and the social process. The attitude on gender that was passed down within the Thai society had received the influence from India and China until their roots was already deepened, as well as the governing and the influence from Brahmanism and Buddhism. Men were able to be ordained in order to repay the gratitude to their parents, which caused men to have a higher status in society. The beliefs from India also give more importance to men, especially in the status of the governing status, which raised the status of men to be higher than women. Women had to be under the governing of their husbands since men work outside to support the families while women take care of the house. Therefore, this attitude towards women had created a frame for women to be mannered, polite, housekeeping. The role of women in the past had been limited in many dimensions. They are lowly educated and didn't get many opportunities to be in the outside society. After they got married, they were expected to serve their husbands and raising their children. In other words, housekeeping became a woman's job in which men are not responsible for except their works outside of the house just as Fasai Viseskul (2002) had mentioned in her study that goes along with the study by Janthana Emmaneerat (1993) that talks about how Thai society in the past had split roles between men and women like any other societies. The split in the roles showed the differences in the behavior between men and women, both within the household system and the society system. The differences in the roles and status reflect the inequality on a personal level between women and men. Women's role was to follow and to respond to the need of men and her families. Women's role tend to be inside the house; such as house cleaning, preparing food, clothing, as well as caring for the health of the children, the husbands, and other family members. Apart from this, women also had a role in producing food for the family because laboring within your own farm was not considered as hard labor; for example, plowing

the land, trimming the grass, raising silk worm, and rice farming. Men's roles inside the households consist of providing income for the families and other hard work labor such as hunting, tending the fields, planting rice, and building houses; mostly with the help of technological tools.

When we talked about Isaan social culture and the roles of women from in the past, the children and grown up men were taught according to the way of life in each period of time; for instance, men were taught to make basketry and women learned how to weave. The knowledge was passed down from their families and relatives. The teaching on the values, the beliefs, Heed Kong, the traditions, and the ceremonies, which were influenced by the supernatural and religion, was aimed for women to be aware and accept their roles. Societies in the past were depending and sharing communities. Works were distributed according to the different genders in response to the agricultural way of life which is the main way of life that ties together systematically and connectedly. Somsak Srisontisuk. (1992) said that women's role were not only limited just within the household but they also work as labors outside of the households. These labor works were collective activities involving the agricultural productions and rituals amongst relatives, the passing on of the production inputs; such as land and other possessions, and the important role in maintaining the continuity of the families and the communities. Mostly, women will inherit from their parents and men make their own living. After marriage, men can also be part of those inheritances from their wives. The women's main occupations were rice farming, crop farming, and gardening. Women can also make additional living by trading, selling their labors, weaving, raising animals, tailoring, beauty shops, and other handicrafts. Although these jobs provide a small amount of income, they do help support the families. Moreover, women were also responsible for other works within a family such as preparing the food, maintaining the utensils inside the house, cleaning and maintaining the hygienic condition, and passing on the knowledge to the children and other people within the family. On the other hand, Isaan women also had a role in being the leader in many rituals according to the beliefs in Isaan culture; such as Phi Fah ceremony, midwife, and etc. (Manatchaya Rojanaphaitoonthip, 2002). This shows that the social beliefs in the supernatural created some roles for Isaan women in the past in addition to what had been mentioned earlier.

But when the dependent economy system changed to capitalist system, using money in the exchanges, trades, and investment, some occupations remain while some disappeared. That was also true for some beliefs and traditions. This incident goes along with what Term Wiparkpojnakij (1999) had mentioned that Isaan people have unique cultures, traditions, and livelihood that goes along with the economy and social system in each era. But today, the cultures, traditions, beliefs, and local wisdoms became less important. They are having fewer roles within the way of life while being replaced by money and economy. In the midst of the capitalist and consumerist society, as well as the influence that came with globalization in the present day where information is being transferred through modern technology, new cultures are spreading more rapidly. The western and foreign influences come into Thailand, especially to the people in big cities. The social values that changes with the new era had molded a new form of culture that might bring about the destruction of the original local tradition.

As for the adaptation of Thai society to capitalism and globalization, Amara Pongsapich (1999) mentioned that Thai society had changed from a self-sustain agricultural society to an agricultural and industrial society aiming for the export, which is a full transformation from the self-sustain economy to a full capitalism. This transformation process had created changes in the social and cultural structure; from a society built on the relationship within family members to a patronage relationship. Later on, the relationships became more dependent on either money or other mechanism; such as power. The changes in the economy and social that were mentioned include the changes in the paradigm, the world view, the values, and the ideology. For the changes in Thai society, Thailand had a social change in the year 1855, during the reign of King Rama V, Thailand had sign the Bowring Treaty to open up the country, the revolution in 1932, the acceptance of the western development plan after the second world war, and the drafting of the national development plan since the year 1959. It can be concluded that the

social and culture had been merged together with capitalism that came into the country and today, the Thai society and culture had drastically changed.

Today, in terms of the social and cultural changes that affect the development of the country, from the 11th National Economy and Social Development Plan (Office of the National Economic and Social Development Board, 2012), Thailand still needs to face these important changes both domestically and internationally which are both opportunities and risks in the development of the country: 1) The important global changes both in the new regulations that every country needs to adjust to, the adjustment into the Multi-centered World Economy, the growing importance of the Asian region, the technological advancements that play an important role in the economy and social, as well as responding more to the livelihood of the people. 2) The domestic changes both in the economy, social, natural resources and environment, the management and development of the country.

Another dimension that is in the state of risk is the degradation of good values and the distorted tradition due to the changes under the pressure of globalization under the capitalist economy which caused Thai society to become more materialistic, giving less importance to good morals and culture, as well as the livelihood and the relationship with other people. People only focus on getting more income to respond to their needs to consume, helping each other less, having less kindness, taking advantage on other people, lacking unity and respect for other people's rights, and stop upholding the ideology of a greater good. Thailand needs to effectively build up the protection against all the risks by taking the following capitals that have potentials and used them help one another while strengthening them to become an important foundation in the development of the country: strengthen the social capital (human, social, and cultural capital) for it to be important in developing the Thai people and society to a better quality. We have to build immunity starting from an individual, family, and community level, to be able to deal with the risk and adjust to the changes which will provide more opportunities to gain access to the resources and fully benefit from the development of the economy and social.

When we talk about the change in the northeast or Isaan, a dry and deserted land, that was once a rich kingdom filled with traces of prehistoric and historical civilizations. The cultural inheritance relates to the Laan Xang and Khmer culture. The way of life for people in this area is seamlessly blended between the traditional beliefs in spirits, magic, luck, and curse, while believing in the gods and angels according to the Brahmin and Hinduism beliefs. Buddhism was integrated into the traditional beliefs in ghost and angels and the Brahmin principle (Jarunee Wonglacorn, 2006). Heed Sip Song is the annual way of life for Isaan people. It involves the traditions to show the existing beliefs in the sacred and supernatural beings. Moreover, Heed Sip Song also integrated religious beliefs. Kong Sip See provides a form of how people should behave. There are still other traditions that reflect the Isaan way of life.

Since the year 1971, when looking at the economic development of the Isaan as well as its people's way of life, overall average growth of the economy is somewhat high. However, there is still imbalance of such a growth creating revenue gap between the rural area and the urban. Poverty and the fact that the rural is underdeveloped are problems government is struggling to find the solutions to. Though numbers of the poor evidently decreased, poor people still scattered among many parts of Thailand but mostly in Isaan, of which citizen's revenue is the least than what people in other parts of Thailand receive (Jaruan Limpasene and Ekasid Dajakaisiyavanit, 1996). Nevertheless, it can be said that, in the light of the development of the current capitalist society affecting Isaan, the economic development is inconsistent with traditional way of life of Isaan people. This situation can lead to many problems including issues related to migration of labor in Thailand which is still evident. The migration from rural to urban area can be either permanent or seasonal; for example, the movement to big cities such as Bangkok or abroad. The migration issue has posed many problems to the society and one of the problems is how traditions practiced by its ancestors can be preserved and maintained. Since the ways of life of citizen from adults to juvenile, who will be one of the spinning wheel in the society,

is now shifting and adapting itself to be align with capitalist society and globalization that is swiftly taking over the world, the existence of the traditions and cultures is at risk.

When talking about the society and cultural change as a result of the economic development, Khon Kaen is one of the provinces in Isaan that has most interesting history, anthropology, and development of society and culture. Archeological evidence, it was shown that Khon Kaen use to be a prosperous and civilized land even before written history was recorded. This has made Khon Kaen the city that possesses heritages of the people in the ancient time. The traces left to be seen are, for example, ‘the pre-historic painting—Red Hand’, ancient Kingdom of Tawaravadee and Pueai Noi Castle (Teerasak Teecayuphan, 2006). Nevertheless, in respect to the development of Khon Kaen, the province has developing very quickly not only in economic but also in education and public facilities. The indicator that tells the education in the province is developed are the numbers of leading university such as Khon Kaen University, Private universities and schools being established within the city. The factors pinpointing the development of public facilities can be seen of the numbers of hospitals being built in Khon Kaen (Farung Meeudon, 2009). Khon Kaen is, therefore, the Isaan hub for both economy and education. The fast growing of urban city in Khon Kaen can reflect the potential of city as well as poses problems coming underway as a result of such growth (Khon Kaen province, 2001).

Khon Kaen possesses numbers of potentialities and advantages whether in terms of its location, where Khon Kaen is located right at the center of the Isaan Region; the infrastructure, which makes that transportation from north to south and east to west possible, serving as a bridge connecting region to regions; education, by the fact the province has numbers of qualified education institutes; medical service, which is high in terms of both quantity and modernity; preparedness of regional government offices, that are ready to provide services to people as well as support different operations in Khon Kaen. From the mentioned advantages that Khon Kaen has, such potential can even further lead to the development along the East-West Economic Corridor (EWEC), the establishment of the city to be the center for industrial development within Isaan, which in turn will extend its development to other regions. Also, the government has made Khon Kaen one of the three provinces to lead and pilot on the project development in information technology and communications aside from Phuket and Chiang Mai.

When considering the Development Plan 2011-2014 visioning Khon Kaen to be the hub connecting trade, investment, and transportation to the international network, this reflects key strategies used which are significant to the development of Khon Kaen. The used strategies are implemented in many respects whether in light of economic development aiming to increase the financial stability as well as the province’s competitiveness in being the central for agriculture, region’s economy, and industrial development to maximize the use of the land’s potential, as well as other respects in trade, tourism, services and basic infrastructure development to make Khon Kaen the center of the region. Aside from that, the strategy also aims at the development of people and society’s quality through education, establishment of a stable foundation in society and economy status, development on public facilities and medical practices, promotion on sports and recreational activities, social welfare support, building of strong family foundation, promotion of local traditions, escalation of people’s welfare and the balance between life and work of the citizen. Though Khon Kaen has high potential, it still encounters problems surfaced in many respects.

The above information on the social and culture that affect the role of women and men both in the international and regional level is an indicator that shows the phenomenon in which the economic dimension is influencing every life. This is different from in the past when the cultural dimension was the main thing that affects the roles and way of life. Even though the role of Isaan women had to face many types of problems which were determined by the cultural factors, Isaan women still maintain their internal strength that was shown through the cultural inheritance. The strength of women can also be seen within changing process within both the regional and Thai economy and social. Isaan women had taken over many new roles; such as service job up until participating in the local and national politics (Jaranya Wongprom, 1998 and Pasuk Phongpaichit, 1998). Isaan women reflect their life

experience and diverse roles through the ability in adjusting and struggling with their difficult lives. These potentials also reflect the strength of Isaan women within the traditional culture.

It can be concluded that at the moment, Isaan women are accepted by the society and are trying to determine their own lives and roles. The study on Isaan traditional culture and role was aimed at creating the consciousness, pride, as well as stimulating the direction in the improvement of clearer roles of Isaan women.

Therefore, the analysis study on the issues concerning the roles of women under Isaan culture in the capitalist society shows many interesting characteristics. The researcher saw that the study of the roles of Isaan women by looking through the lens of economy, social, and cultures, which help show how the factors that can affect the changes in the role of women in the past. Especially in today period which is considered the era of capitalist economy and society, the trends on consumerism and the invasion of globalization. The researcher hopes that these understandings will help with the adaptation in order to lead to the opportunities in the development of the women's role today to be sustainable in the future.

2. Research Objective

2.1 Studying the Role of Women in Isaan Culture

2.2 Studying the Role of Women in the Isaan Culture under a Capitalist Society

3. Methodology

This research is the study from both the documents and the observations from the field study, interviews, and focus group discussions from three different target groups of 40 people which consist of 1) academics, experts, knowledgeable people from the related field, 2) working women, and 3) students from the undergraduate level. The tools used in this research consist of observation forms by using participatory and non-participatory observation, interview forms, and focus group discussion. The questions were clearly organized into categories.

4. Result of the Study

The content of the study on Women's Role Within the Isaan Culture Under A Capitalist Society can be divided into two periods: The role women within the Isaan culture which looks at the role of women within the Isaan society and culture in the past and the role of women within the Isaan culture under a capitalist society which looks at the role of women within the current Isaan culture, reflected from the urban community in Muang district, Khon Kaen province. The content is presented in three dimensions which include the cultural dimension, the economic dimension, and the social dimension.

The results from the study consist of the followings:

4.1 The Study of Women's Role within the Isaan Culture

4.1.1. The Cultural Dimension

The majority of people in the urban communities in Nai Muang sub-district, Muang district, Khon Kaen province are Isaan people who have originally been living here, as well as those who had migrated from other districts or provinces due to many reasons; the decision to migrate due to their own families' decisions, educational, or occupations. From the information acquired from the interviews with the three target groups which consist of academics, specialist, experts in related field, groups of working women, and groups of undergraduate students, it was able to identify the similarities and differences in terms of their attitudes as well as the reasons behind those attitudes that concerns the

role of women within Isaan culture in the past. On the cultural dimension, the interviews with the experts on the roles of women related to household works and responsibilities shows similar attitudes as the other two target groups even though the three groups have their differences in terms of age and experiences. One thing that clearly identifies the similarities in the reasoning for the three groups is due to the intense, the continuity, and the long social training and refining process. Therefore, overseeing the cleanliness of the house, preparing meals for the family, maintaining the household utensils, taking care of the health of family members, helping with the agricultural work in some levels, passing on the local knowledge, such as clothes weaving, pottery, mats weaving, trading goods with the nearby communities, and minor selling of the produce as additional income for the families, are the things that were ingrained in the roles of women within Isaan culture in the past; such as the role as mothers, wives, and daughters, in which women had to take on those responsibilities according to what the societies expected of them. Those roles of women that the societies expected within the cultural dimension through the training and refining social process includes the works that relates to the religious traditions such as Heed Sip Song Kong Sip See, literatures that includes teaching such as a teaching for women to safe herself (Intiyaan Sawn Look), women should have a spouse or men to protect her (Intiyaan Sawn Look), wives should fear and honor their husbands (Intiyaan Sawn Look), women should respect their husbands and ask for permission every time they want to go somewhere (Phraya Khum Kong (Sawn Phrai)), ask for forgiveness from their husbands every day, wash their husbands feet before going to bed every night (Thammada Sawn Lok), wives should support their husbands (Intiyaan Sawn Look), a teaching that teaches women to have both beauty and quality such as possessing polite manners, smiling, knows how to talk to people, using polite words, have skills, hardworking, and being a good housewife (Intiyaan Sawn Look), good women should do good deeds, knows the Heed Kong tradition (Thammada Sawn Lok), wives are servers to their husbands, they are to take care of their husbands (Kalanub Meu Suay), being loyal to their husbands (Lum Maha Chaat), women shouldn't talk bad to their husbands (Suthon Chadok), good women should make merits, knows the Heed Kong traditions (Thammada Sawn Lok). The attitudes of the three target groups go in similar direction depending on the intensity of the eras and society. But it is clear that Isaan women in the past had been taught all these things. The majority of the information was gathered from undergraduate level students. The reason for this is because these people had a chance to spend time with their families in their original hometown before migrating in for educational purposes. Their experiences and memories can reflect the detail more than any other groups, whether it's a group of working age women or a group of experts.

The information gathered from the observations and the interviews shows that in the way of life in the past, most people practice agriculture as a living. They depended in the natural resources to sustain their lives. Most villagers, men and women, will have separate roles; women have roles within the dimension of household works such as housework, cooking, raising children and taking care of husbands. Men might help out a little bit in the fields. While waiting or after the harvesting period, women will weave clothes, mats, and these types of knowledge were passed down to the daughters both in the direct and indirect ways. The interviewees within a group of undergraduate students shared her experience that had been passed down from her grandmother. She said that her grandmother would recite her poems telling how women should behave; preparing water after waking up, cook the rice and doing other shores before the husbands wake up. When the husbands wake up, food should already be laid out on the table. (Jaruan Thuanman, interview). Other people also shared their experience and from what they have seen. The roles of women during the time of their grandmother were being housewives; obey their husbands, being respectful, don't talk back, being polite. They wouldn't be allowed to go work outside other than weaving mats or silk at home. The husbands will be the ones going to work outside. Wives could somehow be ordered to go and help with the work outside the house by their husbands. However, the majority of people will stay at home and learn how to sew, weave clothes and mats, blankets, and silk to be used inside the house. Other interviewees from the group of undergraduate students had also mentioned about the additional work apart from within their

own families. They mentioned their grandmothers weave the mats to give to their relatives or donate them to the temples. Their crafts are not for sell but used more a tool to teach their children to go find reeds and sedge to weave mats. (Duangrudee Srimoontree, interview). The information from the interviews also goes along with information gotten from a group of experts saying that their first experience from the community shows that women identified their roles as wives and mothers as their number one roles (Suntree Sengking, interview), which is also the expectation from the society on the role of women that has been long passed down through different processes. However, the role of a leader and in making decision still remains as the men's role since men makes a living and bring honor to their family. The sole power on making the final decision still depends on men.

And since the cultural and traditional dimension that goes hand in hand with the belief had been mentioned, a lot of time, women have a role in supporting men, who play the main role in the process of those culture and traditions. The data accumulated from the interviews shows that most villages practice Buddhism. Moreover, the belief itself also covers other supernatural power that influences the pattern of beliefs, traditions, ceremonies, as well as Heed Kong. The data from the interviews with one woman in the working class shows the similarities with another expert (Anusara Kartlun, interview) (Sukanya Noiphangnok, interview) on the point that in the cultural dimension that reflects women's participation in the culture and tradition, women have the role of finding and preparing food as part of the ceremony. But within the practice itself, men will be leading the process.

On the aspect of the refinement and passing on, one interviewee from the expert group said that in the past, parents will teach about Heed Sip Song Kong Sip See, but will only practice in some portion. Some of which were pass down to their children and grandchildren according to the changes in the society. One interviewee gave an example of a grandmother passing down this knowledge. The grandmother still brings her grandchildren to the temple in the morning during the Boon Khao Pradap Din ceremony. Women would be preparing rice and fish to be laid out to the spirit at night and making merit in the morning. Men would join in some part of the ceremony or maintaining the precepts. In the past, the ceremonies that men participated in were, for example, Boon Khao-Grum, where men would help with the offering to the monks. Some ceremonies are no longer practiced; such as Boon Some Ha, which had no longer been practiced since the time of the grandparents. Boon Khao Sak is still being practiced the same way it was practiced in the past. As for the Boon Bung Fai, people in the city area had a chance in participating. Villagers got to light the rocket along with the communities from the city area. Amongst the undergraduate student group, the ceremony that was most mentioned was Boon Hod Song or Boon Songkran due to the fact that the ceremony has been continuously practice both on the national and the local level. However, none of the interviewees provided the reasons of how the ceremony itself is connected to the livelihood and the aspect of how the ceremony was being maintained. As far as we know, the conservation of the ceremony itself was initiated by the government for the benefit of tourism. As for other annual ceremonies, most of them were passed down through grandmothers, mothers, as well as the schools since it is part of the curriculum that students need to learn. The women from the working class women group had also received and taught about those ceremonies from their families, but most of the knowledge came from schools. As for the Kong, an interviewee from the expert group said that it is still being practice, but is also becoming less and less comparing to the time of her parents. For instance, Kong 6, that teaches wives to wash the husband's feet and pay high respect by Grabb it ever night, was practiced in the past not no longer practice now. In the past, this was done daily since they were taught by their parents. If anyone refuses to do so, they will be condemn by the society that all they care about is dressing up and not taking care of the family, neither the husband nor the children.

For the pattern of passing down and the social refining process from the beliefs and values from the past to the present, the data from the interviews with the working class women group and the undergraduate students shows that Heed Kong affect the role of Isaan women due to the beliefs and the practice that can be seen even in literature works. But no one can say to what extent. However, some aspects of this belief still remain in the present day since the interviewees, even with the younger

generation, were still being taught by the older generations. That shows that the things that have been passing down to this generation from the past is still significant and thus can still be heard through the teaching of today.

4.1.2 The Economic Dimension

The economic dimension covers the activities and the careers that bring about the main and additional income. When talking about the past, this will also covers the household and environmental economy. From the interview with the three target groups on the role of women within the economic dimension, the expert group has the same opinion as the other two groups in terms of the maintaining and decision making on the daily expenses. Women, within the role of a mother and a wife, would make a financial decision within the family; starting from the meals. In the past, a family can sustain itself by depending on the natural resources. Therefore, women have a responsibility for the mouth of everyone in the family. They had to get up early and cook rice, prepare food, finding mushrooms and vegetables, boil the vegetables, make chili paste for everyone. In the families with daughters, the daughter might take over the role for the mother. However, food within the Isaan culture was not relying on money as the main factor. As for the maintaining and the decision on the inheritance, women, within the role of daughters, will take over the inheritance. From the data taken from all the three groups, none of the interviewees mentioned the fact that Isaan women are the ones maintaining and making decisions on the inheritance. From the data, at the very least, from the time of their grandparents, the decision on the inheritance would be handled by the father or other older male relatives. It will be divided between the sons and daughters equally. Today, women within the role of mothers or wives don't have the full power to make decisions on the income, even with the surplus of the income after cutting out the expenses. Due to the fact that men are people who provide the main source of income, women no longer have the rights in making decisions on the money, which go in line with the maintenance and decision making in terms of debt. In the past, women within the role of mothers and wives might have a part in the management of debts but the person who finds the money will have the rights to manage the saving within the family. As for the role of a mother and a wife, in some families, the income was from the works of the women. Some sold the vegetables they picked or the exchange of the things that they made to help support with the income. The roles of women in the past were not finding income. But for some families, that might become their additional role. But men's main role is mainly still generating income and honor to their family. As for the work during the planting season, the target groups that have families in the urban area might not have large spaces for agriculture; they will instead rely on the finding of mushrooms and vegetables. But for the families that live further from the city, women have a role to help their family out during the planting season. During the harvesting season, the target groups that live in the city don't have land so they don't have work that involves harvesting or providing food for the labor that come and help out. During the dry season, since the groups that are living in the city don't have land, they have to rely on the knowledge that was passed down to them from their ancestors to help provide for the families. However, they mostly rely on the natural environment in their production; such as clothes weaving, mats weaving, or processing food to sustain their lives. In the past, money is not the main factor in the way of life of Isaan people. The role of women or the products that they produce therefore can't be calculate into monetary or income value.

The data from the observation and the interviews shows the participation in some levels within the economic dimension. Isaan women started to play a part in this role since the beginning. Although the role of women cannot neither be calculated into monetary or income value, nor was it an occupation or activities that help generate income for the families, but it can be said that the role of women help the family to sustain itself within this economic aspect one way or the other.

4.1.3 Social Dimension

This dimension covers the community and public area; the work within the women's group or the work for the community that they lived in. From the observation and the interviews of three target groups,

when asked about the role of women that were expected by the society, the expert group provide the same attitude similar to the other two groups on the participation and on the work with the government agencies to initiate certain projects. The data was gathered from the observations and interviews. It was found that the committee and the coordinating team of the community mostly comprise of men. There were a few women, to none for some communities, who volunteered to work with the government. The observations of the village meetings show that there have been more women involved with the village meeting compared to the past. The reason for this is because husbands had to go work in other areas which allows the women to step in as representatives. In the aspects of the activities within the community's activities; such as participating in meetings, become part of the committee, joining the working committee, and participating in trainings, the data gathered from the interviews show a huge similarities as the village meetings. If the activities revolve around religious or traditional ceremonies, most people in on the committee will be men. Women might have a role in supporting or being asked to help in the service department. Women will not get a chance to participate in the trainings that happens in other areas outside of their villages because leaving their homes and families behind make them feel that they are not being responsible for their roles. From the observations and the interviews, the government will run the projects that they initiated. Most of those projects were thought out and presented to the villagers instead of inviting villagers to come up with the projects together. The role of Isaan women within it is to wait for the order of what things might need their helps with; which mostly come down to facilitating and servicing. Women don't feel that they need to participate in the projects. There is a different between the expert group and the other two target groups in terms of the participation in the project initiated by the NGO. The expert group has had direct experience working with the women's group while the other two groups, the women's group and the undergraduate students, have had no experience since they had to migrate into the city for work and education and had to live far away from their families. With the exception some working age women who had chance to participate in the field work in community development or participated in the projects that are run by the communities. From the information above, in every project by the community, the working committee mostly comprises with men. The role of women is to wait for the orders to help in the servicing department. The participation process is therefore a vertical relationship; waiting for the orders from the men. From the data gathered in one interview from an expert on the effort of participation within the social dimension on political issue, there had been an effort in the past to push Isaan women to step up more in that aspect through the trainings by several agencies. But the belief on the election process had been framed within the culture to put more importance on men. Women who tried to step up rarely get elected and therefore, the number decreased. (Suntree Sengking and Wilaiwatt Grisanaputi, interview)

From the low expectation of Isaan women in the past in the Isaan society and the society within the social dimension, and due to the fact that their livelihood were tied to agriculture, the role of women were therefore limited within their household while the works outside the households within the economy and social context will fall into the men's role. This lack of expectation from the society made women feel that they don't have a space in the social dimension. Participating in the activities that are not related to religious ceremonies made women feel shy and clueless and that men could do a better job. Isaan women therefore never felt like pushing themselves up to work in the social dimension for any reason.

4.2 The Isaan Culture Under A Capitalist Society

4.2.1 Cultural Dimension

From the interviews with the three target groups; academics, experts, knowledgeable people in the related field, women in the working age, and the undergraduate students, show both the similarities and the differences in their attitudes, as well as the reasons behind those attitudes. For the role of women in Isaan culture in the present, on the cultural dimension, from the interviews with the role of women and the expectation from the society within the cultural dimension concerning households and house-

works, the attitudes from the experts show some similarities to the other two groups. The role on taking care of the households, preparing food for the family members, taking care of the household utensils, caring for the health of the family members, teaching children, and additional work or trade that creates additional income for the families is still a role of mothers, wives, and daughters. This practice will be passed down from their grandmothers' period up until today. The difference is on the trading of the products between communities. This aspect was covered in the interviews with the experts but not in working age women and the undergraduate students due to the fact that they had migrated into the city for work and education and therefore didn't get a chance to stay in their original communities. In addition, the way of life in the city is also more individualistic, people minding their own business. They don't depend much on one another and caused the kind of relationship and activities that exist in the villages to disappear. On the social refining process that has been passed down through religious tradition and culture, Heed Sip Song Kong Sip See, and teaching literatures that has been practiced until today, it was found that the participation in these activities and traditions is still an expectation from the society and still what good Isaan women should be practicing. Somehow, the format is different from the past; women in the past plays a role in helping religious work in helping with the ceremony, decorations, the preparations, or preparing the food. Due to the different livelihood today, Isaan women use money in the management of any tasks at temple instead (Wipawee Grisanaputi, interview); such as hiring people to help with the preparation of the meals, which is in contrast to asking people to each bring their own materials or food. There is no clear communal space for people living in the city, in terms of the Heed Sip Song, the three target groups provides the information, which goes in the same direction; the religious ceremony is still being practiced, such as Boon Songkran in April. The three target groups mentioned that although these traditions are still being practiced, but the meaning and the format had changed from the past. They are now aimed for the fun and tourism aspect. Although there are some emphasis in maintaining the original meaning, but not a lot of weight was put on that and the trend is not as strong as the trend with the aim of having fun and creating tourism. From the beautiful tradition and their practice, the things that were emphasized was a campaign for the safety during the tradition which turned into the campaign for seven dangerous days; the campaign against drink alcohol and performing activities containing risks which clearly changed from the traditional tradition. In August, there is a Boon Khao Pansa, in October, Boon Awk Pansa, and in November, and Boon Ka-tin are still the religious ceremony that the three target groups can still express and practice today and thus, can be said that they are the ceremonies that people the society throughout the country still think are important. The interviewees in the undergraduate student group provide additional data that they had learned about the role of women according to the Heed and Kong from the lesson taught in schools. However, the interviewee within this group can only roughly describe the importance of the ceremonies. While the interviewees from the working women group don't have much information and cannot give out clear explanation due to the fact that their original cultural dimension had been cut off from them because of all the time they have to spend in the struggling to live under the pressure of all the changes within economy of the urban communities. The content from the literature and teachings that had been created and still remains within the society concerning the caretaking of the families in different aspects, in the present time especially within the urban settings, women and men live "according to how they want to live". The belief and the behavior of the women changed; even with the values and trends on dressing. Women couldn't wear short like they do today (Sukanya Noiphangnok, interview). This fact goes in line of what other experts (Wipa Ruangprasertkul, interview) had mentioned about how household works became something that can be managed by money. Housewives today had become what we call "plastic bags housewives". Convenient stores can be found all around. They don't have to get up early in the morning to go to the market in order to prepare food for their family. Cleaning the house became a job for the hired maids, both monthly and daily maids. Therefore, it can be said that the role that the society expects women, especially Isaan women, to play is still there, but the pattern and method are different according to the context of each society. The important issue of preserving oneself (Intiyaan Sawn Look) can still be

found in the family level and became a national campaign. But due to the fact that foreign cultural trends had made its way into the media in different patterns, new culture became more acceptable; for instance, living together before marriage, teen pregnancy became one thing that the society are more opened to. That shows that the teaching is still there, but it doesn't make its way into the practice due to the fact that there is an increase in the number of women became pregnant before marriage or being pregnant during whole they're in school. Although the problem itself might come from different reasons, not necessary from the new culture and values that had spread into the society. There is also an issue of materialism; wanting to use brand-name products like their friends within their own social circle in order not to feel discriminated, which led into covert prostitution (Wilaiwatt Grisanaputi, interview). As for the teaching, some topics are still being taught; such as to honor each other. But if a woman got married and later on had problems living together with her husband, breaking up is no longer a shameful thing. In the past, marriage that ended up with a divorce, women will be condemned by the society as not being a good wife and not doing a very good job at being a housewife. Today, once a person gets married and can't find happiness, they can get married to another person again. That is no longer a strange thing (Wipa Ruangprasertkul, interview). Isaan women today, especially those that live in the urban settings, have occupational skills. They no longer look at themselves as the two hind legs of the elephants like in the past. From additional information gathered from the interviews with the undergraduate students, the teachings within the families, from the parents, is still there but not being enforced. Most people raise their children with money. Parents make a lot of money but don't have time for their children. They instead give their children the money and leave them with a nanny, their grandparents, or a television. In more rural communities surrounding the city, the old teachings can still be found. The Heed Kong or the original way of life might not exist anymore in the urban area. Parents are more concerns about the economy. They no longer have the time to pass on those beliefs to their children (Chalabon Treesak, interview). This goes in line with the data gathered from the interviews with the working women group. Ms. Disaraporn Phalapree said that she had an internship experience with a school and saw many children that parents were trying to raise them and respond to their needs by giving them materials or modern technology gadget rather than their teachings. Since parents use most of their time within the economy dimension (Disaraporn Phalapree, interview), the changes in this economy dimension encourage the change of roles. In some families, there are a switch of roles between a man and a woman according to the needs. For instance; within the family of Ms. Supaporn Kidkla, the mother and the father might be switching roles since they both have to work. When her grandfather got sick, her dad had to take care of him while her mother went out to work, which is a switch of role in becoming the main person providing income to the family, while she had to send money home to help her family as well. Therefore, the role of men and women had to be switched due to the needs of certain circumstances within the family (Supaporn Kidkla, interview).

The data from the interviews with the group of undergraduate students reflects that the trend of globalization that is having an impact on the cultural dimension as well as the role of women. This trend also affects those teenagers who are attracted to materialism and those addicted to technology. Although technology had improved a lot but the mind of the people hasn't. The more advance technology is, the less people feel the need to have to live with other people. They spend most of their time in front of the computer, logging on to Facebook. There are increasing number of the danger from technology and social media. People became more secluded. They took themselves out of the society and culture to spend time in front of the computer. Friends who are attracted to the social media encourage other people to follow their example, which can lead to other social problems. The feeling of not having enough can lead to wrong decisions in doing the things that is against the tradition and morals. As for the opinion of the undergraduate students on capitalism is similar to what is happening in the society today; where people only care about the money, economy, and materials, that only creates the virtual communities.

The policies and planning such as the ASEAN community plan will create different effects. All neighboring countries will feel like they are from the same home. People will be able to freely travel to other countries within ASEAN. They can work in other countries. One thing that will follow that plan is it will encourage more migration of the people than before, which could create more gaps within the society. Entering into ASEAN can therefore be both the opportunities and risks on the cultural and social context which had caused a concern that Thai culture could take in too much of other culture and caused some of the Thai culture to disappear. Even before entering into the ASEAN community, some of the culture has already been gone. Once we are fully entered, something will definitely be lost (Chalabon Treesak, interview). That idea goes in line with the attitude of some people within the expert group that said that although there is no clear understanding of the ASEAN community, but from the experience and estimation, once the ASEAN community come in, Thai culture will be closed off until it turned into another culture. (Sukanya Noiphangnok, interview)

From the additional data gathered from the interviews on the issue of the activities or any project that will help with the improvement in the role of women in a better direction, the interviewees within the undergraduate student group had proposed an activity that will help improve the role of Isaan women; such as organizing a training to adjust the attitude, belief, and value. Some women are still stuck with the pattern and old mind-set of relying on the men. There has to be an activity that helps adjust the attitude and build up their own potentials (Chalabon Treesak, interview). Those interviewees in the other also agreed on that but added more into the activity through brainstorming in order to lead to a reality than merely just trainings. This will also help the women to have more courage to step up to do more activities to add more to their roles within the social dimension (Duangrudee Srimoontree, interview) (Jaruan Thuanman, interview). The proposed activities and other projects will consist of people from different age range and the activities that suits people in each age range; such as for children up until youth, there should be activities that helps build the understanding. With the group of people from 25 years old and up, there has to be activities that helps people to see the changes process that is happening (Chalabon Treesak, Jaruan Thuanman, Duangrudee Srimoontree, interview). One of the interviewees within the group of experts proposes an idea from the current social context. Technology plays a huge role and attracts the interest from the youths. There should be activities that helps build up the new generations and serve their interests; such as providing youth with short video clips in order to encourage the youth to learn on their own and for them to use the technologies that they are used to. There might be more support in the social issues which should be able to tie the interest nicely with the social context (Sunee Chairöse, interview).

From what was mentioned above, Khon Kaen is the area that has been receiving a lot of people who migrate within the Isaan area. With its readiness to announce itself as a metropolitan city and one of the most important places for economy investment of the country. From the interviews, it was found that most single families who are living in the communities within the urban setting have no relatives who are living around, no social capital, no community, and no environment. The pattern of living while depending on nature cannot be found within the city area. The culture that had been passed down through the tradition, culture, teaching, that used to go hand in hand with the way of life therefor, had changed. Along came modernization and the values that were influenced by the media. The role of women within the cultural dimension had been passed down from the older generation that are being adapted to the changing social status.

4.2.2 The Economy Dimension

The coming in of the development projects by the government that have goals in developing Khon Kaen into a metropolitan city had created many changes in the societies. Especially for the communities within Muang sub-district, Nai Muang district, Khon Kaen province, both in the way of life of the communities and the people within the community, the plan, the policies, and the strategies within different levels, which aim to mainly develop the economy. This somehow goes along with the global development trend that lies upon the capitalist society base. The impact from the trend of

globalization, people, mostly younger generation, now have higher education. The livelihood also changed, which had an impact on the reflection of the traditional way of life, the way of life that still has to do with agricultural career. From the past where women didn't have much role within the economic dimension, women had to adapt their role to match with the current era in order to bring about the income to help with the family whether as the main income or the additional income. What can be seen in the present day is that women work outside of the house more. Even then, women still have a lot of responsibility within the family because the role of women is still the expectation that the society had passed down to from generation to generation.

From the data gathered from the interviews on the role of women that the society expects under the economy dimension, the attitude from the expert group is similar to the other two target groups. Women within the role of mothers and wives will make the decisions on the expenses; from the living condition of the family that can no longer rely on the natural resources to sustain their lives. However, women still have the responsibilities in taking care of other things that revolve around the meals of the family members. Women still have to wake up in the morning to prepare food, but no longer finding vegetables or mushrooms since there are no resources for people to rely on like in the past. Today, in every society which includes Isaan society, every family has to use money to sustain their lives. In the past, although the role of women and daughters in the past was taking care and making decision on the inheritance, but because the way of life within the agricultural society that relies on nature and rice planting as the main income to sustain the family and Isaan women had no power in any decision making, the decision making concerning the inheritance will be made by the father and the male relatives. Today, the sons and daughters have the equal rights. They are more grandchildren but the inheritance stays the same. The inheritance therefore got split equally. The decision today mainly depends on who inherit the inheritance however they want to do with it. But in today's society, the capitalist society had intruded into every area both the urban setting into the rural area. The inheritance that the children had received came in both form of land or houses. Somehow, these have currently fallen into the hand of businessmen. And when those resources that they had been relying on changed hand, the owner became the employee; such as the case of rice planting. The owner of the original land, after selling their land, came back and asks to lease the land from the new owner. The rent and the conditions were set by the new owner. When they cannot live their lives under the new conditions, permanent or temporally migration happens. As for the responsibility and the decision making on the income that they can find. Due to the fact that women at the current time; mothers, wives, or daughters, had to bring in the income to sustain their family. With all the ability that women had gained, they also gained the power to make decisions, which includes the decision making for the debt of the families. For the interviews with the target groups in the current time, the data shows the similarities within the issue of the debt management within the households which shows that men and women have equal right in the decision making process. Women nowadays have the ability to generate the same amount of income for the families which helps women to have a louder voice within the decision making. On the aspect of savings, the decision making and the management of the saving mainly fell into the roles of mothers and wives ever since the past up until the present. As for the issue on the work to help generate income for the households, even though women didn't have the main role in finding income for the families, men and women have to work together to help generate more income, no matter if they are in the role of mother, wife, or children. But those who are in the role of grandmothers have to help raise the grandchildren. The work status within the city requires people to have to leave for work in the morning until they are done with their work in the evening. They don't have a chance to fully take care of their own children. Parents today send their children to live with their grandparents or the grandparents come to look after them. Sometimes, the children were sent to day care school or they will hire a nanny to take care of their children when they were working. As for the work during the planting season, those target groups that are living within the urban area don't have land to plant which make that role no longer significant, except that they still have paddy fields to work on in their original hometown. However, women who are living in the urban area, whether they're mothers, wives, and

daughters, have to work. However, the works are no longer according to the season. As for the work during the dry season. As it was mentioned that there had been a change from the production way of life with the goal of sustaining their lives to the production that was aimed at business which eventually led to the production system that is under the businesses who controls the production factors. The work during the dry season therefore is determined by the business owner. The workers might have to temporally migrate elsewhere and become labours; such as harvesting sugarcane in the central part of Thailand. In the past, Isaan women within Isaan culture will spend their summer in making crafts that were passed down to them until that had become part of the local wisdom. These were used for household use or trading. Somehow, this requires the natural resources as the main materials. Therefore, that means that the local wisdoms that were passed down were limited by the businesses who also own the rights to the production which also created the local wisdom.

From the interviews of the target groups of the undergraduate students and the women within the working groups shows the aspects and the experiences from within the urban and rural contexts that Isaan women is working hard. That means that the women still have to work within the house which has to cover the economy dimension, they can no longer just stay at home like in the past. Even though they stay at home, they still have to do additional work to help generate more income (Jarawan Thuanman, interview). Therefore, the things that can be clearly observed is the differences from women's role in the past where women today plays more role in the decision make and participating more without having to wait for the orders form the men (Chalabon Treesak, interview). That might be because of the era that had changed. The economy is getting worse; all the family members can no longer stay at home but have to help with finding more income. The role of the people therefore changed (Duangrudee Srimoontree, interview). The economic dimension might be one factor that helps women to have a louder voice within the family than in the past. While the experts who have the knowledge talked about the women within the economic dimension that the same old works that women did are now not enough to sustain their family. The society had changed; they now have to seek for the opportunities to make more living. Mrs. Sukanya Noiphangnok a woman who is living in the urban community, who also didn't have much education but is willing to do the social dimension work with the slum communities in Khon Kaen city reflects a situation for all women who are living within the urban setting. She came up with an effort to try to get together a group to help develop the community. However, most women chose to spend their time working to find more income due to the external debt problems and the economy status that is different from the rural setting where there is nothing the people can rely on in the city except for the money. But when we talk about the role of women within the urban setting, they have the courage, the have a strong characteristic, which is different from the women in the rural area. Women who are living within the city had step pass the role of just being a wife or a mother and their gentle and soft characteristics. In some families, we can see that women are actually the leader in the family. Therefore, it can be concluded that for women in the city who are above 40 years old, those traditional social refining process had no effect on them. Since living in the rural village means that there are things that have been passed down from generation to generation, from the maternal or the paternal grandparents to all their existing relatives. These things had accumulated the expectations from all these family members and form a strong frame for the women in the rural settings. While women who came and live in the city, those ranging from 40-50 years old, are now the leaders within their families. Women are now free from all the concerns about how their relatives and how the society thinks. They have more freedom to play out their own roles. (Suntree Sengking, interview). It can be seen that women from the rural communities have been moving in more to work in factories. Those who came brought back all the technology to their communities, even those students who came in for education. This is happening more and more. Their livelihoods are now more dependent on the city. From the experience of the surrounding communities of Khon Kaen, women who came into the city came to 1) work in factories or 2) take the work from the factory to continue working from their homes. They no longer rely on the fields like in the past. This also spread out further to the communities in the outskirts area such as Sawattee sub-district and

Baan Toom sub-district. The Heed and Kong is still there since the family and the relative system is still there although it is now decreasing. Especially, because the communities in the urban area comprise of people who came from different rural communities and form new communities. A question of “where are you from?” will give you a variety of answers. It is like they all come here to start new communities together. The Heed and Kong are sometimes left behind since the reasons they come together are all economic reasons.

When we talk about the status of Khon Kaen city, one of the factors that urge the changes in all the dimensions, especially in the economic dimension, is the Khon Kaen development plan. From the vision of developing Khon Kaen province to the vision of developing Khon Kaen municipality goes in the same direction. The vision of developing Khon Kaen city is “The center of Isaan economy, caring society, peace, and sustainable learning”. This reflects that the development to become the center for Isaan economy is one of the factors that led to the changes within the society and culture, as well as the roles of women and men in the future. The interviewee had proposed the way of how to combine the plan to develop the economy and investment, art and culture, as well as people. The interviewee said that there should be more cultural investment; in the tourist sites and all the local traditions. However, at the same time, this down side of this is that putting more focus on the cultural products could also make villagers think too much about the economy and forgot their own culture (Jarawan Thuanman and Chalabon Treesak, interview). While another interviewee express the concern on the risk that the culture might disappear. Being a “center” means that there will be more foreigners coming in. The culture that came in from the outside could absorb the existing culture and make them disappear (Duangrudee Srimoontree, interview). This somehow goes in line with the target group of experts on the point that the Khon Kaen development plan that will support the art and culture could be in conflict with the plan that will support the economy. They are concern that the next generation will not be able to see the traditional culture because all they will be seeing is the ASEAN economy. Normally, when people look at modernization, they tend to forget culture (Sukanya Noiphangnok, interview).

Apart from the current status of the development with aims at supporting the investment, there are still other factors that integrate themselves in and might have an impact of the changes of the society and culture, as well as the roles of the people; such as the ASEAN economy which consist of three pillars: ASEAN Security Community, ASEAN Socio-Cultural Community and ASEAN Economic Community. However, more importance had been put on the ASEAN Economic Community. From the data that were gathered from the observation and the interview of the target groups provides many perspectives on this plan which affect the changes within Thai society. The expert group’s opinion on the AEC shows that the ASEAN community only focuses on the economy; mostly preparing the logistics structure for the transferring of the goods and product. While the issue on women is still being talked about, the focus is mostly on women’s rights (Suntree Sengking, interview). The target group of undergraduate students had reflected their opinion on the ASEAN community on the fact that the cultural dimension might disappear since there will be no one left to pass them down to the next generation. The ability to travel to different areas further away for economic purposes will cause a gap within the cultural dimension (Jarawan Thuanman, interview). Another concern is that many women had gone to work in other countries such as Japan. If we were to look at this from another perspective, this can be a good opportunities for women to develop more potential. This might create for motivation to spread the Isaan culture. However, these women don’t have high education; they mostly end up in the labor sector or fall in to the human trafficking process (Duangrudee Srimoontree, interview).

Apart from the ASEAN community, there is another factor that had integrated itself and causes the changes in the Thai society and culture; that is the women development fund. This fund was set up to ease the problem that women have in order for women to gain an access to concrete development. The government had announced to the senate as one of the sixteen urgent policies in the year 2011. The process falls within the government role to make sure that the benefit reaches every woman. Although the women development fund is a positive trend will can help with the development of

women's role, the gap within the administration could cause it to become a problem that the opportunities and the potential for the society.

Today, the women development fund had already become the main factor in the development of the women within the cultural, social, and economic dimension. The interviews with the target group shows that people have to get registered to gain an access to the fund. There will be a representative that will come in and explain the detail of the funding. Sukanya Noiphangnok, one of the interviewees, wants to use this fund to form a weaving group in order to conserve the traditional culture due to the fact that people know longer knows how to do it and it can also help generate additional income for the families. But the reflection from other women's group is that they only want the money to be set up as a fund to help them with their financial problems. The undergraduate student group had mentioned many interesting points; the fund should be aimed for rural or remote area. For those who are already educated, there should be more support for building up their careers or how to further their studies, or other suggestion that can concretely help them with their career development. However, those who will be successful in life don't necessarily have a high education. It all depends on how they manage to develop their own ideas (Chalabon Treesak, interview). As for other opinions, people want different things out of the fund. There should be some trainings that help people to understand the limitation of the funding and that the funding should be aimed at developing their own potential. There should also be a follow up to check if the money was used according to their objectives (Duangrudee Srimoontree and Wipawee Grisanaputi., interview). The undergraduate student group and the expert group also shared the idea that the development on the economy should be building off of the projects that already got started. They propose that the budget should be used to support the career development such as the support on the OTOP. There could also be more support going towards helping Isaan women to be more educated. In the Isaan society, women don't pay much attention to education as they should. Moreover, the parents also don't support the education process and therefore caused them to be ignored. Some of the budget should be pushing towards the support of education and career (Jaruwan Thuanman, interview) (Wipawee Grisanaputi., interview). There should be more research into the opinions towards the projects in order to respond to the objectives of the funding which will requires help from many different parties. Once the needs are identified, the strategies are laid out. The experts and the some speakers can come and provide more knowledge and then build up a structure together with the communities of what they need. The research will have to rely on the area, the problems and the potentials that need to be focused on or developed. This can be done through the research conducted on that specific area. This will help give a clear picture on the development of women's role.

The target group of experts had provided the opinion towards the direction in the future for women; mothers, wives, and daughters, within the aspects of economy, social, and culture. This can be the fight within the economic dimension of women in the urban settings and could be the thing that helps women to be stronger because women who are living on the city don't have the natural resources, paddy fields, rice to put in their barns, and no vegetables they can pick. They have to find money in order to get the food and build up security within the families. These are the things the women in the city have to develop. There is not much reliance within the community. They all have to rely on their own. They have to manage themselves. This is the positive side since because of all the things that were mentioned earlier, women had to become stronger or they will not be able to live within the city.

4.2.3 Social Dimension

From the data gathered from the observation and the interviews, when asked about the role of women that are expected by the social dimension, the opinion form the expert goes in line with the other two groups on the coordination and working together with the government agencies. Women are playing more roles in coordinating with the government. There are many women volunteers who came and become part of the social dimension. Women joined in more in village meetings. From the interview with the target groups, Isaan women joined in village meeting more because they feel that they are part

of a community. They should have right to know the updates of the situation. We can therefore see more women playing a role. Women ask to be part of many other activities more; such as joining meetings, being on the committee, or involving in trainings. Women also have more courage to bring themselves out from just being in the cultural frame and they not only join in to participate like in the past. They also share ideas or even act as the chairperson in some meetings. As for their participation on the NGO projects, the interviews with the target groups show that women who are living in the rural area work more with NGOs than women who are living in the city. They use collective interest which helps them to form groups easier than in the city where most families are single family, or they are living their lives more individually. Women who came into the city to study don't live their lives like women in the rural area. It is therefore harder to find a collective interest comparing to the rural communities.

The target group of experts talked about their observation and the work that they did with the women in many different communities of how women had less role in social activities. Before the activities are separated between the men and the women, women are asked to gather as a group and provide to opportunities to express what they want to do. This is the strategy that hopes to bring women closer to development work. The step is to let the women see the problem in terms of the financial status within the family while pointing out that they have the skill, for instance weaving, and encourage them to use that skill to help generate more income. Other female activist also see have the same experience and collaborate to create a network that will help support women on the careers which eventually became the Isaan Women Development Network. However, the network is not as strong comparing to the past due to many factors. The founders of the networks had split up to go work in different areas, mostly their hometown. However, the remaining people in the network are still keeping the activities on going up until the present time; such as Phan Mai group, Roi-Et province, Praepan group, Khon Kaen province (closed down on December 2012) and Taw Pha group, Udonthani province. There are weaving groups although the income is not as high as in the past but it is still a fundamental career for women. There is also a movement of women in other networks concerning the environment and agriculture. There are women activists that still use the training on women's role with younger generation of activist. This is the problem why women still don't have the same access to development projects as men. The women network expanded by networking with other women groups who are working on different issues. (Suntree Sengking, interview) (Wilaiwatt Grisanaputi, interview) From the earlier interviews, we can see that the women's issues do ties together in every dimension. The cultural dimension consists of the skills that were passed down to this generation; such as weaving, can play a role in the economy dimension and the social dimension and thus, created more confidence for women to join in the social dimension. This goes in line with one interviewee from the expert group that says that the role of women today had changed, not only in the cultural dimension or the economy dimension; there is also an increase in their participation and their roles. The role of men and women are almost equal in every activity. Women now have become leaders within the society, and many organizations, both formally and informally. One of the interviewee volunteered to take care of the community, doing community development work, responsible for children and youth within the community and coming up with activities that will keep children off of being addicted to video games and causing problems. The activities include things such as bringing children out of the area to do activities and doing activities with other communities.

Additional information from some of the interviewees (Suntree Sengking, Wilaiwatt Grisanaputi and Sunee Chairose, interview) shows that from their experience in working with women, forming a group helps push their potential to be used, giving them more self-confidence to them to move to do jobs in other dimensions. It also provides an opportunity for women to learn because of they are successful in the economic dimension, they will have more confidence and will be more accepted by the society which can open so many doors to the broader world. They will gain the confidence from their own experience. When women play more role within their family economy, they will begin to see their role broaden up and will not be tied or limited to the same old things and will

eventually come to the realization that women can do many things; such as during the Tambon Administrative Office (TAO) campaign, many women felt that they need to be part of the local political, they worked with Khon Kaen university professors and NGOs to prepare in every aspect; such as making posters and PR, talking about what type of content should be in the campaign posters, and how can they use their gender as a women to gain more vote. They even have to learn how to use a microphone. Even though starting from the economy dimension can help women to cross over to other dimensions, Isaan women cannot leave behind the roles as wives and mothers which is still an expectation from the society. If we look at this from another perspective, we might feel that the family and the society is taking advantage on the women since women had to do everything, economy, politics, and household works. We don't see a lot of men cooking rice or doing laundry. Most women have to be the leader in that department and manage those jobs well. Women can go and join in other activities as long as they don't neglect that household job. Most interviewees have had experience working more with women in the rural area, therefore, these traditions and belief can still be found more than in the city. There are still expectations of women role within the cultural dimension due to the long process of teaching and passing down to the next generation. Women in the leading position step away from that role since they might not have a family or children to pass this knowledge and belief down to.

One interviewee who's in the working age group (Supaporn Kidkla, interview) talked about the changes in the community concerning the role of women that from her experience, in the community, men will be the main person for all the administrating job. But now, women are more educated and are being more accepted and given more opportunities than in the past. This is true for middle age women. But for women in their youth, 20% of the youth in the communities are clearly playing fewer roles within the communities due to the migration issue where the youth don't spend much time in their own community and didn't get a chance to absorb all the culture or involve with the community development work.

As for the obstacle in developing women to enter into the social dimension, the undergraduate student group said that knowledge and education is important. In the past, women might not need education because men took care of them. But now everyone needs to find more income for the families. Therefore it is less opportunity for them to be involved in the development process. Somehow, knowledge can be either the opportunities or the obstacles in developing women's role and building up self-confidence for women (Chalabon Treesak, interview). When asked a question of how should this new generation live? The trend of consumerism is so strong that it had created a huge impact. New generation will be out of the cultural frames, the Heed Kong, but will run into the traps that will fall on them causing them their freedom. Women will fall under the idea of consumerism, social media, and social IT. These trends will keep pushing down on women and cause them not to be able to use their potential or be part of the politics (Suntree Sengking, interview). This goes in line with what participation of women in politics in Thailand and its neighbouring countries. The percentage of women participating in politics is only at 15% which is lower than other countries. When in other activities under the cultural dimension, the housewives and the women in their working age will bring their children to these activities to have them absorb the traditions and to reduce the gaps between generations (Wilaiwatt Grisanaputi, interview). In the social dimension, the youth group that should supposed to the continuing the social dimension works left for school or to work. Women from this age until the working age had totally disappeared from the development in the social dimension. Therefore, having children to participate in the activities might present itself with good results while fixing the gap between the generations.

The concrete starting point needs to start from conversations. Women have both their own problem and the collective problems; such as the equal rights. Some of the issues can be push forward, and it might have an impact on all women; such as the standard principle of the women development fund or trying to push for the gender equality in the policy level. These issue needs to be fought together, if succeeded, everyone will benefit. Women in different groups also have different problems;

for example, the minorities in the north have problems concerning the environment in their community. The activist needs to create a conversation to reflect and analyse the problems to all people to be able to decide what should be done first, with who and how, and how they come together. According to the perspective of the target group of academics and experts, people in the city needs to use the issues that exist within the communities; such as the collective problem of the communities living by the train track is the land issue. The prevention to eviction should be the issue that ties the communities together since it is the issue that everyone is facing and the problems that they need to solve together. Other communities within the city could be grouped together by their occupations. Some leaders use the careers or occupations as a mean to form a group such as a saving group or an elderly welfare group. The interviewee from the working age women group Supaporn Kidkla and Disaraporn Phalapree mentioned that it could start with small projects that can be done from within the community; such as housewife group coming together to do some sort of activities besides raising children at home. This common point should consist of target groups with similarities or age in order to come up with activities and the content that will match with their context. The women group can come together to updates on the news and information, creating more alternatives for themselves and the group, which from the experience can create women member who will eventually become involved more in the work within the social dimension. Therefore, the changes are that we will see the increasing role of women.

5. Conclusion

The conclusion from this study is as followed; the role women within the Isaan culture are the result of the social structure that was based in agriculture that determined the work between the men and the women. The women is mostly within the cultural dimension within the families through the process of socialization, passing on, remaking through teaching, the beliefs, the tradition, which is the thing that determine the status and the role of women. Family within Isaan society is an extended kind of family, which will usually pass on values, beliefs continuously through generations. Therefore, the support in the role of women in the past is through the support of occupations such as develop techniques in weaving skill and men's roles are limited to outside of the household in the dimension of economy and social dimension which is the things that will add to the knowledge, experience, skills, and the power for men.

The role of Isaan women in the current time from the context of the urban area, families in Isaan are shifting more towards single families. That is caused by the capitalist social structure that aims at economy and the role of women within the cultural dimension changed. Currently, the role of women had crossed over to the economy dimension that pushes women to have to raise their status for the survival of their own families and the expansion of the economy within the big city like Khon Kaen. Moreover, the trend of consumerism that comes with the technology and globalization had forced women to have to adjust their role more towards the economic dimension. At the same time, while the role of women is shifting more towards the economic dimension, it also pushes women to leave their role in other dimension due to the time condition that had all been used in the economy dimension. However, in pushing themselves to be able to enter into the economic dimension for women will have to rely on the education and partly in generating more income for the family by entering into the employment system in the urban society which helps the women to feel more valuable and making themselves and their families proud. It is also a way of gaining more acceptances within the society. The changes in women's role into the economic dimension as well as the social dimension with the acceptance from the society and men became the negotiating power for women and give them more power in making decision on the economic basis, which is in a way, maintaining the social balance of living together in a society.

As for the reception of new culture from the migration into the city for education, work, and finding a place to live and the expansion of different culture had cause the socialization process both in the content and the format. The content that were passed down from the past starting to become loose

because those things no longer reflect the reality in the current time. The spreading of the culture through individuals that travel in and decided to settle in the urban community or the community on the outskirts of the city, even when they decided later on to move back to their hometown, are all the factors that help accelerate the spreading of the urban way of life and mindset, the beliefs, and the livelihood. That means that the old cultural dimension is fading away and might be lost in the future. Therefore, the cultural dimension is the thing that society has to consider and determine where they want the community to go in the future. Another intervening factor that is important and has an impact on the role, attitude, belief, and the acceptance from the community is using the benefit provided from the women development fund efficiently by focusing on the youth and the working class people who are the mechanism of the society within the movement in the social dimension, creating a network to provide continuous work and providing a space for women to become a part in developing the community in order to keep up the things that will happen in the future with the coming in of the ASEAN community.

6. Recommendation

6.1 Recommendation for Application of the Study

- 1) The opportunity in continuously developing the role of women and youth in the future by using the Thai Women Empowerment Fund by using this fund as the educational funds for women in each area in order for them to be able to have a higher education which will affect their roles within the economy dimension. There should also be a condition where they are supposed to come and work with the Thai Women Empowerment Fund in order to increase the work and help create the continuity in the work that will help women and affect their roles in the social dimension.
- 2) The potential of the media at the present time and the presented content that affect the understanding and the values on the role of men and women, the equality in order to change the roles to be more suitable to the existing social status.

6.2 Recommendation for Further Studies

The study on the direction of on the development of women's role basing on the Thai Women Empowerment Fund for the youth, to expand the development framework to the youths, and creating a continuous working process.

References

- [1] Fine Art Department. (1972). **Tri Poom Phra Ruang by Phraya Litai**. Bangkok: Charoen Aksorn Publishing Ltd.
- [2] Jaranya Wongprom. (1998). The Study of Women's Status in Isan. in Thanajak Yenbamrung (editor). **Isan Women: The Alternitives, The Potential, and The Direction in Development**. Research and Development Institute, Khon Kaen University
- [3] Khon Kaen Province. **Khon Kaen Development Plan 2011**. Accessed on 12 November 2011, from <http://www.khonkaenpoc.com/>
- [4] Janthana Emmaneerat. (1993). **Gender roles in decision making and division of labor in silkworm production process: A study of Amphoe Ban Fang Changwat Khon Kaen**. Master of Arts in Development Sociology, Khon Kaen University.
- [5] Jarunee Wonglakorn.. (2006). **Cultural Philosophy and Thai Culture**. Chiang Mai: Department of Philosophy and Religions, Faculty of Humanities and Social Sciences, Chiang Mai University.

- [6] Jaruwan Limpaseni and Ekasid Dajakaisiyavanit (1996). **A Study for Poor Rural Development Plan: A Case Study of Southern Northeast Thailand**. Bangkok: Chulalongkorn University.
- [7] Term Wiparkpojnakij. (1999). **Isaan History**. Bangkok: Thammasart University.
- [8] Teerasak Teecayuphan. (2005). **The Development of Dokkoon Siangkaen Festival in Khon Kaen Municipality**. Master of Arts in Thai Studies for Development, Rajabhat Loei University.
- [9] Pasuk Phongpaichit. (1998). Preface. in Thanajak Yenbamrung (editor). **Isan Women: The Alternitives, The Potential, and The Direction in Development**. Research and Development Institute, Khon Kaen University.
- [10] Fasai Viseskul. (2001). **Gender Attitudes in Internet Webboard**. Master of Arts in Business Communication Arts, Dhurakijpundit University.
- [11] Manatchaya Rotchanaphaithunthip. (2002). **An analysis study of status of a female community leaders: A case study of Tambon Thapra municipality, Muang District, Khon Kaen Province**. Master of Arts in Thai Studies for Development, Loei Rajabhat University.
- [12] Sodsri Sriratdeejarus. (2006). **Development of Women Organizations in Wapipathum District through Participatory Process**. Master of Arts in Strategies for Development, Maha Sarakham Rajabhat University.
- [13] Somsak Srisontisuk. (1992). **The Study on the Changes of Isaan Rural People's Occupation**. Khon Kaen: Khon Kaen University.
- [14] Office of National Economic and Social Development Board. (2012). **The 11th National Economic and Social Development Plan (2012-2016)**. Bangkok: Office.
- [15] Amara Pongsapich. (1999). **Cultural Diversity (The Paradigm and Role Within the Civil Society)**. Bangkok: Chulalongkorn University.
- [16] Farung Mee-Udon. (2009). **The Contribution of Universal Health Insurance Coverage Scheme to villagers' wellbeing in Northeast Thailand**. Dissertation for Degree of Philosophy of the University of Bath.
- [17] *Arunee Sriruksa. 2014. The role of women in Isaan Culture under a capitalist society. Doctor of Philosophy Thesis in Art and Cultural Research, Graduate School, Khon Kaen University.*
- [18] *Thesis Advisors: Assoc. Prof. Dr. Niyom Wongpongkham, and Asst. Prof. Dr. Homhuan Buarabha*

Technical Efficiency and Interest Rate Spread in the Indonesian Banking Industry

Nury Effendi

*Faculty of Economics and Business, University of Padjadjaran, Indonesia
Jl. Dipati Ukur No. 35 Bandung 40132, Indonesia*

Rina Indiatuti

*Faculty of Economics and Business, University of Padjadjaran, Indonesia
Jl. Dipati Ukur No. 35 Bandung 40132, Indonesia*

Taslim Z. Yunus

*Muhammadiyah University, Indonesia
Jl. Kyai Ahmad Dahlan Jakarta 15419, Indonesia*

Maman Setiawan

*Faculty of Economics and Business, University of Padjadjaran, Indonesia
Jl. Dipati Ukur No. 35 Bandung 40132, Indonesia*

Abstract

This research investigates the effect of technical efficiency on the interest rate spread in the Indonesian banking sector. This research uses the sample of banks listed in the Indonesian Stock Exchange Market during the period from 2003 until 2012. Technical efficiency is estimated using the data envelopment analysis (DEA) with bootstrapping approach. Regarding the role of bank, the technical efficiency is estimated using the intermediation approach in the DEA. The effect of technical efficiency on the banks' spread is estimated using panel data regression. This research finds that the banks listed in the Indonesian Stock Exchange Market are moderately efficient with the average technical efficiency of 0.89. The interest rate spread is relatively high during the period of estimation with the spread of 6.66%, on average. This research also finds that the technical efficiency does not affect the banks' spread indicating that the Indonesian banking sector may not be competitive.

Keywords: technical efficiency, banking pricing, interest rate spread, Indonesian banking sector, data envelopment analysis.

1. Introduction

Banking sector has a significant role in the Indonesian economy. This sector provided funding to run the Indonesian businesses with the banking credit reached about 2706 Trillion Rupiah in 2012. During the period from 2002 to 2012, the growth of the banking credit was about 25% with the highest increase in 2012. Therefore, the performance of the banking sector will affect the performance of the Indonesian economy.

Despite the importance of Indonesian banking sector, it may limit the investment and economic growth because of the banking pricing problems i.e. setting high interest rate of borrowing and low

return for the savers (high interest rate spread). Interest rate spread in the banking sector can affect the economic decisions of both depositors who save the money and people who borrow the money. Compared to the other Asean countries like Malaysia and Singapore, Indonesia has higher interest rate spread between the borrowing and lending rate. According to the data from World Bank (2013), the Indonesian interest rate spread was about 6%, on average.

Conceptually, the interest rate spread is related to banks' operation in which the banks transform the inputs into outputs. Bernanke (1983), Robinson (2002), Sologoub (2006) suggested that the high interest spread reflected the costs of financial intermediaries. Furthermore, Brock and Rojz-Suarez (2003) found that there is association between the high interest spread (i.e. the difference between borrowing rate and lending rate) with the banking inefficiencies. Further, Quaden (2004) suggested that the efficiency in the banking system would benefit the real economy by giving the higher expected returns for the savers and lower borrowing cost for the project financing.

Related to the relationship between the interest rate spread and banking efficiency, there is a lack of research investigating the effect of the banking efficiency on the interest rate spread in the Indonesian economy. Besar (2011) investigated the effect of cost efficiency on the spread in Indonesian banking. He found the different results when the model is applied to the different assets¹. In spite of this, none of the previous research related the banking pricing with the technical efficiency which is important in transforming the input into output which affect the final cost. For example, Besar (2011) used cost efficiency as the ratio of operating cost to the operating income. Therefore, it is relevant to investigate the technical efficiency in the Indonesian banking as well as its effect on the spread.

This research investigates the effect of technical efficiency on the Indonesian banking spread. This research also has policy implications regarding how the banks set both deposit and lending rates. If there is no significant effect of the technical efficiency on the spread, the central bank may support the banking sector with the competitive internal and external environmental that encourage the banks to set the competitive pricing.

The paper is organized as follows. Section II describes the modeling approach which is broken in two steps. In the first step, technical efficiency scores are estimated using data envelopment analysis with bootstrapping approach and the spread is calculated using the difference between deposit and borrowing rate. Next, the effect of technical efficiency on the pricing is estimated using panel data econometrics. This is followed by the description of data in section III and the presentation of the empirical model and results in Section IV. The last section summarizes the results and draws conclusions.

2. Modelling Approach

2.1 Pricing and Technical Efficiency

This research defines the pricing as the “*ex-ante*” interest rate spread defined as the difference between actual or contractual deposit interest rate and lending interest rate (see Sologoub, 2006; Boldbaatar, 2006)². The spread indicates how the banks sets the borrowing cost and gives the return to the savers. The deposit and lending rates are the annual interest rate that are received by the savers and the borrowers, respectively.

Regarding the efficiency measurement, this research uses the technical efficiency to measure the Indonesian banking efficiency. The data envelopment analysis (DEA) is applied in the technical efficiency estimation using the method of Coelli *et al.* (2005), as follows:

¹ He measured the spread as the difference between 1-month rate of the Certificate of the Bank of Indonesia and time deposit rate. The model is applied into the time deposit, demand deposit, and saving accounts.

² This measure has an advantage than the “*ex-post*” interest rate spread because “*ex-ante*” approach reflects the marginal cost of intermediation (see Gelos, 2006)

$$\begin{aligned}
& \max_{\theta, \lambda} \phi, \\
\text{st} \quad & -\phi q_i + Q\lambda \geq 0, \\
& x_i - X\lambda \geq 0, \\
& \Pi' \lambda = 1 \\
& \lambda \geq 0,
\end{aligned} \tag{1}$$

where $1 \leq \phi < \infty$, and $\phi - 1$ is the proportional increase in outputs that could be achieved by the i -th firm, with input quantities held constant (output orientation). λ is an $I \times 1$ vector of constants and $\Pi' \lambda = 1$ is a convexity constraint, with Π being an $I \times 1$ vector of ones. This research uses convexity constraint by imposing variable returns to scale (VRS) because of the variative size in the banking samples. This research also uses a Farrel measure of technical efficiency (1957) to get an efficiency score which varies from 1 to infinity and to avoid getting negative efficiency score. Using the method of Setiawan *et al.* (2012), We define $1/\phi (\hat{\delta}(x, y))$ as a measure of the technical efficiency score which assumes the values in the unit interval.

Furthermore, this research applies the bootstrap technique of Simar and Wilson (1998) to get robust estimates of the efficiency scores. This is a repeated simulation of the data generating process which uses a resampling method and applies it to the original estimator to the simulated sample so that the simulated estimates imitates the sampling distribution of the original estimator (Simar and Wilson, 1998).

Moreover, this research uses the intermediation approach to select the inputs and outputs for the technical efficiency estimation. Following Karray and Chichti (2013), the inputs and outputs are described as follow:

Inputs

1. Total deposits includes saving deposits, time deposits, demand deposits, and other banks deposits.
2. Interest cost and comission fee includes all costs related to savings and deposits of the customers, checking accounts, other liabilities, and all comissions.
3. Labor cost includes costs related to gross wages paid to the banking employees.

Outputs

1. Loan is the credit given by bank to the customer in Rupiah and foreign currency.
2. Interest and comission revenue comes from comission, customer credits and bank investment on financial instruments, such as obligation and government bonds.

2.2 The Relationship Between Interest Rate Spread and Technical Efficiency

Furthermore, to investigate the effect of the technical efficiency on the interest rate spread, this research uses panel data econometrics with the model, as follows:

$$\text{Spread}_{it} = \alpha_i + \alpha_1 TE_{it} + \sum_{k=1}^K \beta_k x_k + e_{it} \tag{2}$$

Where i, t are the banks and period subscripts, respectively; *Spread* is interest spread; *TE* is technical efficiency; and x is the vector of the control variables. Regarding the research of Bernanke (1983), Robinson (2002), Sologoub (2006), Brock and Rojz-Suarez (2003), and Quaden (2004), the effect of the banking efficiency on the spread is expected to be negative ($\alpha_1 < 0$) indicating that the higher the efficiency, the lower the spread.

Furthermore, this research uses the control variables of banking concentration (*CR4*) and deposit rate (*RDEP*) that affect the spread as applied by Boldbaatar (2006), Besar (2011), and Georgievska (2011). Fixed effect or random effect model will be applied based on the Hausman (1978)

test. The fixed-effects model is chosen if the Hausman test shows that there is correlation between individual effects and other regressors. Otherwise, the random effects model will be used. Also some problem related to the panel data i.e. heteroscedasticity and autocorrelation will be corrected.

3. Data

This research uses sample of banks listed in the Indonesian Stock Exchange market from period from 2003 to 2012. There are about 32 banks listed in the Indonesian Stock Exchange Market (ISEX) with some banks have no complete series data during the period of estimation. Therefore, eq. (4) is estimated using the unbalanced panel data econometrics. Although this research only uses the banks listed in the ISEX, this may still represent the banks as a whole, since the 32 banks dominate more than 60% of the Indonesian Banking Sector in their assets³.

Table 1 shows that the interest rate spread has an average of 6.661% with coefficient of variation of 0.447. Although the coefficient of variation for the interest rate spread is relatively low (less than one), the interest rate spread has the large interval between 1.360% and 17.680% indicating the banks have different strategies in the pricing. Moreover, CR4 has low coefficient of variation during the period of estimation with the coefficient of 0.604 indicating the stable market power in the Indonesian banking sectors, respectively. This also indicates that the Indonesian banking sector is classified into the oligopolistic structure. Furthermore, although deposit rate has the low coefficient of variation with value of 0.237, the variable has the wide variation between banks with minimum and maximum value are 5.125 and 15.920, respectively.

Table 1: Descriptive statistics of the variables from 2002-2012 Across Banks

Variable	Mean	Standard Deviation	Coefficient of Variation	Minimum	Maximum
Spread (%)	6.661	2.979	0.447	1.360	17.680
Total Deposits (Billion Rp)	40822.219	77427.860	1.897	3555.000	456854.700
Interest cost and comission fee (Billion Rp)	2070.946	3421.424	1.652	248.000	25016.579
Labor cost (Billion Rp)	1496.110	2767.863	1.850	2060.000	16299.620
Loan (Billion Rp)	26826.731	52372.240	1.952	1229.000	2403.000
Interest and Comission revenue (Billion Rp)	4691.442	8453.894	1.802	2403.000	49950.797
CR4	0.604	0.047	0.078	0.525	0.680
Deposit Rate (%)	8.722	2.069	0.237	5.125	15.920
N-Banks	32	32	32	32	32

Source: own calculation

Further, the input and output variables for the technical efficiency estimation have the high variation with the coefficients of variation are higher than 1 for all the input and output variables. For example, Labor cost and loan have the coefficients of variation of 1.850 and 1.952, respectively. This indicates that there are different ways in transforming the inputs into the outputs among the banks.

4. Results

This research uses two-stage approach to estimate the effect of the technical efficiency on the interest rate spread. The first stage is estimating the technical efficiency using the bootstrapping approach and the second stage is estimating the effect of technical efficiency on the interest rate spread.

Table 2 provides the banks interest rate spread and the estimation of the technical efficiency of the Indonesian banks listed in BEI during 2003-2012. Table 2 also separates the technical efficiency

³ Most of the big banks are listed in the Indonesian Stock Exchange Market.

estimation between pre-crisis and after crisis 2008 to see whether the crisis effect the performance of the banks significantly.

Table 2: Average Biased-Corrected TE and Bank Interest rate Spread

Period	Average Biased-Corrected Technical Efficiency Score	Spread (%)
2003-2007	0.887	6.715
2008-2012	0.897	6.737
2003-2012	0.887	6.661

Source: own calculation

Table 2 shows that both technical efficiency score and the interest rate spread are relatively the same between the period of pre-crisis (financial crisis), after crisis, and the whole period. The average technical efficiency score is 0.887 during the period 2003-2012 indicating that banks only exploit 88.7% of their credit and revenue potential. This indicates that the banks can still increase their credits and revenue by 11.3%. The average technical efficiency increase slightly after the period of financial crisis by 0.010 of 0.887 after the financial crisis. Furthermore, the spread of the banks are relatively constant between pre-crisis and after crisis with the average of 6.661% for the period from 2003 to 2012. There is a slight increase of the interest rate spread by 0.022% of 6.715% after the financial crisis as the cause of the increase in the financial risk. The spread data is consistent with the numbers provided by World Bank (2013).

Table 3: The Effect of Technical Efficiency on the Interest Rate Spread

	spread
te	-0.297 (0.20)
rdep	-0.300 (2.48)*
cr4	0.103 (0.06)
_cons	9.482 (4.09)**
R2	0.11
N	281

* p<0.05; ** p<0.01

Source: own calculation

Table 3 provides the results of the technical efficiency effect on the interest rate spread of the banks using the fixed effect model⁴. From the results it is shown that technical efficiency does not have an effect on the interest rate spread at the 10% critical level. This can be an indication that the interest rate spread or pricing setting is not affected by the internal competitiveness which can be a fact that the price setting is mostly affected by the environmental factors.

CR4 also does not have a significant effect on the interest rate spread at the 10% critical level. This result supports the findings of Claessens and Laevens (2004) who found that concentration did not reduce competition which may not affect the market power in setting the price.

Furthermore, deposit rate has a significant effect on the interest rate spread at the 5% critical level with the coefficient of -0.300. The increase of deposit rate by 1%, decreases the spread by

⁴ The Hausman test reject the random effect model at 1% critical level. Also the model has been corrected from the heteroscedsticity problem by using the Newey-West method.

0.300%, *ceteris paribus*. This result supports the findings of Crowley (2007) who found that the higher deposit interest rate was associated with lower interest rate spread in the African countries.

The results indicate that the interest rate spread is not affected by the input transformation into the output as well as the possibility of market power effect on the pricing for the banks listed in the Indonesian Stock Exchange Market. Instead, the deposit rate following the rate from Central Bank affects significantly the spread.

Regarding the results, the policymaker should consider to improve the performance of the banking sectors by encouraging the competitive internal and external banking sector that support the banks to set the competitive pricing. This can be done through improving the efficiency of banking sector and in the same time reducing the role of central banks as a guidance in setting the interest rate dominantly.

5. Conclusion

This research investigates the technical efficiency and the interest rate spread in the Indonesian banking sectors as well as the relationship between the variables. The interest rate spread is defined as the difference between deposit rate and lending rate and the technical efficiency is estimated using the benchmarking approach of the data envelopment analysis (DEA).

This research finds that the Indonesian banks are moderately efficient with the average technical efficiency of 0.887. The spread between the deposit and lending rate is still high in the level of 6.661% which closes to the data of World Bank (2013). Furthermore, the technical efficiency and banking concentration does not affect the interest rate spread. Only deposit rate affects the banking spread in Indonesian economy.

The insignificant effects of the technical efficiency and banking concentration on the interest rate spread indicate that the banks consider more on the rate set by the Central Bank⁵ which is not healthy for the banking system. Therefore, the results of this research suggest the policy maker to redesign the policies by supporting the competitive internal and external environment in the banking sector. This can be done by increasing the internal efficiency and at the same time reducing the role of central banks as the guidance to set the interest rate.

References

- [1] Besar, D.S., 2011. Essays on Indonesian Banking: Competition, Efficiency, and its Role in Monetary Policy Transmission. (Unpublished Doctoral thesis, City University London).
- [2] Bernanke, B.S., 1983. Non-monetary Effects of the Financial Crisis in the Propagation of the Great Depression. *American Economic Review*, 73(3): 257-276.
- [3] Boldbaatar, D., 2006. Measurement and Implication of Commercial Banks' Interest Rate Spread in Selected SEACEN Countries, The SEACEN Centre ISBN: 983-9478-55-9
- [4] Brock, P. and Liliana R-S., 2000. Interest Rate Spreads in Latin America. In *Why So High? Understanding Interest Rate Spreads in Latin America*, edited by Philip Brock and Liliana Rojas-Suarez, pp. 1-38. Washington, D.C.: Inter-American Development Bank.
- [5] Claessens, S., and Laeven, L., 2004. What Drives Banking Competition? Some International Evidence, *Journal of Money Credit and Banking*, No. 36, Vol. 3, June, Part 2: 563-83
- [6] Coelli, T.J., Rao, D.S.P., O'Donnell, C.J., and Battese, G.E., 2005. *An introduction to efficiency and productivity analysis*, 2nd ed.. Springer.
- [7] Crowley, J., 2007. Interest Rate Spreads in English-Speaking African Countries, IMF Working Paper 07(01).

⁵ Deposit rate is significantly influenced by the Central Bank Rate in Indonesian banking system.

- [8] Farrell, M.J., 1957. The measurement of productive efficiency. *Journal of Royal Statistical Society*, 120:253–281.
- [9] Georgievska, L., Kabashi, R., Manova-Trajkovska, N., Mitreska, A., and Vaskov, M., 2011. Determinants of Lending Interest Rate and Interest Rate Spread, Special Conference Paper, Bank of Greece, ISSN: 1792-6564
- [10] Hausman, J. A., 1978. Specification tests in econometrics, *Econometrica*, 46:1251-1271.
- [11] Karray, S.C and Chichti, J.E., 2013. Bank Size and Efficiency in Developing Countries: Intermediation Approach versus Value Added Approach and Impact of Non-Traditional Activities, *Asian Economic and Financial Review*, Vol. 3(5):593-613.
- [12] Quaden, G., 2004. Efficiency and stability in an evolving financial system, www.bnb.be/Sg/En/Contact/pdf/2004/sp040517en.pdf
- [13] Robinson, J.W., 2002. Commercial Bank Interest Rate Spreads in Jamaica: Measurement, Trend and Prospects. www.boj.org.jm/uploads/pdf/papers_pamphlets.pdf
- [14] Setiawan, M., G. Emvalomatis and A. Oude Lansink, 2012. The Relationship Between Technical Efficiency and Industrial Concentration: Evidence from the Indonesian Food and Beverages Industry, *Journal of Asian Economics*, Vol. 23 (4):466-75
- [15] Simar, L. and P.W. Wilson, 1998. Sensitivity analysis of efficiency scores: How to bootstrap in nonparametric frontier models. *Management Science*, 44:49–61.
- [16] Sologoub, D., 2006. The determinants of Bank Interest Margins and Profitability: Case of Ukraine. www.bof.fi/bofit/seminar/bofcef06/sologub.pdf
- [17] World Bank, 2013. International Monetary Fund, International Financial Statistics and data files, data.worldbank.org.

Assessment of MEHR Housing Policy in Iran by using SWOT Technique (Case Study: Khoram Abad City)

Mahdi Garavand

*Department of Art and Architecture, Science and Research Branch
Islamic Azad University, Boroujerd, Iran*

Iraj Kalhor

*Department of Art and Architecture, Science and Research Branch
Islamic Azad University, Boroujerd, Iran*

Fatemeh Olfaty

*Department of Art and Architecture, Science and Research Branch
Islamic Azad University, Boroujerd, Iran*

Kourosh Khodayari

*Department of Art and Architecture, Science and Research Branch
Islamic Azad University, Lorestan, Iran*

Abstract

After industrial revolution, government has been disabled in order to preparing housing due to growth of population. For appropriate performance in housing, should be adapted by climatic conditions of the region, the number of people who reside in units, material of building. So it is necessary regard to needs that creating comfortable building.

Providing house for various people in societies has become the main concerns for governance in countries. Iran as a country with the population growing and providing housing for this population has been one of the main concerns is government. In recent decade, MEHR housing project has been considered as serious policy by the government in Iran. MEHR housing project is the wide project to construct housing by government for low-income people in order to reduce the price of house. This is Mass production of housing units in order to control the supply and demand in the housing market until the end of the project. The main objective of this project is providing housing for homeless people with priority to low-income strata.

The main object of research is assessment impact MEHR housing policy in Iran. This research is applied. The research method is "descriptive – analytical" and questionnaire is used to collect data. On the other hand was used " Quantitative method" in order to analyzing. Also we used SWOT technique.

Keywords: MEHR housing, Satisfaction, housing policy, Iran, Khoram Abad

1. Introduction

One of the main human needs is appropriate dwelling. This is necessary basic need in their life. Good Dwelling supply human needs some aspect such as: social, mental and physical needs.

Different countries for resolving the housing problem have carried out some different techniques, some have tried to rehabilitate slums around the cities, some of them gave mortgage to eligible, some gave land with cooperation of municipalities to eligible, some taking tax on uninhabited houses, giving facilities to mass manufacturers etc. We have high inflation and high cost of housing in Iran.

In Iran, housing market always acts as a “buffer” for the economy. In the periods when other sectors suffer depression, this sector absorbs capital surplus and passive assets and preserves the economy from depression. In three recent decades, between 3 to 9 percent of GDP (Gross Domestic Product) of Iran was produced from this sector and in average since 10 years ago, this share has reached 4.5 percent annually [1].

Although this figure is not meaningfully conspicuous, but after service sector, the main investment comes from housing sector, another implication of its importance.

On demand side, there are many influential parameters such as relative price of houses, the expectation of future changes in price, national income, liquidity, credit market of house, rate of return of current assets in economy, and population that affect demand for houses or investment for buying a house. Among these items, population and immigration are main factors of increasing demand in recent years in Iran. Unfortunately due to disequilibrium in demand and supply of housing market, there exists an excess demand which leaves many households homeless. This disequilibrium may result from inappropriate policies and decisions implemented in this market in recent years. In reality, the most important factor for a household is its purchasing power. Thus, financing the purchase decision is of paramount importance. Some studies have shown that a house is a luxury good (or even necessity) with positive income elasticity. Thus an increase in household

Income leads to increase in its demand. Therefore, in a macro level taking the inelastic supply of houses, an increase in the real income of all households, highly correlated to national income per capita, can lead to an increase in real value of houses [1]. Assume a person, who in a general framework of optimization, not only is “willing” to buy a house, but also regarding the capital market as perfect, is “able” to do so. He can finance this purchase by his savings plus present income and his future incomes transferred to present in the form of loans and installment plans. Therefore, the purchasing power depends on past savings, present income, and the ability to borrow regarding the future incomes. In Iran, the main share of financial resources for buying a house is households’ savings, while a small part is provided by loans from banks or loans from other sources. This reveals significant shortcomings of financial intermediaries in Iran. If somebody has enough current income without any considerable savings, he/she will not be able to buy a house in the current system. Financial systems in Iran lacks appropriate structures and mechanisms such as long-term loans and commensurate support which may help households to finance their purchase decisions and buy houses more easily with lower financial pressures.

As of January 2011, the banking sector, particularly Bank Maskan has given loans up to 102 trillion rials (\$10.2 billion) to applicants of Mehr housing project.[2] Under this scheme real estate developers are offered free lands in return for building cheap residential units for first-time buyers on 99-year lease contracts. The government then commissioned agent banks to offer loans to the real estate developers to prepare the lands and begin construction projects in an attempt to increase production and create equilibrium in the supply and demand curve (2008). Close to 400,000 units have been built and permits have been issued for another 12,000[3]. MEHR Housing project is expected to provide 600,000 residential units in its first phase [4]. About 3.7 million people have so far registered for MEHR Housing Plan (2008). About 10 million rials are to be paid by applicants for preparing the land and another 10 million to be given by the government in the form of banking facilities. Applicants should pay about 20 percent of the construction costs. In addition, about 140 million rials worth of

housing loans will be granted to them (10,000 rials=1 USD in 2008)[5]. While most Iranians have difficulties obtaining small home loans, 90 persons have managed to secure collective facilities totaling \$8 billion from banks [6]. Starting in 2014, the MEHR housing scheme will be taken off the balance sheet of the Central Bank of Iran.

Research method

The paper is applied and the research method is "descriptive – analytical". Also, questionnaire is used to collect data. The statistical population is residential of MEHR housing in Khoram Abad. Thus sample size is 257 household that have been calculated by Cochran formulate. Also we used the statistical methods to analyzing the data for example Excel Software. At finally we use from SWOT matrix in order to proposing strategies.

Research Background

In Iran, such that it must be, the right of housing issue has not been considered. Most researches have considered how concept of the right of housing changes, governing principles, adequate housing concept and housing policies.

2. IRAN HOUSING 'S LITERATURE

2.1 Reviewing Housing Policies in Terms of Economic Development Programs, Social and

Cultural Rights in Iran

Production of adequate housing in all countries not only is the manifestations of economic growth, but also meets the social needs and widely effects on mobility and accelerating the economic wheels of the country. For this purpose, the housing issue was one of the most important chapters of law for the five-year program of Iran.

2.1.1 First Program of Economic, Social and Cultural Development (1989-1993)

The objectives of this program is the change in methods of building, to build durable buildings, increasing the proportion of buildings, the promotion of existing per capita and conducting housing production with less infrastructure and better quality and in accordance with national per capita is 12. The problem of housing in this program includes lack of adequate support from manufacturers, the lack of organized standards, specifically for old buildings, Lack of necessary laws and regulations for the housing sector, in forms of Production cooperatives and utilization cooperatives (The First Economic, Social and Cultural Development Plan for Islamic Republic of Iran)

Important policies of this program include:

- Encourage the private sector - cooperatives and financial institutions to mass production of residential units
- Giving priority to the war-torn areas
- Special facilities to property builders
- Developing and implementing standards to minimize construction costs while maintaining quality [7].

The strengths of this program can be attributed to an increase in construction of durable residential buildings and Reduction of the number of single unit residential buildings [8].

2.1.2 Second Program of Economic, Social and Cultural Development

This program in housing were designed for purposes such as renewal of old buildings, Integration parts in urban areas of the country, assistance to vulnerable groups [9] and its main goal was implementation of clean policy (Savings, mass construction and miniaturization [10]. The major policies of this program are as follows:

Reform of the investment process, with emphasis on mass production and miniaturization by reducing investment by using insurance companies and investment firm's guarantee.

- Moving into reducing the cost by encouraging the miniaturization, compression, reducing the building construction period and madding standard dimensions and volumes of construction.
- Amending the tax laws related to housing, in order to miniaturization, Compression, making rental housing and protecting and enhancing the cooperative housing [10].

2.1.3 Third Program of Economic, Social and Cultural Development

Reducing the average level of infrastructure of residential units and increasing their life was the aim of this program.

The major policies of this program are as follows:

- Gradual payment of banking facilities for the stage construction of low-income group's housing. Creation of a secondary market and possibility of buying and selling partnership bonds in housing sector in the stock market.
- Amending the rules on payment of subsidies of housing sector to promote consumption pattern of Housing
- Amending the lows of rental houses to gradual decrease of government intervention and increase of private section presentation in local institutions (t The Economic Report of 2003 and monitoring the performance of the first four years of the Third Development Plan of Iran, 2003).

2.1.4. Fourth Program of Economic, Social and Cultural Development

Housing section got more attention in the fourth program of Iran's development (2005-2009) So that the Ministry of Roads and Urban Planning (the relevant department) is obliged due to interactions between the housing sector and the national economy and its balance role in improving the quality of life and reducing disparities develop and agree the housing master plan (The Law of the Fourth Economic, Social and Cultural Rights of Iran).

2.1.5 The Fifth Program of Economic, Social and Cultural Development

The articles from 167 to 176 of the fifth program of the law devoted to housing in the country, the program in which the following strategies are focused:

- Emphasizing on organizing and supporting the building and supplying of housing.
- Giving the emphasis on empowering approach to organizing informal settlements.
- Allocating at least 50 percent of the resources and facilities to the housing section for old buildings.
- Retrofitting buildings against earthquakes (The low of the fifth Economic, Social and Cultural development Plan for Islamic Republic of Iran).

3. STUDIED AREA

4. Studied area is Lorestan province. also, MEHR housing in Khoram Abad. MEHR housing divides four locations. "KAMALVAND (1)" – "KAMALVAND (2)" – "ALI ABAD " – "DAREH GARM".

Table 1: MEHR housing of Khoram Abad

Region	Area (hectare)	Progress (%)
KAMALVAND (1)	63	52%
KAMALVAND (2)	75	
AREH GARM	15	90%
ALI ABAD	2	90%

5. DESCRIPTIVE FINDINGS

5.2 Social – Cultural Issues

In order to assessing MEHR housing social-cultural criteria are necessary. Social & cultural Factors are such as: population, age, gender.

Table 2: social- cultural factors

Sample	Percentage
Male	47.6%
Female	52.4%
Total	100
Age	Percentage
18-29	28.9%
30-39	42.1%
40-49	50.9%
50-59	6.3%
More than 70	3.0%
Total	100

5.2 Infrastructure

One of the main challenges is inappropriate accessibility to infrastructure such as: gas, water, power, telephone and etc.

Table 3: infrastructure condition

infrastructure	Accessible (%)	Inaccessible (%)
Water	1.33	9.66
Gas	4.31	6.68
Power	6.43	4.56
Phone	4.30	6.69
Total	6.34	4.65

According table 3, 65.4% of resident don't access to infrastructure.

5.3 Environmental Issues

One of the main issues in order to locating urban land use should be regarded ecology and environmental issues. On the other hand, it is necessary that develop green space and parks. Also, this location shouldn't be faced natural treats such as flood, earthquake and etc. So, the environment criteria are:

- Site condition in natural climate
- Developing green space
- Decreasing environment pollution such as: sound or air pollution.
- Regarding to proximity between land uses.

According to field studied and questionnaire 98.2% of people don't access to parks and green spaces. On the other hand, site selection is not appropriate due to facing natural treats such as flood. Although these site are far from factories and industry centers.

Figure 1-2-3: there isn't adequate green space



5.4 Accessibility to Public Services and Center

Accessibility is important criterion studied area. Indeed, 75.5% of residential believed accessibility to them is inappropriate.

Table 4: Accessibility to public services

Accessibility	Excellent	Good	Inappropriate
Hospital	1	3	6.90
Education center	3.8	6.11	6.68
Office (work place)	-	8.3	2.86
Bus station	6	7	8.74
Organization	-	4	7.85
Urban services	2.3	8.6	7.77
Total	13.1	37.01	75.5

Figure 4: inappropriate accessibility



5.5 Physical Housing Aspects

Building is considered two aspects. One building as one residential unit, also, its relation by around environment.

Based on results, 14.5% of resident believed, apartment space is designed well. Also, 47.4% believed the space of apartment is inappropriate.

Table 5: resident opinion about physical housing aspects

Space	Appropriate	Inappropriate
Suitable using of space	11.6	45.2
Sunshiny facade	25.1	27.5
Inside building	16.1	57.3
Enclosures	11.4	29.3
Enclosures	7.8	77.8
Total	14.5	47.7

Figure 5-6: resident opinion about physical housing aspects



Figure 7: monotonous façade of building



6. Analyzing Data

In order to analyzing data was used "SWOT" technique. **SWOT analysis** (alternatively **SWOT matrix**) is a structured planning method used to evaluate the strengths, weaknesses, opportunities and threats involved in a project or in a business venture. A SWOT analysis can be carried out for a product, place, industry or person. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieve that objective. Some authors credit SWOT to Albert Humphrey, who led a convention at the Stanford Research Institute (now SRI International) in the 1960s and 1970s using data from Fortune 500 companies.^{[1][2]} However, Humphrey himself does not claim the creation of SWOT, and the origins remain obscure. The degree to which the internal environment of the firm matches with the external environment is expressed by the concept of strategic fit.

- **Strengths:** characteristics of the business or project that give it an advantage over others.
- **Weaknesses:** characteristics that place the business or project at a disadvantage relative to others
- **Opportunities:** elements that the project could exploit to its advantage
- **Threats:** elements in the environment that could cause trouble for the business or project

Identification of SWOTs is important because they can inform later steps in planning to achieve the objective.

First, the decision makers should consider whether the objective is attainable, given the SWOTs. If the objective is *not* attainable a different objective must be selected and the process repeated.

Users of SWOT analysis need to ask and answer questions that generate meaningful information for each category (strengths, weaknesses, opportunities, and threats) to make the analysis useful and find their competitive advantage.

Figure 8: graph of SWOT technique

SWOT ANALYSIS



Therefore, data were divided four sections. 1- Strengths 2- weaknesses 3- opportunities 4- threats that have been shown in table 6.

Table 6: Analyzing data (SWOT MATRIX)

Factor	Opportunity	Threats	Weakness	Strengths
Social; cultural, economical factors	The most of population are young people	There are unemployment people	There is multi native nation	Becoming a homeowner
	There is appropriate size family in order controlling population	There is low income (poor people)	There isn't appropriate MEHR housing price	
Infrastructure	There are water source in this region	-	There is appropriate infrastructure such as water, gas power, etc.	-
Environmental factors (parks and green space)	There are vast lands that could be changed to parks and green area	There is sound pollution due to more than half people have vehicle (57%)	There isn't urban green space in neighbor level	Good approach resident in order to cooperating about field
	There are garden and open space	There is public green space in order to achieving pour air	There isn't division according performance of parks	
	There is appropriate access to water source	<ul style="list-style-type: none"> There isn't adapted planet with climatic Facing natural treats such as flood 	There is the least per capita of green space	
Accessibility to public services and center	-	Inadequate transportation system	Inappropriate accessibility to services centers	-
	-	There aren't various land uses	There aren't daily public centers	
Physical housing aspect	-	There isn't eligibility	Inappropriate façade	-
	-	There isn't vitality		
	-	There isn't identify according to Islamic identify	Inappropriate landscaping	
Building as one	-	There is adequate parking	-	Appropriate

Factor	Opportunity	Threats	Weakness	Strengths
residential unit				sunshiny
			There is Elevators and heating	
Social problems	-	High density is led to unsafe urban space	There are some social problems such as robbery, addiction	-
		There isn't supervision on urban space so, creating hidden space		
		There isn't active urban space (just residential space)		

7. Conclusion

Providing house for various people in society is necessary. In recent year, MEHR housing project has been considered as serious policy by government. In this housing project, land owned by government and is transferred to the applicants without cost. In order to MEHR housing cooperative project based on cooperative economics law of Iran has been approved in September 1991.

In this research, was studied MEHR housing of Khoram Abad in Lorestan province. Finding show, although MEHR housing is new policy for low-income people but has not been successful in order to preparing needs of people. Some problems that have been created by project are: there isn't special identify, there isn't eligibility, there isn't affiliation between resident and etc. so Was proposed some strategies in order to improving project. They are:

- Creating various in many aspects for example different façade
- Improving culture level from different cultural ways
- Creating strong relation between people and their location (strengthen local identify)
- Creating cooperation between resident according historical, cultural and economical background.
- Strengthen housing planning. Also, preparing infrastructure in housing planning.
- Creating social spaces in order to promoting vitality in urban spaces.
- Regarding to natural factor in order to appropriate locating.

References

- [1] Khodabaksh F. (2000). Factors affecting the quality of housing and Evaluation of quality objectives for housing in reconstruction programs before and after the revolution, Proceedings of the seventh conference on Iran are housing policies of development, Proceedings of the seventh conference on policies of housing development, Department of Housing and Urban Development. P. 84-97.
- [2] William C. Wheaton (1999). Real Estate Cycles: Some Fundamentals [Journal]. Boston: Journal of Real Estate Economics. Vol. 27
- [3] Mokhber A. (1984). Social Dimensions of housing, Planning Organization of Iran, pp. 69, 24. Tehran, Iran.
- [4] Khazafy H. (1999). Reviewing of the Third Plan housing sector, Journal of Economics Housing, 29: 5-7.
- [5] Habibi SM, Ahari Z. (1996). Others minimum of housing. Building and Housing Research Center of Iran, second edition, pp. 92-94. Tehran, Iran.
- [6] Centre for Human Rights Studies, a selection of the most important international instruments on human rights (2003) Faculty of Law and Political Science of Tehran University, PP. 12, 13, 52, 72, 114. Tehran, Iran.

- [7] Naji Meidani, A., Zabihi, M., Ashena, M.,(2011) "House prices, Economic Output, and Inflation Interactions in Iran", *Research in Applied Economics*, Vol. 3, No. 1.
- [8] Rahmani M. (1996). Evaluation of the housing sector in shape of economic and social development, *Proceedings of the Third Seminar of development of housing policy in Iran*, pp. 600, 606. Tehran, Iran.
- [9] Azizi MM (1995). A housing indices in different countries (research projects), *National Land and Housing of Iran, Office of Housing and Economic Planning*, pp. 12-24, Tehran, Iran.
- [10] Arjomand A. (2002). *International Human Rights Instruments (Universal Instruments)*, martyr Beheshti University Press, pp. 251-254. Tehran, Iran.

Poverty Measures with Entropy Weight Methods

Melvi Elizabeth Romero Castillo

UPIICSA- Instituto Politécnico Nacional, Av.Te950,08400, México D.F

E-mail: soyesenciaely@hotmail.com

Tel: +97-0155-56242000 ext 70269; Fax: +97-0155-6242011

Eduardo GutiérrezGonzález

Corresponding Author, UPIICSA-Instituto Politécnico Nacional

Av.Te950, 08400, México D.F

E-mail: egutierrezg@ipn.mx

Olga V.Panteleeva

Universidad Autónoma Chapingo, carretera México-Texcoco km 38.5, CP 56230

Texcoco, Estado de México, México

E-mail: ac12810@chapingo.mx

Sergio Raúl Jiménez Jerez

UPIICSA- Instituto Politécnico Nacional, Av.Te950,08400, México D.F

E-mail: srjimenez@ipn.mx

Abstract

This paper proposes a comparison of poverty measures of the states of Mexico, describing two methods for multi-attribute decision and a third used multivariate analysis method is proposed. The use of each of the methods is based on objective considerations of the information entropy to measure poverty, analysing 12 socioeconomic variables. For each method, two measures are proposed; in the first the entropy of each variable is weighted, and in the second the entropy is reduced by gathering the 12 variables into four groups: basic social needs deprivation, quality and living spaces deprivation, social infrastructure provided by the government deprivation and the buying power of current income. The values of the 12 variables were obtained through CONEVAL and ENIGH for three decades 1992, 2000 and 2010, and the Census of Population and Housing of the 1990s, 2000 and 2010. With the proposed methods, the states of Mexico were ranked and indicated using a poverty map.

Keywords: Additive value function, CRITIC method, entropy method, principal components, poverty measurement.

JEL Classification: C430, I320

1. Introduction

The study of poverty is a task that encompasses varied social and economic aspects; all these aspects must be analysed to propose a comparative measure of the poverty. Whatever the choice, the measurement process generally involves two elements: the identification of people who are considered poor and the aggregation of the welfare of these individuals as a poverty measure.

There are different approaches to measuring poverty. To Amartya Sen (Sen, 1976) the direct and indirect approaches are the most representative. Sen mentioned that the indirect method uses income as a proxy for the personal standard of living. On the other hand, the direct method is a different representation of poverty and not just an alternative methodology because it shows the living conditions directly and defines a person as poor according to the breach between the living conditions of social standards. Alkire & Santos (2014) presented a multi-dimensional poverty index with the direct method applied to poverty in more than 100 developing countries, but mainly based on estimates of poverty through income.

In general, methods for measuring poverty are multi-dimensional, although there are widely scattered approaches depending on each country and time. For example, in the U.S. Atkinson (1987) introduced a measure of poverty in which re-examined three basic issues: the choice of the poverty line, poverty rate, and the relationship between poverty and inequality. While Callan, Nolan & Whelan (1993) with Irish data showed how to select appropriate resource deprivation, in their work exposed the restrictive nature of poverty conceived in terms of exclusion rather than explain poverty as a compliance of minimum resources of each individual. In this century Cohen (2010) showed a multidimensional tool for measuring poverty in rural areas.

Nowadays are investigations of poverty factors like the work of Maestri (2014), who introduced a measure of poverty in the Netherlands including housing in social indicators. Sung-Geun (2014) applied three different fuzzy statistical methods to a database of English families in 2006 to measure poverty and made a comparison of results to conclude which method was better. Meanwhile, Cohen (2010) presented a multi-dimensional tool to measure poverty in rural areas. Chowdhury & Mukhopadhyaya (2014) show that the needs of the poor in Bangladesh are different in each region of that country, reason for which indicators of poverty and strategies to reduce poverty depend on the region.

In the case of Latin America a method of measuring poverty is used named Unsatisfied Basic Needs (UBN). This method allows testing whether households have satisfied a number of previously established needs to be considered poor or not, using recent and current information. For the application, the UBN method considered only dichotomous variables, a situation that hinders their application because the poverty level is very sensitive to the number of unsatisfied needs for an individual to be considered as poor. In addition as the number of poor increases so does as the number of indicators. Feres & Mancera (2001) show a matrix, Table 1, the cross product of the results of the UBN and the poverty line (PL). This matrix generates 4 groups of population: poor income and unsatisfied needs, poor income that covers their needs, those with adequate income but with unsatisfied needs, and the non-poor and without UBN.

Table 1: Matrix of Feres and Mancera

PL/UBN	HOUSEHOLDS WITH UBN	HOUSEHOLDS WITHOUT UBN
Poor Households	Extreme Poverty (Total)	Recent Poverty (Pauperized or Relevant)
Non-poor Households	Structural Poverty	Households with totality social conditions

From the study of Feres & Mancera new combined measurement methodology was developed, emerging Integrated Method of Poverty Measurement (IMPM). The IMPM was proposed by the economist Julio Boltvinik Kalinka (1995), and was designed to combine an improved variant of the UBN in its enhanced variant widespread normative basket of PL and incorporates an indicator of poverty time version to obtain an integrated poverty index by household, which allows calculation of all aggregate measures of poverty. The method starts with the six primary indicators of deprivation given by the direct method UBN:

- Unsuitable quality and quantity of housing (quality of construction materials of walls and ceilings, floor type, and amount of space per occupant). It is necessary to obtain the primary index by multiplying both.

- Unsuitable sanitary conditions (indicators of water pipe, drainage and bathroom)
- Unsuitability of other services (indicators of electricity and telephone)
- Unsuitability of basic heritage (domestic equipment associated with food, hygiene, recreation)
- Educational backwardness (as indicators of illiteracy, school attendance and educational attainment)
- Excessive working time (inverse indicator of time available for education, recreation and domestic work)

In the case of Mexico, the problem of poverty has worsened considerably in recent decades. In 2012 the National Council for the Evaluation of Social Development Policy (CONEVAL for Mexico) provided a staggering level of poverty: in Mexico 46.2% of the population live in poverty, representing 52 million people. One of the most effective ways to improve public policy is to evaluate and measure poverty in different regions of the country.

For more than 20 years, poverty in Mexico has been measured using only the indicator of income, combined with partial indicators that cannot show the accurate conditions for different communities in the country. Even measuring poverty by CONEVAL is multi-dimensional in nature and was designed according to the General Law of Social Development (GLSD), signed in 2004. This takes into account only the indicators such as: income, housing, basic services, access to education, social security, access to health and social cohesion (CONEVAL, *Avances y Retos de la Política de Desarrollo Social en México*, 2012).

Currently, in Mexico poverty measurement can be divided by factors and by states and districts. The information is presented by CONEVAL along with the National Institute of Geographical and Statistics (INEGI for Mexico) in the Section of Socio-economic Conditions of the National Household Income and Expenditure Survey, 2008 (ENIGH MCS-2008) (Battiston, Cruces, Lopez Calva, Lugo & Santos, 2009).

This article proposes a comparison with three methods for measuring poverty in the states of Mexico. The three methods are characterized by objective entropy weights of the information be used to measure poverty. Proposals variables considered the various economic and social issues facing their communities. To allow comparisons between different methods, a poverty indicator is calculated for each one, re-scaled between 0 and 1, to rank all states of Mexico.

2. Research Method

The research proposes a multivariate statistical method to compare two models of multi-attribute decision analysis to measure poverty in Mexico, each of them were carried out under the steps described below.

2.1 Selection of Data Variables

The methods described to measure poverty are based on variables that represent deprivation indicators. These variables must be restricted to some simple index that will measure the intensity level of the variable in the final poverty indicator.

2.2 Construction of the Data Matrix

To carry out the analysis of the database, values are represented in a matrix for better recognition. In this study each alternative decision or location is an analysed event, values are located in the matrix named data matrix. The values of the variables are proposed in the same order in which they originally appeared and are placed in columns of each row. Thus, the first data matrix is the matrix containing:

$$\mathbf{X} = \begin{pmatrix} x_{11} & \dots & x_{1m} \\ \vdots & \ddots & \vdots \\ x_{n1} & \dots & x_{nm} \end{pmatrix}.$$

Where, \mathbf{X} = Original data matrix, x_{ij} = Value of state i , qualified under the variable j , with $i = 1, 2, \dots, r$ number of states and $j = 1, 2, \dots, m$ quantity of variables. At this stage the investigation can find some variables that can be qualitative and also quantitative, last of them will be evaluated as fuzzy variables.

When the values of the observations for different variables are disproportionate in value, it is recommended to scale the values between 0 and 1 with the formula (1)

$$I_{ij} = \frac{x_{ij} - \min_j \{x_{ij}\}}{\max_j \{x_{ij}\} - \min_j \{x_{ij}\}} \quad (1)$$

If the variables are inversely proportional, it is recommended to use the inversion proportionality formula (2)

$$I_{ij}^* = 1 - \frac{x_{ij} - \min_j \{x_{ij}\}}{\max_j \{x_{ij}\} - \min_j \{x_{ij}\}} \quad (2)$$

Getting in both cases the data matrix

$$\mathbf{X}^* = \begin{pmatrix} I_{11} & \dots & I_{1m} \\ \vdots & \ddots & \vdots \\ I_{n1} & \dots & I_{nm} \end{pmatrix} \quad \text{or} \quad \mathbf{X}^* = \begin{pmatrix} I_{11}^* & \dots & I_{1m}^* \\ \vdots & \ddots & \vdots \\ I_{n1}^* & \dots & I_{nm}^* \end{pmatrix}$$

2.3 Weighting of Variables

One of the main problems to propose a comparative measure of poverty lies in properly quantify the information entropy. There are different methods that weight the variables that some traditional methods more objective and rational way possible. For example, Zhou *et al.* (2012) propose a method to perform entropy weighting of the objectives of the study, in which considered the average of the subjective weights of decision makers. Llamazares & Peña (2013) propose another alternative weighting method in a multi-attribute decision problem, where the weights are assigned considering the most favourable weights for each alternative. Although these methods are currently available, there are not completely objective.

In this research we propose a statistical method based on principal components of the multivariate analysis, and the use of two methods of multi-attribute decision analysis we describe below, besides three methods that have the particularity to be objective.

1. Principal Components Method

It has a tool called Principal Component Analysis, PCA (Pearson, 1901) (Hotelling, 1933) in the statistical part of the multivariate analysis. This method is based to find new uncorrelated variables, called principal components, PC, by linear combinations of the values of the original variables x_{ij} . The original purpose of this tool is to sort the variables according to the extent to which help to explain the phenomenon of study, this research attempts to quantify poverty in the states of Mexico. The PCA is based on two aspects:

- i. Principal components, C_j , need not to be correlated, $\text{cov}(C_j, C_k) = 0$ for $j \neq k$, where a covariance is calculated with formula (3)

$$\text{cov}(C_j, C_k) = \frac{1}{n} \sum_{i=1}^n (x_{ij} - \bar{x}_j)(x_{ik} - \bar{x}_k) \quad (3)$$

- ii. Components are going to be ordered according to the magnitude of their variance (4) in no increasing way, in other words $\text{var}(C_1) \geq \text{var}(C_2) \geq \dots \geq \text{var}(C_m)$, where

$$\text{var}(C_j) = \sigma_{C_j}^2 = \frac{1}{n} \sum_{i=1}^n (x_{ij} - \bar{x}_j)^2. \quad (4)$$

Then for an objective weighting that would reduce existing biases in a dataset, the PCA of the variance and covariance matrix is used (where data are commensurable) or the correlation matrix (when data are not commensurable). This matrix we will denote by \mathbf{V} and correlations are calculated with formula (5)

$$\rho(C_j, C_k) = \frac{\text{cov}(C_j, C_k)}{\sigma_{C_j} \sigma_{C_k}}. \quad (5)$$

Where $\rho(C_j, C_k)$ y σ_{C_j} are the correlation coefficient and standard deviation respectively, of the values in columns corresponding to the information matrix \mathbf{X} or \mathbf{X}^* data.

- iii. After applying PCA the eigenvalues of the matrix \mathbf{V} , denoted by m_j , are obtained. The eigenvalues are sorted in non-increasing shape and the highest will be chosen as those of greater representation for the values that are weighted by (6)

$$w_j = \frac{m_j}{\sum_{j=1}^m m_j}. \quad (6)$$

Where, m_j is the eigenvalue of the variable V_j and w_j is the weight. With w_j each row of matrix \mathbf{X} or \mathbf{X}^* can be weighted for each group. If \mathbf{w} is the normalized vector of eigenvalues, it is necessary to calculate $\mathbf{X}\mathbf{w}^t$ or $\mathbf{X}^*\mathbf{w}^t$, for each group, denoted by its elements with Iw_{ij} . When the previously indexes are inversely proportional, the inversed formula of proportionality (2) is used, applied to the values Iw_{ij} , to obtain Iw_{ij}^* .

The PCA method has been used in several studies with different approaches and they have all been successful, for example Zamudio, Corona & López (2008); Gutiérrez, Aguilar & Cristóbal (2013); Gutiérrez, Romero, Panteleeva & Jiménez (2014).

2.-CRITIC Method

The CRITIC method (Criteria Importance Through Correlation Intercriteria) (Diakoulaki, Mavrotas, & Papayannakis, 1992, 1995), is an objective method of weighting criteria. The principle of this method is to calculate objective weights based only on data of the alternatives (columns of the data matrix). The aspects considered are the correlations between each variable and the variability of each of them, is based on the correlation coefficients between each pair of variables and the standard deviation as a measure of variability. Assign lower weights to the criteria that are strongly correlated and those with less variability and vice versa.

This method is carried out as follows:

- i. Re-scale the data between 0 and 1, using the formulas (1) or (2).
- ii. Calculate weights q_j using formula(7)

$$q_j = \sigma_{C_j} \sum_{k=1}^m [1 - \rho(C_j, C_k)]. \quad (7)$$

- iii. Calculate final weights w_j of each variable C_j with formula(6) applied to q_j .

3. Entropy Method

Entropy method (Zeleny, 1982) is also an objective weighting method, based solely on the variability of the data, and does not consider the correlations among them. Unlike CRITIC and PCA that use the standard deviation and eigenvectors, this method uses the entropy of the data as a measure of variation. The steps to perform are as follows.

- i. With formula(2), we obtain the data as ratios

$$z_{ij} = \frac{x_{ij}}{\sum_{i=1}^n x_{ij}} \quad (8)$$

Where z_{ij} is the standardized value for the state i to the variable j , x_{ij} of the values \mathbf{X} or \mathbf{X}^* .

- ii. The entropy value is calculated using the formula (9)

$$e_j = -\frac{1}{\ln(n)} \sum_{i=1}^n z_{ij} \ln(z_{ij}). \quad (9)$$

- iii. The degree of divergence f_j for each variable is calculated with the formula(10)

$$f_j = 1 - e_j \quad (10)$$

- iv. Weights w_j of the degrees of divergence (10) are calculated by(6) applied to $r_j = f_j$.

This method is not applicable when data are equal to zero, because there is not the logarithm of zero.

2.4 Construction of the Value Function and Index Proposed

To measure the level of poverty in each state and organize them, it is proposed to use an additive function that uses as data values re-scaled I_{ij} and weighted with w_j , the value of each state in each variable is calculated using the formula(11), and the total value of each state is given by the formula(12).

$$v_i = x_{ij}w_j \text{ for } i = 1,2, \dots, n \text{ y } j = 1,2, \dots, m \quad (11)$$

$$V_i = \sum_{j=1}^m x_{ij}w_j \text{ for } i = 1,2, \dots, n \quad (12)$$

Where v_i is the value of the state i in variable j and V_i is the total value of state i .

Finally to compare different methods from those calculated with (12) we use values (1) to calculate the poverty index in each state.

The values taken by the index poverty measurement are between zero and one. Where, a value close to one indicates that this state is more poverty, while the near or equal to 0 value represents less poverty.

2.5 Grouping

Another way to compare the extent of poverty in the states is to order the variables in groups. In each category steps are repeated to find poverty rates by group, considered as a data matrix in each group to the part of the matrix \mathbf{X} or \mathbf{X}^* that corresponds to the variables by group. Finally the steps repeatedly occur considering as data matrix, the matrix formed with results of the indexes for each strata.

3. Results

The proposed models will be applied to measure poverty in Mexican states. Databases of more than three decades of information accumulated in studies of 1990, 1992, 2000 and 2010 were used.

The information used to measure poverty in Mexico is obtained through the database of CONEVAL on the National Household Income and Expenditure Survey (ENIGH) for the years 1992, 2000 and 2010, and the Census of Population and Housing 1990, 2000 and 2010. Both instruments were obtained by the National Institute of Statistics, Geography and Informatics (INEGI for Mexico).

3.1 Selection of Poverty Measurement Variables in Mexico

The ENIGH MCS-2008 began for the first time in Mexico to have information to generate estimates of multi-dimensional poverty by state, as provided by GLSD. This law identifies two broad approaches that analyse the multi-dimensional nature of poverty: the welfare approach and the social rights approach. The first relates to the approaches of unsatisfied basic needs, assets and capacities (Rio Group, 2006) (Sen, 1976), the second is associated with the existence of fundamental and irreplaceable guarantees (where poverty is considered in itself a denial of human rights) (PNUD, Human Development Report, 1997)

The welfare approach needs to identify the dimensions and conditions that limit the freedom of individuals to be fully developed. The social rights approach, on the other hand, assumes that every person must have a series of essential guarantees for their dignity.

While the social rights approach provides elements necessary for individuals and social groups to exercise their freedom, taking into account the importance of the goods and services that are available in the market, it is necessary to complement it with an assessment of monetary resources available to individuals. Therefore, the welfare approach allows analysing individual access to those goods and services. In that way, it is possible to link the social rights approach and the welfare approach in two complementary analyses reinforce, but in turn, must be methodologically different.

To limit the two approaches, criteria were established for distinguishing the presence or absence of deprivations in each one. In the welfare approach there are minimal monetary resources (defined by the welfare line) required to meet the basic needs of people, in the social rights approach, these are universal and interdependent. It is considered that a person is unable to exercise one or more rights when they are lacking in at least one of the six indicators listed in Article 36 of the GLDS:

- Educational backwardness
- Access to health services
- Access to social security
- Access to quality and housing space
- Basic services in housing
- Access to food supplies.

A third approach or investigation, in addition to the analysis of welfare and fundamental rights, is involved in relational and communal aspects expressed territorially.

Based on these approaches for estimating poverty, 12 variables are selected to measure the level of poverty in the states of Mexico. In the choice of variables, it was considered as a starting point the basic social deprivation and income, presented in the databases of more than three decades of study, variables that are contemplated for the study are listed below.

1. Educational Backwardness (EB): Fraction of the total population that meets at least one of the following criteria:
 - From three to fifteen years old, has no compulsory basic education and does not attend a formal education center.
 - Born before 1982 and does not have the level of compulsory education in force at the time did not finish elementary school.
 - Born since 1982 and did not finish secondary school.
2. Access to health services deprivation (AHSD): Fraction of the total population has no affiliation or right to receive medical services from an institution, including Popular Insurance, private or public social security institutions such as IMSS, ISSSTE federal or state, Pemex, Army or Navy.

3. Deficient housing for flooring material (DHFM): Fraction of the total population with a home where the floor is soil, stone, or other material that is not suitable for a firm or a good settlement.
4. Deficient housing for wall material (DHWM): Fraction of the total population with a house whose wall material is mud or daub; reed, bamboo or palm; sheets of cardboard, metal or asbestos; or scrap.
5. Deficient housing for roofing material (DHRM): Fraction of the total population with a house whose roof material is sheets of cardboard or scrap.
6. Deficient housing for overcrowding (DHO): Fraction of the total population who live with over 2.5 people per room (because of overcrowding).
7. Deficient housing for access to piped water (DHAW): Fraction of the total population who live in dwellings that use water from a well, river, lake or stream; and is carried from another home or if the water is obtained from the public pipe or hydrant.
8. Deficient housing drainage service (DHDS): Fraction of the total population who live in dwellings that do not have drainage, or have one connected to a drainpipe that runs into the river, lake, ocean or canyon. If the property has a septic tank it is not considered necessary.
9. Deficient housing for electricity service (DHE): Fraction of the total population whose housing does not have electricity inside.
10. Food supply deprivation (FSD): Fraction of the total population whose income does not allow obtaining a basic food basket even using all disposable income at home for that objective.
11. Capabilities deprivation (CD): Fraction of the total population whose income does not allow obtaining a basic food basket and also the necessary expenditures in health and education, even with the total household income for these purposes only.
12. Heritage deprivation (HD): Fraction of total population whose income does not allow obtaining a basic food basket and the necessary expenditures in health, clothing, housing, transportation and education, although the total household is used solely for the purchase of these goods and services.

3.2 Data Matrix to Measure Poverty in Mexico

In Tables 2, A1 and A2 matrix X represents the indicators for each Mexico states, given in deprivation percentages. The calculations are explained to the data matrix for 1990 and repeated them for 2000 and 2010, provided in Tables A1 and A2, respectively.

Table 2: Indicators for each variable in Mexican states 1990

	EB	DHFM	DHWM	DHRM	DHO	DHAW	DHDS	DHE	FSD	CD	HD
Aguascalientes	23.1	7.4	1.2	5.4	23.6	5.0	15.2	5.0	18.3	25.9	49.4
Baja CaliforniaNorte	18.8	8.1	4.0	5.5	15.4	21.0	34.8	10.6	9.0	14.6	35.8
Baja California Sur	20.5	13.9	9.3	14.1	17.7	12.3	36.0	11.1	10.7	16.6	37.8
Campeche	31.8	24.2	17.6	27.9	41.3	33.5	56.4	15.3	28.1	36.8	60.3
Coahuila	20.1	8.4	2.2	15.0	17.8	10.0	32.5	5.3	13.2	20.1	43.1
Colima	25.8	20.9	10.8	9.6	28.5	8.5	19.6	5.9	16.5	23.7	46.6
Chiapas	43.2	50.9	20.2	10.9	50.2	47.9	64.5	35.3	46.2	55.1	75.1
Chihuahua	23.0	9.6	1.9	13.5	18.8	13.8	34.7	13.4	12.4	18.2	39.2
Distrito Federal	13.0	2.4	1.6	7.7	15.4	4.8	7.4	0.8	8.7	14.2	34.6
Durango	26.8	20.0	2.0	18.0	21.8	17.1	48.7	13.9	20.8	28.5	51.8
Guanajuato	32.1	16.6	2.2	6.0	32.0	18.9	42.8	12.7	29.5	38.3	61.6
Guerrero	35.2	49.9	19.6	21.3	51.2	50.2	68.1	23.0	40.6	49.2	69.9
Hidalgo	30.9	29.9	10.5	12.3	34.0	35.8	61.2	22.9	34.2	42.6	64.0
Jalisco	25.3	13.1	1.5	4.6	20.1	16.0	21.2	7.9	18.7	26.1	48.7
México	20.5	12.7	1.8	11.4	24.7	17.0	29.5	6.5	17.8	25.2	48.3
Michoacán	34.9	28.5	4.9	18.4	31.9	25.5	48.6	13.3	26.7	35.1	58.1
Morelos	23.8	21.6	8.2	14.3	28.1	14.5	38.8	4.0	18.0	25.4	48.2
Nayarit	28.9	21.5	5.4	10.0	27.3	19.6	44.4	8.8	19.6	27.1	50.0
Nuevo León	17.1	6.1	2.2	6.2	16.4	11.7	19.2	3.6	9.6	15.1	35.6

	EB	DHFM	DHWM	DHRM	DHO	DHAW	DHDS	DHE	FSD	CD	HD
Oaxaca	38.4	52.6	17.3	12.2	46.1	49.3	73.8	24.2	41.3	49.9	70.4
Puebla	31.3	30.0	5.5	15.7	38.7	33.9	57.8	15.7	34.2	42.6	63.8
Querétaro	26.7	16.7	5.1	6.0	30.1	22.1	46.2	15.9	26.4	34.1	55.7
Quintana Roo	27.6	23.0	16.2	29.8	42.0	19.2	45.6	15.8	18.0	25.2	47.3
San Luis Potosí	30.2	29.7	12.3	8.8	30.1	37.5	54.5	28.3	31.6	39.8	61.3
Sinaloa	26.6	23.6	9.0	14.7	26.0	22.1	47.9	9.1	19.8	27.5	50.7
Sonora	21.0	18.1	8.6	20.1	19.0	10.1	35.8	9.3	12.6	19.2	41.9
Tabasco	29.8	13.8	24.3	9.9	34.8	45.7	42.0	15.6	30.0	38.5	61.0
Tamaulipas	23.5	13.8	7.7	12.5	25.3	21.4	42.9	16.0	16.6	23.9	47.0
Tlaxcala	22.1	14.2	2.9	9.7	35.2	11.5	46.0	5.7	22.4	30.4	53.7
Veracruz	34.3	35.9	17.9	21.6	38.0	45.6	55.5	27.4	33.4	41.8	63.3
Yucatán	34.2	18.5	18.2	17.3	38.5	31.1	58.1	9.4	30.6	39.0	61.0
Zacatecas	32.4	16.8	1.2	13.7	25.8	27.3	55.8	13.5	28.4	37.0	60.1

To apply the methods of weighting the correlation matrix V_{ij} calculated, by the year 1990 the values are shown in Table 3.

Table 3: Correlation matrix corresponding to Table 2

	EB	DHFM	DHWM	DHRM	DHO	DHAW	DHDS	DHE	FSD	CD	HD
EB	1.0000	0.8411	0.6218	0.3125	0.8437	0.8257	0.8301	0.7744	0.9247	0.9280	0.9297
DHFM	0.8411	1.0000	0.6530	0.3704	0.8331	0.8106	0.8112	0.7999	0.8461	0.8366	0.8134
DHWM	0.6218	0.6530	1.0000	0.4703	0.7471	0.7661	0.5863	0.6274	0.6122	0.6062	0.5864
DHRM	0.3125	0.3704	0.4703	1.0000	0.4343	0.2792	0.4568	0.2514	0.1916	0.1983	0.2136
DHO	0.8437	0.8331	0.7471	0.4343	1.0000	0.7893	0.7794	0.6782	0.8790	0.8794	0.8728
DHAW	0.8257	0.8106	0.7661	0.2792	0.7893	1.0000	0.8328	0.8502	0.8835	0.8746	0.8491
DHDS	0.8301	0.8112	0.5863	0.4568	0.7794	0.8328	1.0000	0.7710	0.8324	0.8309	0.8257
DHE	0.7744	0.7999	0.6274	0.2514	0.6782	0.8502	0.7710	1.0000	0.7951	0.7825	0.7509
FSD	0.9247	0.8461	0.6122	0.1916	0.8790	0.8835	0.8324	0.7951	1.0000	0.9991	0.9902
CD	0.9280	0.8366	0.6062	0.1983	0.8794	0.8746	0.8309	0.7825	0.9991	1.0000	0.9952
HD	0.9297	0.8134	0.5864	0.2136	0.8728	0.8491	0.8257	0.7509	0.9902	0.9952	1.0000

3.3 Weighting variables for measuring poverty in Mexico

The three weighting methods previously discussed will be used to calculate poverty indicators by state and then founded values will be ranked.

1. Principal Component Method for the poverty of Mexico

We calculate the eigenvalues of the matrix in Table 3 and then re-scale values between 0 and 1 with (6) to obtain the weight vector w , with this vector additive value function for each state are calculated, and their values abstract in Kw^* . Finally re-scale these values between 0 and 1 with (1) obtaining the values of the poverty index for principal components and to conclude these values are ranked with 1 to the largest value of the index, 2 for the subsequent and concluding with the state less poor. The results are shown in column PC for values of the index and ranking in Table 4.

Table 4: Indexes and ranking of poverty of 3 methods for 1990

Method	CRITIC		ENTROPY		PC	
	Index	Ranking	Index	Ranking	Index	Ranking
Chiapas	0.1330	2	0.10507	1	0.2689	1
Oaxaca	0.1282	3	0.25253	3	0.1786	2
Guerrero	0.2751	1	0.39581	2	0.2560	3
Michoacán	0.8163	12	0.77156	12	0.6277	5
Veracruz	0.2171	4	0.19079	4	0.2157	4

Method	CRITIC		ENTROPY		PC	
State	Index	Ranking	Index	Ranking	Index	Ranking
Puebla	0.2969	10	0.39803	11	0.4048	8
Guanajuato	0.9778	16	1.00000	23	1.0000	12
Yucatán	0.2334	7	0.25275	9	0.2944	6
Zacatecas	0.0000	13	0.00000	21	0.0000	11
Hidalgo	0.4153	8	0.37023	8	0.4341	9
San Luis Potosí	0.3816	11	0.34910	7	0.5472	10
Jalisco	1.0000	28	0.96853	28	0.8090	21
Campeche	0.6578	5	0.70491	5	0.5957	7
Morelos	0.1751	19	0.20638	17	0.3468	20
Nayarit	0.2537	20	0.24197	18	0.2424	15
Durango	0.5639	15	0.51842	22	0.6757	17
Tabasco	0.3655	9	0.40284	6	0.3669	13
Sinaloa	0.3548	14	0.40021	13	0.4872	16
Querétaro	0.0546	17	0.10731	15	0.1186	18
Quintana Roo	0.8992	6	0.92475	10	0.8812	14
Tlaxcala	0.6383	22	0.59116	24	0.6028	23
México	0.3773	25	0.43251	27	0.4203	28
Chihuahua	0.6918	26	0.67835	25	0.5109	24
Colima	0.6150	23	0.73021	19	0.5736	19
Tamaulipas	0.4405	18	0.49958	14	0.4502	22
Sonora	0.3536	21	0.40858	16	0.2876	25
Baja California Norte	0.6550	30	0.76936	26	0.5311	30
Baja California Sur	0.3694	24	0.45922	20	0.3372	27
Aguascalientes	0.3208	29	0.28066	31	0.2961	26
Coahuila	0.8643	27	0.89059	29	0.7262	29
Nuevo León	0.6882	31	0.69408	30	0.6528	31
Distrito Federal	0.4694	32	0.38475	32	0.5649	32

2. CRITIC Method for the Poverty of Mexico

From the **X** matrix and using (1) the values of each variable between 0 and 1 are re-scaled. Starting the new matrix rescaled and applying formula (4) we calculate the standard deviation of each variable. With these values and the formula (7) we calculate the weighting of variables, w_j , and additive value function for each state. Finally re-scale these values between 0 and 1 with (1) obtaining the values of the poverty index by the CRITIC method. In conclusion rank these values as was done in PC. The results are shown in CRITIC column for the index values and ranking in Table 4.

3. ENTROPY Method for the Poverty of Mexico

From the **X** matrix and using the formula (8) we calculate, z_{ij} , standardized value of i state corresponding to the variable j . With the formula (9) entropy is calculated e_j , per variable and with (10) the divergence of the entropy f_j . These values are weighted with the formula (6) and the additive function value is calculated for each state with the formulas (11) and (12). Finally re-scale these values between 0 and 1 with (1) obtaining the values of the poverty index by the method of Entropy, to conclude these values are ranked as was done in PC. The results are shown in column Entropy values for the index and ranking in Table 4.

Repeating the above calculations for the other two decades 2000 and 2010 we obtain the poverty ranking of the states of Mexico, see Table 5. In the Table A3 the values of poverty are re-scaled between 0 and 1 to get the ranking in Table 5.

Table 5: Poverty ranking of Mexico with 3 objective weighting methods

Method	CRITIC	ENTROPY	PC
--------	--------	---------	----

State\ Decade	1990	2000	2010	1990	2000	2010	1990	2000	2010
Chiapas	2	2	3	1	1	3	1	1	1
Oaxaca	3	3	2	3	3	2	2	2	2
Guerrero	1	1	1	2	2	1	3	3	3
Michoacán	12	12	6	12	12	6	5	5	4
Veracruz	4	4	4	4	4	4	4	4	5
Puebla	10	10	5	11	11	5	8	7	6
Guanajuato	16	17	18	23	23	21	12	11	7
Yucatán	7	9	11	9	9	10	6	6	8
Zacatecas	13	13	25	21	21	27	11	10	9
Hidalgo	8	8	10	8	8	13	9	9	10
San Luis Potosí	11	11	7	7	7	7	10	13	11
Jalisco	28	27	26	28	28	28	21	21	13
Campeche	5	5	8	5	5	8	7	8	12
Morelos	19	16	14	17	17	12	20	20	15
Nayarit	20	21	15	18	18	15	15	14	14
Durango	15	15	13	22	22	18	17	17	16
Tabasco	9	7	12	6	6	11	13	12	17
Sinaloa	14	14	23	13	13	17	16	18	18
Querétaro	17	18	22	15	15	22	18	16	20
Quintana Roo	6	6	9	10	10	9	14	15	19
Tlaxcala	22	19	17	24	24	25	23	22	22
México	25	24	16	27	27	19	28	25	24
Chihuahua	26	26	21	25	26	24	24	24	23
Colima	23	23	28	19	19	20	19	19	21
Tamaulipas	18	20	24	14	14	19	22	23	25
Sonora	21	22	19	16	16	16	25	27	26
Baja California Norte	30	29	27	26	25	26	30	29	27
Baja California Sur	24	25	20	20	20	14	27	28	28
Aguascalientes	29	30	31	31	30	32	26	26	29
Coahuila	27	28	30	29	29	29	29	30	30
Nuevo León	31	31	32	30	31	31	31	31	31
Distrito Federal	32	32	29	32	32	30	32	32	32

3.4 Poverty Index Measurement for Mexico

In Table 5 we see that the ranking of poverty change drastically in the decade 2000 to 2010, for example with the CRITIC method Sinaloa state moves from place 14 to 23. Similarly the state of Querétaro with Entropy method changes from place 15 to 22. We propose a method to reduce the drastic changes in the ranking of poverty, grouping variables objectively through its definition and correlation matrix.

To define the order of twelve variables, the correlation matrix for each data matrix is calculated and averaged their values, see Table 6.

Table 6: Average of correlation matrix for 3 decades of study

	EB	AHSD	DHFM	DHWM	DHRM	DHO	DHAW	DHDS	DHE	FSD	CD	HD
EB	1.0000											
AHSD	0.7010	1.0000										
DHFM	0.8139	0.7166	1.0000									
DHWM	0.6023	0.3794	0.6958	1.0000								
DHRM	0.3444	0.4580	0.4514	0.4208	1.0000							
DHO	0.7630	0.6501	0.7887	0.7339	0.5663	1.0000						
DHAW	0.7786	0.6879	0.8650	0.7754	0.3868	0.7713	1.0000					
DHDS	0.8277	0.6303	0.8276	0.6697	0.4405	0.7643	0.8212	1.0000				
DHE	0.7022	0.4237	0.7704	0.6291	0.2712	0.6347	0.7693	0.7695	1.0000			
FSD	0.9018	0.7869	0.8511	0.6531	0.3459	0.8722	0.8566	0.8487	0.7276	1.0000		
CD	0.9044	0.7910	0.8401	0.6452	0.3515	0.8679	0.8472	0.8457	0.7140	0.9985	1.0000	

HD	0.9009	0.7774	0.8065	0.6184	0.3591	0.8465	0.8133	0.8327	0.6819	0.9828	0.9912	1.0000
----	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

By the analysis of the correlations in Table 6 and the definitions of the variables, 12 variables are placed into 4 groups. Then the variables chosen for the development of the poverty index takes as a starting point the basic income and social deprivation in the population presented in the following 4 groups for analysis.

Stratum 1 Health services and educational backwardness: Variables like EB and AHSD mark the deprivation of the population at a social level, where the education and access to health services are conditions of both personal and government responsibilities.

Stratum 2 Quality of housing: The variables of this group: DHFM, DHWM, DHRM and DHO, present the needs of the population taking into account the quality and the living spaces of their dwellings.

Stratum 3 Social infrastructure: The variables of this group: DHAW, DHSDHE and DHO, indicate the lack of basic social infrastructure of housing to provide a quality of life.

Stratum 4 purchasing power: The variables of this group: FSD, CD and HD, indicate the ability of people to acquire certain types of goods according to their current income.

After performing the grouping, apply the steps proposed to obtain the poverty index, but now for each stratum, obtaining 4 indicators. The method is repeated for those indicators, to obtain one poverty indicator for each state. Finally values are ranked and the results are summarized in Table 7. Table A4 shows the values of poverty indicators rescaled between 0 and 1, with them the ranking from Table 7 is obtained.

Table 7: Poverty ranking for Mexico grouping

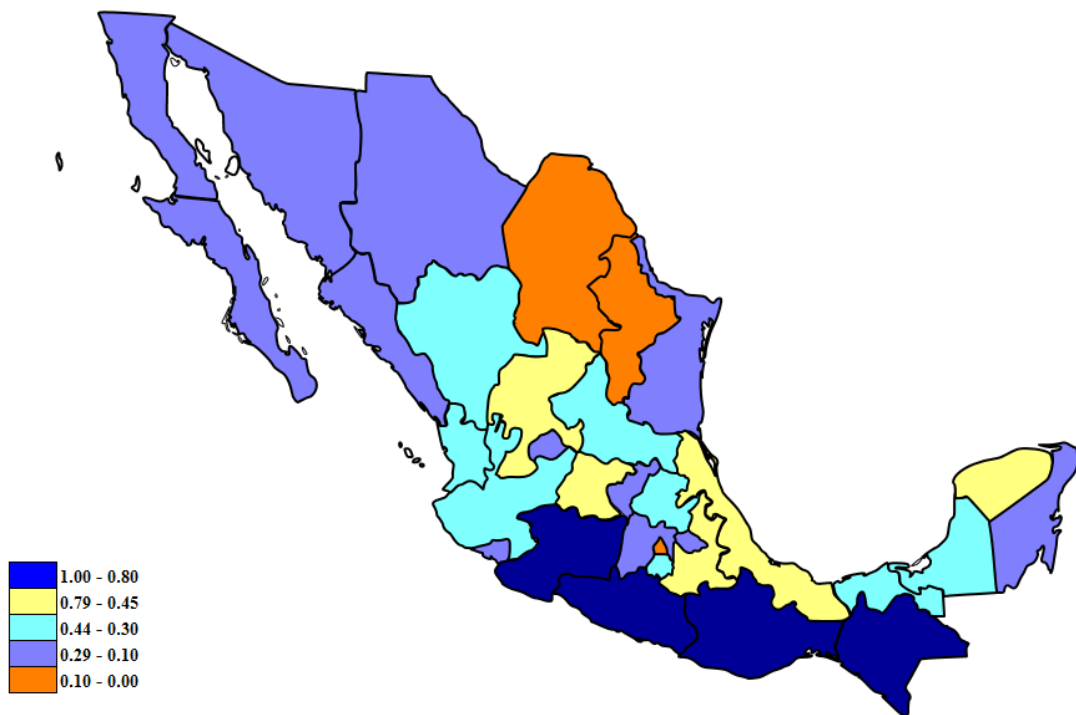
Method State \ Decade	CRITIC			ENTROPY			PC		
	1990	2000	2010	1990	2000	2010	1990	2000	2010
Chiapas	1	1	3	1	1	3	1	1	1
Oaxaca	3	3	2	3	3	2	2	2	2
Guerrero	2	2	1	2	2	1	3	3	3
Michoacán	11	11	6	12	12	7	5	4	4
Veracruz	4	4	4	4	4	4	4	5	5
Puebla	8	7	5	11	11	5	9	7	6
Guanajuato	14	14	14	22	22	21	10	8	7
Yucatán	6	9	10	9	9	10	6	9	8
Zacatecas	13	13	18	16	16	26	7	6	9
Hidalgo	7	6	8	8	8	12	11	11	10
San Luis Potosí	9	10	7	7	7	6	12	12	11
Jalisco	25	25	25	28	28	28	20	17	12
Campeche	5	5	9	6	6	8	8	10	13
Morelos	20	20	16	20	18	13	21	19	14
Nayarit	18	18	15	17	17	14	14	14	15
Durango	17	17	12	19	20	16	18	16	16
Tabasco	10	8	11	5	5	9	13	13	17
Sinaloa	15	16	22	13	13	17	16	15	18
Querétaro	16	15	20	15	15	22	17	20	19
Quintana Roo	12	12	13	10	10	11	15	21	20
Tlaxcala	21	19	19	24	24	25	25	22	21
México	24	23	17	27	26	19	27	27	22
Chihuahua	27	27	21	25	25	23	23	23	23
Colima	22	22	28	23	23	24	19	18	24
Tamaulipas	19	21	23	14	14	20	22	24	25
Sonora	23	24	24	18	19	18	26	25	26
Baja California Norte	30	30	27	26	27	27	30	29	27
Baja California Sur	26	26	26	21	21	15	28	28	28
Aguascalientes	29	28	29	30	30	32	24	26	29
Coahuila	28	29	30	29	29	29	29	30	30

Distrito Federal	32	32	31	32	32	30	32	32	31
Nuevo León	31	31	32	31	31	31	31	31	32

3.5. Poverty Map of Mexico

With the poverty measurement obtained a map can be drawn of poverty in Mexico. On the map the states most affected by poverty are shown, using the index calculated with PC method, through a grouping for 2010 year. Figure 1 is a map that includes five categories of poverty levels taking as the most critical regions those poverty indicators that fall between 0.80 and 1.00, successively.

Figure 1: Poverty map for Mexico



4. Conclusions

The proposed poverty measure model has a wide scope because it allows generating indexes from any number of variables, either qualitative or quantitative can be valued as fuzzy variables, as well as being applicable to both data obtained through instruments such as questionnaires, or historical data collected on the census databases.

The methods used in variables weighting to measure poverty have the particularity to calculate objective weights. This is because each of them determines the level of significance of variables based on the data correlation and its entropy by assigning higher weights for the variables that have a lower level of correlation with respect to the other variables. In the case of PCA the eigenvalues of the correlation matrix of the data are considered as an indicator of variability, the higher eigenvalue greater impact in the weighting of the variables that determine the measure of poverty.

The model allowed a measurement and ranking of poverty during the three decades in which the research was conducted, besides knowing the evolution of the poverty indicators in Mexican states.

Finally the study also provides the comparison index, the possibility of providing alternative classifications to the proposed alternatives according to their value. Also it will allow knowing the evolution of certain alternatives and the variables over time if the decision is to apply this model for different study periods.

Comparing the methods used for weighting variables, the conclusion is that the proposed method of weighting variables provides more homogeneous and real results in the three decades in

which they conducted the investigation. The PCmethod provided a more uniform measure of poverty in both situations, with and without grouping variables.

5. Future investigations

Future investigations will continue the poverty measurement based on new data collected in the next census by the INEGI, helping social studies at government level in order to have information to add new possible indicators for poverty measurement.

In the study for the measurement of poverty it is necessary to investigate the causes of the variability in poverty index from period to period and to what degree the changes depend on the government. This necessitates looking at policies for the allocation of government budgets confined to reduce poverty in marginalized states.

Acknowledgment

The authors thank the SIP-IPN for their support to the project 20140057, of which this article is derived. The authors wish to sincerely thank the anonymous referees for the constructive criticism that resulted in considerable improvement of this work.

References

- [1] Alkire, Sabina; Emma Santos, Maria, 2014. “Measuring Acute Poverty in the Developing World: Robustness and Scope of the Multidimensional Poverty Index”. *World Development*, 59, pp. 251-274.
- [2] Atkinson, A., 1987. “On the measurement of Poverty”. *Econometrica*, 55, pp. 749-764.
- [3] Battiston, D., Cruces, G., López Calva, L., Lugo, M., & Santos, M., 2009. “Income and Beyond: Multidimensional Poverty in Six Latin American countries”. La Plata: Oxford Poverty & Human Development Initiative (OPHI).
- [4] Boltvinik, J., 1995. “La pobreza en México. Metodologías y Evolución”, *Salud Pública de México*, 33(4), pp. 288-297.
- [5] Callan, T., Nolan, B., & Whelan, C., 1993. “Resources deprivation and the measurement of poverty”, *Journal of Social Policy*, 22 (2), pp. 141-172.
- [6] Chowdhury, TamgidAhmed & Mukhopadhaya, Pundarik, 2014. “Multidimensional poverty approach and development of poverty indicators: the case of Bangladesh”. *Contemporary South Asia*. Published online: 13 Jun 2014. DOI: 10.1080/09584935.2014.927827
- [7] Cohen, A., 2010. “The multidimensional poverty assessment tool: A new framework for measuring rural poverty”, *Development in Practice*, 20(7), pp. 887-897.
- [8] CONEVAL, 2013. “COMUNICADO DE PRENSA No.003”, *Informe Pobreza 2012*, México.
- [9] CONEVAL, 2010. “Metodología para la medición multidimensional de la pobreza en México”, México: CONEVAL.
- [10] Diakoulaki D., Mavrotas G., and Papayannakis L., 1992. “A multicriteria approach for evaluating the performance of industrial firms”, *Omega*, 20(4), pp.467-474
- [11] Feres, J., & Mancero, X., 2001. “Enfoques para la medición de la pobreza”, *Breve revisión literaria*. Santiago de Chile: CEPAL ECLAC.
- [12] Gutiérrez González, E., Aguilar Fernández, M. & Critóbal Vázquez, I.M.A, 2013. “A lean manufacturing model for reducing idle time on a production line”, *IIE Annual Conference and Expo 2013; San Juan; Puerto Rico; 18 May 2013 through 22 May 2013; Code 104963* pp., 2211-2219.
- [13] Gutiérrez González, E., Romero Castillo M. E., Panteleeva Olga V. & Jiménez Jerez S.R., 2014. “Measuring poverty using deprivation indicators”, *Pensee Journal*, 76 (7), pp. 370-386.
- [14] Hotteling, H., 1933. “Analysis of a Complex of Statistical Variables Into Principal Components”, *Journal of Educational Psychology*, 24(6), pp. 498-520.

- [15] Llamazares, B., Peña, T., 2013. “Aggregating preferences rankings with variable weights”, *European Journal of Operational Research*, 230 (2), pp. 348-355.
- [16] López Calva, L.F. & Ortiz Juárez, E., 2009. “Medición Multidimensional de la Pobreza en México: Significancia estadística en las inclusion de dimensiones no monetarias”. El Colegio de México, *Estudios Económicos*, vol. 0(Special issue), pp. 3-33.
- [17] Maestri, Virginia, 2014. “A Measure of Income Poverty Including Housing: Benefits and Limitations for Policy Making”. *Social Indicators Research*, 1-22. Published online: 29 May 2014, DOI: 10.1007/s11205-014-0657-z
- [18] Pearson, K., 1901. “On Lines and Planes of Closest Fit to Systems of Points in Space”, *Philosophical Magazine Series 6*, 2(11), pp. 559-572.
- [19] Rio Group, 2006. “Compendium of best practices in poverty measurement”, Río de Janeiro: Expert Group on Poverty - CEPAL.
- [20] Sen, A., 1976. “Poverty: an ordinal approach to measurement”, *Econometrics*, 44(2), pp. 219-231.
- [21] Sung-Geun, Kim, 2014. “Fuzzy Multidimensional Poverty Measurement: An Analysis of Statistical Behaviors”. *Social Indicators Research*. Published online: 11 Apr 2014, DOI: 10.1007/s11205-014-0616-8
- [22] Zamudio, F., Corona, A., & López, I., 2008. “Un índice de ruralidad para México”. *Espiral*, XIV(42), pp. 179-214.
- [23] Zeleny, M., 1982. “Multiple Criteria Decision Making”. New York N.Y.: Mc Graw Hill.
- [24] Zhou, R.X., Fan, F. Y., He, D.Y., Qiu, W.H., 2012. “Integrated entropy weight method based on data stability and subjective preference in multi-attribute group decision-making”, *Kongzhixue/Control and Decision*, 27 (8), pp. 1169-1174.

Annex

Table A1: Indicators for each variable in Mexican states 2000

	EB	AHSD	DHFM	DHWM	DHRM	DHO	DHAW	DHDS	DHE	FSD	CD	HD
Aguascalientes	18.0	43.7	3.6	0.4	0.6	12.6	2.7	6.3	1.8	11.2	16.9	37.8
Baja California	16.2	42.5	4.7	2.2	2.0	11.3	9.9	20.1	2.4	5.0	8.3	23.7
Baja California S.	16.9	39.6	10.5	7.2	9.8	14.3	12.0	20.0	4.6	8.4	13.1	31.9
Campeche	26.0	61.3	15.0	10.2	15.6	32.5	20.0	39.8	8.8	37.7	45.8	66.8
Chiapas	15.2	28.9	4.6	0.9	1.8	9.9	5.6	16.8	1.4	9.3	14.9	36.2
Chihuahua	21.6	51.1	12.5	4.6	5.1	15.2	5.4	7.5	2.0	18.2	25.4	47.7
Coahuila	36.8	81.6	41.0	10.8	5.7	39.2	31.3	46.0	12.1	53.3	61.5	79.1
Colima	19.4	41.1	7.0	0.5	2.6	13.1	7.6	16.1	6.3	9.5	13.6	30.2
Distrito Federal	10.6	47.1	1.3	0.9	3.8	10.4	2.6	2.5	0.2	5.8	9.9	28.0
Durango	22.4	50.1	13.8	1.0	4.1	12.9	9.6	29.1	6.6	20.6	27.3	48.4
Guanajuato	27.7	65.5	11.0	1.3	2.8	20.8	11.1	26.9	3.2	26.7	34.4	56.2
Guerrero	30.3	79.3	40.0	10.5	20.9	41.4	40.8	57.2	11.1	50.8	58.4	75.7
Hidalgo	25.3	70.5	19.0	5.8	4.4	20.8	20.6	39.9	7.7	34.6	42.3	62.1
Jalisco	21.8	54.8	7.4	0.5	1.3	12.4	10.7	11.0	2.1	13.8	20.0	41.3
México	16.7	58.0	7.2	0.8	7.0	17.5	10.0	19.1	1.8	17.6	24.8	47.7
Michoacán	31.0	73.3	19.9	2.1	15.1	21.1	17.3	35.6	4.4	31.6	39.9	61.6
Morelos	20.4	64.3	14.8	4.8	8.0	19.5	13.9	22.3	1.4	24.1	31.9	53.1
Nayarit	23.9	58.8	13.2	2.4	4.7	15.4	15.1	23.8	4.7	23.4	30.8	52.7
Nuevo León	13.6	32.0	3.3	0.9	1.1	9.1	5.5	9.0	1.0	5.9	9.9	28.0
Oaxaca	33.1	77.1	41.7	11.4	5.2	35.3	34.9	60.6	12.7	52.7	60.0	76.1
Puebla	27.1	74.1	24.1	2.9	12.0	28.9	23.1	42.4	4.8	40.3	48.5	68.0
Querétaro	20.8	53.6	10.1	1.5	2.3	20.3	11.1	27.4	5.8	23.4	30.1	50.4

	EB	AHSD	DHFM	DHWM	DHRM	DHO	DHAW	DHDS	DHE	FSD	CD	HD
Quintana Roo	19.7	52.7	11.4	6.8	20.3	32.2	9.3	19.4	4.4	23.3	30.4	52.4
San Luis Potosí	25.2	62.0	23.8	8.3	3.3	19.4	24.8	41.9	11.6	34.5	41.8	61.3
Sinaloa	23.3	46.1	14.5	5.8	7.6	16.4	14.6	29.4	3.4	17.3	23.7	44.6
Sonora	17.6	42.4	13.3	5.4	10.0	12.9	7.5	22.3	3.3	12.9	18.9	39.5
Tabasco	24.5	70.3	13.6	12.7	2.5	23.4	32.1	19.2	5.9	35.5	44.0	65.1
Tamaulipas	18.8	47.5	9.1	4.0	5.0	16.4	9.0	27.1	5.0	12.1	18.1	40.1
Tlaxcala	18.6	69.8	9.0	0.7	6.0	23.1	8.8	21.2	2.1	27.5	35.4	56.1
Veracruz	29.9	68.9	29.4	11.9	13.2	26.8	35.4	41.9	11.2	37.8	45.7	65.7
Yucatán	28.2	54.4	5.6	11.3	10.9	30.0	9.8	45.8	4.1	35.1	42.7	62.4
Zacatecas	28.6	67.2	9.1	0.2	1.3	14.0	15.8	32.8	4.0	28.9	36.3	56.3

Table A2: Indicators for each variable in Mexican states 2010

	EB	AHSD	DHFM	DHWM	DHRM	DHO	DHAW	DHDS	DHE	FSD	CD	HD
Aguascalientes	15.1	17.1	1.0	0.3	0.1	5.3	2.2	2.1	0.8	13.8	21.0	45.4
Baja California N.	14.1	27.3	1.8	1.4	1.0	5.7	4.1	6.2	1.0	9.8	16.2	40.5
Baja California S.	13.8	23.7	4.3	2.4	3.5	10.0	9.5	5.2	2.4	7.8	12.8	32.3
Campeche	20.8	17.6	4.7	4.0	2.4	20.1	12.2	13.1	3.6	21.3	29.4	53.7
Chiapas	12.9	21.1	1.2	0.7	0.7	4.5	3.6	4.8	0.7	9.2	15.3	38.8
Chihuahua	18.0	16.5	4.5	2.5	1.8	9.1	3.1	1.5	0.6	13.3	20.2	43.0
Coahuila	32.9	43.2	14.8	5.2	1.8	27.9	25.8	22.2	3.8	48.6	58.0	78.1
Colima	16.9	24.2	3.0	0.4	0.8	6.9	5.1	7.4	3.9	13.6	20.5	44.5
Distrito Federal	9.4	32.9	0.7	0.6	1.7	7.0	2.6	1.1	0.1	7.7	12.6	31.7
Durango	18.2	28.7	6.2	0.6	1.6	8.4	6.8	11.6	4.8	17.8	25.2	49.7
Guanajuato	23.5	27.3	2.8	0.7	0.6	9.6	9.0	12.6	1.6	21.0	29.6	55.1
Guerrero	27.9	46.1	18.1	5.7	11.6	29.4	37.4	30.1	4.6	38.4	48.0	71.0
Hidalgo	19.7	32.4	6.4	2.3	1.3	9.7	11.8	16.6	2.6	21.3	29.3	53.1
Jalisco	19.1	33.8	2.3	0.4	0.5	7.3	6.8	3.3	0.9	13.4	20.2	43.2
México	14.7	39.3	3.3	0.6	3.5	10.6	8.3	9.0	0.9	18.2	26.3	51.2
Michoacán	28.5	44.4	9.6	1.1	7.5	11.1	11.5	15.5	2.0	23.1	32.0	57.7
Morelos	17.3	34.1	7.2	2.5	3.4	11.3	12.4	7.1	1.0	15.0	22.0	44.8
Nayarit	19.7	22.3	3.9	0.8	3.4	8.9	11.1	7.7	3.9	15.4	22.1	44.4
Nuevo León	11.8	18.9	1.5	0.5	0.2	4.9	3.7	2.8	0.3	7.8	13.3	35.8
Oaxaca	29.9	44.3	18.2	7.8	2.0	21.3	29.4	33.2	5.1	35.4	44.6	67.4
Puebla	24.1	50.4	9.1	1.6	6.2	17.1	17.3	17.4	1.9	30.0	39.4	63.6
Querétaro	17.4	25.8	2.7	0.5	0.4	9.8	9.1	10.9	2.7	15.2	22.1	44.5
Quintana Roo	16.1	30.4	3.8	2.6	6.2	20.8	9.7	6.8	1.6	19.2	27.5	52.8
San Luis Potosí	20.3	24.1	7.8	5.0	0.9	9.0	15.1	20.9	3.9	23.8	32.4	56.6
Sinaloa	18.8	22.2	5.9	1.7	3.2	8.8	7.9	9.3	1.4	12.3	19.1	43.5
Sonora	14.3	24.0	5.0	2.2	3.1	8.5	5.6	9.6	1.8	12.5	19.6	44.4
Tabasco	18.2	23.6	5.6	4.8	0.3	12.6	25.6	14.2	1.6	20.4	28.6	53.0
Tamaulipas	15.9	21.9	3.1	1.5	1.2	8.7	5.5	11.7	2.4	13.7	21.5	47.8
Tlaxcala	15.3	36.5	3.2	0.3	1.6	11.3	3.5	7.3	1.1	18.1	26.2	51.2
Veracruz	26.5	40.1	11.8	6.3	3.7	15.1	23.4	20.3	3.1	25.0	33.7	58.2
Yucatán	23.5	22.4	2.8	4.0	2.9	18.6	6.1	20.4	1.9	20.0	28.1	52.9
Zacatecas	22.5	28.0	2.4	0.2	0.4	6.1	7.2	10.6	1.4	18.4	26.8	52.8

Table A3: Indicator values re-scaled between 0 and 1, without grouping

Method	CRITIC			ENTROPY			PC		
State	1990	2000	2010	1990	2000	2010	1990	2000	2010
Aguascalientes	0.13297	0.09483	0.03249	0.10507	0.10342	0.00000	0.26886	0.24861	0.13105
Baja California Norte	0.12825	0.10267	0.11774	0.25253	0.24944	0.14802	0.17862	0.15187	0.14917
Baja California Sur	0.27515	0.23810	0.22217	0.39581	0.39088	0.36235	0.25597	0.20362	0.14264
Campeche	0.81626	0.78992	0.39189	0.77156	0.76904	0.49088	0.62766	0.60723	0.39108
Chiapas	0.97782	0.96159	0.78690	1.00000	1.00000	0.71945	1.00000	1.00000	1.00000
Chihuahua	0.23335	0.19219	0.21497	0.25275	0.24928	0.18105	0.29439	0.25619	0.24318
Coahuila	0.21712	0.15468	0.04269	0.19079	0.18443	0.06587	0.21574	0.14206	0.07413
Colima	0.29690	0.26932	0.10833	0.39803	0.39599	0.22140	0.40478	0.37706	0.25466
Distrito Federal	0.00000	0.00000	0.07290	0.00000	0.00000	0.05543	0.00000	0.00000	0.00000
Durango	0.41525	0.38061	0.33932	0.37023	0.36815	0.31517	0.43410	0.40144	0.32620
Guanajuato	0.38158	0.36466	0.22669	0.34910	0.35072	0.21016	0.54721	0.57315	0.50291
Guerrero	1.00000	1.00000	1.00000	0.96853	0.96833	1.00000	0.80899	0.79893	0.87021
Hidalgo	0.65781	0.65322	0.35467	0.70491	0.70490	0.39292	0.59565	0.60506	0.40865
Jalisco	0.17507	0.15664	0.14471	0.20638	0.20666	0.09990	0.34683	0.35044	0.36254
México	0.25368	0.25383	0.27872	0.24197	0.24273	0.27966	0.24242	0.25198	0.24117
Michoacán	0.56389	0.55842	0.48539	0.51842	0.52040	0.53079	0.67566	0.69600	0.79845
Morelos	0.36552	0.37184	0.29473	0.40284	0.40379	0.40358	0.36688	0.37592	0.33018
Nayarit	0.35482	0.33529	0.28344	0.40021	0.39996	0.34887	0.48723	0.48187	0.34889
Nuevo León	0.05459	0.00931	0.00000	0.10731	0.10249	0.01305	0.11855	0.06481	0.02095
Oaxaca	0.89918	0.88637	0.85105	0.92475	0.92442	0.81979	0.88118	0.86547	0.91293
Puebla	0.63832	0.63993	0.57403	0.59116	0.59277	0.57503	0.60278	0.62280	0.67412
Querétaro	0.37726	0.34855	0.21349	0.43251	0.43080	0.19322	0.42027	0.40870	0.27326
Quintana Roo	0.69181	0.66092	0.38167	0.67835	0.67456	0.46464	0.51093	0.46718	0.27497
San Luis Potosí	0.61499	0.59448	0.43879	0.73021	0.72817	0.51293	0.57356	0.55922	0.40729
Sinaloa	0.44046	0.39728	0.20408	0.49958	0.49552	0.34340	0.45016	0.39794	0.32059
Sonora	0.35355	0.31998	0.22568	0.40858	0.40428	0.34417	0.28762	0.23322	0.16280
Tabasco	0.65496	0.65535	0.34081	0.76936	0.76881	0.43650	0.53105	0.56591	0.32530
Tamaulipas	0.36942	0.33912	0.20233	0.45922	0.45584	0.24978	0.33725	0.30864	0.20307
Tlaxcala	0.32076	0.34106	0.22804	0.28066	0.28372	0.17543	0.29606	0.33830	0.24559
Veracruz	0.86434	0.84752	0.61643	0.89059	0.88884	0.70307	0.72622	0.71150	0.73290
Yucatán	0.68824	0.64048	0.34629	0.69408	0.69056	0.44496	0.65281	0.62756	0.50229
Zacatecas	0.46937	0.45628	0.17747	0.38475	0.38647	0.13534	0.56487	0.59133	0.46017

Table A4: Indicator values re-scaled between 0 and 1, with grouping

Method	CRITIC			ENTROPY			PC		
State	1990	2000	2010	1990	2000	2010	1990	2000	2010
Aguascalientes	0.19988	0.15297	0.06193	0.15862	0.14922	0.00000	0.30836	0.24060	0.10750
Baja California Norte	0.14667	0.11839	0.12837	0.31912	0.31559	0.19609	0.19182	0.18187	0.13890
Baja California Sur	0.23686	0.19690	0.18274	0.44927	0.44493	0.42080	0.24384	0.21153	0.11831
Campeche	0.71514	0.70068	0.39560	0.79770	0.79656	0.57761	0.61702	0.57008	0.34474
Chiapas	1.00000	1.00000	0.89695	1.00000	1.00000	0.80610	1.00000	1.00000	1.00000

Method	CRITIC			ENTROPY			PC		
State	1990	2000	2010	1990	2000	2010	1990	2000	2010
Chihuahua	0.23595	0.18909	0.24061	0.32857	0.32074	0.25608	0.31659	0.28668	0.22796
Coahuila	0.20688	0.13483	0.05048	0.25320	0.24200	0.09094	0.22493	0.12795	0.05553
Colima	0.31015	0.27969	0.11926	0.44166	0.43666	0.24346	0.40600	0.38776	0.22281
Distrito Federal	0.00000	0.00000	0.04920	0.00000	0.00000	0.04665	0.00000	0.00000	0.00090
Durango	0.41329	0.37838	0.36629	0.45765	0.45179	0.41255	0.44464	0.41585	0.31698
Guanajuato	0.47612	0.45964	0.31850	0.44617	0.44077	0.29754	0.60540	0.61348	0.49023
Guerrero	0.92757	0.95278	1.00000	0.96142	0.96510	1.00000	0.75876	0.79065	0.85771
Hidalgo	0.66329	0.67236	0.39995	0.76463	0.76615	0.49390	0.59685	0.56181	0.40242
Jalisco	0.25018	0.22777	0.20579	0.28471	0.27896	0.14606	0.38898	0.39083	0.36674
México	0.26196	0.26791	0.29584	0.31617	0.31610	0.35834	0.24817	0.23235	0.24812
Michoacán	0.58402	0.58544	0.56591	0.60228	0.59937	0.61024	0.70335	0.75165	0.80760
Morelos	0.35007	0.36485	0.30278	0.45682	0.45771	0.47013	0.35260	0.37880	0.32660
Nayarit	0.39541	0.37653	0.30510	0.48059	0.47617	0.43999	0.50889	0.48370	0.32496
Nuevo León	0.07574	0.02153	0.00000	0.15230	0.14390	0.01241	0.13094	0.07527	0.00000
Oaxaca	0.90487	0.90996	0.91629	0.93786	0.93865	0.88113	0.85583	0.87633	0.91091
Puebla	0.64704	0.66347	0.63556	0.67045	0.67118	0.66249	0.60830	0.63836	0.69177
Querétaro	0.42740	0.40004	0.24941	0.52114	0.51737	0.27350	0.44558	0.36508	0.25814
Quintana Roo	0.56014	0.53837	0.35180	0.70169	0.69961	0.52477	0.47553	0.33373	0.25100
San Luis Potosí	0.62724	0.61578	0.46548	0.78372	0.78373	0.61133	0.57564	0.55696	0.38212
Sinaloa	0.42972	0.38585	0.22039	0.56378	0.55830	0.41112	0.44563	0.44157	0.29585
Sonora	0.28968	0.25574	0.20905	0.45769	0.45402	0.40971	0.26214	0.24257	0.14065
Tabasco	0.62614	0.63930	0.36735	0.80133	0.80412	0.53567	0.55692	0.53800	0.30013
Tamaulipas	0.35561	0.32673	0.21688	0.53137	0.52842	0.33031	0.34243	0.28650	0.17864
Tlaxcala	0.34211	0.37486	0.25686	0.35645	0.35888	0.23892	0.29664	0.31865	0.24998
Veracruz	0.79814	0.79651	0.66428	0.90410	0.90493	0.76810	0.71273	0.73679	0.72841
Yucatán	0.66565	0.61955	0.37691	0.73724	0.73165	0.52728	0.68135	0.61193	0.46009
Zacatecas	0.52259	0.51306	0.26996	0.48247	0.47790	0.20298	0.61973	0.64718	0.45277

Theoretical Evaluation of Afghanistan's New Constitution Law in Terms of Democracy

Poopak Dehshahri

Department of Public Law, Shiraz University, Shiraz, Iran

E-mail: p.dehshahri@gmail.com

Tel: +98-9197011220; Fax: +98-2122060657

Abstract

Drawing up and approval of Afghanistan's 9th constitution followed the democratic approach in accordance with the Bonn agreement. This paper is aimed at dealing with the Afghanistan's constitution principles using two (supportive and evolutionary) liberal democracy models. Throughout this evaluation five indexes including anthropology, the "Rights" issue, the political system, democracy and the democracy realization processes have been used as the basis for analyses. The new constitution of Afghanistan was consistent with both above mentioned models in terms of five indexes.

Keywords: Afghanistan, theoretical evaluation, constitution, democracy

Introduction

Afghanistan, having spent several decades in war grabbed the international attention after the September 11 incident (2001). The outcome of the international community coalition and the collaboration of domestic forces was the Bonn agreement that provided for a new arena of socio-political developments for this country. The basis for the Bonn agreements was the advancement of democracy that was planned in framework of mechanisms like approval of Constitution, holding of presidency and parliamentary elections, etc. The 9th Afghanistan Constitution hereinafter called the "new constitution", was ratified by the unanimity vote -in a Loya Jarga held from December 13, 2003 till January 04, 2004 - and officially came into operation as of January 26, 2004 of the same year by the assent of the president of the era, Hamed Karzay.

Various classifications exist concerning types of democracies. One of the broadest and most comprehensive theoretical classifications of democracy was made by David Held who classified it into 9 categories. He has categorized the liberal democracy into two supportive and evolutionary models. In supportive democracy model the Machiavelli, Locke, Haber, James Madison, Montesquieu and James Mill's doctrines and in the evolutionary democracy model the, Rousseau and Stuart Mill's views have been discussed. In this paper Afghanistan's new constitution principles have been compared with the above models. For this paper five indexes are determined as the analysis basis including the following:

1. Anthropology: How the human being is defined in each individual model?
2. The "Rights" issue: What are the rights each individual model is propounding?
3. The political system: What is the political ruling system each model is considering as favorable?
4. Democracy: What definition of democracy each model is offering?
5. And that how each individual model is evaluating the democracy realization processes. Finally the Afghanistan's new constitution is considered using those same above mentioned indexes.

I. Supportive Liberal Democracy Indexes

A. Anthropology: Individualism

The middle ages in the European history was accompanied by the church dominant rule. But the two renaissances and reformation movements changed the situation; the supportive model of democracy tried to fight against the Christian thinking that perceived freedom only as surrendering oneself to God and that the world is the place of unhappiness and separation between the God and the man. The Luther and Kalvin teachings which by nature contained a new concept of person as an “individual” (Held, p69, 2005) accelerated the trend of obeying the reason and avoiding from the church teachings. Hobbes on the other hand, had a psychological perspective. In his opinion, the human being is individualist, egotist, evil-minded and hegemonist by nature (Alem, P237, 2005). He believes that “People are like wolves”. But Luck has a different opinion. He perceived the human being an altruist entity and believed that all the men are of a single essence (Alem, p275, 2005). In his view, humans are rational entities. He says: “To be born sane is the reason for our being born free.” So the human freedom and his authority for what he wills is based on his reason” (W.T. Johns, 2005, p208). Bentham and Madison however believe that the motivation power of an individual is searching for contentment and avoiding from pain and suffering. What drives the human being into the society is the benefit he gains from it. If everyone seeks his benefits, the benefit of all the society is fulfilled.

The “Rights” issue: 1) Natural rights, 2) Right of ownership and right of transferring one's property to others.

Establishment of two social contracts by the companions of social contract commenced the formation of modern concept of “Right”. The two contracts included a “social” and a “political” contract. The social contract was specified by the notion of “equality” and the social contract was defined by the obedience of individuals to the political authority in the modern doctrines as the top priority “Social Right”, something that practically determined the intrinsic nature of the relevant political institutions. In this model the human being as an individual, acquires the natural right on the basis of natural law. John Luck says in this respect: “The God has granted (to the creatures) the strong willing to preserve the life and existence... the reason like the Gods’ voice teaches us to preserve this natural willingness.” (W.T. Johns, 2007, p6).

B. The Political System: Constitutional Government

The same way the change in anthropology perspective changed the philosophy of Right, it altered the political system origin as well. In social contract theories, an individual has a rational character and can realize that lack of legal norms leads to instability in human relationships, making the security impossible. In social contract theories the submission and obedience of people to the orders of the ruler and the ruler's Right of enforcement of power must be based on a kind of satisfaction to which Jain Hampton refers as “Consent based rule theory” (Hampton, 2001, p97). The supportive model emphasizes the importance of satisfaction of individuals and restricts it conditional to the wanting of the majority. The power in this model after surrendering to the ruler is absolute and unlimited but this transference is not definitive and permanent (Sanaei, 2000, p15). Also the public benefit constitutes the axis of the political theory. The government in this theory is an aggregation of individuals and the public benefits are not principally something other than the numerical aggregation of individual's specific benefits (Pouladi, 2005, p137).

C. Democracy: Representative Democracy

According to the supportive model theorists, in democracy someone must rule. The people agree with each other and each person gives covenant to the other that surrender himself to the rule of a man or an association of men, and the right of speech on behalf of the majority is given to that man or association and all, whether voted for or against, must consider as lawful the deeds of that man or association in rule (Alem, 2008, p246). Also the rulers must not possess rights equal to that of the ordinary people.

They are the agents of the government and have tasks and duties to fulfill corresponding to the people. Luck in chapter 10 of his book “The second Dissertation” describes that if the majority decides to be the judge and enforcer of the law of nature, it has voted for the democracy (Hampton, 2005, p 108). Also, Montesquieu considers a political system as democratic should it devote itself for supplying freedom and minimizing the corruption and unacceptable monopolies of privileges (Held, 2005, p90).

D. Democracy Realization Process: Consent Based

The supportive model emphasizes the competency of the government's power. The most important duty of a government is to be successful in establishing peace and order. Lawmaking and adaptation to certain cases and enforcement of law, all are of the ruler's duties. The will of the ruler is Law, but his duty is to bring about laws and regulations that preserve the people's natural rights in the society and protect their interests. The ruler is responsible for legislating and enforcement of law. He is also responsible for the Judiciary and must exercise adequate supervision of the army. The ruler collects the taxes and the agents are only responsible and accountable to him. Hobbs and Luck believe that the social contract entails rational commitment between the parties (ruler and the people) and the people are bound to accept the liability arising from this contract. This model also advocated a range free from the government involvement in which the trading, experiences and the paternalistic family or somehow the civil society could grow. But it failed in determining the principles and institutions necessary for limiting the state functions (Held, 2005, p83).

In Montesquieu's opinion who is one of the most important founders of the conditional government in supportive model, “the constitutional government is the main mechanism guaranteeing the individual's rights. The power structure must be invulnerable to the misuse by the individuals or groups. He insistently advocated the notion of a society in which the individuals, talents and capabilities are full of the cognition that the private interests must be protected. Montesquieu is the main founder of division of powers' theory. He leaves the executive power in the hands of the King who emphasizes the quick decision making... But to limit his power, there must be a legislative power competent at discussing the executive power's policy, amending and modification of the laws and interpellation of the executive power and can make containing of the executive power possible by controlling the governments' economical basis. The constitutional amendments the legislative power to be more efficient, must be constituted by two nobility and common people assemblies. The House of Lords is entitled with the right of rejection of the laws and the House of Commons possess the right of legislation. But the Judiciary acts independent of the other two powers. And eventually he believes that “these are the obedient citizens who are accountable to the rulers.” (Held, 2005, p97).

Madison also in search of finding a way of adjustment for different and intermingled interests and preventing from the majority despotism advocates for a “representation system”. This type of government attains power through direct or indirect selection by the people.

II. Evolutionary Liberal Democracy Indexes

A. Human being: Utopianism

In this model the teaching of man good faith is advocated. Rousseau in his book “An Article on Origin of Inequality” (1775) implicitly attacks the church teaching on the original sin of the man and explicitly confronts the Hobbs's notion of “the natural state”. He considers a natural human being inherently possessing the two motives egotism and compassion. The second motive moderates the second motive's force and thereby makes constitution of society possible. “The compassion is a natural affect that through moderating the violation of in individuals helps in preserving of all the types.” (Alem, 2005, p345). This moderation makes the man peaceable. But the men are more perfectionist than being peaceable and this perfectionism would be possible only in a social system and not in natural status.

B. The Right: Spiritual Rights

The Right issue in the opinions of the evolutionary democracy theorists has developed more by far than that of the supportive democracy. In evolutionary model of democracy the national sovereignty belongs to the people and the government is only an agent acting on behalf of the people. Human being in addition to the “natural rights” has “Intellectual rights”. They are entitled with the right of growing their talents and seek along with their perfection seeking tendency and the government is obliged to facilitate realization of their will. Right of equality that was briefly dealt with in the political law was developed and right of economic equality was propounded. Freedom of speech was Mill's most importantly considered opinion. The freedom of speech primarily provides the possibility for new thoughts to be propounded. New thoughts are prerequisite for evolution and progress of the communities (Lidman, 2002, p23).

C. Political System: (Combined System with Direct Participation)

The rule in evolutionary model has been interpreted as “the general will”. The general will besides comprising the true will of the individuals, will end in the public fairness. Rousseau's social contract basis suggests that each of us share our entity and power under the supreme leadership of common will and accept each member as inseparable component of the whole in our collection (Kasraei, 2000, p68). In this model the non-combined or simple type of the government has been introduced as the best system for achieving the favorable political system (Alem, 2000, p426).

D. Democracy: Nurturing the Talents

The evolutionary model theorists believe that any form of government could be proper for a particular situation and improper for another. Democracy is suitable for the small countries; Rousseau states clearly that to establish democracy and achieving freedom it should be effortlessly possible “to describe the number of population like a simple relationship” (Rousseau, 1966, 62). Rousseau establishes a direct relationship between population of a country and achieving democracy because in country with low population there is the possibility for building relationships between the people and the government based on the freedom principles. In such a society there is the possibility for participation of all the people and nurturing the talents. The Rousseau's interpretation of a democracy based society is a comprehensive government whose achievement he considers somehow impossible (Lipist, 2004). In Mill's opinion the ideal government “is a government in which the rule or the superior administrator power of the country is at the service of pervasive aggregation of the community people and not only the citizens can express their opinion and view about the way of enforcing of that superior rule but at least he/she is called in for playing an active role in administering parts of political, regional and state duties.” (Mill, 1990, p67).

E. Democracy Realization Process: Public Participation

Evolutionary democracy model theorists believe that the government's duties is not confined to protecting the sole and properties of the citizens and providing them with the material needs but to fulfill the spiritual needs of the mankind and facilitating the felicity for which he has been created should lie in the ultimate goals of the government. The real felicity lies in the public fairness that would be accessible only through living in the society and obeying the government (general will) and fulfilling the duties. Also the ownership is the means of dominating over those who lack it; so the ownership must be controlled by the general will or the government (Alem, 2000, p369).

John Stuart Mill, another theorist of the evolutionary model, proposes a combination of a selective and free market economics to ensure maximum freedom of citizens and limiting the government's activity domain. He places limitations to the government's power and restricts it to

solving issues relating to the coordination and provision of the public services but avoids from presenting a clear perspective (Held, 2005, p152). Also guaranteeing the rights of individuals and minorities against the majority was of the major preoccupations of John Stuart Mill in the last century. Mill defended the rights of individual from the one hand and on the other hand, he was concerned about the possibility that aggregation of rights of individuals in the form of majority would end up with some kind of despotism towards the minority whether be individuals or ethnic -religious minorities. He frequently argued for his concerns so that he demanded support for the individuals and citizens against the dominating thoughts and emotions of the day (Ghaderi, 2004, pp. 26, 27); he also thought about broadening of the government's power. Mill perceived as necessary some of the government's interventions in the lives of the individuals and admitted it on the basis of preventing them from harming others and believed that the limitation for such intervention was self-preservation. But he feared about the arbitrary involvements based on the personal interests. He also feared about the over-expanded government as this would lead to a restriction of freedom of minorities.

He considered the universal suffrage as necessary but did not advocate equal suffrage. In his view the people belong to different categories in terms of levels of awareness and accordingly are different in terms of suffrage. There are groups of people who should never be allowed to use the suffrage. Those who belong to lower levels of knowledge belong to this category. However, those to whose ingenuity and ideas the social development is dependent and play role in increased performance of democratic governance, should be granted higher level of suffrage, and considers “the job status” as the criteria of judgment.

III. Democratic Indexes of Afghanistan's New Constitution

A. Anthropology: Human Dignity

One of the most important axes of Afghanistan's new constitution is paying respect to the “human dignity”. In the new constitution the state is responsible for establishing a prosperous and progressive society based on the social equality, preserving human dignity, promotion of human rights, realization of democracy, provisioning of national unity meanwhile observing the equality of all ethnics and tribes and maintaining balanced development throughout the country (Introduction of the Constitution Law). Preservation of the human dignity (Article 6) and the human freedom to which the government is bound to paying respect and giving support (Article 24) and observing the human rights (Article 6 and 7) are among the most important matters propounded in the new constitution of Afghanistan concerning the human and his rights. Also strengthening the socio-political and economic fundamentals of the society in pursuit of fulfilling the human rights and preserving the high human spiritual and moral values are of the other duties of Afghanistan's political system.

B. The Right: The Human Natural Rights

The Right in Afghanistan's Constitution has been based upon “paying respect to the human dignity”. Accordingly, strengthening the political, social, economic and defensive fundamentals of the country, provisioning a prosperous life and healthy environment for the citizens has been mentioned as the primary goals (Introduction). Also the second chapter of the constitution entitled “The basic rights and duties of the nationals” provides in detail the aims of compilation and adoption of the constitution as “to accomplish a civil society free of oppression and. .. establishing social justice and preservation of human dignity and rights and furnishing the fundamental freedoms and rights of the people”.

C. Political System: Islamic Republic

Afghanistan's Constitution in its first Article defines the formation of government as an “Islamic republic, independent, unitary and inseparable” (Article 1) which has been constituted from two “republic” and “Islamic” elements. The stability of government has been based on two popular basis of

being republic and Islamic. Both of these elements in essence include people participation. The new Constitution is a completely Islamic Constitution Law. 140 out of 162 Articles are about Islam. Islam is obviously seen in all of the first four paragraphs of the Introduction. Islam obviously constitutes the foundation of policy and religious law of Afghanistan (Mohmoudi, 2004, pp870). Islam is the state's official religion (Article 2) and no law can be opposite to the Islamic beliefs and precepts of Islam sacred religion. More highlighted presence of Islam in the new Constitution bounding it to “Islamic beliefs and precepts of Islam sacred religion” compared with the 1964 Constitution that only prohibited legislation of laws opposing to the “Islamic principles”, has made it closer to the Islamic Law. There are numerous Articles indicative of more highlighted role of Islam (Their, 2006/7, pp577).

D. Democracy: Representative Democracy

The seventh paragraph of the introduction of Constitution Law states the purpose of compilation and adoption of the Constitution as follows: “establishing a system relying on the people's will and democracy” and the eighth paragraph emphasizes the “establishment of a civil society free from injustice, despotism, discrimination and violence and founded based on legality, social equality, preserving the human dignity and rights, provision of freedoms and the fundamental rights of the people”. “National sovereignty in Afghanistan belongs to the people and they enforce it directly or through their representatives.” (Article 4).

E. The process of Democracy Realization

In review of democracy realization processes we consider four criteria that largely overlap with each other (See Bitam, 2004, pp248-251):

- 1) Free and equitable elections;
- 2) The Governments accountability;
- 3) Division of powers;
- 4) Civil and political rights

1. Free and Equitable Elections

The people constitute the starting point for representative democracy. In new Constitution of Afghanistan the elections process lies within the scope of presidency elections, parliamentary elections and judicial power. The Constitution expresses the presidential elections process as follows: “The president is elected with the majority of over 50% of the vote through a free, confidential and direct electoral system.” (Article 61) and if none of the candidates can win the vote with a majority of over 50 percent of the votes cast, a runoff election will be held among the two candidates who have received the most number of votes in the first round and only the candidate who can win the majority of votes in the second round will be known as the President (Article 61). The Ministers are selected by the president and confirmation, dismissal or acceptance of their resignation must be approved by the House of Commons.

1.a) Parliamentary Elections

The National Consultative Assembly constitutes from two separate assemblies namely the House of Commons and Senate and one person cannot be a member of both assemblies simultaneously. “Members of House of Commons (Welsy Jerga) are elected by the people through free, public, confidential and direct elections” (Article 83). With regard to the election procedures of the National Consultative Assembly representatives the Article (88) of Constitution states that: “the electoral securities of the National Council members are carefully evaluated by the independent electoral commission in accordance with law injunction.”

Likewise the procedure of parliamentary elections' systems has been left to the elections' law. Article (38) with regard to the quality and level of democracy in elections, the law prescribes that the

Elections Law must: “In the elections’ law provisions must be made for the elections’ system to provide for all the people of the country to achieve an equitable public representation and measures must be taken considering the population of each province so that on average at least two female representatives are elected to Welsy Jerga. The Senate members are elected through the following steps: “1-One person elected by and from among total number of the provincial councils’ members for a period of 4 years; 2- 1-One person elected by and from among total number of the township councils’ members of each province (Walsvalis) for a period of 3 years; 3-The remaining one third from among the renowned and respected experts in addition to two representatives from among the handicapped and disabled and two representative from Kuchis appointed by the President for five years. The president appoints 50 percent of these persons from among the women. (Article 84).

1.b) The Judiciary elections

The Supreme Court (Satrah Mahkamah) is the highest judicial organ positioned at the head of the Judiciary. The Supreme Court consists of 9 members who are appointed by the President and with the approval of House of Commons and proper observance of the provisions stipulated in the last paragraph of Article (50) and Article (118) of this Constitution in the following order: Three persons for a period of 4 years, three persons for 7 years and 3 others for a period of 10 years. The next appointments (to increase or replacement of the members) will be for terms of 10 years. Appointment of a member for a second term will not be possible. The President will appoint one of the Supreme Court members as the head of the Supreme Court. The Supreme Court members except for the case mentioned in the Article (127) of this Constitution could not be removed from office until conclusion of their service term (Article 117).

1.c)The government accountability and responsibility

The government shall be continually accountable to the people and their representatives. The power must be applied in accordance with the regulations ensuring the peoples’ monitoring and consultation and thereby hindering the arbitrary misuse of power by the government. The political system of Afghanistan which is a presidential system has considered many jurisdictions for the president and the government (Articles 64 and 65). Accountability in the Afghanistan's Constitution considering the jurisdictions has been explained as follows:

2. Accountability of the President and Ministers

The president shall not be subject to no-confidence vote except it is requested for by one third of the House of Commons’ members for the felony charges of committing crimes against humanity, national betrayal or murder provided that such request is approved by two thirds of votes in favor of all the assembly members in which case the Loya Jergah will assemble and the president will be held responsible to the nation and the House of Commons (Article 69).

- Accountability of ministers: Accountability and responsibility of the ministers has been mentioned explicitly in Article (77) as follows: The ministers are responsible to the President and the House of Commons concerning their specific duties”. Also the House of Commons based on proposal by 20% of all members may interpellate anyone of the ministers (Article 92), but according to some other Articles of the Constitution the ministers shall be accountable through a number of ways: “Any of both assemblies of the National Councils’ commissions can ask anyone of the ministers questions on certain topics” (Article 93) or “Any of the two assemblies of the National Council can demand the ministers of their presence in its session” (Article 103).

2.a) Accountability of the National Council

National Council is the supreme legislative organization and manifestation of the peoples’ will in the Islamic Republic (of Afghanistan) and represents the entire nation. The Council members upon voting

shall consider the reason of state and best interests of Afghanistan nation (Article 81). The jurisdictions of National Council have been mentioned in the Articles (90, 91 and 96) of Constitution and no accountability of the National Council members has been specified in any Articles except for committing crimes.

2.c) Accountability of Loya Jergah

Loya Jergah is the supreme manifestation of Afghanistan's peoples' will. The Loya jurisdictions include all the crucial affairs of the country and constitutes from 1-the National Council members and 2- heads of the provincial and township councils (Article 110). No accountability of Loya Jergah members has been specified in any Articles except for committing crimes.

2.d) Accountability of Judiciary

Verification of consistency of the laws, legislative decrees, interstate treaties and international conventions with the Constitution and their interpretation in case demanded by the government or the courts according to the provisions of the law is of the Satrah Mahkamas jurisdictions (Article 121). None of the laws has referred to the accountability of Judiciary. Article (127) declares that if the head or some members of the Satrah Mahkama calls for trial of the Judiciary members and such demand meets the approval of two thirds of all the Satrah Mahkama members, the defendant will be removed from office and the issue will be devolved to the special court (Article 127).

3. Division of Powers' System

Afghanistan's new political system is a pure presidential system (Deledde, 2006, p3) including a president, two Vice Presidents, a two-assembly legislative power and an independent Judiciary which are elected through direct vote of the people. The president is both the head of government and the state and will not be subject to the no-confidence vote by the assembly (save arraignment on charges or impeachment). The president selects his cabinet although the cabinet is subject to approval by both legislative assemblies. The president has sole sovereignty over the executive power. The legislative power and Judiciary of government also play another important role under the new Constitution Law. The legislative power consists of a House of Commons called the "Welsy Jergah" comprising of 249 members with at least 69 female members and a Senate which is equally divided among the elected representatives of the provinces and districts and the presidential appointees. The judicial system is comprised of a supreme court whose members are appointed by the president and approved by the House of Commons. The inferior courts' judges are elected by the Supreme Court and are approved by the president.

This Constitution tries to maintain a significant segregation and equilibrium between the three powers of the central government (Their, lced, pp571-572). The constitution has organized the relationships between the powers so that from the one hand escalates the decision making and execution ability within this power by defining a presidential system and giving the helm of executive power affairs to the hands of the president and by adherence to the collaboration of powers' theory from the other, establishes strong regulatory levers for controlling the executive power's performance in order to further strengthening the National Council's position as well (Mohammadi, 2005, p39).

4. The Civil Society

Development, promoting and strengthening the civil society has been determined as the aims of the Constitution Law (Introduction). Some of the rights and freedoms provided for in the second chapter of the Constitution entitled "The Fundamental Rights and Duties of Nationals" contain individual and social aspects to which we have referred in this paper. Also devolution of authorities to the local councils can assist in expansion of the civil society The economic system, the rights of parties, minorities, women etc. are important in this regard.

4.a) The Councils and their Membership Procedure

One of the most important pillars that can assist in realization of the civil society and national unity and independence is the administrative centralism. This has been emphasized in Afghanistan's Constitution (Articles 137 and 142) and it develops a highly centralized government that grants no administrative and political jurisdictions to the provinces. The officials of the provincial departments are appointed by the ministries in the central government. The Constitution only creates elected advisory institutions at provincial and district levels (Ibid, p574) Administration of Islamic Republic of Afghanistan is adjusted based on the headquarters units and their regional offices (Article 136). The government meanwhile maintaining the centralism principle devolves jurisdictions to the local departments (Article 137) and a provincial council will form for facilitating the affairs.

The provincial council's members are elected by the provincial residents according to the law in proportion to the population of each province through free, public, confidential and direct elections for a period of 4 years. Head of the provincial council will be appointed by the provincial council's members (Article 138). Members of townships and villages' councils (Welsawalis) and municipalities' members (Sharwalies) as well as the municipality assemblies are elected through the same procedure (Article 141). The provincial council 1) will assume responsibility in the developmental goals of the government and improvement of provincial affairs as stipulated in the regulations and 2) gives advice on the provincial affairs and performs certain duties in local administration according to the laws (Article 139).

4.b) The Parties

Article (35) of the Constitution stipulates that Afghanistan's nationals are entitled to form associations or parties according to provision of the law in order to fulfill material or spiritual purposes provided that: 1) the statute and Articles of association of the association or party is not in contradiction to the decrees of sacred religion of Islam and the texts and values mentioned in this Constitution Law; 2) The organization and financial resources of the party is public; 3) Does not pursue military or paramilitary goals; 4) Is not dependent to foreign political parties or interests; 5) Establishing a political party based on ethnicity, position, language and theology is prohibited. None of the parties could be dissolved without convincing reasons of a judge or a verdict from a competent court.

4.c) Minorities Rights

The second Article of Constitution has declared freedom of the followers of other religions in performing their rituals subject to fulfilling the provisions of the law (Article 2) and Placing restrictions on the religious minorities concerning observation of the law provisions including the Constitution Law can be viewed as infringement of their rights as Afghan citizens. For example a non-Muslim person cannot stand as a candidate at the presidency elections. Contrary to the previous constitution laws that declared the Hanafi theology as the official religion of the country, the new Constitution is not declaring superiority of any religion over others and all the ethnics and religions have enjoy equal rights.

4.d) The women's Rights

Although the women constitute half of the body of human society and they should enjoy equal rights due to their being human, they have always suffered from discrimination throughout the history. Currently in many countries the women's equal rights with men are denied. Accordingly the women's rights in Afghanistan have faced discrimination but Afghanistan's new Constitution adopts a completely different approach to the women's rights. According to the Afghanistan's new Constitution Law “any discrimination and special privileges among the Afghanistan's nationals is prohibited. The Afghanistan's nationals whether men or women have equal rights and duties under the law.” (Article 22). The men and women have therefore equal rights. Afghanistan's women who have always suffered from discrimination at social and political levels have also been subject to infringement of their rights within the family. The new Constitution Law by protecting the family rights and especially supporting

the mothers and the children has tried to protect the women's rights. This Law also stipulates that it will remove all “the traditions which are against the commandments of sacred religion of Islam”. This means that the Islamic commandments are applicable to the women's and family rights. Some theorists believe that a number of Afghanistan's Constitution Law including the Article (3) that declares: “No laws could be against the Islamic beliefs and commandments” has made the women's and the human rights vulnerable to abuse and this way has allowed for extremist interpretations of Islam (Niaz Shah, ,2005 11p). This Constitution to provide more support for the women's rights has made the membership of the women mandatory both for the National Council's assemblies (Articles 83 and 84) and the Loya Jergah (Article 110).

Conclusion

1. Afghanistan's new constitution which concerning the anthropology index has considered respect for and preservation of the human dignity as its most important axes and has placed emphasis on such respect in the Introduction section as well as in the provisions of some other Articles including the Articles appearing in the chapter second, is consistent with the supportive democracy which considers the human as a rational entity with power of reason and logic and refers to altruism of the man. Evolutionary democracy by enumerating the inherent features like perfectionism, peaceableness and sagacity as the human nature is consistent with Afghanistan's Constitution concerning this axis.
2. In the “Right” index, the supportive democracy has recognized the natural rights as the human rights that are in fact manifestations of the natural law. The evolutionary democracy on the presumption of the natural rights, has considered those spiritual rights that are effective in the growth of the human talents and his perfectionism as natural rights of the human being and categorized freedoms like the freedom of speech in this category. The new Constitution law of Afghanistan on the basis of its anthropology perspective has prescribed rights and freedoms for the citizens, comprises the views of both democracy models and is consistent with both models concerning this index.
3. In connection with the political system index, the desirable government from both democracy models' perspectives is the consent based rule. Establishing the government on the basis of the social contract between the people and the ruler is the fundamental basis of both models and both have advocated for the constitutional government. The political system of Afghanistan has been mentioned as the Islamic Republic so that both components of this combination somehow reflect the views and beliefs of the people. The favorable political system of new constitution of Afghanistan has been prescribed as a system based on the people's vote in the form of an Islamic Republic. So the Constitution Law in this index is consistent with both models of liberal democracy.
4. The democracy from both models' perspectives is representative democracy. The evolutionary democracy defines the democracy as a country with low population so that the conditions for realization of democracy could be fulfilled. Afghanistan's Constitution through acknowledgement of national sovereignty as belonging to the nation and its enforcement directly by the people or their representative can be entitled as a political system based on the representative democracy. The Constitution Law is consistent with both models of liberal democracy concerning this index as well.
5. In respect of the democracy realization processes index, Afghanistan's new Constitution Law has consistency with the supportive and evolutionary liberal democracy in terms of enforcement of national sovereignty through elected representatives, regular elections, confidential voting, rule of the majority, government accountability, segregation and equilibrium of powers, free market economy and providing the people with support by the government, ensuring the promotion of the spiritual rights of individuals (observing the

freedoms and nurturing the talents, widespread participation in local governments and political freedom of women. Ultimately the Afghanistan's Constitution was consistent with supportive and evolutionary democracy models in all the five above mentioned models.

References

- [1] Bytam, D. *“The Human Rights and Democracy”*, translated by Mohammad Taghi Delforouz, Tarhe Now Publications, Tehran. (2004)
- [2] Pouladi, K. *“From the rule of authority to the Government of Reason”*, Markaz Publications, Tehran. (2005),
- [3] Rousseau, Jean-Jacques *“The Social Contract”*, translated by Enayatollah Shkybapour, Tehran, Farouki Publications. (1966)
- [4] Sanaei, M *“Individual Freedom and the Power of Government”*, Tehran, Hermes Press.. (2000)
- [5] Alem, A. *“Political Philosophy of the West: from the Beginning to the End of the Middle Ages”*, Tehran, Political and International Studies Bureau. (2005)
- [6] Qaderi, H. (2004), *“Political Thought in the Twentieth Century”*, Vol. V, SAMT Publications, Tehran. (2004),
- [7] Kasraei, M. (2000), *“The Challenge of Tradition and Modernity in Iran: from the Constitution until 1941”*, Tehran, Markaz Publication. (2000),
- [8] Lipset, S. Martin. (2004), *“Encyclopedia of Democracy”*, translated into Persian under the supervision of Kamran Fannie and Noorollah Moradi, Tehran, Ministry of Foreign Affairs. (2004),
- [9] Lydman, S. Erik (2002), *“The History of Political beliefs from Plato to Habermas”*, Translated by Saeed Moghaddam, Akhtar Publications, Tehran. (2002),
- [10] Mohammadi, A. *“Power Relations in the Constitution of the Islamic Republic of Afghanistan”*, Gofteman-e Now Quarterly, Journal of Strategic Studies Center of Afghanistan, 2nd year, Issue 5. (2005)
- [11] Manochehri, A. *“The Red Reason and the Green Right”*, Proceedings of the International Seminar on Human Rights, Qom. (2003)
- [12] Mill, John Stuart *“Reflections on the Elective Government”*, translated by Ali Ramin, Ney Publications.
- [13] Held, D. (2005) *“Models of Democracy”*, translated by: A. Mokhber, Roshangaran and Women's Studies Press, 3rd edition. (1990)
- [14] Hmptn, J *“Political Philosophy”*, translated by Kh. Deyhimi, Tehran, Tarh-e Now Publications. (2001)
- [15] Jones, W. T. *“The Gods of Political Thought”*, translated by Ali Ramin, Vol. II, Part I, Tehran, Amir Kabir Publications. (2009)

The Islamic Banking System: A New Economic Competitive System

Mahmoud Ababneh

*Assistant Professor in Law, Amman-Jordan, Airport Street
Middle East University - School of Law, Office NO. (6)
Office tel: +96265516817; fax: +96265513793
E-mail: mababneh2012@yahoo.com*

Abstract

This paper deals with concept of Islamic banking and its system of finance has become one of the competitive financial systems that try to avoid the exploitation of clients on the basis of profit-loss-Sharing. The Islamic banking system achieved a long track of success and efficacy and expansion in the last year. It became one of the international financial components which need and deserve more studying and researching. This paper is dedicated to search this subject in two parts. The first part is to illustrate the roots of the system in the Islamic *Sharia* law and the second part is to explore the advantages which have been shown through the 2008 financial crisis.

Keywords: Islamic Banking, Conventional Banking, interest in Islam, *Riba*, Profit-loss-sharing (PLS).

Introduction

The last quarter of the Twentieth century has witnessed a substantial progress in expanding and spreading the Islamic banking system. Apart of the political and ideological factors which contributed to such expansion, the Islamic banking system became a successful and tangible fact, not only in the Islamic world but also worldwide. Its philosophy in managing and dealing with banking and financial activities attracted many financial institutions and scholars to study and compare this system with the current conventional banking system, in order to asses and evaluate its sustainability and firmness in fort on the 2008 financial meltdown.

After the world economic crisis of 2008, the western world started to look for an economic system that could help prevent a similar crisis in the future. Economics from Europe and North America started to extensively study the Islamic economic system, and found that this system had great potential to protect the economy from collapse. This paper will first explore how the Islamic financial system works, then why this system is now seen as a viable solution.

Part One: Islamic Banking

The term "Islamic banking" refers to a banking system that is consistent with the principles of the *Sharia*¹ (Islamic rulings); and its practical application that promotes development of Islamic

¹ *Sharia* law comes from a combination of sources including the *Quran* (the Muslim holy book), the *Sunnah* (sayings and conduct of the prophet Muhammad), *Ijma'a* (the consensus of Muslim jurists) and *Qiyas* (the analogical reasoning to provide an Islamic compliant response to a new problem).

economies. The principles of *Sharia* emphasise moral and ethical values in all dealings, and therefore have wide universal appeal². *Sharia* prohibits the payment or acceptance of interest charges –or what is known to Muslims as *Riba*- for the lending and borrowing of money. Also prohibited is carrying out trades or other activities that provide goods or services in a manner considered contrary to its principles³. While these principles were used as the basis for a flourishing economy in earlier times⁴, it is only in the late 20th century that a number of Islamic banks were formed to provide an alternative to Muslims⁵, although it is important to note that the Islamic banking system is not restricted to Muslims only. In fact, it is seen now as an ‘economic system’, not a religious one.

I. Rationale

The essential feature of Islamic Banking is that it is interest free. While there are some other features such as the contribution of Islamic banking towards a more equitable distribution of income and wealth, and increased equity participation in the economy⁶, the overarching principle is that there is no place for the institution of interest in the Islamic order. Interest in Islam is forbidden (*Haram*) regardless of the amount or purpose of it. This prohibition of interest (*Riba*) has been mentioned clearly in the Quran in four different places⁷. The general rule in Islam is that there should not be any increase or decrease in the amount returned relevant to the amount given, or what is known in the Islamic Jurisprudence as “the equity rule”. According to this rule, everything should be in equal amounts: what you give is what you get. This rule was debated by the companions of the prophet Mohammad as to whether “profit” generated out of trade is encompassed within the prohibition: if there cannot be any increase or decrease and if everything should be in equal amounts, then would not buying low and selling high to earn profit also be forbidden? The issue was solved when a holy verse was sent to Mohammad acknowledging that “*whereas Allah has permitted trading and forbidden Riba (usury)*”⁸. Thus, profiting out of trade is allowed because it involves work and risk, but profiting out of interest is forbidden because it lacks both work and risk.

The justification of prohibiting *Riba* in Islam is that it promotes exploitation of the poor by the wealthy. The wealthy are exploiting the need of the poor by charging interest on their loans which makes the rich richer and the poor poorer, and that is unjust and unfair.⁹ This exploitive characteristic of interest has been explored by Islamic jurists who have pointed out that profit, although lawful in Islam, could also be exploitive¹⁰. However, they have not agreed on the threshold beyond which profit becomes exploitive. The most dominant opinion is that the price of a commodity or a service should be the same, or almost the same, to the price of a similar commodity or service¹¹. This is called the “rule of the same (or alike);” the Arabic term for this is *Al-mithel*. For example, if someone sold a kilo of dates for \$10, then to determine if there is exploitation or not, one should look for similar dates -in terms of quality and quantity- and compare their price with the first price. If the similar dates are sold for \$10, or with a slight increase or decrease, then there is no exploitation, if the difference is large then this is considered exploitation, and the sale in such case is considered invalid.

²http://www.bbc.co.uk/religion/religions/islam/beliefs/sharia_1.shtml

³ Alcohol, pornography, gambling and Pork meat are all forbidden to trade with.

⁴The peak of the Islamic welfare economy was in the Caliphate era. See, Patricia Crone, “Medieval Islamic Political Thought” (2005) Edinburgh University Press, at 308–9.

⁵ The first Islamic Bank in the World was “Mit Gkamar Bank” in Egypt which opened in 1963.

⁶ See for example, K. Ahmad, “Islamic Finance and Banking: The Challenge” (2000) 9 Review of Islamic Economics 57 at 67-69.

⁷ Holy Quran; Surat al-Rahman (Chapter 30), verse 39; Surat al-Nisa (Chapter 39), verse 161; Surat al-Imran (Chapter 3), verses 130-2; Surat al Bakarah (Chapter 2), verses 275-81.

⁸ Holy Quran, Surat al Bakarah (Chapter 2), verse 275.

⁹ Mahmoud Al-Jamal, *An Economic Explication of the Prohibition of Riba in Classical Islamic Jurisprudence*, Rice University (2001) at 2.

¹⁰ Al-Nawawi, *Fark fi mathaheb al Ummah Fi Bayan Illat al-Riba fi al-ajans al-arabieh*, Al-Subki, 1995 at 105-09.

¹¹ *Ibid*.

The Islamic ban on interest does not mean that Islamic banks give loans that are repaid in the same amount. Islamic banks do charge fees on loans, just by other methods. The Islamic Banking system is based on a main rule: money cannot be made out of money. This is contrary to the conventional banking system. When a conventional bank lends money to a borrower the bank is not taking any risk; In fact, is it making certain profit by posing a rate (interest) on the money lent (principle), which should be paid to the bank over the principle. Thus, it is ‘money mushrooming’: the lent amount of money mushrooms into a larger amount returned by imposing interest. The interest is not a charge for bearing risk with the borrower; rather, it is an evaluation of the time taken to repay. Importantly, however, this certain profit (interest) exists only in the future; the bank does not own it yet. As a result, the conventional bank has what is termed “artificial wealth”¹². In the Islamic System, however, the latter scenario is forbidden. Contribution to the general economic welfare and risk sharing are the only ways to gain legitimate revenue. Islamic Banks are based on the notion of Profit-and-Loss-Sharing (PLS): their profit is generated through the owning and handling of physical goods, and involvement in the process of trading, leasing, and construction by using various Islamic modes of finance.

Simply, Islamic banks cannot pose a charge on loans to gain profit unless they also agree to share any losses which may or may not be incurred as a result of the loan.

II. Structure

As mentioned above, no one in the Islamic order is entitled to any addition on the principle sum if he does not share in the risks involved. Hence, Islamic jurists have developed ways and structures for Islamic-compliant finance. All of the methods outlined below are applied by Islamic banks, and are now being applied by some western banks as well¹³. While there are many types of Islamic Financing, each with its own use and application, this paper will cover only the most widely used methods: trustee financing (*Mudarabah*), equity participation (*Musharakah*), and the ‘mark-up’ methods (*Murabaha* and *Ijarah*). The Islamic Economic System also has its own insurance system which is called *Takaful*. It is essential to understand how these Islamic financial methods operate in order to fully appreciate why Islamic Banking is gaining in popularity and why it is now seen as an anti-crises economic system.

Trustee Financing (*Mudarabah*)

As known, Conventional banks give interest to their depositors, and since the prohibition of *Ribain* Islam outlaws both the taking and receiving of interest, Islamic jurists had to find a way where banks could give (interest) to their depositors if they wanted to profit from their deposits as they would have in conventional banks. In *Mudarabah*, a person with capital could invest his/her money by giving it to a person with skills and expertise. They will share the profits by a pre-agreed amount or rate. The losses, however, are born solely by the capital owner. The justification for this is that if the investment results in a loss, then the capital owner bears the financial loss and the entrepreneur (person with skills and expertise) bears the loss of his/her time and effort. Islamic banks use this method to legitimize giving interest on deposits by investing the depositors' money, generating profit out of that money, and then sharing the profit with the depositors.¹⁴ If the investment made by the bank results in losses, the depositor with bear the financial losses alone and the bank bears the loss of time and effort spent in the investment without any reward. As such, in theory the rate of return could be positive (profit) or negative (loss), but in practice the returns have always been positive and quite comparable to rates conventional banks offer on their deposits.¹⁵

¹² Nawal Ammar, “Manifest Ecological Crisis: Issues of Justice” in Harold Coward & Daniel Maguire ed, *Visions of a New Earth: Religious Perspectives on Population, Consumption and Ecology* (Sunny Press 2000) 131 at 137.

¹³ HSBC (*Amanah*) is the global Islamic financial services division of the HSBC Group. Established in 1998, and serving the Middle East, Asia-Pacific, Europe and the Americas. <http://www.hsbcamanah.com/>

¹⁴ Abraham Udovitch, *Partnership and Profit in Medieval Islam* (Princeton University Press, 1970) at 174-5.

¹⁵ Mohamed Ariff, “Islamic Banking” (1998) 2 Asian-Pacific Economic Literature 48 at 51.

Equity Participation (*Musharakah*)

The *Musharakah* model is used to finance projects; it involves a partnership between two parties who both provide capital towards the financing of new or established project. When a project owner is in need of finance for his/her project, s/he will approach the Islamic bank for an amount of money; the bank will enter as a partner in the project with the required amount of money being its share.

Both parties share the profits on a pre-agreed ratio which allows managerial skills to be remunerated. Losses are likewise shared on the basis of equity participation. One or both parties can undertake management of the project. For that reason, Islamic banks always have a representative on the board of directors of that business to keep an eye on the management. As both parties take on project risk, it is relatively rare for Islamic banks to participate in *Musharaka* transactions.¹⁶

‘Mark-Up’ Methods

Due to the risky nature of the above mentioned method (*Musharakah*), practice has shown that Islamic Banks tend to use the ‘mark-up’ methods more often.¹⁷ These methods, profiting (*Murabaha*) and leasing (*Ijarah*) are indeed less risky and represent the essence of Islamic Banking. The bank does not have to share any loss with the client; in fact, the bank is more secured than conventional banks in this regard. Moreover, they ensure that each party of the transaction (lender and borrower) knows their obligations beforehand. This is fundamental to Islamic banking since there should be no room for chance or uncertainty in the Islamic order; everything has to be predetermined and disclosed.

a) Profiting (*Murabaha*)

Literally, *Murabaha* means a sale on mutually-agreed profit. Technically, it is a contract of sale that Islamic banks have adopted this as a mode of financing in which the seller declares his/her cost and profit. This financing technique involves a request by the client (borrower) to the bank to purchase certain goods for him/her. The bank makes the purchase for a definite profit over the cost, which is stipulated in advance. In practice, this mode of financing is the equivalent of the conventional financing method, which is used for example with car loans. However, instead of borrowing an amount of money from a conventional bank to buy a car, the borrower in the Islamic system asks the bank to buy a specific car. The Islamic bank then resells that car to that borrower/client after adding an amount of profit (mark-up) which was determined before the sale between the two parties. The borrower then pays back that amount (i.e. the original price plus the agreed-upon mark-up) to the bank in instalments over a period of time. It is required here that the title of the car stays with the bank until all instalments are paid, and then the title is transferred to the buyer/borrower. Hence, it is *de facto* a sales contract between the bank and the borrower, and the ‘mark-up’ is the profit resulting from that “trade”. This is what legitimizes the ‘mark-up’ and renders it compliant with Islam, as profiting from trade is allowed.¹⁸

b) Leasing (*Ijarah*)

This mode of financing is very similar to the ‘*Murabaha*’ (Profiting) model outlined above. Here, the client asks the bank to buy the property that s/he needs. The bank then buys the property and leases it to the client. The client has the option to buy the property from the bank at the end of the lease period. Thus, the client –if s/he decides to buy the property at the end of the leasing period- will have to pay two instalments. The first instalment is the rent of the property: the client pays rent to the bank on the amount of shares that s/he does not own. The second instalment is to buy shares in the property. The rent instalments keep decreasing over time because the client is increasing his/her shares in the property. When the client buys all the shares in the property, there will be no more rent to pay, as s/he

¹⁶ Islamic Finance: Basic Principles and Structures, Freshfields Bruckhaus Deringer, January 2006.

¹⁷ Mohsin Khan & Abbas Mirakhor, “The Financial System and Monetary Policy in an Islamic Economy” (1989) 1 Journal of Islamic Economics 39 at 45.

¹⁸ See page 2.

has bought all the bank's shares in the property. At this point, the complete title of the property is transferred to client/buyer. If during the process the client does not manage to keep buying shares in the property, s/he will pay rent for the amount of shares remaining that are owned by the bank, and is entitled to keep the shares that s/he has already bought. The same condition as '*Murabaha*' applies here: the bank has to inform the client at the very beginning of the margin of profit it will take should there be a complete sale of the property from the bank to the client/buyer. What makes this mode Islamic compliant is that there is no interest in the whole process; instead, the bank's profit comes from the rent payments, and the bank's principle is repaid by selling its shares to the client/buyer.

Islamic Insurance (*Takaful*)

It is worth to mention that the concept of cooperative insurance is not an Islamic one. Many old nations recognized such a system in either ways, *Ibn Khaldoon*, one of the Islamic jurists in the middle ages said that the Arabs recognized such a system before the birth of Islam, he states "*Arabs practiced insurance during the winter and summer trips, members of caravans agreed among themselves to compensate, from the profits of the trip, anyone of them who might lose a camel during the trip. Each member paid a share in proportion to his profits or his capital in the trip according to the condition*".¹⁹

As pointed out above, the Islamic banking system is based on the prohibition of *Riba* (Interest), but Islamic insurance is based instead on the prohibition of *Gharar*. The translation of *Gharar* is "risk" or "uncertainty"; in financing, *Gharar* is generally used as a term to describe "...a risky or hazardous sale, where details concerning the sale item are unknown or uncertain. *Gharar* is generally prohibited under Islam, which explicitly forbids trades that are considered to have excessive risk due to uncertainty."²⁰ Other scholars define *Gharar* as "*the sale of probable items whose existence or characteristics are not certain, due to the risky nature which makes the trade similar to gambling*."²¹

Many examples of *Gharar* sales could be given²², such as; the sale of fish in the sea, birds in the sky, un-ripened fruits on the tree ...etc. All such cases involve the sale of an item which may or may not exist. For example, the fish in the sea may never be caught, and if caught the amount is not determined. Thus, the Islamic order requires that trading parties be very specific about the quality and quantity of what is being sold and for what price.

In contemporary financial transactions, the two areas where *Gharar* most profoundly affects common practice are insurance and financial derivatives. Jurists often argue against the financial insurance contract, where premiums are paid regularly to the insurance company and the insured receives compensation for any insured losses in the event of a loss. In this case, jurists argue that the insured may collect a large sum of money after paying only one monthly premium, or in the other case, the insured may make many monthly payments without ever collecting any money from the insurance company. In both cases one of the parties is subject to unfairness and injustice. Thus, conventional insurance contracts are considered forbidden due to this "uncertainty" of what is paid and what is received, and the "risk" of paying too little and getting too much²³ or *vice versa*.

The Islamic alternative to conventional insurance is the notion of cooperative or mutual insurance (*Takaful*)²⁴. Under the *Takaful Act of Malaysia*²⁵, *Takaful* is defined as "A scheme based on

¹⁹ See also, Dr. Ahmad Sabbagh, *The Islamic Insurance (Theory & Practice)*, (Amman: National Library 2006) at 17-18.

²⁰ <http://www.investopedia.com/terms/g/gharar.asp#axzz1rINWtywB>

²¹ Mahmoud Amin El-Gamal, *A Basic Guide to Contemporary Islamic Banking and Finance* (2000) [unpublished, archived at Rice University].

²² For instance, Ahmad and Ibn Majah narrated on the authority of Abu-Said Al Khudriy that the prophet Mohammad has forbidden the purchase of the unborn animal in its mother's womb, the sale of the milk in the udder without measurement, the purchase of spoils of war prior to their distribution, the purchase of charities prior to their receipt, and the purchase of the catch of a diver.

²³ The majority of Islamic Jurists have concluded that the conventional insurance contract is invalid based on the prohibition of *Gharar*.

²⁴ It is worth noting that the word *Takaful* has been Trademarked in the U.S and Europe. For example, **Takaful USA Management Services, L.L.C** is a registered trademark in the U.S.

brotherhood, solidarity and mutual assistance, which provides for mutual financial aid and assistance to the participants in case of need whereby the participants mutually agree to contribute for that purpose”²⁶. In literal terms, Takaful is derived from an Arabic word that means ‘to help out’. In this Islamic module of insurance, a group of subscribers contribute to a pool of funds. Whenever one of the members makes a legitimate claim (relative to the specific form of cooperative insurance to which they subscribed), they draw money out of the pool. In the meantime, the funds in the pool are invested in an Islamic-compliant manner, and without exposing the policy holders to extra significant risk. Unclaimed profits are then distributed among the policy holders. Islamic jurists such as *Al-Zuhayli* argue that:

*“The difference between commercial and cooperative insurance is that the latter is not an institution separated from the insured. Moreover, the members of the insuring organization are not seeking to make profits, but only to reduce the losses which affect some of them. In contrast, the insurance in exchange for fixed instalments is implemented by an insurer which is a profit seeking corporation. Such profits are made at the expense of the insured...”*²⁷

As should be evident, Islamic insurance, like the Islamic banking system, is based on Profit-and-Loss-Sharing; all parties in the pool of funds share the loss of each other and share the profits generated from investment of the funds.

Part Two: Why Islamic Banking?

Subsequent to outlining how the Islamic banking system works, this paper will now discuss the main reason that led western scholars to study the Islamic banking system, as well as why the Islamic system is seen as a more attractive alternative to the conventional banking system.

I. The Global Financial Crisis of 2008

The global financial crisis of 2008 is a complex topic; a thorough explanation of the multi-factorial causal mechanisms is far outside the scope of this paper. Nevertheless, this paper will try to briefly illustrate the main causes that led to a worldwide financial meltdown in 2008.

The U.S. Financial Crisis Inquiry Commission (FCIC) reported that “the crisis was avoidable and was caused by: Widespread failures in financial regulation, including the Federal Reserve’s failure to stem the tide of toxic mortgages; Dramatic breakdowns in corporate governance including too many financial firms acting recklessly and taking on too much risk; An explosive mix of excessive borrowing and risk by households and Wall Street that put the financial system on a collision course with crisis; Key policy makers ill prepared for the crisis, lacking a full understanding of the financial system they oversaw; and systemic breaches in accountability and ethics at all levels.”²⁸

In other words, what happened was a series of defaults by major financial institutions such as banks and insurance companies, due to unsecured credit loans given to borrowers. Usually, banks securitize their loans; for example, a house mortgage will be secured by the house itself. If the borrower defaults and is not able to pay back the loan, the bank will simply sell the house to get its money back. In the early 2000’s, due to the economic welfare of the United States at that time, banks wanted to benefit more and increase their profits. The easiest way to do that was to increase lending: more lending means more interest (profit). However, to increase lending they had to simplify the process of getting a loan. Banks stopped asking for assets to securitize the loan; anyone who needs

²⁵ LAWS OF MALAYSIA, Act 312, Takaful Act 1984,

²⁶ *Ibid* at Article 2 (b).

²⁷ Al-Zuhayli, W, *Al-Fiqh Al-Islami wa Adillatuh* (Damascus: Dar Al-Fikr 1997).

²⁸ Financial Crisis Inquiry Commission, Media release on January 27, 2011.

http://fcic-static.law.stanford.edu/cdn_media/fcic-news/2011-0127-fcic-releases-report.pdf

money could just go ask for it without providing any securities or guarantees of repayment.²⁹ In other words, it was “free money”.

Compound interest also had a major role in the occurring of the crisis. As mentioned earlier, interest is seen as certain profit; compound interest is interest over interest. Compound interest arises when interest is added to the principal, so that, from that moment on, the interest that has been added also earns interest. This addition of interest to the principal is called compounding. A loan, for example, may have its interest compounded every year: in this case, a loan with 1000\$ initial principal and 20% interest per year would have a balance of 1200\$ at the end of the first year, 1440\$ at the end of the second year, and so on³⁰.

Compound interest is literary ‘money mushrooming’, and, as was so effectively demonstrated in 2008, has a disastrous effect on world economy. One interesting observation about compound interest was made by Napoleon Bonaparte when he said “The deadly facts herein revealed, lead me to wonder that this monster, interest, has not devoured the whole human race. It would have done so long ago if bankruptcy and revolutions had not acted as counter poisons.”³¹

Due to the fast increase of borrowed amounts (thanks to compound interest), some borrowers were not able to repay their loans and mortgages any more. Borrowers started to default, and banks started going through a minor financial crises. With more and more defaults, the crisis started growing, and banks no longer were able to cover all the deposits that they had from depositors. This led to the major financial crisis that made banks themselves default. As known, banks have investments in investment pools, and when banks started to default, the investment pools also started to default. This in return led other financial institutions such as insurance companies to default and so on. The resultant domino effect spread to crisis from Wall Street to the rest of the world.

II. Islamic Banking: The Solution

The Global financial crisis opened the door for scholars and economists to study the reasons that led to such a crisis, and how it could be prevented in the future. After extensive study of different financial systems, loud voices raised the view that Islamic finance was the system to be followed in order to protect the economy from a similar crisis in the future.³²

This section will demonstrate why the Islamic financial system is seen now as an anti-crisis system, and as a replacement to the current system.

As seen above in the (FCIC) report, the main causes of the crisis were a) the lack of regulation for some financial matters, b) not applying corporate governess principles, c) toxic mortgages, d) reckless acts by banks and, e) the breaches of accountability and ethics. The Islamic economic system actually negates all these issues within its main principals, making it indeed a safer system than the current one.

a) Complete Regulation of all Matters

Muslims believe that their religion, Islam, encompass all aspects of a Muslim’s life, determining the articles of their faith and the relationships between man and God, and between human beings. They also believe that their moral and behavioural conduct should be governed by Islam³³. Islamic law or *Sharia* governs all economic and social activities of Muslims.

The Islamic *Sharia* (Islamic law), comes from a combination of sources including the *Quran* (the Muslim holy book), the *Sunnah* (sayings and conduct of the prophet Muhammad), *Ijma’*a (the consensus of Muslim jurists) and *Qiyas* (the analogical reasoning to provide an Islamic compliant response to a new problem).

²⁹ Heinsohn, Gunnar, Decker and others, “A Property Economics Explanation of the 2008 Global Financial Crisis” (2008) at 8. Available at SSRN: <http://ssrn.com/abstract=1331712>

³⁰ http://en.wikipedia.org/wiki/Compound_interest

³¹ Lincoln, *Money Martyred* (California: Omni Publications 1935).

³² See for example, Economic Solutions from Islamic Finance, and, The Global Financial Crisis and Islamic Finance.

³³ Arshed Khan, *Islam, Muslims and America: Understanding the Basis for Their Conflict* (U.S: Algora 2003) at 192.

Thus, there is no room in the Islamic order for anything in a Muslims life that is not regulated within the four sources of legislation mentioned above. New issues that have not been addressed by the *Quran*, *Sunnah* or *Ijma'ah* have to be addressed and regulated by Islamic jurists to determine whether or not they comply with Islam. Muslims are religiously bound not to deal with anything new, unless the Islamic jurists issue a *Fatwa*³⁴ that allows them to do so.

It follows, therefore, that Islamic banks are not allowed to deal with any transaction unless the Islamic jurists approve it as Islamic-compliant and determine how this transaction should be executed in a manner that is within the Islamic framework. For this reason, each Islamic bank has a board of jurists called “Sharia Boards”; the main objective of these boards is to ensure that Islamic banks comply with the appropriate *Sharia* rulings.³⁵ The *Sharia* Boards play a vital role of supervision and consultation. They are responsible for ensuring that financial institutions comply with the *Sharia* rulings. They do this by answering queries as to whether proposals for new transactions or products conform to the *Sharia* and by reviewing the operations of the financial institution to ensure its *Sharia* compliance. For example, they make sure that the transaction does not contain implicit or hidden interest, the profit margin is clear and disclosed from the beginning, and that the transaction does not deal with any forbidden trade, such as alcohol.

Thus, everything in the Islamic banking system is regulated and approved by the Sharia Board before being dealt with. This is contrary to the conventional banking system, where the (FCIC) found that many issues and transactions were not regulated and banks were executing those transactions in a way that generated maximal profits while disregarding any potential long-term problems. As such, lack of regulation was one of the reasons that led to the financial crisis.

b) Corporate Governance in Islam

Sharia Boards also play a key role in corporate governance. Under the Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) rules, *Sharia* Boards should be an independent body of specialised jurists in Islamic commercial jurisprudence. It may also include other experts in areas of Islamic financial institutions with knowledge of Islamic jurisprudence relating to commercial transactions. Board members with specialized knowledge of particular aspects can work very effectively on sub-boards related to particular initiatives or projects. Their important duties include analysing unprecedented situations in the bank’s transactional procedures or those reported by different departments and even the customers.³⁶

This should provide an effective check and balance mechanism in the overall management of the Islamic bank³⁷. *Sharia* Boards should also act as a responsible trustee to shareholders and investors who require assurance that their transactions are in conformity with *Sharia* law. The board reports directly to the management, and should not be under any influence. The Sharia board also has to make sure that the bank is undertaking its duty of contributing to society: this is what is known as “corporate social responsibility” in the conventional system. The Sharia board examines and reviews the financial statements of the bank, and ensures their accuracy³⁸. It also issues an independent report about the bank's financial situation and performance every year, making the bank’s clients more confident of their bank’s financial situation.

Corporate governance in the Islamic banking system is very strict and is inspected by the *Sharia* boards to ensure that the banks are applying the best methods of management and transparency. It is unfair to say that conventional banking do not apply corporate governance standards, but it is true to say that there is not any inspection or assurance that corporate governance standards are being

³⁴ *Fatwa*s is a juristic ruling concerning Islamic law issued by an Islamic scholar. <http://islam.about.com/od/law/g/fatwa.htm>

³⁵ Islamic Finance: Basic Principles and Structures, Freshfields Bruckhaus Deringer, January 2006 at 2.

³⁶ Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) Rules of 2010.

³⁷ *Supra* note 32 at 3.

³⁸ *Supra* note 33.

applied it in the proper manner. Indeed, the FCIC found that there was a lack in applying corporate governance standers, which helped in creating the crisis.

c) Safer Transactions

Another of the causes stated in the (FCIC)'s report was "toxic mortgages". As mentioned before, conventional banks used to lend money for house mortgages without securitizing the loans, which led banks to lose their capital when defaulting borrows could not pay them back.

In the Islamic banking system, there are many factors that prevent risky transactions:

Firstly, the Islamic banking system is an "asset based" system.

As explained in the previous section, because of its prohibition of interest, the Islamic banking system had to invent alternatives to charge fees on loans. In general, these alternatives are based on sale contracts. Instead of lending money and charging interest, the Islamic bank will buy the commodity or property on behalf of the client and resell it to that client by adding a 'mark-up' to the original price. Thus, until the bank receives all instalments of the price, the title of the commodity or property remains with the bank. If the borrower/buyer defaults or was no longer able to continue paying the instalments, the bank could simply sell this property or commodity to some else. By that, the bank is always secured; there is no way that the bank could lose its principle.

Secondly, the Islamic banking system is based on "Profit-and-Loss-Sharing".

In the case of project financing, the Islamic bank does not lend an amount of money to a borrower to finance his/her project without any other relation besides being a lender. Rather, the Islamic bank enters as a partner in the project with its share of money that will help the other partners in completing their project. By the bank entering as a partner in any project it finances, it will always be very careful in selecting and accepting these projects³⁹, since it will share profits and losses with the other partners⁴⁰. The bank, as a partner in the project, has the right to manage the project or at least keep an eye at the management of the project to make sure that no reckless acts are being made by the other partners. Besides the fact that banks will only accept to finance projects that are clearly profitable, this will also help newly established business projects to survive and stay in business, since banks have the expertise and skills to maintain a project in business much more than individuals. This also contributes to the general welfare of society.

This notion of profit and loss sharing in Islamic banking makes Islamic banks act much more responsibly before financing any project. This is a stark contrast to conventional banks, which, according to the FCIC, were entering into unsafe mortgages and financing risky projects.

Thirdly, there is no interest in the Islamic financial system.

As seen above, one of the main causes of the 2008 financial crisis was interest, and specially compound interest. The notion of "no money could be made out of money" in the Islamic order adds an ethical aspect to this financial system where work and risk are the only means for legitimate revenue. The exploitive nature of interest is what led borrows to reach the point where they could not continue to pay the bank anymore, causing them to default. In the Islamic system, the bank is obliged to disclose its margin of profit in each and any transaction, thus, there is no uncertainty or ambiguity, and everything is predetermined and agreed upon beforehand. This leads the parties (and especially borrowers) to make better decisions in deciding to get involved in the transaction or not. Conversely, in conventional banking borrowers do not know what their 10000\$ loan could end up costing them in interest in the long run.

Conclusion

The Islamic banking system did indeed do better in resisting the global financial crisis than the conventional banking system. During the crisis, conventional banks lost their capital and went bankrupt.

³⁹ Muhammad Siddiqi, "Islamic Banking: theory and Practice" in Mohammad Ariff ed, *Islamic Banking in Southeast Asia* (Singapore: Institute of Southeastern Studies 1992) 34 at 44.

⁴⁰*Supra* note 19 at 18.

However, Islamic banks were not affected as much; they did lose profits, due to the bad financial situation around the world, but they did manage to preserve their capital. Around 26 banks in the U.S alone filed for bankruptcy in 2008, while no Islamic bank filed for bankruptcy anywhere in the world that year⁴¹.

A survey conducted by the International Monetary Fund (IMF) in 2010, concluded the following: “*the performance of Islamic banks compared to conventional banks during the recent financial crisis, finds that Islamic banks, on average, showed stronger resilience during the global financial crisis.*”⁴²

It is seen now as a fact that the Islamic banking system is an anti-crisis one, or at least, will not be affected as severely as the conventional system in an economic downturn.

Due to its effectiveness, Islamic banking is growing fast. Islamic banks are operating in many western countries, and governments of Western countries are now regulating Islamic-compliant financial tools. London is now known as the “hub” of Islamic finance in the West.⁴³ An article that appeared in the New York Times in 2009 noted that “*In October, the British Treasury drew up rules that would soon allow Britain to issue Sharia- compliant government debt. The same month, the World Bank issued \$100 million in Sharia- compliant bonds.*”⁴⁴

After exploring the background of the Islamic banking system, and how it works, then comparing it with to the current “conventional” system; This paper concludes that Islamic banking is a system which negates most, if not all, of the causes that led to the 2008 financial crisis. Thus, it is indeed a better and safer system than the current one. The statistics conducted by various international entities, which show how Islamic banks did much better during the crisis than conventional banks, does support this conclusion. The escalating emergence of Islamic financial institutions in the west also show how the Islamic financial system is getting universal acceptance, and has the potential of being the “New Conventional System” in the near future.

Recommendations

- 1) It has become necessary to shed the light on the subject of Islamic Banking, which is the core of the Islamic economic theory. Taking into consideration the recent intensive calls for adopting the Islamic financial system.
- 2) In the light of increasing calls for applying the principle of social responsibility of banks, it is worthy to investigate such an issue in the Islamic financial philosophy.
- 3) It is worth for the Islamic Banking jurists to study and deal widely with Leasing Finance as a new Banking product which has its roots in Islamic *Sharia* Law.
- 4) It is the appropriate time in some Islamic States to issue laws and regulations that organize and supervise the Islamic Banking products and services.
- 5) It is necessary that the jurist board’s in the Islamic Banks gain financial and technical skills and not limit them self’s to strict religions matters.
- 6) The main entity which supervises the Islamic bank’s activities and controls its compliance with the Islamic principals are the Jurist Boards. Thus, it is necessary to maintained their independence and neutrality and not be subject to any sort of influence by the bank’s management.

References

- [1] Abraham Udovitch, *Partnership and Profit in Medieval Islam* (Princeton University Press, 1970).
- [2] Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) Rules of 2010.

⁴¹ Survey Found on World Bank Official Website: <http://data.worldbank.org/topic/financial-sector>.

⁴² **Global Financial Stability Report:** Meeting New Challenges to Stability and Building a Safer System, International Monetary Fund (IMF), 2010. <http://www.imf.org/external/pubs/ft/gfsr/2010/01/pdf/text.pdf>

⁴³ Islamic Finance in the UK: Regulation and Challenges, Financial Services Authority (FSA), (2007) at 3.

⁴⁴ *Dubai Crisis Tests Laws of Islamic Financing*, appeared in print on December 1, 2009, on page B4, New York Times

- [3] Al-Nawawi, *Fark fi mathaheb al Ummah Fi Bayan Illat al-Riba fi al-ajans al-arabieh*, Al-Subki, 1995.
- [4] Al-Zuhayli. W, *Al –Fiqh Al-Islami wa Adillatuh* (Damascus: Dar Al-Fikr 1997).
- [5] Arshed Khan, *Islam, Muslims and America: Understanding the Basis for Their Conflict* (U.S: Algora 2003).
- [6] Dr. Ahmad Sabbagh, *The Islamic Insurance (Theory & Practice)*, (Amman: National Library 2006).
- [7] *Dubai Crisis Tests Laws of Islamic Financing*, December 1, 2009, on page B4, New York Times.
- [8] Economic Solutions from Islamic Finance, and, The Global Financial Crisis and Islamic Finance.
- [9] Fadi Al Rifai, *Islamic Banking*, (Beirut: AlHalabi Press 2004).
- [10] Financial Crisis Inquiry Commission, Media release on January 27, 2011.
- [11] **Global Financial Stability Report: Meeting New Challenges to Stability and Building a Safer System**, International Monetary Fund (IMF), 2010. <http://www.imf.org/external/pubs/ft/gfsr/2010/01/pdf/text.pdf>
- [12] Heinsohn, Gunnar, Decker and others, “A Property Economics Explanation of the 2008 Global Financial Crisis” (2008). Available at SSRN: <http://ssrn.com/abstract=1331712>.
- [13] Holy Quran.
- [14] http://en.wikipedia.org/wiki/Compound_interest
- [15] http://fcic-static.law.stanford.edu/cdn_media/fcic-news/2011-0127-fcic-releases-report.pdf
- [16] http://www.bbc.co.uk/religion/religions/islam/beliefs/sharia_1.shtml
- [17] <http://www.hsbcamanah.com/>
- [18] <http://www.investopedia.com/terms/g/gharar.asp#axzz1rINWtywB>
- [19] Islamic Finance in the UK: Regulation and Challenges, Financial Services Authority (FSA), (2007).
- [20] Islamic Finance: Basic Principles and Structures, Freshfields Bruckhaus Deringer, January 2006.
- [21] Islamic Finance: Basic Principles and Structures, Freshfields Bruckhaus Deringer, January 2006.
- [22] K. Ahmad, “Islamic Finance and Banking: The Challenge” (2000) 9 Review of Islamic Economics.
- [23] LAWS OF MALAYSIA, Act 312, Takaful Act 1984.
- [24] Lincoln, *Money Martyred* (California: Omni Publications 1935).
- [25] Mahmoud Al-Jamal, *An Economic Explication of the Prohibition of Riba in Classical Islamic Jurisprudence*, Rice University (2001).
- [26] Mahmoud Amin El-Gamal, *A Basic Guide to Contemporary Islamic Banking and Finance* (2000) [unpublished, archived at Rice University].
- [27] Mohamed Ariff, “Islamic Banking” (1998) 2 Asian-Pacific Economic Literature.
- [28] Mohsin Khan & Abbas Mirakhor, “The Financial System and Monetary Policy in an Islamic Economy” (1989) 1 Journal of Islamic Economics.
- [29] Muhammad Siddiqi, “Islamic Banking: theory and Practice” in Mohammad Ariff ed, *Islamic Banking in Southeast Asia* (Singapore: Institute of Southeastern Studies 1992).
- [30] Nawal Ammar, “Manifest Ecological Crisis: Issues of Justice” in Harold Coward & Daniel Maguire ed, *Visions of a New Earth: Religious Perspectives on Population, Consumption and Ecology* (Sunny Press 2000).
- [31] Patricia Crone, “Medieval Islamic Political Thought” (2005) Edinburgh University Press.
- [32] World Bank Official Website: <http://data.worldbank.org/topic/financial-sector>.

Framing within Critical Discourse Analysis

Haleh Mojarrabi Tabrizi

Department of English, Khoy Branch, Islamic Azad University, Khoy, Iran

E-mail: mojarrabiphd@gmail.com

Tel: +98-914-1151738; Fax: +98-41-34210911

Biok Behnam

Department of English, Tabriz Branch, Islamic Azad University, Tabriz, Iran

E-mail: behnam_biok@yahoo.com

Tel: +98-914-1170342; Fax: +98-41-34210911

Abstract

Critical discourse analysis starts with the assumption that 'language use is always social' and that 'discourse both reflects and constructs the social world' (Rogers 2004:5). A critical analysis might explore issues such as gender, ideology and identity and how these are reflected in particular texts. This might commence with an analysis of the use of discourse and move from there to an explanation and interpretation of the discourse. From here, the analysis might proceed to deconstruct and challenge the texts, tracing ideologies and assumptions underlying the use of discourse, and relating these to different views of the world, experience and beliefs (Clark 1995).

This work is a review of framing within critical discourse analysis which makes an attempt to analyze this subject from major perspectives and present an easy to grasp perception while comparing diverse views in this field. Framing is a central discursive strategy that occurs in virtually all genres of discourse and may be implemented as a very useful method of satisfaction, often having deep political, social or behavioral results. Hereby, you will be presented with the view of framing and to various approaches to frame analysis within discourse analysis, as we explore various genres of discourse and investigate framing and framing strategies such as metaphor and lexical choice.

Keywords: framing, critical discourse analysis

1. Introduction

The conceptual framework draws on the literature review to develop the foundation that guides the discourse analysis. Founded upon the theory of social construction, framing is implemented as a tool to recognize speech acts in newspaper articles. As part of 'the larger context of media effects research' (Scheufele, 1999: 104), framing is deemed as a narrative structure within the realm of journalism; a regulative technique planned to 'prioritize some facts or developments over others, thereby promoting one particular interpretation of events' (Norris et al., 2003:11). In relation to this study, it is posited that journalists are able to present alternative realities, and that audience understanding will vary depending on how events are **framed**. Entman states: To frame is to select aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular ... causal interpretation, moral evaluation, and/or treatment recommendation for the item described (1993: 52).

It has been recommended that newspapers constantly and actively set the limits that audiences apply to interpret and discuss public events (Tuchman, 1978). Applying definitions of **framing broadly** to this dissertation, it is considered that Journalists frame speech acts to earn different consequences and outcomes. In considering how newspapers inform, deliberate and witness, this work examines how frames might potentially create ideas, contexts, and actions in readers. While studies have expanded to television framing of social movements (McLeod and Detenber, 1999), newspaper framing of protests is less attended; in this respect the concept is relevant. Speech acts need an ‘illocutionary force’ – both authority and a relevant context – for them to be successfully communicated (Green, 2009).

In order to comprehend how speech acts are validated, we must take into consideration that professionalism and objectivity have granted credibility to Journalism. Objectivity is the framework found in Journalism to ensure that news is reliable: ‘objectivity ... means that a person’s statements about the world can be trusted if they are submitted to establish rules deemed legitimate by a professional community’ (Schudson, 1978: 7). The fact of the matter is that, it is this legitimacy that gives Journalism its dominance, since ‘the Journalist could claim higher position as an expert reporter’ after the period of professionalization (Rosen, 1999: 69). An understanding of Journalism’s authoritative voice is useful for closer study, since Journalism is the context – and newspaper articles the discourse – that validate speech acts tying these concepts – framing and the authority of journalism – is mediation.

Mediation focuses on factors which impact the receipt of information (the way things are mediated) and the role that media play in actually producing the relation between Journalism and its publics (the act of mediation). Mediation, the situation in which media are the original source of information and communication in society (Strömbäck, 2008: 230), illuminate the processes by which media discourses produce meaning and action. Choices about how to intercede speech acts – the way they are arranged, the practices used to communicate them – are intentional and call for particular dispositions in readers.

The value of mediation is in its capacity to acknowledge the critical role that media implement in describing and constructing reality, and therefore in influencing public perception. Briefly, three concepts are applied for this dissertation.

Mediation is considered firstly, as a macro-level theory, building from its belief that widespread use of media for information and communication allows newspapers to influence readers’ perceptions of reality. This is for responding to questions about what kinds of realities newspaper discourses would put forward. Secondly, the medium-level, journalism’s authority is considered in order to determine the consequences of speech acts for readers of the articles. Thirdly, framing as a micro-level concept for exploring specifically how newspapers use speech acts, in terms of their linguistic, syntactic and grammatical options.

2. Conceptual Foundation

Since CRITICAL DISCOURSE ANALYSIS is not a particular dimension of research, it does not have a unitary theoretical theoretic frame. There are many types of critical discourse analysis, and these may be theoretically and analytically quite different. Critical analysis of conversation is very different from an analysis of news reports in the press or of lessons and teaching at school. Yet, in terms of the common perspective and the general aims of this subject, we may also find total conceptual and theoretical frameworks that are closely tied. As suggested, most kinds of it will ask questions about the way specific discourse structures are scattered in the reproduction of social dominance, whether they are part of a conversation or a news report or other genres and contexts.

Therefore, the typical vocabulary of many scholars in this field will put forward concepts such as power, dominance, hegemony, ideology, class, gender, race, discrimination, interests, reproduction, institutions, social structure, and social order, besides the more familiar discourse analytical notions.

3. Framing

Finding a sizeable amount of linguistic metaphors that would either be explicitly spelt out or implicitly evoking a corresponding metaphoric concept is what discourse model of metaphor looks for. Usually, linguistic metaphors extend gradually in discourse, amassing around a concept and constructing conceptually an unrehearsed metaphoric category (Shen, 1992) or a frame (Fillmore 1975: 1982). Fillmore (1975: 129) states that “metaphor can be seen as the act of applying to one scene a frame which is known to be more basically associated with a different scene”. Discussing the way people analyze discourse, Fillmore (1975: 125) posits that:

One way of talking about it is this: the first part of a text creates or ‘activates’ a kind of schematic or outline scene, with many positions left blank, so to speak; later parts of the text fill in the blanks (or some of them, anyway), present new scenes, combine scenes through links of history or causation, or reasoning, and so on. That is, a person, in interpreting a text, mentally creates a partly specified world; as he proceeds with the text, the details of this world get filled in; and in the process, expectations get set up which later on are fulfilled or thwarted, and so forth.

Hence, identifying linguistic metaphors is an activity that requires patience and attention during the reading process; one might not find what one wants from the first reading of a presented discourse, but a third reading may reveal what first and second readings did not. The idea of continual struggle over meaning is shared by various approaches to discourse analysis. Laclau and Mouffe’s (1985) discourse theory, for instance, states that although all discourses try to take on a paramount position, ‘closure’ (complete dominance) is never fully possible. There is always a chance of a gap, through which borderline discourses can break in and take over a more primal position. For instance, the feminist discourse broke into the central view that only men were fully apposite to vote. The presence of this opening means there is a continual struggle for dominance. In line with the above mentioned issue, Bamberg and Andrews state that “The ‘counter’ of counter-discourse should not, then, be taken as a static entity; rather, this continual struggle over meaning prioritizes the ‘fluidity’ of what is predominant and what is dissenting, leaving space for alternative representations to turn into a mainstream space (Bamberg and Andrews 2004). At the same time in the analysis of political discourse carried out by (Lakoff 2002; 2004), there is a contradiction between various ‘frames’ for conceptualizing politics in different aspects. He describes a fleeting Nation-as-Family metaphor, expressed in phrases such as founding fathers, Uncle Sam, Big Brother, and sending our boys to war.

This metaphor consists of two models of family life, each possessing its own type of parent-child relationship. The optimal government is conceptualized either as a Strict Father or as a Nurturing Parent; the citizens are seen as the Children. A preference for either of these two models impacts an individual’s view of, for instance, social security: For those preferring a Strict Father frame ‘social security’ brings the images of a ‘nanny-state’ and the suppression of individual self discipline, self-reliance and ambition, whereas for a Nurturing Parent frame it offers support for those born into less fortunate social conditions. In his study the Republican and the Democratic parties in the USA are struggling to establish which meanings dominate political life in terms of these two frames one after the other (Cienki 2005).

Complication of an issue calls for a relatively long article. Issues can, however, also be **reframed** in shorter, more tangible articles. The fourth strategy is slight reframing, with the next section describing the fifth and final strategy, radical reframing. Reframing can be characterized as changing an issue away from its conventional ‘location’ within one set of common assumptions and inferring it via a different set of data.

So that, the issue is attributed a different interpretation, that is comes to have a different ‘meaning’ in its new context. At the beginning of 2006, news users heard that the Russian gas company Gazprom turned off its gas supplies to Ukraine. Generally this was framed as Russia ‘bullying’ Ukraine, using ‘strong-arm tactics’ to ‘punish’ Ukraine for going its western / anti-Russian way during the Orange Revolution of 2004-05. Paul Robinson in, the Spectator takes this position as

his baseline. He does not disagree with the mainstream frame that Russia is using gas as a geopolitical ‘weapon’, but he does shift the focus of explanation. After pointing out that Gazprom was making a loss selling gas to Ukraine for \$50 (per 1000 cubic ms), rather than the market price of \$230, the article continues:

Now you might imagine that it is entirely Gazprom's business if it wants to make a loss on some of its deals; but not so in the eyes of the ever-meddling European Union, which for years has been asking for that Russian companies stop giving subsidy for energy prices and start charging market rates. (Robinson 2006) The article reframes the issue of gas sales within a critique of the ever-meddling European Union. i.e. it fits into a more general Euro-skeptic frame. Instead of construing the halt to gas supplies within the frame of Russia’s strong-arm politics, he reconsiders it within the frame of free market economics. Gazprom is reacting to market demands. This free market frame then entails a logical criticism of the EU’s unnecessary involvement, and no longer foregrounds Russia the bully. This is indeed an example of ‘reframing’.

This article counters the mainstream frame by focusing on an alternative frame and thus presenting that the Europhiles are in no condition to blame Russia for fulfilling the EU demands. Nevertheless, the reframing is only ‘partial’, since the article does not question the primal view that the price rise was indeed a geopolitical power action by Russia. He only states that other commentators are in no position to find fault with the price rise. The ultimate strategy for contesting the dominant discourse is a more radical effort to break into the consensus and totally turn around the reporting of a subject. Radical reframing involves not only dialogue with other frames, as in the Euro-Skeptic report, but also an inversion of the mainstream view of the issue.

As mentioned above, the mainstream media tend to ignore news stories which simply invert the conventional view with logical arguments. Mixing an inversion with items of other prevalent frames can, however, propel the counter-discourse into the publication.

One almost radical reframing is John (Laughland’s 2004) essay in *The Guardian* headlined *The Chechens' American friends*. Previous research has shown that *The Guardian* has a very mainstream position in terms of the Chechen-Russian tension. In their view, Russia’s brutal repression of the Chechen independence movement has forced Chechens to a politics of frustration, i.e. the Russian military is the original cause of the various sieges, hostage-takings and attacks carried out over the last few years. The advantages and disadvantages of this frame are beyond the scope of this paper. Of interest here is how one article with an entirely different perspective comes to be printed in the newspaper.

It was written just after the Beslan school siege in 2004 as an answer to several media reports which gave Putin direct responsibility for making the conditions that ended in the hostage taking. Laughland implements various discursive strategies to position himself towards these reports, including parody, nominalization, extremism, etc. He changes the western media stories which, for example, argue that Russian television ‘played down’ the siege. To counter this, he explains the extensive coverage he saw on Russian television. The most noteworthy strategy for our purposes, however, is his dialogue with another very prominent frame in *The Guardian*: On deeper inspection, it turns out that this so-called ‘mounting criticism’ [of Putin] is in fact being driven by a specific group in the Russian political spectrum - and by its American supporters.

Moreover the distancing so-called and the scare quotes around mounting criticism, Laughland here introduced his primal move in contesting the criticism of Putin: he devalues the critics. He proceeds to say that the specific groups driving the criticism are, firstly, Russian politicians ‘associated with the extreme neoliberal market reforms which so exhausted the Russian economy’ in the 90s, and secondly, American neoconservatives. The Americans involved are part of the ACPC, the American Committee for Peace in Chechnya. Not only are they presented as neoconservatives, they are characterized as fans of the ‘war on terror’. That *The Guardian* is against the war on terror can be seen not only by its articles on the subject, but also by the editorial suggestion that the employees join the Stop the War Coalition en masse.

The journalists declined, preferring to retain the image of political neutrality. The article presents a number of eight members of the ACPC, and gives each the exact opposite of what Jonathon Potter calls 'category entitlement' (Potter 1996): this is category disentanglement at work. In the list, each epithet is in direct opposition to The Guardian's dominant discourse.

'Framing' has been titled a broken paradigm (Entman 1993), since a multitude of disciplines implement the term, each with their own terminology. The use of the term 'frame' in this paper draws on cognitive linguistics and media analysis. Cognitive linguistics sees a frame as the background knowledge put into practice by one particular word (concept). Frame knowledge is crucial to understanding the meaning of a word in its broadest sense. Media analysis proceeds to say that not only words but '[f]acts have no intrinsic meaning'. Facts make sense only when 'embedded in a frame or story line that organizes them and gives them coherence, selecting certain ones to focus on while disregarding others' (Gamson 1989:157).

Similarly, Fauconnier and Turner refer to 'organising frames', which specify 'the nature of the relevant activity, events and participants' (2002: 123). In the prototypical buy-sell frame, for example, we see the economic activity, the case of purchasing, and the functions of buyer and seller.

Framing is a central discursive strategy that occurs in virtually all genres of discourse and may be implemented as a very useful method of satisfaction, often having deep political, social or behavioral results. Hereby, you will be presented with the view of framing and to various approaches to frame analysis within discourse analysis, as we explore various genres of discourse and investigate framing and framing strategies such as metaphor and lexical choice.

Framing is everywhere present concept in almost all discourse and all examples of language use as a way of amassing specific messages across or exchanging specific views, and framing is implemented as a discursive strategy, quite often as a tool of persuasion or instilling a specific worldview in peoples' perspectives.

4. Frames

As Lakoff states, "among the cognitive structures we think with". In other words, **a frame is a structured set of concepts**. These concepts work as specific functions within the frame and relate to each other in specific ways, and are so deeply related that, to understand one view, you have to understand them all. Most of our pondering and understanding of the world is "directed" by frames; we basically filter and interpret input from the world via frames. Therefore, frames also tend to a large extent make up worldviews and encyclopedia knowledge. Charles Fillmore found individual words, or lexemes, come with frames and that the meaning of a single word goes beyond just its denotative mode.

For example, try to define the meanings of the following words:

- a. dead
- b. broken
- c. egg
- d. mother

When a word appears in a text, it activates, or **evokes**, its frame. Moreover, language in general draws on frames; for instance, try to explain the use of definite articles in the following texts:

She caught a plane from London to Paris. After she had found her seat she checked whether the life vest was beneath it, but she could not find it. So she asked the flight attendant to find one for her.

John went into a restaurant. He asked the waitress for coq au vin. He paid the bill and left.

The critical issue is that frames and concepts are evoked even if they are negated. So, when Lakoff tells his students 'Don't think of an elephant', the first thing they would do is to think of an elephant. If Nixon says 'I'm not a crook', people still evoke the **proposition** in which Nixon is a crook and they still associate the concepts in the frame evoked by the word 'crook' with him. When

somebody assures you 'We are not accusing you of anything', the first thing you think is that they are accusing you of something.

So what is framing? Framing is basically assigning a specific character to a concept or adding a specific perspective to a concept by associating it with a specific frame, or a set of specific frames (or even just by changing the perspective within the same frame).

Here is a classic example:

'The glass is half full' vs. *'the glass is half empty'* basically, what framing does is to add the perspective of a certain worldview to the concept or phenomenon in question, through choice of words.

Here are some more examples:

- a. 'pro-life' vs. 'pro-choice'
- b. 'We broke up' vs. 'She dumped me'
- c. 'Bob stole Jenny's car' vs. 'Jenny's car was stolen'

5. Framing through Language/Discourse

There are different ways to do framing in discourse, such as choosing of lexemes and grammatical constructions. Metaphor is another usually used method of framing, metaphor being the conceptualization of something in terms of something else. Here is an example of successful framing through metaphor:

'tax relief': What does 'tax relief' mean? The answer seems obvious. A tax relief is a deduction that lowers taxes. This is the meaning the, but there is more to it than just that. There are a lot of perspectives to this word. So, what does 'tax relief' really mean? Putting the word under close linguistic scrutiny reveals the secret political definition.

First of all, 'tax relief' is a **compound noun**, consisting of the two nouns 'tax' and 'relief'. 'tax' evokes the frame of knowledge having to do with taxation. That is, the idea that tax is what the citizens pay in order to be part of a society. What about 'relief'? Consider the following examples of 'relief' and 'relieve' being used in non-political everyday discourse:

- a. He also took a strong part in famine relief and the campaign to abolish the British opium trade
- b. Charles felt enormous relief that he wasn't Bill Holroyd.
- c. Working class women gave birth at home with no pain relief.
- d. This is one burden I would be relieved of!
- e. Relieved by unloading her bombshell, Jonquil began to move.
- f. There was no shortage of helpers to relieve us for breaks.

All of these examples indicate that 'relief' and 'relieve' refer to THE PROCESS OF REMOVING SOME BURDEN OR SOME AFFLICTION. 'Relief' therefore evokes this frame, which we could call the **RELIEF frame** in lack of a better terminology. In other words, 'relief' evokes a frame in which a victim suffers thanks to an affliction, or a burden. The burden is then erased thanks to some cause, and the victim changes from being suffering to being non-suffering. The causes of relief can be many, but if it is a person that removes the burden or affliction, then the person is a kind of hero.

By mixing 'tax' (or 'skat') and 'relief' (or 'lettelse'), one creates a new concept of tax – namely a conceptual metaphor in which tax is conceptualized in terms of a burden or an affliction and the tax payer as the victim who suffers. That is 'tax relief' creates a tax is a burden metaphor, thus framing the concept of tax as something inherently negative. The government that supports decreases in taxation is thus conceptualized as a sort of hero, while the government that imposes taxation upon its citizens the conceptualized as a kind of villain or oppressor. All of this additional conceptual metaphorical meaning is part of the total meaning of 'tax burden' by virtue of combining 'tax' with 'relief'. Expressions like 'tax cut', 'tax break' or 'tax reform' would not have the same impact.

6. Conclusion

As was explained all along the work, a further way of doing a critical analysis is to examine the way in which the content of a text is framing; that is, the way in which the content of the text is presented to its audience, and the sort of perspective, angle and slant the writer or speaker is taking. **So what is framing?** Framing is basically assigning a specific character to a concept or adding a specific perspective to a concept by associating it with a specific frame, or a set of specific frames (or even just by changing the perspective within the same frame). No need to say that this dimension of critical discourse analysis is in need of more and more studies by the researchers of this field to clarify the impacts of framing from social, psychological, and literal perspective on the discourse.

Reference

- [1] Bamberg and Andrews, 2004, “How to do things with words”, *Oxford, Clarendon Press*
- [2] Clark R.J, 1995, “Developing critical reading practice”, *Prospect*
- [3] Cienki M and Roseberry, 2005, “The power of discourse: An introduction to discourse analysis”
- [4] Eggins,S, 1997, “Analyzing casual conversation”, *London: Cassell*
- [5] Entman, 1993, “Eating out, The Sunday Age”, *23 April*
- [6] Fauconnier and Turner, 2002, “Opening up”, *University of Chicago Press*
- [7] Fillmore 1975, “Listening to world”, *Cultural issues in academic writing*
- [8] Fries, P.H, 2002, “The flow of information in a written text”, *London, Continuum*
- [9] Green, 2009, “International rituals, theory and method”, *Oxford university press*
- [10] Gamson, 1989, “Intercultural business communication”, *journal of pragmatics*
- [11] Laclau and Mouffe’s, 1985, “The logic of politeness, an introduction to pragmatics”, *University of Sydney*
- [12] Laughland.J, 2004, “Frame conflicts”, *journal of pragmatics*
- [13] McLeod, A and Detenber. P, 1999, “Size isn’t everything, spoken English”, *London Routledge*
- [14] Norris et al., 2003, “Gender enactment on a first date, an investigation”, *University of Melbourne*
- [15] Robinson, 2006, “Discourse analysis in the language classroom”, *Antepodium educational enterprise*
- [16] Rogers. R, 2004, “Setting an agenda for critical discourse”, *Laurens Erlbaum*
- [17] Rosen, H, 1999, “Cross disciplinarian academic presentation”, *Oxford Press*
- [18] Scheufele, 1999, “The routine as achievement”, *Human studies*
- [19] Shen,J, 1992, “Speech acts”, *London*
- [20] Strömbäck, 2008, “Man made language”, *London, Routledge and kegan, Oxford University Press*
- [21] Swann, J, 2002, “Yes, but is it gender?”, *John Benjamin*
- [22] Swales, J.M, 2000, “Discourse Management”, *the University of Michigan Press*
- [23] Tuchman. W. 1978, “Notes on queer”, *London, Routledge and Kegan, Oxford University Press.*

Rethinking Nigeria's Strategic Relationship with its Immediate Neighbours

Sheriff F. Folarin

*Associate Professor, Department of Political Science and International Relations
Covenant University, Ota, Ogun State, Nigeria
E-mail: Sheriff.folarin@covenantuniversity.edu.ng*

Lady A. Ajayi

*Lecturer, Department of Political Science and International Relations
Covenant University, Ota, Ogun State, Nigeria
E-mail: lady.yartey@covenantuniversity.edu.ng*

Faith O. Olanrewaju

*Lecturer, Department of Political Science and International Relations
Covenant University, Ota, Ogun State, Nigeria
E-mail: faith.oviasogie@covenantuniversity.edu.ng*

Abstract

This paper strengthens the perspective that the national security and development of a state are predicated upon the good and strategic relationship of countries with their immediate neighbours. It centres its argument around the fact that the global system in the 21st century has been characterized by ups and downs that have shaken the grounds of global peace and security and that growing diminution of the “global village”, due to increasing interdependence of states and non-state actors, has necessitated an ever-rising need for collective security on global and regional scale. Nigeria's foreign policy has often been said to be characterized by the principle of good neighbourliness for the purpose of secure neighbourhood and national security. Indeed, the numerous security challenges of the country at present, such as ethnic conflicts, religious fundamentalism, power tussle and insurgency, require shared security intelligence, regional military cooperation and of course, good neighbourliness. This enterprise constitutes a search for a deeper understanding of ‘good neighbourliness’ and suggests a redefinition of that stance to reflect *realpolitik*. The paper seeks to critically identify the new ways in which Nigeria can strategically relate with its immediate neighbours, including Benin, Cameroon, Chad, Niger, Equatorial Guinea and nearby countries that do not share boundaries with it. Emphasis is made on the need for the government to pursue dynamic, tactical and strategic defence policy, which will include ensuring the impenetrability and prevention of infiltration of its boundaries, in view of the fact most of the national security problems testing the corporate existence of Nigeria today are from its borders.

Keywords: National Security, Defensive Policy, Immediate Neighbours, Foreign Policy

Introduction

International security and terrorism are two dominant currencies in international politics. As it has been in many cases, issues of national security or insecurity often snowball into international or global concerns; and local terrorism or domestic insurgency and national insecurity havenot only become important elements in the determination of countries' foreign and defence policies around the globe because of their international dimensions and connections; but also significantly underliethe way in which countries re-strategize, cooperate and network as well as share intelligence on how to safeguard their territorial integrity and corporate existence.

Security threats are not 21st century development, but have become 21st century phenomena and central concerns. Indeed, threats to human security date back to the times when man began to dwell in community. What is the issue with the current trends is that there are new threats and challenges to global peace and security. There are numerous profiles of global security issues from both human and non-human elements all around the world that nations are fighting hard to tackle. Nigeria is not exempted from this commotion as it has experienced ethnic crises, Islamic militancy and local terrorism, and kidnapping ofunprecedented magnitude (Imohe, 2010: 239-257). Critical to the existence of the Nigerian State is the worsening situation of terrorist activitiesof insurgent groups, particularly the Boko Haram. The torrent and dimension of their operations make the subject of security a huge problem. Nations however, enter into strategic security partnership to engage one another in mutual defences for the purpose of securing their borders and riding their territories of threats to national or corporate existence. Geographical neighbours are of utmost importance in the course of such mutual defence cooperation. It is against this background that this paper delves into rethinking strategic relationship of Nigeria with its immediate neighbours.

The paper attempts to clarify some basic concepts central to the discourse, such as national security, strategic relationship, foreign policy as well as address domestic issues that propelinsurgency, which constitute dangers to national and regional peace and security. In the course of this, the paper also discusses Africa's security architecture and attempts at regional peace; Nigeria's foreign policy towards its neighbours; and the necessary strategic measures to apply to ensure lasting peaceand security.

Conceptual Clarifications

Some basic concepts are germane to the subject of discourse. They are security, national security, and strategic relationship. The term regional security in this discourse is interpreted to mean security of the African region, while international security means security of the globe(Imobighe, 2010: 22).

a. Security

There is widespread consensus that the term security is ambiguous. There is no generally acceptable definition of security. Security as an important concept is generally linked with the improvement of threats to cherished principles, particularly the survival of groups, individuals or objects in the future. Therefore, security involves the ability to pursue cherished social and political objectives (Williams, 2008:6). According to Palme (1992), "there is a correlation between security and survival". Whereas survival is a vital condition, security is viewed as safety, confidence, freedom from danger, fear, and doubt, among other human problems. However, security as a concept is futile without a critical discourse of something important to secure. Indeed, security could best be understood when situated within the context of a referent object. It is pertinent to note that in human history, the focus of security has been people-oriented (Booth, 2007). Some scholars in international politics have however argued that when thinking about security, states should be the most important factor. On the other hand, some scholars have challenged this position by arguing that anyscholarly discourse on security should accord priority to human beings since without reference to humans, security is of no value (McSweeney, 1999).

b. National Security

For Morgenthau (1948), national security is tantamount to national interest. National security is predicated upon economic security, energy security, environmental security, food security, among others. The definition given by Dyke (1966) gives a better understanding of the concept. He states that national security embodies the sovereignty of the state, the inviolability of its territorial boundaries and the right to individual and collective self-defence against internal and external threat (cited in Anyadike, 2013). For Okoroafor, Ejike, Nzenwa, Bartholomew and Oti (2012), it can be described as the sum of the efforts, energy, intelligence, commitment and the use of institutions (and their products) to enforce and ensure adequate protection of interests, people and properties of a nation. It also involves the overall protection of a nation's integrity and sovereignty through the use of economic resources, diplomacy, power projection and political power.

Put differently, national security encompasses the sum of what a nation does in order to safeguard itself as a sovereign entity as well as ensuring the protection and well-being of its citizens, institutions, interests, development plans, economy, landscape, national image and independence.

c. Strategic Relationship

The word strategy is derived from the Greek word "stratago", which means planning. It has to do with the idea of devising survival means to live in a ruthless atmosphere. In other words, it is an intellectual activity, stimulated by the desire to survive in the presence of perceived danger. Danger could be hunger, war, epidemic outbreak, deprivation, etcetera. "Strategic relationship" is a phrase commonly used in today's foreign policy discussions, but yet one of the least understood (Folarin, 2014:38). Its emergence in international politics could be traced to the end of the Cold War. Countries that were arranged in blocs and were allied to either of the two superpowers, suddenly found themselves on their own and began to seek new bilateral alliances, usually with states more powerful than themselves. The relation of nations with other countries is defined in terms of partnership or alliance. But when the relationship of two countries is being described as strategic, their ties are deemed to have risen to a new level.

d. Foreign Policy

The foreign policy of a nation serves as a reflection of its domestic reality. It begins with the recognition and expression of national interest (Ajetunmobi, Osunkoya and Omotere, 2011). It is important to note that whatever a nation's interest represents is what sets the basis for the formulation and implementation of policies at the domestic and the international level. Northedge (1968:9) defines foreign policy as "the use of political influence to induce other states to exercise their law-making power in a manner desired by the states concerned: it is an interaction between forces originating outside the country's borders and those working within them". According to Holsti (1977), it is the actions of a state towards the external environment and the conditions, usually domestic, under which these actions are formulated (cited in Folarin, 2014:43). For Henderson (2005), it is the pattern of behaviour that one state adopts in relating with other states that is tantamount in the idea of Waltz (2005) to the approach employed by the state in its relations with other states in the international system (also cited in Folarin, 2014:43). Rizwan (2009) opines that foreign policy refers to traditions in which the central governments of sovereign states relate to each other and to the global system in order to achieve various goals and objectives. Thus, it represents a set of principles or course of action that government of states adopts that help to define their relationship with other parts of the world. Foreign policy therefore is a product of internal environment and external circumstances. Folarin (2014) relates foreign policy to a wedding ring with which the domestic context of a nation solemnizes its union with the international community.

Africa's Security Architecture

Africa has witnessed numerous types of conflict and challenges, including insurgencies, religious extremism, ethnic militancy and armed rebellion. Other crises include economic and political marginalization, resource conflicts, ethnic wars, secessionist conflicts, boundary and territorial disputes, illegal drug trade, struggle for political power, inadequate social and physical infrastructure, governance ineptitude, coup d'états, corruption, human rights issues, poverty and low standard of living, diseases, piracy, national indebtedness, and so forth. Conflict theatres have included Liberia, Sierra Leone, Rwanda, Somalia, Sudan, Democratic Republic of Congo, Ivory Coast, Central African Republic, Egypt, Libya, Mali and Nigeria.

There are various explanations given by scholars on the causes of conflict in Africa. African countries are faced with various security challenges rooted in various socio-economic and cultural causes. The generality of these challenges across Africa has rekindled the need for collective security and collective action amongst African leaders. In other words, so as to stay afloat of these challenges, African leaders have tried to solve them through joint efforts on the platforms of regional, sub-regional and national levels.

Originally, the Economic Community of West African States (ECOWAS) was established as a regional economic grouping with the specific aim of establishing customs union and establishing a common market. Years after, its scope expanded beyond just achieving economic integration to security management in the West African sub-region. African leaders have collaborated in areas such as conflict prevention, management, resolution and peace-building; control of the proliferation of SALWs; containment of refugee crisis; war against money laundering and terrorism (Alli, 2010: 63-90).

The concerns of increasing security threats spurred African leaders into signing the 1978 Protocol on Non-Aggression and the 1981 protocol on Mutual Assistance in Defence. ECOWAS has earned respect for its conflict prevention, management and resolution mechanism. Sesay and Akonai (2010:33-62) aver that unlike the ECOWAS, the East African Community (EAC) and Southern African Development Community (SADC) did not help much in their own sub-regional crises, such as during the violence in Kenya over election disputes, and during the simmering one in Zimbabwe, respectively. They further argue that a major challenge to the effectiveness of the regional organizations is the lack of consensus over what to do.

ECOWAS has achieved applauding success in tackling security issues at the regional level. Due to this reason, there were expectations that a broader organization would be able to address the issues. The task to tackle continental challenges however fell on the African Union (AU), which was once known as Organization of Africa Unity (OAU). Until recently, the OAU Charter was inhibited from intervening in the internal conflicts of African countries (Bujru, 2002). However, one of the important mandates of the AU as contained in its Constitutive Act, is to promote peace, security and stability on the continent. Hence, the Peace and Security Council (PSC), which is supposed to be the collective security arrangement, was found. It is expedient to mention that the AU has however, been inefficient in solving Africa's security issues. Sesay and Akonai (2010:33-62) liken the AU to a house without a roof of which people are asking for shelter and protection from it, and conclude that the organization is more or less an occasion for hope and not a yet an achievement.

Apart from the sub-regional and regional collective security strategy, attempts have been made by superpowers to ensure stability. However, this is not far from the desire to protect their key interests in the region. Imobighe (2010) mentions that technological backwardness and the need for regime security and preservation of military and autocratic governments are reasons for reliance on external security forces. Relevant examples in this regard are the African Crisis Response Initiative (ACRI) and the AFRICOM. The US proposed the African Crisis Response Initiative (ACRI) with the aim of training African Crisis Response Force as well as provides logistics and fund. Despite its seeming African interest coloration, it is a neo-colonial strategist by the United States to strategically intervene in African conflicts.

AFRICOM was formally established on February 6, 2007. It is a unified military command structure for Africa. It aims at penetrating Africa through the establishment of military bases. Imobighe (2010) argues that AFRICOM, like the Cold War strategy of containment, is a means by the USA to securing strategic resources in the continent. The turbulence and political instability as well as economic uncertainties in the Middle-East have made the US to turn to Africa as its chief source of resources. Also, the AFRICOM is a counter to China's growing influence in Africa and it is to resist groups that oppose American world-view in places like Syria, Iraq, Iran, Libya, as well as to provide a base from which the US could respond to threats to its national interest (Saliu, 2010). The North Atlantic Treaty Organization (NATO) is also concerned about terrorism and security, but serves more the purpose of securing investments and interest of member-states.

Nigeria's Security Dilemma

As earlier stated, the traditional meaning of security is state-centric. It centres on the preservation of the territorial integrity of the state. As years went by, the scope of security changed to the individual as the unit of concern. That is, safety should be analysed in the light of the wellbeing of people in their society. The core intent of human security is to preserve human lives from threats- both human and environmental.

The general security challenges prevalent in Africa are also observable also in Nigeria. The security of the Nigerian people is endangered by poverty, hunger, unemployment, health hazards, environmental degradation, depletion of ozone layer, ethno-religious conflicts, politically assassinations, militancy, poor governmental policies and ecological problems affecting food security. In addition to the above, Nigeria is experiencing a host of other challenges such as increase in cross-border crimes, including illegal oil theft and piracy, drug trafficking, modern day slavery and trafficking in persons, corruption, lack of development, poor security network, infrastructural challenges, inequality in the sharing of resources, illiteracy, proliferation of small arms and light weapon, money laundering and illicit arms transfer, which all pose threat to national security (Onuoha and Ezirim, 2013).

Ecological activities by both man and non-human that result in natural disaster, such as erosion, volcanic eruption and earthquakes, do not respect state boundaries. In Nigeria, the Niger Delta is the most susceptible region to ecological challenges. It is the region mostly challenged by the non-human threats to security. It is unfortunate to mention that the ecological malady is inflicted by domestic forces. The Niger Delta is considered the wealth-hub of Nigeria. It is endowed with crude that fetches Nigeria about 90% of its external revenue. Despite the wealth of the region however, it is grossly underdeveloped and most of the people are poor and live in abject poverty (Akpobibibo, 2004).

Worst still, the activities of the multinationals, such as the flaring of gas and oil spillages have destroyed the means of livelihood of the people. Their farmlands have become so soiled and the soils bad for agricultural activities. The contaminated atmosphere has brought untold critical health hazards and untold hardships (Ogundiya, 2009). More worrisome has been the collusion between the Federal Government, community leaders and the oil companies in the in the exploitation and neglect of the people's plight. The deprivation of the people has escalated into militancy that threatens the security of the state. Numerous militant groups have arisen to express their grievances and fight for a fair share of the wealth gotten from that region. The Niger Delta agitation is a struggle for control as well as fair allocation of petroleum revenue and the preservation of the environment against degradation.

According to Ogundiya (2009), there are about 150 groups that claim to be voicing the desires of the people. The movement for the emancipation of the Niger Delta (MEND) is the most dreaded of the militant groups. Some of the strategies they use include kidnapping and hostage taking of expatriates and top Nigerian officials, vandalization of pipelines, bunkering, sabotage of company properties etc. The struggles for justice earned activists such as Ken Saro-Wiwa and nine other Ogoni leaders death sentences from a cruel military leader, Sani Abacha. Since then, the hitherto peaceful struggle has taken violent dimensions.

Following the Niger Delta militancy has been the increasing torrent of terrorism in Nigeria and the dangerous dimensions this has taken. The advent of Boko Haram group changed the content, context and texture of national insecurity. While the militants in the Niger Delta operated mostly within that region, the Boko Haram has earmarked the whole of the country as their terrain. However, most of their operations have been in the northeast of Nigeria. The surge of Islamist terrorism and Islamic fundamentalism in Nigeria from 1999 has copious negative implications, ranging from loss of lives and property, to increase in destitute and refugee crisis, humanitarian crisis, flight of investors and investments, closure of schools, to mention just few. The causes of Islamic extremism and outright acts of terror have been linked to a number of factors, which include the culture of militarism that has its antecedents in military rule; failure of the state and its institutions, economic disempowerment of the people, politics of exclusion, failed political leadership and the poor immigration policy and watch, which have caused porous borders and inflow of illegal migrants from other countries, as well as free flow of arms into the country (Ibrahim and Igbuzor, 2002:7; Alli, 2010a: 63-90).

Leadership failure primarily led to the failure of the institutions and capacity of government to deliver necessary amenities and infrastructure required for the good life to its people. This failure on the part of the government is the root cause of the disconnect between the people and the government and the shift of allegiances from the state to other social groupings, whose operations most times are detrimental to the existence of the state. For instance, it is documented that the institutional failures in the Nigerian State made it easy for terrorist groups to easily conscript followers. According to Eme and Ibietan (2012:17), between 2002 (the first public appearance of the sect) and 2009, Boko Haram had expanded their operation to various northern states, mainly in the northeastern part of Nigeria, due to the increase in number of followers recruited from various walks of life.

Accounts of newspapers, radio, television and even the internet depict the degraded state of security in Nigeria. Nigeria's security dilemma is so critical that the ordinary man is not sure of existence anymore and just resorts to self-help or resigns to faith in the Supreme Being or fate. There have recorded numerous and successful attacks of the Boko Haram sect on various sectors of the society. These have included international organizations, security agencies, educational institutions, places of worship, and so forth, including the United Nations building and Force Headquarters in Abuja, raids on army barracks and military formations, bombing of churches and mosques, among others. On October 1, 2010, when Nigeria was celebrating its Golden Jubilee, terrorists attacked Abuja, the federal capital. These events and activities have instilled fears and anxiety in Nigerians and visitors (Okoroafor, et al, 2012; Jaja, and Odigbo, 2013). According to the Human Rights Watch, Boko Haram has struck over 115 times between 2011 and first quarter of 2014, in the course of their operations (cited in Onimisi, 2014: 80-85). Zumve, Inagyoroko and Akuva (2013) posit that the sect has indeed changed the face of terrorism in Nigeria.

The deadliest dimension of the Boko Haram terror has been its incessant moves into Cameroon, establishment of major camps in neighbouring countries, kidnap and dehumanization of over 234 Nigerian teenage girls, occupation of important towns and cities and declaration of sovereign 'Caliphate Republic' in the northeastern part of the country. These ominous trends constitute serious threat to Nigeria's corporate existence and could end the nationhood. This is where strategic partnership with immediate neighbours comes in, to encircle Boko Haram and other terrorist elements and share military and intelligence resources with Cameroon, Chad and Niger to tackle and put an end to Islamist terror.

Nigeria's Strategic Relationship with its Immediate Neighbours

The strategic relationship of Nigeria with its immediate neighbours could be traced largely to four basic principles embedded in its foreign policy. This includes the respect for the sovereignty and territorial integrity of every African state, non-interference in the internal affairs of other African countries, sovereign equality of all African states and the commitment to functional cooperation as a means of promoting African unity (Folarin 2014; Tijani, 2010). Nigeria's immediate neighbours are

Republic of Benin, Cameroon, Chad, and Republic of Niger, while it has maritime boundaries in the south Equatorial Guinea. Resulting from their colonial histories, Cameroun, Chad, Benin and Niger are French-speaking countries, while Equatorial Guinea is Portuguese-speaking. Colonialism is a factor in the nature of the relationship between these countries. According to Whittlesey (1934), “the political map of Africa today, is the product of diplomatic chess game amongst the colonial powers, a game played on European council tables since the 1880s by men who never saw Africa”. The ethnic-political traits of the African landscape are thus altered and interrupted as members of same ethnic groups found themselves under diverse political controls.

Nigeria - Republic of Benin

Over the years, the Nigeria and Benin Republic relationship has been flawed by the frequent occurrences of border clashes. The periods between 1969 and the late 1970's, led to a decline of political relationship between the two countries. One of the major sources of threats to Nigeria from Benin has to do with the activities of Beninese who incessantly and forcefully collect taxes from Nigerians along the Nigeria-Benin border villages. The porosity of the border has led to the inflow of both legitimate and illegitimate goods. Interestingly also, is the perpetual removal of the Nigerian flag in these Nigerian border towns and villages and its replacement by the Republic of Benin flag- a sign of their occupation by the latter (Ate and Akinterinwa, 1992 cited in Omede, 2006). In view of the foregoing, one may then contend that:

The security relations between Nigeria and Benin have always centred on two issues - boundary and military relations. The two overlaps. Boundary relations are important in the first place because of the imprecision which marked the delimitation exercise. . . This setting, is further compounded by the activities of smugglers and the actions of overzealous functionaries who attempt to enforce legislation beyond their areas of jurisdiction. . Apart from boundary relations, political instability in Benin Republic has been important for their security relations (Ate and Akinterinwa, 1992 cited in Omede, 2006).

Also very important to note are some activities carried out by Beninese citizens that involve the smuggling of petroleum products and other essential commodities like sugar, beverages, textiles and detergents. It has been noted over the years that these activities have constituted and still constitute threats to the Nigerian economy. Furthermore, during the periods of political crisis in Nigeria, the Benin border becomes an easy escape route for erring Nigerian politicians. The issue of illegitimate foreigners is an area that has caused great friction. It is interesting to note that, there are over thousands of Nigerians living in Benin and same number of Beninese living in Nigeria. However, Benin has over the years deported some Nigerians back home. A classic example was the December 1996 deportation of about one thousand (1,000) Nigerians (CIDOB, 2008). Nigeria, on the other hand, had on the grounds of protecting its national security engaged in the closure of its borders with Benin Republic. Nigeria has had to shut its borders with Benin to punish the latter economically for any intransigence or untoward act towards Nigerians. Such economic measure would stop the outflow of finished products, including petrol to Benin, which would have ripple effect on the social life of the people; and to also stop the importation of second-hand (overseas) vehicles into Nigeria, which would paralyze the Beninese economy as Nigeria have been the largest market for that economy whose primary source of revenue is sale of imported used cars.

It is interesting to note that, in spite of their differences, rigorous efforts have been made to improve the relationship between the two countries. Accordingly, the remarkable decrease in pressure between Nigeria and Benin could thus be described as follows:

Friction along the two countries' borders had considerably reduced as a result of bilateral meetings held at various governmental levels. . . Increased cooperation between Benin and Nigeria has led to fruitful joint efforts in policing the borders. Consequently, criminals operating around the borders e. g. armed robbers and car snatchers find it difficult to dispose of stolen goods (Eze, 2010).

Despite the various attempts made to improve relations between Nigeria and Benin, the fact remains that the Republic of Benin is a French sphere of influence in West Africa. This factor remains a major source of security concern in the Nigeria-Benin relations.

Nigeria and Cameroon

The Bakassi Peninsular has made Nigeria-Cameroon relations to be characterized by mutual mistrust, suspicion and hostility (Njoku, 2012). Interestingly, the boundaries between both countries happen to be the longest of all Nigeria's international boundaries and the most obscure geographically. The boundary disputes between Nigeria and Cameroon Republic (1680 kilometres) are of colonial origin. However, it has remained a basis of variance in direct bilateral relations of the two countries since independence (Ate and Akinterinwa, 1992). According to Omede (2006);

The Peninsular is located at the Southeastern tip of Nigeria, where the Peninsular pushes southward into the Gulf of Guinea. It is a low-lying region bordered on the West by the estuary of the Cross River, on the North by the Akpa Yafe (also known as the Akpa Ikang), on the East by the Rio del estuary, and on the South by the Gulf of Guinea. The Peninsular itself consists of series of Islands covering approximately 50 square kilometres and occupied for the most part by long established communities of Nigerians, in several dozen villages.”

It is an obvious truth that both countries claim ownership of the Bakassi Peninsular and this has made them engaged in series of victimisation and military exercises which have had stern security and political implications on the sub-region. It is pertinent to note that, in terms of military competence, only Cameroon of all Nigeria's immediate neighbours have well-built and well-trained armed forces. This to a large extent explains the unpleasant reason why Nigeria had to give up the Bakassi Peninsular to Cameroon.

It is however pertinent to note that the Nigeria-Cameroon clash over Bakassi was the climax of a long-drawn battle over territorial assets, supremacy and relevance. Cameroon had during the colonial times had its western part administered within Nigeria by Britain, which had made most of that part Anglicized, Nigerianized and the lands settled by Nigerian groups. This had led to flashes of attacks on Nigerian communities in the 1970s and 1980s by Cameroonian gendarmes, which had culminated in attempt in 1982 by the Shehu Shagari administration to contemplate an invasion of Cameroon as a counter-measure and way of showing the Nigerian superiority over that obstinate neighbour. Commonsense however prevailed with the reference to Cameroon's support for one Nigeria (in deference to France, its colonial master's stance against corporate Nigeria). In more recent times also, Cameroon has been fighting alongside Nigeria to contain a Boko Haram that has begun to eat into its domain. However, there has been controversy as to who has been better at fighting and overwhelming the terrorists, which climaxed in the mutual laying of claim to the killing of Abubakar Shekau, the notorious killer-head of the Islamist group (Ukpong, 2014)

Relations with Chad

Nigeria-Chad relations are the most horrific despite the shared intimate history and culture. For instance, the Borno Kingdom originated from the Kanem in present-day Chad Republic. Pre-colonial Nigerian leaders that formed the First and Second Kanuri Empires, known as Kanem-Bornu, shared heritages of both countries. Currently, the king of Mao, a capital of one of the prefectures of Chad is married to the daughter of the Shehu of Borno and there exists a cordial relationship between the two palaces.

It is important to note that the conflict between the two countries is mostly over water. Of significance were disputes in 1980 and the 1993 dispute that led to shooting over border and the control of islands in Lake Chad (Tijani, 2010:187) which has been the most persistent threat to Nigeria's national security. In recent times, Nigerians have speculated that Chad might be one of the masquerades behind the Boko Haram terror acts in northeast Nigeria.

Relations with Niger

The Niger–Nigeria relations refer to the current and historical relationship between both countries. Their relations are based on a long shared border, common cultural and historical interactions, which are similar to that of Nigeria and Chad. Culturally, the centre and west of the borders cut across the northern section of Hausa land which is the home of the Hausa people. Long before European incursions and colonial rule, the Trans-Saharan Trade Routes between Kano and Agadez in Niger had bound the two states together. Interestingly, before the 20th century, there was no formal border, but the current line which was roughly the northern reach of the 19th century Sokoto caliphate (William, 2005). It is however pertinent to note that most of the territories in the southern Niger were tributaries or extensions of the overlapping imperial Hausa states in the 15th-17th centuries. The expansion of French and British imperialism in the period 1890–1905 demarcated the line which would become the modern Niger–Nigeria border. During colonial rule, the French and English languages were implanted on each side of the border, along with cultural, educational and political traditions. Rival French and British interests meant that during much of the colonial period, trade and social interactions across these borders would be discouraged (CIDOB, 2008).

It is possible to acknowledge that there existed in the past and present, pockets of incursions into Nigeria by some Nigerien destitutes. The enormity of intimidation created by the attack is minimal compared to those of other neighbouring countries. Clearly, Nigerien refugees have flooded Nigeria and in conjunction with their Chadian counterparts, have turned the northern highways into killing zones. Sophisticated weapons such as the submachine guns and rifles, bows and arrows are being used to perpetuate these violent acts. This had informed policy to have security operatives embark on rigorous patrol in those areas. Aside this, both countries continue to enjoy a warm relationship. Nigeria-Niger relations appear to have been the most cordial of the relationship with immediate neighbours, with little or no restrictions in migration of Nigeriens into Nigeria; the flip side of this is the fact that the overwhelming trust and conviviality have been the very reason for the swarming of dissidents and anti-Nigeria elements using the same routes under the pretexts of being Nigeriens or Nigerians living in Niger and elsewhere.

Relations with Equatorial Guinea

Equatorial Guinea (E-Guinea) has been a hard nut to crack for Nigeria in its good neighbourliness equation. Throughout history, there have been struggles by great powers like USA, Spain, Portugal, France and England for E-Guinea's cooperation, more as a result of its strategic location. The island location makes it possible to be used as a launching pad for military operations. For instance, during the Murtala-Obasanjo administration in the later half of the 1970s, the US was asked to remove its radio transmitter based in Kaduna. There was no hesitation to have it mounted in E-Guinea. During the Cold War, the Germans did same in E-Guinea.

Traditionally, E-Guinea maintains a hostile disposition towards Nigeria and embraces what is rejected by the latter. Nigerians languish in E-Guinea jails and there have been acts of defiance of that country towards any ultimatums issued or pleas offered (Folarin, 2010). Yet Nigeria has never taken any military action against it. The maritime insecurity at the Gulf of Guinea can be used to subvert Nigeria militarily and economically. Waters off Nigeria is ranked as the second most dangerous in the world (International Maritime Bureau, 2009 cited in Basse, 2000:273). Armed pirates operating in the Gulf of Guinea have about 3000 creeks around Nigeria's territorial waters alone. Apart from these illegal crimes, which could have been perpetrated by Guineans and Nigerians alike, there have also been incessant killings, harassment and brutality of Nigerians in Equatorial Guinea. This had led to the evacuation of Nigerians at a point from Equatorial Guinea (Oshuntokun, 1992). The increasing Chinese presence and the alleged construction of South African air/naval bases in the country not only heightened the potential danger the island poses to Nigeria, but also underscores the strategic importance or threat of Malabo and Fernando Po to Nigeria. The geo-strategic location of the island as

well as the possibility of its potential use by foreign (not-too-friendly) countries require Nigeria to adequately protect its borders as well as to better prioritize its defence policy so that Equatorial Guinea as an offshore island would not gravitate into the orbit of any foreign power which might be hostile to Nigeria (Oshuntokun, 1978).

‘Being friendly without being friends’: New Strategic Relationship with Immediate Neighbours

Good neighbourliness is no doubt a strategic measure to reduce vulnerabilities and guarantee Nigeria’s security and survival. With all its neighbours outside the Anglophone axis and most of them bound by a common French heritage- which is distant and naturally hostile to former British vassals- good neighbourliness is *sin qua non* to survival and preservation. However, good neighbourliness must be well defined and situated within the precincts of immediate and secondary priorities, as well as contextualized within the holistic framework of national interest. Prior to this time, Nigeria’s continental role as a big brother actually intensified the spirit of good neighbourliness it extended to other African countries (Tijani, 2010:196). This was good neighbourliness defined in terms of showing the hospitality, maturity, understanding and rationality of Nigeria, even when its interests were at jeopardy. The principle of good neighbourliness in terms of national security priority and advancement of national interest got lost in showmanship and grandiloquence of rulers generous to African neighbours, far and near. It lacked the strategy of cooperation for containment.

It has to be understood that the dynamic security situation of Africa has altered the reasons for the pursuit of good neighbourliness foreign policy, for the fun of it. National security is and remains the sole aim of such policy. Safety of citizens at home and in the neighbouring countries has become the main essence of good neighbourliness as a foreign policy strategy. In the face of current security challenges Nigeria grapples with, certain measures have to be considered.

The good neighbourliness extended by Nigeria’s leaders towards its immediate neighbours should not mean patronage of the states around even if they wish to be traditional foes, or indifferent towards Nigeria. The good neighbourliness should culminate in bilateral and formal agreements with friendly and hostile neighbours, which will be binding on both parties in each case, with international organizations being neutral and observing partners. Such treaties should compel every nation around Nigeria to recognize the strategic importance of Nigeria as a neighbour, with whom there can be mutual benefits. Such agreement should have as underlying features, subtle demonstration of the unpleasant consequences of betraying the clauses and undermining Nigeria’s security by compromising the borders or territorial waters for enemy operations. Put differently, Nigeria’s good neighbourliness should show the rewards to any country for being a loyal partner in military cooperation, intelligence sharing and joint actions to contain trans-border crimes and movements; and punitive measures for a breach of trust and Nigeria’s security by its partners. However, it has been noticed overtime that the distrust amongst and between Nigeria and its neighbours has obstructed the potency of bilateral and multilateral attempts at addressing issues of common concerns. It is thus proposed that to effectively solve the security problem, distrust and suspicion amongst countries should be discountenanced. This will make concerted efforts of security pacts whether bilateral or multilateral effective. The lack of such direct bilateral or multilateral security treaties has made neighbours, most of who are already jealous of Nigeria’s potentials and afraid of its capacity to overwhelm them in the future, to allow activities inimical to the country’s national security thrive unchecked.

Another important measure will be to demonstrate to the African neighbours that the country is more of an asset than a liability. Some states have voiced out the challenges Nigerians and the country’s internal problems have posed to their own stability. The frequent acts of political or public corruption, political brinkmanship, religious skirmishes, trans-border crimes, human trafficking, smuggling and money laundering, have had spiraling effects on the social life of certain neighbours, such as Benin and Cameroon, that have had to either complain about how the activities have spread across their borders, with partners emerging and outposts for such criminal acts created in their countries, or, in some cases, insurgents attempting to establish cells and camps in their territories. The Nigerian authorities therefore have the duty to mop up the security within, stem the tide of corruption

in the security agencies and purge the agencies of elements that put up unprofessional conducts and thus compromise the security of the country. The harassment by E-Guinea, Cameroon and Benin has largely been due to negative perceptions of Nigerians in those countries.

Furthermore, in order to strengthen its foreign and defence policy of good neighbourliness, Nigeria should play up or use the card of shared history. According to Tijani (2010: 197-198), the whole of Niger was part of the Borno Empire and apart of Sokoto Caliphate, while all of northeast Cameroun was part of the pre-colonial Borno Empire. These antecedents explain the cultural homogeneity across these post-colonial boundaries. By exploring this shared identity of culture and historical trajectories with its neighbours, the countries around Nigeria could be made to build a better bond with it. Such can play out by a well defined, planned and executed national ideology and sold out through propaganda. The tendency to suspect a course to Pax Nigeriana may arise, but Nigeria will have to be transparent and open in this regard to earn the trust of its neighbours. The ultimate goal is Nigeria's national security interest.

Despite all of these, there is however the question of the extent to which good neighbourliness can help protect Nigeria from the general threatening level of global insecurity. Good neighbourliness has not been able to address the issues associated with the porous borders; it has rather worsened it, and it has not prevented hostility to Nigerians in these neighbouring countries. Although good neighbourliness should be a strategy Nigeria can employ, yet it has been argued that there are reasons why Nigeria must tread carefully in pursuing the principle or policy. According to Tijani (2010), the principle has been used by Nigeria's foreign policy partners against it and has been employed as an exploitative tool, with abuses of this Nigerian goodwill.

Tijani (2010) further posits that such "goodness" could at best be a wishful thinking or at worse a deterrence mechanism as it is hardly expected to work at the level of international politics, a thinking that syncs with realist tradition. According to realists, security help does not always come from neighbours or other states. Nations help themselves and cannot trust the moral obligations of other states to watch their backs for them. This is because the first attack might just come from that trusted neighbouring ally. As earlier argued, there is therefore for the healing to come from within first. Internal determinants of the external contexts must first be clearly, systematically, holistically and satisfactorily addressed. Nigeria should pursue good governance. Unless good governance is achieved, these challenges that are threats to Nigeria's national security will persist. Democratic principles like the rule of law, all-round justice and equitable distribution of resources and wealth as well as respect for the rights of people must be embraced and judiciously implemented. Once the people can have a good feel of the government in terms of meeting their basic needs, Nigeria itself will be able to wield strength against terrorism. Once the homefront is settled, neighbouring states will feel at ease, trust Nigeria, cooperate with it and even revere the country and treat its citizens with lots of respect. The lack of such good governance and dynamic leadership has been the very reason for the emergence, notorious activities and festering of the menace of Boko Haram and other local insurgents.

Conclusion

From all indications, security is a big challenge to all countries of the world. Nigeria, formerly the 'Regional Police', stemming insecurity in West African states and restoring order and political stability, has turned out to become a peculiar security case in the West African sub-region. Incidentally, most of its security challenges have come from its badly managed borders, implying that as its problems are actually from its immediate neighbours. Nigeria thus needs to rise and strategically deal with the existing threatening security situation around its borders, which requires a redefined context of good neighbourliness. The summary of good neighbourliness suggested here is one that comes with the strengthening of the internal institutions, social fabrics and advancement of the standard of life, as well as cleaning up the stable and tightening up of the borders, to make Nigeria earn a considerable degree of respect, so that it can be trusted as a reliable ally, an asset in West Africa and can be feared and respected by notorious and friendly neighbours alike. Direct bilateral treaties are required to compel compliance and

obligations towards Nigeria by neighbours and subtle intimidation go side by side with friendship or partnership in international politics. This is called strategic deterrence, which is required as Nigeria continues to deal with criminal acts emanating from its borders. To put this context of good neighbourliness in a simple phrase, the approach should be such that the country can “be friendly without necessarily be friend” of its neighbours.

Although security is a major issue, the general Nigerian situation, over the years, is a pathetic one. It is however safe to conclude that the insecurity posed by activities of Islamic fundamentalists and Boko Haram terrorists has exposed the critically vulnerable state of the borders and the seeming fertile grounds of its immediate neighbours, who are mostly Francophone countries, for national enemies. In view of this regional, international security issues and prevailing challenges such as the Boko Haram terror, one could again state, unequivocally, that the nature of the its border, coupled with the lack of decisive defence policies, are major factors enhancing external infringement on Nigeria’s territorial integrity.

References

- [1] Ajetunmobi, R.O, Osunkoya, O.A and Omotere (2011). “Impact of President Olusegun Obasanjo’s Personality on Nigerian Foreign Policy, 1999-2007”. *Pakistan Journal of Social Sciences*. 8(6), pp.308-315
- [2] Akpobibibo, O. (2004). “Human Security Dilemma in Nigeria’s Delta”. *Human Security Perspectives*, 1(Issue 1): 45-50.
- [3] Alli, W.O. (2010). “Security Challenges in West Africa”. In Eze, O.C, Anigbo, C.A., Dokubo, C.Q. (ed.) *Nigeria’s Security Interest in Africa*. Lagos: PrintServe LTD. Pp.63-90.
- [4] Babangida, I.B (1991) *For Their Tomorrow We Gave Our Today: Selected Speeches of IBB*, Volume II Safari Books, Ibadan, p. 271
- [5] Booth, K. (2007). *Theory of World Security*. London; Cambridge University Press
- [6] Bujra, A. (2002). “African conflicts: their causes and their political and social environment.” Development Policy Management Forum, Occasional paper, No 4. <http://www.dpmf.org/images/occasionalpaper4.pdf>
- [7] CIDOB (2008). “Nigeria and its Regional Context”. Retrieved on 5 June, 2014 from www.cidob.org
- [8] Eme, O.I. and J. Ibietan (2012). “The Cost of Boko Haram Activities in Nigeria”. *Arabian Journal of Business and Management Review*, 2(2):10-32.
- [9] Eze, O.C. (2010). “Interrogating Nigeria’s National Interest”. In Eze, O.C., (ed.). *Beyond 50 years of Nigeria’s Foreign Policy: Issues, Challenges and Prospects*. NIIA: Print Serve Ltd. pp. 79-91
- [10] Folarin, S.F. (2014). *Visibility and Relevance in International Politics: National role conceptions and Nigeria’s Foreign policy in Africa*. Lagos: Media Expression International.
- [11] Folarin, S.F. (2013). “National Role Conceptions and Nigeria’s African Policy, 1985-2007”, Doctoral Thesis, Department of Political Science and International Relations, Covenant University, Ota, Nigeria.
- [12] Ibrahim, J. and Igbuzor, O. (2002). Memorandum Submitted to the Presidential Committee on National Security in Nigeria.
- [13] Imobighe, T.A (2010). “Perspectives on Regional Security in Africa”. In Eze, O.C., Anigbo, C.A., Dokubo, C. Q (ed). *Nigeria’s Security Interest in Africa*. NIIA: Print Serve Ltd. pp21-29
- [14] Imohe, E.E. (2010). “Extra-Regional Security Challenges for Nigeria”. In Eze, O.C, Anigbo, C.A., Dokubo, C.Q.(ed.) *Nigeria’s Security Interest in Africa*. Lagos: PrintServe LTD. Pp. 239-257.
- [15] Jaja, N. & J.Odigbo(2013). Security and National Development in Nigeria: The Threat of Boko Haram. *International Journal of Humanities and Social Science*, 3(4): pp. 285- 291.
- [16] McSweeney, B. (1999). *Security, Identity and Interests: Sociology of International Relations*. London: Cambridge University Press
- [17] Morgenthau, H. J. (1948). *Politics Among Nations: The Struggle for Power and Peace*. New York: Alfred Knopf.

- [18] Ngwube, A (2013).“Nigeria’s Peace Keeping Role in Darfur”. *Journal of Studies in Social Sciences*. 4(1), pp.76-91.
- [19] Njoku, N.L. (2014).The Bakassi Kingdom and the Dilemma of ‘Boundaries’ and Co –existence in Post-Colonial Africa.*Africana*(2155-7829), 6(1):194.
- [20] Northedge, F.S.(ed.) (1968). *The Foreign Policy of the Powers*. London: Faber & Faber.
- [21] Ogbu, E. O. (1967). “Nigeria’s Foreign Policy”.*The Quarterly Journal of Administration*, 19(1): 85.
- [22] Ogundiya, I.S. (2009). Domestic Terrorism and Security Threats in the Niger Delta Region of Nigeria. *Journal of Social Science*, 20, 1:34-42.
- [23] Okoroafor, E. C, Nzenwa, B. N. and Oti, B. I. (2012). Democracy and National Security: Exploring the Synergy for Good Governance in Nigeria. *Journal of Research and Development*, 4(1):135-148.
- [24] Omede, A.J (2006). “Nigeria’s Relations with her Neighbours”.*Stud Tribes Tribals* 4(1), pp.7-17
- [25] Onimisi, T. (2014).“Globalisation and the Nigerian National Security: An Overview”. *Journal of Good Governance and Sustainable Development in Africa*.2(2): 80-85.
- [26] Onuoha, F.C. and G.E. Ezirim (2013).“Terrorism and Transnational Organized Crime in West Africa”. Retrieved on 30 June, 2014 from <http://studies.aljazeera.net/en/reports/2013/06/2013624102946689517.htm>
- [27] Oshuntokun, J. (1978). “Relations between Nigeria and Fernando Po (now Equatorial Guinea) from Colonial Times to the Present”. In A. B. Akinyemi, (ed.)*Nigeria and the World*. Nigeria, Ibadan: Oxford Univ. Press. Pp. 1 – 9.
- [28] Osuntokun, J. (1992). “The Dynamics of Nigeria - Equatorial Guinea Relations from Colonial Times to the Present”. In Ate, B. and B. Akinterinwa,(eds.)*Nigeria and Its Immediate Neighbours. Constraints and Prospects of Sub-Regional Security in the 1990’s*. Nigeria: Nigeria Institute of International Affairs (NIIA).
- [29] Oviasogie, F.O. and Shodipo, A.O. (2013).“Personality, Foreign Policy and National Transformation: An Assessment of the Olusegun Obasanjo’s Administration (1999-2007)”. *Covenant University Journal of Politics and International Affairs (CUJPIA)* 1(2)
- [30] Paime, M. A. (1992). *Guardians of the Gulf*. New York: Free Press.
- [31] Rizwan, A. (Ed.) (2009). “An Introduction to Foreign Policy: Definition, Nature & Determinants.” Retrieved on 28 June, 2014 from <http://Amerrizwan.Blogspot.Com/2009/08/Introduction-To-Foreign-Policy.Html>
- [32] Rothschild, E. (1995). *What is Security?* New York: Columbia University Press.
- [33] Saliu, H.A. (2010). “Nigerian Responses to the US AFRICOM Project”. In Eze, O.C, Anigbo, C.A., Dokubo, C.Q. (eds.)*Nigeria’s security interest in Africa*. Lagos: PrintServe LTD. Pp. 192-216.
- [34] Sesay, A & R.I. Akonai (2010). “Where are the leaders of the Regional Groupings? The AU, Regional Economic Communities, RECs and the Maintenance of Regional Security”. In Eze, O.C, Anigbo, C.A., Dokubo, C.Q. (eds.) *Nigeria’s Security Interest in Africa*. Lagos: PrintServe LTD. Pp. 33-62.
- [35] Tijani, K. (2010). “Continued Good Neighbourliness or a Future Source of Threat?: Nigeria and its Immediate Neighbours”. 187-220. In Osita, C.E (ed.) *Beyond 50 years of Nigeria’s Foreign Policy: Issues, Challenges and prospects*. Lagos: Nigerian Institute of International Affairs.
- [36] Ukpogon, U. (2014) “Boko Haram: We’ve Killed Shekau-DHQ”, Lagos: *National Mirror*, September 25, 2014. Pp. 1 and 5.
- [37] Whittlesey, S. (1934). (ed.) *The Earth and the State*. USA: New Haven.
- [38] Zabadi, S.I. (2005). *Understanding Security and Security Sector Dynamics*. Baltimore: John Hopkins Uni. Press.

The Extent of the Application of Transparency in Administrative Disciplinary Decisions for Students at King AbdulAziz University from the Viewpoint of Students

Najat Mohammad Saeed Al Saigh

Associate Professor, King AbdulAziz University

Abstract

The purpose of this study is to investigate the extent of the application of transparency in administrative disciplinary decisions for students at the University of King AbdulAziz from the viewpoint of students, and also aimed to investigate the effect of year, and GPA on the point of view of students. To achieve the purpose of the study, a questionnaire was distributed among students.

The study sample consisted of 90 students 48 males and 42 females from king AbdulAziz University. Means and standard deviations and t-test were used to analyze the results.

The results showed that there were statistically significant differences in the views of the students on the extent of the application of transparency in administrative disciplinary decisions, also showed a statistically significant differences at the level of significance ($\alpha \geq 0,05$) in their views due to the gender variable, as there are statistically significant differences at the level of significance ($\alpha \geq 0,05$) in their views due to the year variable, and results also showed the existence of clear statistically significant differences in the views of the students on the extent of the application of transparency in administrative disciplinary decisions due to the general point average of the students (GPA).

Keywords: Transparency, Administrative Disciplinary Decisions

Introduction

Higher education institutions entered the third millennium with many global variables, territorial and challenges of the era which is characterized by revolution of knowledge as well as great and wide unprecedented technological information which made the world a small village with an open border in addition to implications of globalization, which got them the concepts of openness, freedom, human interaction and increasing the public's awareness of their rights and duties of what was accepted or ignored in the past specifically, issues of routine, bureaucracy and corruption which have become unacceptable in our present time.

These challenges formed a major challenge for the administrative systems that seek to find some sort of consensus between them and the new needs of the community as an obligation that has to become more flexible, sophisticated, open and responsive to the rights and requirements of individuals which are able to cope widely with the problems of organizational systems and management, such as: Abusing of power and upholding the professionalism procedures and completion of the work along with the administrative complexity and excessive control with lack of clarity of instruction (Quarouti, 2010), which means adopting flexible mechanisms for contributing to the detection of these problems

and offer solutions suitable for treatment before they become a threat to the development of civil society organizations and various institutions.

The educational system just like any other systems of civil society prone to corruption, financial and administrative responsibilities and the magnitude its association with all the layers and society sectors, organization and institutions of the State to another (Amayreh,2008), in addition to the difficulty of obtaining information and data for activating the control procedures and accounting which requires the adoption of the style of management based on transparency, openness and clarity.

The university system of comprehensive objectives in the community played an influential role in development of the individual intellectually, emotionally and cognitively which will be able to deal with the facts of life and development for the benefit and interest for himself and his community and humanity at large. And facing universities many of the problems that led to the decline in the quality of teaching and scientific research and low internal efficiency which crunch created on a global level as a result of the weak capacity of universities to respond rapidly and successive variables in different areas of knowledge and to provide the requirements of comprehensive development (Harman, 2010) which applies heavily on Saudi universities and imposition of post beneficiaries of the services to find appropriate solutions for development of programs and administrative activities, academic and address any deficiencies in its performance without access to accurate information that could contribute to remove any confusion or ambiguity which may expose the credibility of the university systems of accountability.

Furthermore, the policies of the universities and their internal systems must be designed in order to provide its members and stakeholders of the services that have to be adequate information about their performance and practices where such information and data should reach the beneficiaries, it has to be qualitative and accurate along with it should be also substantial, credible, safe and reliable offered by universities about the quality of academic options which is important for ensuring the efficiency of the adopted educational system guarantee as a principle of transparency frame for academic and administrative practices of the University. (Dill & Soo, 2004)

Problem of the Study

Issue of transparency was an important issue since the end of the seventies of the last century and it has still much attention from researchers in fields of knowledge with a view to sounding different and shed light on the contents multinational effort to provide administrative practices fair elections contribute to achieving the goals that seeks her every community has been growing interest in the topic of transparency in recent years at the local and global, and as a result has become an urgent requirement for the emergence of calls directed to strengthen transparency and administrative matter and anti-corruption types in order to strengthen the role of the public sector with all its institutions and improve the practice and the practice of rooting transparency among individuals and organizations to limit abuse.

Consequently, transparency and anti-corruption have gained increasing attention in Saudi Arabia in the recent years as a religious requirement more than a cultural necessity where the development of the latest report of International Transparency in 2011 classified the Kingdom in (57) position at the level of the world and at the sixth level of the Arab countries in terms of the lack of transparency and corruption (Transparency International, 2011). That emphasizes the urgent need to increase the focus on the adoption of the concepts of transparency, accountability and anti-corruption initiative to establish a National Commission for anti-corruption as well as joining Anti-Corruption of Arab conventions and treaties for that purpose.

Additionally, with the escalating problems regarding traditional system of education management in the Kingdom of Saudi Arabia, it became necessary to search for causes and origins of these problems for solving them, especially since transparency practices in various fields is not clear (Almaikl, 2012) which shows clearly in the universities that suffer from the administrative structure

and a variety of academic problems resulted from the vagueness of the legislation and weakness oversight and accountability systems in addition to lack of specialized studies in field of administrative transparency for evaluating level of performance of the Saudi universities.

Importance of the Study

The current study acquires its importance through the recent issue of transparency as an approach to the administrative task, which is a requirement for democracy practicing and community development and upgrading its status between the countries of the world and the urgent need to consolidate the values of integrity, transparency and accountability at the various sectors of the state and its institutions and private higher education sector, which fits with the trends of national and international in scaling up the administrative work of institutional structure on the integrity application, transparency and sophistication performance of the universities, which are the main focus in system of higher education institutions and the community expectation of them for playing an influential role to promote the principle of transparency along with improving the efficiency and effectiveness of administrative work and academic achievement of goals and objectives of higher education policy in the Kingdom of Saudi Arabia.

Moreover, it is through the study, in addition to determining degree of practicing administrative transparency among academic departments at King Abdul-Aziz University, it is hoped to contribute to the results of the study to determine the number of criteria and indicators that can be measured the level of practicing of administrative transparency in universities for providing a reference recently to researchers and students on the subject of transparency. These are expected to benefit from the results of the current study:

- Supervising authority on higher education and policy makers, decision-makers and educational leaders in Saudi Arabia.
- Saudi universities by the reference decision, which will be provided through the results of the study of the administrative systems in universities, deans of colleges and heads of academic departments about reality of transparency in administrative organs their universities and take appropriate decisions in order to raise the level of practice and a culture of transparency at the administrative and academic leaderships.
- Anti-corruption National Commission and the concerned transparency organizations in the Kingdom for contributing the results of the current study to assess efficiency of the work of academic and administrative leadership in higher education institutions.
- The National Commission for Assessment and Academic Accreditation through the adoption of criteria, indicators for monitoring and accounting issue that can contribute to enhancing administrative transparency at the public educational institutions and universities in particular.

Purpose of the Study

The purpose of this study is to investigate the extent of the application of transparency in administrative disciplinary decisions for students at the University of King AbdulAziz from the viewpoint of students, and also aimed to investigate the effect of year, and GPA on the point of view of students. To achieve the purpose of the study, a questionnaire was distributed among students.

Questions of the Study

The researcher tried to answer the following question:

1. What is the extent of the application of transparency in administrative disciplinary decisions for students at the University of King AbdulAziz from the viewpoint of students?
2. Are there any statistically significant differences between the views of the students at King AbdulAziz University on the extent of the application of transparency in administrative disciplinary decisions due to the year (first year, second year)?

3. Are there any statistically significant differences between the views of the students at King AbdulAziz University on the extent of the application of transparency in administrative disciplinary decisions due to GPA of the students (low, high)?

Limitations of the Study

This study is limited to all students at the first and second year at King AbdulAziz University in Saudi Arabia.

Literature Review

Hazelkorn, E. (2012) conducted a study entitled "Instruments of the required transparency for controlling and modernization of higher education of the European" attempted to identify the theoretical background for transparency and its instruments such as: Academic Accreditation local and global models and measurement, classification and aspects of variation among them also, it aimed to propose the appropriate instruments that can provide a greater degree of transparency and information to stakeholders and beneficiaries of the services offered by institutions of higher education, besides determining degree of the impact of these instruments on the challenges faced by and the ability of these instruments to support the goals of higher education policy, strategic directions and requirements of knowledge societies. The study recommended an adoption of the leaders of higher education for a number of the key instruments to support transparency in higher education institutions along with the requirements of the application, such as: spreading a culture of integrity and accountability in accordance with the principle of reward and punishment, in addition to development of laws, regulations and constantly updated and investigating the flow of information and made them available to the beneficiaries to the modernization and development of European Higher Education.

The study by Stephens (2007) entitled "The role of transparency in the management of data in improving the performance of organizations" focused on concept of transparency in the management of the data in terms of the degree related to the organization with the producers and consumers of information where the study pointed to the benefits of transparent data management for improving accountability and importance of the role played by technology in discovering and prevention of concealment operations as well as achieving participated institution. The study findings concluded that organizations are open to the best performance, while the closed organizations and better able to achieve the satisfaction of the beneficiaries as they save a lot of costs, time and effort. The study recommended a need to adopt transparency in the management of data and information provided to the beneficiaries.

The aim of the study conducted by (Castro, 2003) entitled "Effective leadership between Deans academics: Exploring the relationship between power and emotional impact of leadership" to identify the relationship between the ability emotional and effective leadership as opposed to the rear regulatory institutions of higher education in the United States of America for gaining an access to relevant information in evaluating the performance of Deans academics and possibility to identify the professional sophisticated issues for deans of academics to achieve the purposes of the study and data collection, the researcher used Emotional Competence Inventory (ECI) and the list of Leadership Practices Inventory (LPI) and the study results showed that leadership practices affected the ability emotional deans of academics with presence of a statistical significance relationship between Competence emotional and cognitive psychological and emotional between some leading practices obstacles as a challenge and transmit the spirit of shared vision and empowering others and role models in behavior and motivation. The study noted the presence of a statistically significant relationship between Competence and emotional impact and two of the leadership practices as well as the study results showed that there is no differences of statistical significance between the averages of each group from the list of leadership practices of the academic departments of and academic leaders upper key while the study indicated existence of statistical significant differences among the list of emotional abilities and the transparency in the different leadership practices.

Hancock & Hellawell (2003) conducted a study entitled "Degree of academic leaders Practices of the Central Administrative Transparency," which aimed to identify degree of middle-management

level of Faculty deans and Heads of the Departments in one of the modern universities in the United Kingdom for transparency through their dealings with their superiors and employees. The study showed that the deans as well as the heads of the departments are committed principally in a very large support transparency with flow of information, but they are treated in some ways at the secret times involuntarily as a result of the need for that, as they were treated in ways similar secret by their higher management. The study findings showed that confidence effected the degree of secrecy practiced by the administration and that the tendency to hide the full truth appears in three general issues as follows: Free flow of information and communication and ethics regulatory based on trust, credibility and personal relationships along with functional trends to deal with the different levels of institutional structure and systems. Additionally, the study findings indicated some of the frustrations experienced by middle management as a result of the lack of full transparency, such as lack of career and sense loss of status or academic institutional exception of decision-making, which will lead to a series of loss of quality in the overall level of performance for the middle management.

In the same context, (Kuchapski, 2002) conducted a study entitled “Reformulation of Accountability in Education” which aimed to bring more clarity to the idea of accountability. The study was conducted in two parts as the first one devoted to review the themes of accountability and the search for answers to questions such as: What are the objectives of accountability? And what are objectives that seek to achieve? And what are the cases that can be viewed as embodying the accountability? Moreover, what are the concepts that have to be perceived more broadly to achieve accountability? A revision has to be implemented about this issue as well as relationship bases between the historical issue and democracy. The second part of the search for the reformulation of the concept of accountability in education, the study showed a lack of new models of accountability. It also included results of three basic principles as follows: disclosure, disclosure and transparency, and the treatment and the relationship of these principles of accountability and democracy, the study indicated four key elements such as: Planning, assessment, response, communication and relationship with the concept of accountability itself. The study recommended a need for increasing research that focuses on principles of accountability and transparency in field of education and promotes awareness of the elements besides applying and maintaining them on the education system.

Design and Methodology

Population of the Study

The population of the study consisted of all first and second year students at King AbdulAziz University in Saudi Arabia.

Sample of the Study

The sample of the study consisted of 90 students, from king AbdulAziz University in Saudi Arabia; a questionnaire was distributed among them.

Instrument of the Study

A questionnaire was distributed among the first and second year students at king AbdulAziz University and this questionnaire was designed by the researcher herself, it consisted of 25 items. Many variables were included such as the year and GPA of the students.

Reliability of the Instrument

To ensure the questionnaire reliability, the researcher applied it to a pilot sample of (15) students excluded of the study sample at king AbdulAziz university with a two-week period between the first

and second time it was distributed. The reliability of the questionnaire was calculated using correlation coefficient and it was found 0.87 which is suitable to conduct such a study.

Procedures of the Study

A questionnaire about students' point of view about the extent of the application of transparency in administrative disciplinary decisions at King AbdulAziz University was given to 90 students. After that the researcher collected the questionnaires and collected data, and then this data was analyzed statistically.

Statistical Analysis

The results were analyzed for each item in the questionnaire using suitable statistical methods such as mean and standard deviation. The researcher also used figures to clarify the results more.

Findings of the Study

The purpose of this study is to investigate the extent of the application of transparency in administrative disciplinary decisions at King AbdulAziz University, and also aimed to investigate the effect of year and GPA on the point of view of students. To achieve the purpose of the study, a questionnaire was distributed among students to measure their point of view.

A questionnaire was distributed among 90 students from King AbdulAziz University in Saudi Arabia. Means and standard deviations and T-test were used to analyze the results

To answer the first question about students' point of view towards the extent of the application of transparency in administrative disciplinary decisions: What is the point of view of students at King AbdulAziz University on the extent of the application of transparency in administrative disciplinary decisions? A questionnaire was distributed among them and means and standard deviation were calculated. Results were shown in table 1

Table 1: students' point of view about the extent of the application of transparency in administrative disciplinary decisions

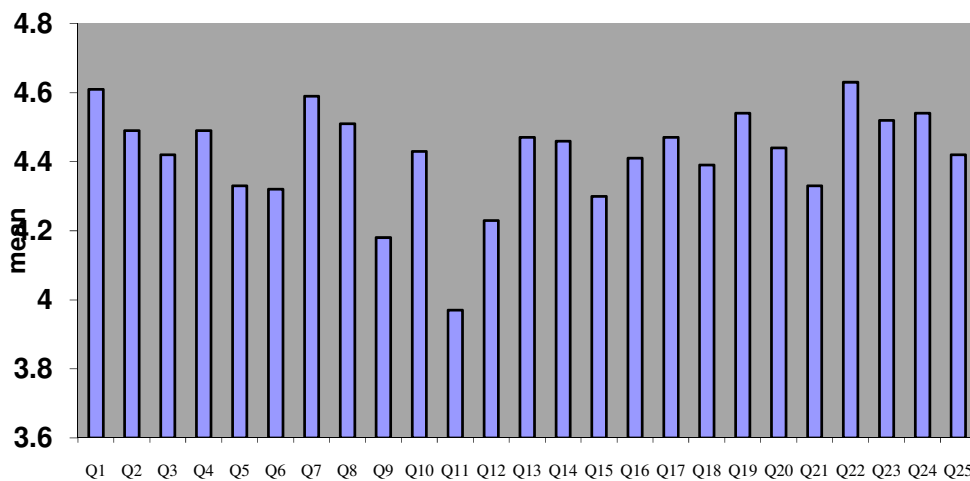
	Mean	Std. Deviation
Q1	4.61	.698
Q2	4.49	.715
Q3	4.42	.805
Q4	4.49	.858
Q5	4.33	.848
Q6	4.32	.767
Q7	4.59	.693
Q8	4.51	.732
Q9	4.18	.907
Q10	4.43	.877
Q11	3.97	1.000
Q12	4.23	.884
Q13	4.47	.905
Q14	4.46	.880
Q15	4.30	.837
Q16	4.41	.806
Q17	4.47	.759
Q18	4.39	.879
Q19	4.54	.741
Q20	4.44	.784

Q21	4.33	.945
Q22	4.63	.679
Q23	4.52	.755
Q24	4.54	.672
Q25	4.42	.812
QALL	4.42	.584

Table 1 show that there are statistically significant differences in students' point of views about the extent of the application of transparency in administrative disciplinary decisions. It shows the results of the questionnaire which was distributed among (90) students about their point of views about the extent of the application of transparency in administrative disciplinary decisions. Means and standard deviations were calculated and results show that question 22 got the highest mean which was (4.63); question 11 comes next with a mean of (3.97).

Standard deviation for question 22 was (0.679) which is higher than ($\alpha \leq 0, 05$) so it means that it is statistically significant. Standard deviation for question 11 was nearly the same; it was (1.000) which is also statistically significant.

Diagram 1: students' point of views about the about the extent of the application of transparency in administrative disciplinary decisions



It is clear in the diagram that the mean of question 22 was the highest mean, question 1 comes next. The mean of the (4, 8, 19, and 24) are nearly the same, so students' point of view about the extent of the application of transparency in administrative disciplinary decisions.

To answer the second question about students' point of views and year: Are there any statistically significant differences between the views of the students at king AbdulAziz University on the extent of the application of transparency in administrative disciplinary decisions due to the year (first year, second year)? Means and standard deviations were computed and table 2 shows the results.

Table 2: Means, standard deviations and t-test according to year variable

Year Variable	N	Mean	Std. Deviation	t	Df	Sig. (2-tailed)
First year	52	4.26	.722	-3.387	168	.001
Second year	38	4.55	.385			

Table 3 shows there are statistically significant differences due to year variable. It shows the results of the questionnaire which was distributed among (90) students about their point of views about the extent of the application of transparency in administrative disciplinary decisions. Means and standard deviations were calculated and results show that students who are in the first year got a lower

mean than students who are in the second year which was (4.26, and 4.55) respectively; this indicates that year have an effect on students' point of views.

Standard deviation for students who are in the first year was (0.722) which is higher than ($\alpha \leq 0, 05$) so it means that it is statistically significant. Standard deviation for students who are in the second year was lower; it was (0.385) which is also statistically significant. So, table 3 shows there are statistically significant differences due to the year variable in favor of the second year students.

Diagram 2: Means, standard deviations and t-test according to year variable

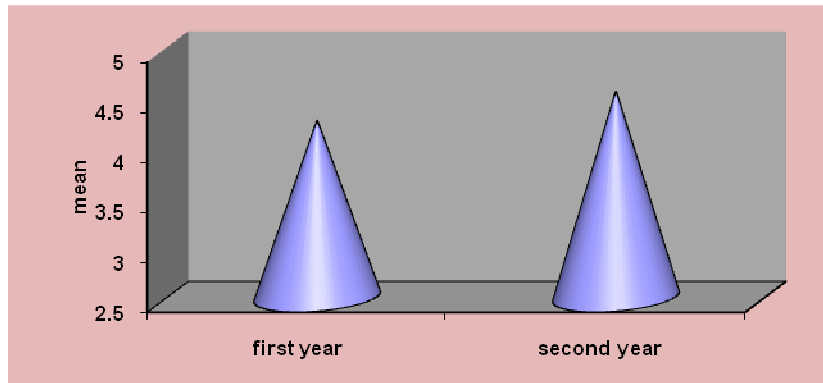


Diagram 2 shows that students of the second year got positive point of views about the extent of the application of transparency in administrative disciplinary decisions than students of first year.

To answer the third question about students' point of views and their GPA: Are there any statistically significant differences between the views of the students at king AbdulAziz University on the extent of the application of transparency in administrative disciplinary decisions due to GPA of the students (low, high)? Means and standard deviations were computed and table 3 shows the results.

Table 3: Means, standard deviations and t-test according to GPA variable

GPA	N	Mean	Std. Deviation	t	Df	Sig. (2-tailed)
Low	62	4.22	.853	-2.299	168	.023
High	28	4.47	.482			

Table 3 shows there are statistically significant differences due to GPA variable. It shows the results of the questionnaire which was distributed among (90) students about their point of views on the extent of the application of transparency in administrative disciplinary decisions at king AbdulAziz university. Means and standard deviations were calculated and results show that students with high GPA got a higher mean than students of Low GPA which was (4.47, and 4.22) respectively; this indicates that GPA of the students have an effect on students' point of view.

Standard deviation for students of high GPA was (0.482) which is higher than ($\alpha \leq 0, 05$) so it means that it is statistically significant. Standard deviation for students with low GPA was higher; it was (0.853) which is also not statistically significant. So, table 4 shows there are statistically significant differences due to GPA variable in favor of students with high GPA.

So, table above shows there are statistically significant differences in students' point of views due to GPA variable in favor of students with high GPA.

Diagram 3: Means, standard deviations and t-test according to GPA variable

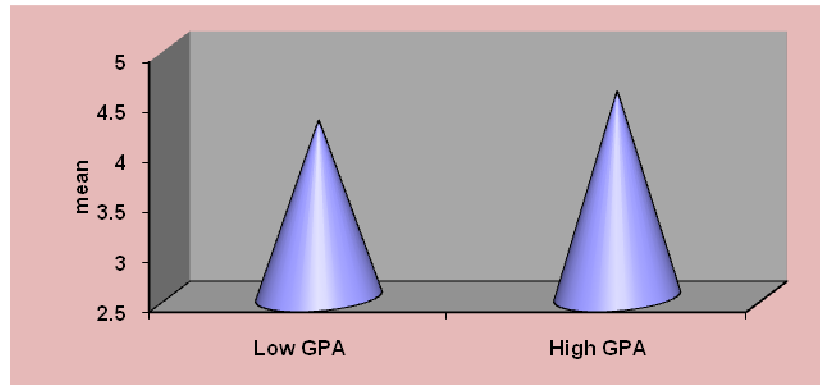


Diagram 3 shows that students with high GPA got positive point of views about the effectiveness of social networks on self awareness than students with low GPA.

Conclusion

In light of the findings revealed by the study, the researcher recommended the following:

1. Work on the adoption of the leaders of the College of Education and academic departments to apply the principle of administrative transparency, and through the implementation of procedural plan promotes clarity policy and disclosure of all data and information related to academic and administrative services provided to beneficiaries and stakeholders, and to achieve the greatest possible transparency in the various dealings
2. Consolidation of practices and transparency Allen Azyh Smuka to become familiar with and expected of everyone, through the adoption of laws and systems of accountability and accounting in the College of Education and academic departments and applied fairly and objectively between all employees of the faculty and administrative staff members.
3. Activation of confidence and empowerment principles and that by allowing beneficiaries and stakeholders to attend meetings of the boards and the college departments, real participation in academic and administrative decisions related to college programs and future plans industry.
4. Educate employees and beneficiaries of their rights and duties, and to encourage them to reveal financial and administrative irregularities, which are incompatible with integrity, and that weakness through training programs and Aelablmah the aim of spreading the culture of transparency, administrative, and the application of the principle of reward and punishment to everyone without exception.

References

- [1] Almaikl, N. (2012) The degree of transparency in public administration for education in Riyadh from the viewpoint Employees. Department of Educational Administration, College of Education, King Saud University, Riyadh.
- [2] Amayreh, A. (2008) (administrative transparency in education managers in Jordan and its relationship to both the pressure and Security Psychiatrists for workers in their directorates, Unpublished PhD thesis, University of Amman, Jordan
- [3] Castro, J. (2003). Effective Leadership Among Academic Deans: An Exploration of the Relationship Between Emotional and Leadership Effectiveness, DAI –A, 64 / 05 P. 1471.
- [4] Dill, D. And Soo, M. (2004). Transparency and Quality for Higher Education Markets. Public policy for Academic Quality, Retrieved June 11, 2012, from: www.unc.edu.
- [5] Hancock, N. & Hellowell, D. (2003). Academic Middle Management in Higher Education: a Game of Hide and Seek? Journal of Higher Education Policy and Management Vol.25 (1), P4-13.

- [6] Harman, J. (2010). Perceptions of technology transfer specialists and science and Technology academics. *Journal of Higher Education Policy and Management*. Volume 32, Issue 1, pages 69-83.
- [7] Hazelkorn, E. (2012). European "Transparency Instruments": Driving the Modernisation of European Higher Education, Dublin Institute of Technology, Ireland
Kuchapski, R. (2002). Reconceptualizing Accountability for Education, *DAI - A 62/ 11*, p. 3641
- [8] Stephens, (2007). Transparency of Data Management. *DM Review*. Volume 17, Issue 10. P38.
- [9] Transparency International (2011). *Global Corruption Report, 2011*. London: Pluto Press. Available at <http://www.transparency.org>.
- [10] Qaryouti, M. (2010) *Organization Theory and organization*, Amman. Dar Wael for Publishing and Distribution, Fourth Edition.

Evaluating the Economic Return to Participatory Commune Cultural Post Offices in Viet Nam - An Endogenous Switching Regression Model Approach

Truong Tuan Linh

*Department of Agricultural and Resources Economics
Graduate School of Bio-resource and Bio-environmental Science
Kyushu University, Japan*

E-mail: ttlinh@ictu.edu.vn; tuanlinhtruong@gmail.com

Tel: +81-92-642-2970 (2972); Fax: +81-92-642-2970

Teruaki Nanseki

*Faculty of Agriculture, Kyushu University, Japan
6-10-1 Hakozaki, Higashi-ku, Fukuoka, 812-0053*

Yosuke Chomei

*Faculty of Agriculture, Kyushu University, Japan
6-10-1 Hakozaki, Higashi-ku, Fukuoka, 812-0053*

Abstract

The commune cultural post office (CCPO) is an important program in Viet Nam. Its duty is to contribute to the development of the social and economic aspects of the country, allowing people to easily gain knowledge about the policies of the government. However, after 16 years, there are some disadvantages and it has become unsuccessful and not effective. There is no research that uses an econometric approach to estimate the implications of the CCPO and to suggest certain policies based on the results that enhance or cut off the program. This paper aims to identify factors that influence the probability of participation in the CCPO, to estimate the factors affecting economic outcome indicators and to quantify the benefit of the participant decision for both groups. Endogenous switching regression analysis was used for the farm level data in Son La province, Viet Nam for the first time. The results indicate a positive and significant influence of the head of household's education and owning livestock on participation, as well as the impact of extension services on household income per capita. With regard to the main hypothesis, it also unexpectedly suggests that differences in participation in the CCPO are not really meaningful.

Keywords: CCPO, Endogenous switching regression, Participant decision, Selection bias, Viet Nam, Son La, Northwest upland.

1. Introduction

After the political and economic reforms (Doi Moi) launched in 1986, Vietnam's society and politics have gradually progressed towards greater openness and tolerance for civil participation. The Viet Nam government has a strategy to make the country a more modern, industrialized society by 2020.

Although the Gross National Income (GNI) per capita for Viet Nam rose from 590\$ in 2004 to 1.730\$ in 2013, poverty in the country is still widespread and intense (The World Bank, 2014). Vietnam's economic development and social and political stability are heavily dependent on agriculture. Nearly 70% of the population live in the rural areas, 50% of the labor force is agricultural and agriculture accounts for nearly 75% of the total land in the year 2011 (GSO, 2012).

Recently, the information and culture network has been promptly upgraded, supporting the enhancement of the people's spiritual life. The communication systems in rural areas have been improved to better serve the needs of business and management activities in all sectors and in rural households. The number of households with a phone has increased from 5.3% in 2001 to 86.6% in 2011. The proportion of communes with a local loudspeaker system linked to the villages is 81.4% in 2011 (56.8% in 2006). The proportion of communes in rural areas with private Internet service points is developing very fast, from 32.5% in 2006 to 53.7% in 2011. The system of the CCPO continues to develop providing destinations for people to read papers, make phone calls, access internet, receive postal packages and meet and engage in cultural activities. By the year 2011, there were 7467 CCPOs in a total of 9071 communes in the whole country (GSO, 2012). This suggests the importance of the CCPOs in the social life of Vietnamese, especially in rural household life.

In this study, we apply the endogenous switching regression approach to the farm-level data for the first time. This method accounts for selection bias and quantifies the economic outcome indicators for discussion group membership by controlling both the observed and unobserved factors that affect participant decisions and income per capita of household. Many researchers have used the endogenous switching regression method to evaluate the impact of social programs in both group adoption and non-adoption on different economic indicators such as Alene and Manyong (2006); Läpple, Hennessy, and Newman (2013); Fuglie & Bosch (1995). In all cases, selection bias and the endogeneity of technology adoption was accounted for.

The CCPO is an important program in Viet Nam. There have been many meetings, and conferences have discussed and evaluated the impact of the CCPO on rural social life. However, to our knowledge, there is no study that uses the econometric approach to estimate the implications of the CCPO and that, based on the results, suggests policy to enhance or cut off the program. Therefore, this study provides an additional literature review for policy makers or those who are interested in the topic. This paper aims to (a) identify the factors that influence the probability of participation in the CCPO; (b) to estimate factors affecting the economic outcome indicators as to whether farmers participate in the CCPO program; and (c) to quantify the benefit of the decision to participate for both groups.

The following section discusses the back-ground information of the CCPO program. Section 3 presents the methodology. Section 4 describes the data and empirical models. Section 5 provides results and discussion, with the conclusions in section 6.

2. Background

Started in 1998, the CCPO is a large program of the Ministry of Information and Communications (MIC) of the Socialist Republic of Viet Nam, which includes business and social service activities. Basically, the CCPO is a combined model that provides postal and basic telecommunications services (including Internet access). It supplies information and free books and magazines for people in rural areas, especially in difficult communes. Its duty is to contribute to the development of the social and economic aspects of Vietnamese life, allowing people to acquire knowledge and understand the policies of the government. The average land area granted per point is 185 m². However, after 16 years of establishing and developing the program, some advantages and many disadvantages have become apparent.

The national conference of the CCPO held by the Ministry of Information and Communications on 8th January, 2011 concluded that the CCPO is a familiar destination for farmers where they are able

to read newspapers, send and receive letters, make phone calls, and access the internet for a low price. Therefore, it has helped to develop the rural economy, increase people's expectations in life and improve the conditions for people to have access to information technology, knowledge, and the policies of the party and the laws of the government. Nevertheless, after 13 years and the division of the Vietnam Posts and Telecommunication Group (VNPT) into the VNPT and VNPost (Viet Nam Post), the development of the rural economy, mobile phones, the internet, and postal services as well as the decrease in CCPO infrastructure, the volume of books and magazines, and the CCPO staff salaries, have made the program unsuccessful and in supportable (Viet Thang, 2012). According to the VNPost statistics, total income in quarter II, 2009 is 32.5 billion VND (1.823 million USD), averaging 1.347 million VND (75 USD) per CCPO per month, and the CCPO of the Hoang Van Thu ward (located in the Ha Noi capital) is only 5.000 VND per month (Minh Quyen, 2009). The number of CCPO decreased by 3.18% from 2006 to 2011 (GSO, 2012). The number of staff and visitors has also fallen over time.

Despite inefficient operation, the CCPO still maintains a very important policy in developing the social-economic life, reducing the gap between rural and urban and supporting the availability of information technology for farmers. Therefore, the Minister of the Ministry of Information and Communications called for a review of all CCPOs; the objectives were to maintain points in remote areas; to diversify and integrate services to maintain not only the social objectives but also the economic objectives; and to develop a comprehensive system of radio, television and telecommunications services, including broadband internet (Viet Thang, 2012). Hence, this article contributes to the literature by investigating the economic impact of participation in the CCPO using an endogenous regression model.

3. Methodology

The important issue in the evaluation of any social program is how to account for endogeneity and sample selection bias problems. Because of the hampering effect caused by the fact that the before and after activities of the farm are not observed, researchers usually have to change their approach to a comparison of the adopter and non-adopter (Fulie K.O, 1995). A suitable estimation method accounts for both endogeneity and sample selection bias, and participants and non-participants are not directly comparable; the endogenous switching regression model allows complete interaction between the participation and non-participation inputs in the income function (Alene & Manyong, 2006; Maddala, 1983). The self-selection bias corrected estimate of the impact of the program was addressed by using the comparison between expected outcome and the actual case (Läpple et al., 2013).

The literature suggests numerous econometric techniques in analyzing the impact of technology adoption on agricultural productivity and income. Yorobe & Smale (2012) estimated the impacts of Bt maize on smallholder income using two methods of instrumental variables estimation. The results indicated that the placement bias was not examined, while selection and endogeneity was examined (Yorobe & Smale, 2012). However, this method generates residuals that are heteroskedastic, and the result cannot be used to obtain the consistent standard errors without potentially cumbersome adjustments (Lokshin & Sajaia, 2004). An additional method that is commonly used in the quasi-experimental approach is propensity score matching (Dehejia & Wahba, 2002). However, this method does not account for unobserved variables. It is only used if the assumption is that selection is on the observable characteristics only (Heckman, 1998)

The endogenous switching regression model uses a probit model in the first stage to determine the relationship between participation in the CCPO program and a number of household, farm, and wealth characteristics. In the second stage, separate regression equations are used to model the household income per capita indicator on a specified criterion function for both groups conditional on selection.

Theoretically, the participation in the CCPO program is a dichotomous choice, for which the farmer decides to participate in discussion groups when there is a positive difference in the expected utility received between participation (D_1^*) and non-participation (D_0^*). Nevertheless, the participation in discussion groups (D) is observed, while the expected utility is not observed. Thus, using the underlying latent variable model, the participation decision is a probit model that can be expressed as:

$$D^* = \alpha Z + u \tag{1}$$

$$D = 1 \text{ if } D_1^* > D_0^*$$

$$D = 0 \text{ if } D_0^* \geq D_1^*$$

where Z is a vector of explanatory variables, α is a vector of parameters to be estimated, and u is a vector representing a normally distributed error term with mean zero and variance σ_u^2 . The error term includes measurement error and factors known by the farmer but not observed by the researcher.

It assumes that the choice of the farmer to participate in the CCPO program affects household welfare, such as household income per capita. In the endogenous switching regression model, separate outcome equations are specified for participants and non-participants.

$$Y_1 = \beta_1 X_1 + v_1 \tag{2}$$

$$Y_0 = \beta_0 X_0 + v_0 \tag{3}$$

Here, Y_1 is a dependent variable representing household income per capita under the participation in the CCPO, and Y_0 represents household income per capita under the non-participating CCPO program. β is a parameter to be estimated, X represents the explanatory variables, and v is an error term. That is, only Y_1 and Y_0 are observed for any given household, depending on the criterion function (1). This indicates that ordinary least squares regression (OLS) estimates of β_j will be biased if some unobserved farmer characteristics, such as farmer ability and skills, influence both the decision to participate and household income per capita.

Assume that the error term u , v_1 and v_0 have a trivariate normal distribution with mean vector zero and covariance matrix:

$$Cov(u, v_1, v_0) = \begin{bmatrix} \sigma_u^2 & \sigma_{u0} & \sigma_{u1} \\ \sigma_{u0} & \sigma_0^2 & . \\ \sigma_{u1} & . & \sigma_1^2 \end{bmatrix} \tag{4}$$

where σ_u^2 is a variance of error term u in the selection equation; σ_0^2 is the variance of v_0 ; σ_1^2 is the variance of v_1 ; and σ_{u0} and σ_{u1} are the covariance between u and v_0 and v_1 , respectively. The covariance σ_{01} is not defined, as Y_{0i} and Y_{1i} are never observed simultaneously. It can be assumed that $\sigma_u^2 = 1$, because α is estimable only up to the scalar factor. Under these assumptions, in the presence of selection bias, the expected values of the truncated error term ($v_1|D = 1$) and ($v_0|D = 0$) are:

$$E(v_1|D = 1) = E(v_1|u > -\alpha Z) = \sigma_{uv_1} \frac{\varphi(\alpha Z)}{\Phi(\alpha Z)} = \sigma_{uv_1} \lambda_1 \tag{5}$$

$$E(v_0|D = 0) = E(v_0|u \leq -\alpha Z) = \sigma_{uv_0} \frac{-\varphi(\alpha Z)}{1-\Phi(\alpha Z)} = \sigma_{uv_0} \lambda_0 \tag{6}$$

where Φ and φ are the cumulative distribution functions and the probability density of the standard normal distribution, respectively. The ratio of φ and Φ evaluated at αZ , using the probit estimation in equation (1), is the inverse Mills ratio [λ_1 and λ_0 in equations (5) and (6), respectively]. The terms λ_1

and λ_0 can be used as missing variables in equations (5) and (6). Substituting λ_1 and λ_0 , the household income per capita equation can be written as (Maddala, 1983):

$$Y_1 = \beta_1 X_1 + \sigma_{uv_1} \lambda_1 + u_1 \text{ if } D = 1 \quad (7)$$

$$Y_0 = \beta_0 X_1 + \sigma_{uv_0} \lambda_0 + u_0 \text{ if } D = 0 \quad (8)$$

where u_1 and u_0 have zero conditional means and are heteroscedastic (Maddala, 1983). In reality, if we use OLS to estimate equation (2) and (3), it will lead the parameters β_j to be biased and inconsistent, as the term $\sigma_{uv_j} \lambda_j$ is omitted. Recently, full information maximum likelihood (FIML), an efficient method to fit the endogenous switching regression model, has been widely used (Abdulai & Huffman, 2014; Lokshin & Sajaia, 2004). The FIML method is the simultaneous estimation of the selection and outcome equations to yield consistent standard errors. However, the FIML method has an identification problem in that it requires at least one variable in selection equation (1) that is not included in outcome equations (7) and (8). This means that we must choose at least one variable as a selection instrument that directly affects the decision to participate in the CCPO program but not the household income per capita.

We used the *movestay* command in STATA (Lokshin & Sajaia, 2004) to obtain the parameters of the endogenous switching regression model.

The signs of the estimated covariance $\rho_1(\sigma_{uv_1})$ and $\rho_2(\sigma_{uv_0})$ not only provide statistical evidence of sample selection bias but also have economic interpretations. The statistically significant estimates of ρ_1 and ρ_2 suggest that there is sample selection. It proves that using the endogenous switching regression model in this case is suitable. Moreover, if $\rho_1 > 0$ and $\rho_2 < 0$, this indicates that both groups have positive selection. This indicates that farmers who participate in the CCPO program have above-average returns from the participation and that those who choose not to participate have above-average returns from non-participation, while the opposite case is not to have the definition of the covariance terms. The same positive sign ($\rho_1 > 0$ and $\rho_2 > 0$) implies a positive selection for a group who choose participation and a negative selection for a group who choose non-participation. In this case, it suggests that participants have above-average returns whether they participate or not but that they are better off participating. If $\rho_1 < 0$ and $\rho_2 < 0$, this mirrors the explanation in the previous case (Läpple et al., 2013; Maddala, 1983)

The greater interest in this study is the effect of participation in the CCPO program on household income per capita. This can be examined by comparing the expected household income per capita of the participating members with the conditional expectations case that non-participant members will be participating in that program. They can be derived as follows (Maddala, 1983):

$$E(Y_1|D = 1) = \beta_1 X_1 + \sigma_{uv_1} \lambda_1. \quad (9)$$

$$E(Y_0|D = 1) = \beta_0 X_1 + \sigma_{uv_0} \lambda_1. \quad (10)$$

The interest parameter is the difference between expected outcome with and without participation in the CCPO program. This estimate is referred to as the average treatment effect on the treated (ATT) and is calculated as follows (Abdulai & Huffman, 2014; Heckman, J.J., Tobias, J.L., Vytlačil, 2001; Läpple et al., 2013):

$$ATT = E(Y_1|D = 1) - E(Y_0|D = 1) = X_1(\beta_1 - \beta_0) + \lambda_1(\sigma_{uv_1} - \sigma_{uv_0}) \quad (11)$$

4. Data and Empirical Models

4.1. Data

The data used for this study originates from a survey conducted in six communes located in three districts of Son La Province. The survey was carried out from February to March 2014. A multi-stage sampling procedure was used to select the respondents. In the first stage, three districts, namely, Mai Son, Moc Chau and Phu Yen, were purposively selected based on three categories of altitude, under 1000 m, from 1000 to 2000 m and higher than 2000 m, respectively. In the second stage, we randomly selected two communes in each district. These communes have a large area, but the density is very low. According to GSO (2014), while the density of the whole country is 268 people/km², the figure for Son La Province is 80 people/km² and approximately 40 people/km² per commune. Because one commune has at least one CCPO, we chose one village in which the CCPO is centrally located in and another village that has a CCPO located a great distance from it in the third stage. In the last stage, a total of 336 farmers was then randomly selected from the list of farm families in the 12 villages. Before conducting the research, a pre-test interview was administered to ensure the adequacy and reliability of the tools used to collect the relevant information.

The survey collected valuable information on several factors including household composition and characteristics, farm characteristics, crop production and cropping systems, household membership in different rural institutions and other information on the households.

The literature suggests that many factors influence adoption of or participation in social program. In this study, we included various proxies for household characteristics such as gender, age, schooling of household head, number of children in family, and off-farm labor; proxies for farm characteristics such as total farm size, livestock of farm, electricity cost, and total cost for cultivation; proxies for household assets such as motorcycles, televisions, VCD players, milling machines, and tractors; and proxies for institutional factors such as access to credit, access to extension services, membership in a rural group, distance from household to nearest market, the source of electricity for farm use, distance to the nearest CCPO, and the answer of respondent for the material of CCPO question (Alene & Manyong, 2006; Amare, Asfaw, & Shiferaw, 2012; Asfaw, Shiferaw, Simtowe, & Lipper, 2012).

Table1 represents the definition and the mean values used in this study; 103 (30.7%) respondents in the survey answered that there is at least one family member that usually visit the CCPO, which is the dependent variable for the selection equation. The dependent variable for the outcome equation is defined as the total household income per capita. Previous studies usually used household income for household welfare indicators. However, per capita income is better because it automatically controls for household size, giving a measure of individual welfare, notwithstanding that this measure does not account for the economic scale in larger households (Paweenawat & McNown, 2014). The mean family size is a decreasing function of family income per capita that mirrors household income. It can be very defective if the policy decisions based on household income rather than household per capita income (G. Datta& J. Meerman, 1977). In this survey area, the mean household income per capita is 20 million Viet Nam Dong per year ($\approx 944\$/\text{year}$).

Three regional dummy variables account for the three districts that took the survey. Mai Son is located near the Son La Province capital, where the transportation and economy are more developed. This region has also had good natural conditions to develop cultivation and livestock. In this study, to avoid the dummy variable trap and perfect multicollinearity, we chose this region for the basic group, which is used for comparison with other regions.

Table 1: Definitions and summary statistic of the variables used

Variables	Definition	Mean	Std.Dev
Income_hh	Total household per capita(1000vnd/person)	20473.81	13132.56
Participants	Takes the value 1 if farmer answered usually visit CCPO; 0= otherwise	0.31	0.46

Variables	Definition	Mean	Std.Dev
D_gender	Gender of household head , 1= male, 0= female	0.89	0.31
Age	Age of household head (years)	44.93	11.51
Edu	Schooling of household head (years)	6.86	3.18
Child	Number of children in household (Person)	1.36	0.89
D_off_farm	Off-farm labor, 1= have off-farm labor, 0=otherwise	0.12	0.33
Farm_size	Total farm size (ha)	1.93	1.45
D_livestock	Livestock of household, 1= have livestock, 0= otherwise	0.49	0.50
Cost_elect	Electric cost per month (1000vnd)	106.46	96.32
Total_cost	Total cost of household for cultivation (1000vnd)	20090.5	12381.82
D_motor	Motorcycle in household, 1= have motorcycle, 0= otherwise	0.95	0.22
D_TV	Television in household, 1= have TV, 0= otherwise	0.93	0.25
D_vcd	VCD player in household, 1= have VCD, 0= otherwise	0.67	0.47
D-milling	Milling machine in household, 1= have milling, 0=otherwise	0.22	0.41
D_tractor	Tractor for household, 1= have tractor, 0- otherwise	0.27	0.44
D_credit	Takes the value 1 if farmer has accessed to credit; 0= not	0.65	0.48
D_extens	Takes the value 1 if the farmers obtained the information from extension services; 0= none	0.21	0.41
D_member	Takes the value 1 if the farmer has group membership; 0= not a member	0.79	0.41
Dis_market	Distance from household to nearest market (m)	8592.26	6769.3
D_source_elect	Source of electricity of household, 1= use national source, 0= otherwise	0.92	0.28
Dis_post	Distance from household to nearest CCPO (m)	3095.29	3880.35
D_material	Materials in the CCPO, which take the value 1 if farmer answered sufficient material; 0- Need to add more	0.13	0.34
D_pyen	Takes the value 1 if farmer lives in Phu Yen district, 0= otherwise	0.32	0.46
D_mchau	Takes the value 1 if farmer lives in Moc Chau district, 0= otherwise	0.34	0.47
D_Mson	Takes the value 1 if farmer lives in Mai Son district, 0= otherwise	0.34	0.48

Source: Self survey

It can be observed from the table that the majority of household heads of family are male (89%), who is typically the main source of labor and decision making for the family. Household heads in the sample have an average age of 45 years and graduated at grade 6, with the total number of grades being 12. We believe that household heads with more education will more likely visit the CCPO. The average farm size is 1.96 ha; however, if farmers have a large area, it means that they own large areas of forest mountain land where it is very difficult to produce. In these areas, many households can use a national electricity source, but 8% still do not have electricity for family activities. Distance to the CCPO and the material in the CCPO are believed to affect the frequency of visits of the farmer. When farmers say that the material at the CCPO is sufficient, it means that they are more interested in participating in the CCPO, while the distance to the CCPO is an inhibiting factor for visits to the CCPO.

Table 2: Comparison of the characteristics of participation and non- participation

Variables	Non- participation (N= 233)	Participation (N=103)	Difference
Income_hh	19926.01	21712.98	$t = -1.0504$
D_gender	0.89	0.88	$\chi^2 = 0.24$
Age	45.52	43.62	$t = 1.47$
Edu	6.64	7.36	$t = -1.87^*$
Child	1.39	1.30	$t = 0.90$
D_off_farm	0.08	0.20	$\chi^2 = -2.68^{***}$
Farm_size	1.81	2.19	$t = -1.94^*$
D_livestock	0.45	0.55	$t = -1.67^*$
Cost_elect	102.90	114.52	$t = -0.89$
Total_cost	19657.59	21069.81	$t = -0.88$
D_motor	0.95	0.95	$\chi^2 = -0.11$
D_TV	0.94	0.92	$\chi^2 = 0.43$

Variables	Non- participation (N= 233)	Participation (N=103)	Difference
D_vcd	0.66	0.69	$\chi^2 = -0.51$
D-milling	0.19	0.28	$\chi^2 = -1.80^*$
D_tractor	0.26	0.30	$\chi^2 = -0.81$
D_credit	0.61	0.73	$\chi^2 = -2.18^{**}$
D_extens	0.21	0.19	$\chi^2 = 0.43$
D_member	0.77	0.827	$\chi^2 = -1.22$
Dis_market	8309.01	9233.01	$t = -1.17$
D_source_elect	0.93	0.89	$\chi^2 = 0.97$
Dis_post	3658.79	1820.39	$t = 5.08^{***}$
D_material	0.03	0.37	$\chi^2 = -7.02^{***}$
D_pyen	0.30	0.34	$\chi^2 = -0.63$
D_mchau	0.36	0.28	$\chi^2 = 1.52$
D_mson	0.33	0.38	$\chi^2 = -0.84$

Note: ***,**,* indicate significance at 1%, 5% and 10% respectively.

Source: Self survey

Table 2 outlines the differences in the characteristics of participation and non-participation. The results indicate some notable differences between the two groups, which are confirmed using statistical tests (a *t*-test for the continuous variables and a chi-square test for the category variables). No significant difference is observable in the age, gender of household head and the number of children. The level of education of the household head and the off-farm labor of the household is significantly higher for those who participate in the CCPO program. This suggests that education and off-farm labor may be correlated with the decision to participate. In term of proxies for farm characteristics, there is significant difference between two groups in farm size and livestock activities variables. All of the proxies for household assets are not significantly different except the milling variable. This indicates that the participating group had more milling than the non-participating groups, and they are more likely to visit the CCPO to obtain more information for better milling.

CCPO participation is also distinct in terms of the access to credit, as indicated by the percentage of farmers who borrow from the government banks, local banks or private credit funds. Participants might have more information and are also more likely to access credit to invest in their farm or off-farm activities to increase income and also household welfare. Moreover, both the distance to the CCPO and the quantity and quality of materials in the CCPO are significantly higher for participants. The results also indicate that no significant difference is observed in the access to extension services, membership in a community or farmer group, the distance to the nearest market and the source of electricity used.

4.2. Empirical Model

The literature indicates that the model is identified only if the second-stage regression does not include at least one explanatory variable in the first-stage probit regression (Maddala, 1983). In this research, the selection probit function included four identification restrictions such as use of Television and VCD in the household, distance to the nearest CCPO and the status of the material in the CCPO based on the respondent answers. It is hypothesized that these variables are influenced through the decision to participate decision. Our hypothesis is based on the fact that the majority of families use TV and VCD for entertainment so that it might not affect the income of the household directly.

The probit model of participation in the CCPO was specified and estimated as:

Participation = f (d_gender, age,edu,child,d_off_farm,d_livestock,farm_size,cost_elect,total_cost,d_tractor,d_milling,d_motor,d_source_elect,dis_market,d_credit,d_extens,d_member,d_pyen,d_mchau,d_tv,d_vcd,dis_post,d_material)

The separate household incomes per capita function for participation and non- participation, jointly with the probit selection equation,were specified as:

$Ln(Y_j) = f(d_gender, age, edu, child, d_off_farm, d_livestock, farm_size, cost_elect, total_cost, d_tractor, d_milling, d_motor, d_source_elect, dis_market, d_credit, d_extens, d_member, d_pyen, d_mchau)$

where: Y, the dependent variable, is household incomes per capita; j= 1 if household participation in the CCPO and 0 for non-participation.

The main hypothesis of this study is that participation in the CCPO has significantly different effects on total household income per capita.

5. Results and Discussion

The estimates of the probit model of the discussion group participation decision are presented in table 3. This result is based on estimation from the endogenous switching regression model.

The results indicate that the coefficient of education of household head is positive and significant, suggesting that the more educated household heads are more likely to participate in the CCPO. This finding is similar with the notion that education is an important factor in helping farmers to adopt new innovations and to make technology decisions (Huffman, 2001). The variable livestock of farm is also positive and statistically significant, indicating that farms with livestock are more likely to visit the CCPO to read and have access to information that is related to livestock. This result confirms the importance of livestock activities in the farm’s economic well-being.

The source of electricity has a negative effect on the frequency of visits to the CCPO. If the household has a national electric source, the best source, they are more likely to use it for farming as well as at home for the Television and VCD to access information or entertainment rather than to take the time to go to the CCPO.

In terms of regional effects, the results indicate that farmers who are living in the Phu Yen district and Moc Chau district have a lower probability of participating in discussion groups, other things being equal, compared with farmers in the Mai Son district. The Phu Yen and Moc Chau districts have higher altitudes, difficulties in transportation, more ethnic groups, and a lower level of education; therefore, farmers are less likely to participate in the CCPO. The coefficients of household head age, number of children in family, farm size and total farm cost do not have a significant effect on participation. The non-significance of age is similar to the finding in Läpple et al.(2013), which implies that the age of the household head does not affect the decision to participate.

In terms of the four identified restriction variables, distance to nearest CCPO has a positive significance, although material in the CCPO has a negative and statistically significant effect on the CCPO participation decision. These results prove the hypotheses, indicating that households that are far from the CCPO have less desire to visit, while if the material at the CCPO decreases, the number of visitors will also decrease. However, owning a Television and VCD do not have significant effects, suggesting that farmers are likely to use the TV and VCD for entertainment purposes rather than obtaining agricultural knowledge from information sources. If they have a TV and VCD, they might stay at home rather than go to the CCPO.

Table 3: Discussion group participation

Variables	Coefficient	Std. err	z-statistic
d_gender	-0.1112	0.2905	-0.38
Age	-0.0125	0.0090	-1.39
Edu	0.0609*	0.0316	1.93

Variables	Coefficient	Std. err	z-statistic
Child	-0.1812	0.1138	-1.59
d_off_farm	0.1005	0.2841	0.35
farm_size	0.0656	0.0841	0.78
d_livestock	0.3677*	0.1967	1.87
cost_elect	0.0008	0.0009	0.93
total_cost	7.96e-06	9.43e-06	0.84
d_motor	-0.2144	0.4177	-0.51
d_tv	0.2222	0.5594	0.40
d_vcd	-0.0016	0.2098	-0.01
d_milling	-0.1614	0.2336	-0.69
d_tractor	0.0034	0.2649	0.01
d_credit	0.2239	0.1983	1.13
d_extens	-0.2924	0.2247	-1.30
d_member	0.2664	0.2361	1.13
d_source_elect	-2.5326***	0.5985	-4.23
dis_market	-0.00002	0.00002	-0.81
dis_post	-0.0002***	0.00004	-4.24
d_material	2.2952***	0.3707	6.19
d_pyen	-0.9934***	0.3237	-3.07
d_mchau	-0.8511***	0.2999	-2.84
Constant	2.3051	0.8684	2.65

Note: ***, **, * indicate significance at 1%, 5% and 10% levels, respectively.
 Source: Self survey.

The FIML estimates of the endogenous switching regression model of household income per capita are reported in Table 4. The last two rows of the table present the estimates of the correlation coefficient between the random errors in the system equations. The correlation coefficients ρ_1 and ρ_2 are both positive (case 2) but are significant only for the correlation between the participant equation and total household income per capita equation. Because ρ_1 is positive and there is significant difference from zero, this indicates that the observed and unobserved factors influence the participation decision to frequently visit the CCPO, which confirms that an endogenous switching regression model is the appropriate model. That ρ_1 and ρ_2 are positive implies that participation in the CCPO had a significant impact on total household income per capita and that the participants would have obtained above-average income from participation regardless of participation, but they are better off choosing to participate; however non-participants have below-average income in either case, and they are better off participating.

Overall, the results indicate that age of household head, off-farm labor, livestock of family, electric cost and total cultivation cost are statistically significant in both groups. The negatively significant age of household head suggests that the older the household head, the less family member income is because the household head is the main source of labor that controls and earns profit for the family. The positive significance of off-farm labor and livestock activities indicates that these are important factors that can increase household income in addition to the cultivation activities, implying that the more off-farm labor and number of livestock, the more income the household is able to obtain. The increase in the electricity and total cultivation cost will make the income of the farm also increase, in fact indicating successful investment. This indicates that households invested in modern technologies for cultivating such as pumps, mills, tractors, hybrid seed, etc.

Table 4: Endogenous switching regression results for impact of participation on household income per capita

Variables	Participants		Non-participants	
	Coefficient	Std. err	Coefficient	Std. err
d_gender	0.0936	0.1262	-0.0105	0.0968
age	-0.0089**	0.0043	-0.0102***	0.0028

Variables	Participants		Non-participants	
	Coefficient	Std. err	Coefficient	Std. err
edu	0.0315**	0.0136	-0.0042	0.0105
child	-0.0407	0.0515	-0.1329***	0.0359
d_off_farm	0.2929**	0.1171	0.4051***	0.1127
farm_size	0.0387	0.2805	0.1874 ***	0.0296
d_livestock	0.2634***	0.0924	0.1304**	0.0640
cost_elect	0.0007*	0.0004	0.0013***	0.0004
total_cost	0.00002***	3.73e-06	0.00002***	3.18e-06
d_motor	0.1319	0.1922	-0.2013	0.1357
d_milling	0.2089**	0.1014	-0.0386	0.0819
d_tractor	0.1344	0.1093	0.0793	0.0858
d_credit	0.0589	0.0909	-0.0327	0.0626
d_extens	0.2914***	0.1022	0.0209	0.0710
d_member	0.0011	0.1104	-0.0330	0.0733
d_source_elect	-0.1113	0.1676	0.4889***	0.1490
dis_market	0.00003***	9.19e-06	-5.77e-06	5.81e-06
d_pyen	-0.2213*	0.1171	0.0252	0.0932
d_mchau	0.1171***	0.1525	-0.0144	0.0870
Constant	8.3971	0.3426	9.3267	0.2794
σ_1	0.3874***	0.0305		
σ_2			0.4271***	0.0202
ρ_1	0.4231**	0.1878		
ρ_2			0.0995	0.2901

Note: ***, **, * Significant at 1%, 5% and 10%, respectively.

Source: Self survey.

While education of the household head, ownership of milling of household, the access to extension services and the distance to nearest market have a significant and positive effect for participants, they have no significant effect for non-participants on the household income per capita. The education of the household head and the access to extension services raised participant income per capita by 3.15% and 29.14%, respectively, but they were not significant for non-participants. This is inconsistent with the Abdulai and Huffman (2014) findings and could be because the experience of the farmer is a more important factor than education or information from extension agents in terms of the non-participating members. The significance of distance to nearest market variable of the participant group is similar with the Tipraqsa and Schreinemachers (2009) results, implying that households farther away from the market experience more market integration and may have greater income. Farmers in the participant group with higher education and more information from extension services realize that with the same price as selling agricultural products to the middleman, they are better off not wasting time, and costs to go to the market.

The number of children is statistically significant but has a negative effect on the non-participant group only, suggesting that the non-participant group with lower income per capita will experience difficulty if the number of children increases but this will not happen with the participant group. Therefore, the Vietnamese government introduced the family planning program, suggesting that families must have one or two children to lessen the difficulties for the family and also for social reasons (Ministers Council of Viet Nam, 1988). The results indicate that electric source is positive and significant with the non-participant group but has no significant effect for the participant group, indicating that perhaps non-participant members depended more on electricity in farm activities. The effects of owning motor, tractor, access to credit and membership in rural or farmer group is not significant for either group.

Finally, region variables have different significant effects on income per capita for the participant group but no significance for the non-participant group. While farmers in the Phu Yen district achieve significantly lower income, farmers in the Moc Chau district achieve significantly

higher income per capita than the farmers in the Mai Son district. This difference is based partly on the natural and transport conditions in these regions. The Moc Chau district is a wide and beautiful plateau in the northern uplands with many national roads, green hills, and cool weather all year round. This district has a variety of agricultural products such as maize, lush tea, cow milk and is also an attractive place for tourists from all over the world. Therefore, this region can achieve more income per capita than other regions in the Son La Province and also in the northwest area.

As mentioned above, the greater interest in this study is to determine the effect of participation group membership by comparing the expected income per capita for participants $E(Y_1|D = 1)$ with the conditional expectation that non-participants will participate in the CCPO program $E(Y_0|D = 1) = \beta_0$. This different effect is calculated following equation (11) and is presented in Table 5.

Table 5: Estimated Average Treated for Treatment (ATT) of the impact of participation on household income per capita

Items	ATT	Treated	Control	Difference	Std. Err
Per capita household income	$E(Y_1 - Y_0 D=1)$	9.771	9.717	0.054	0.066

Source: Self survey (2014)

The overall estimates indicate that participation in the CCPO program has positive but non-significant effects on total household income per capita. The result shows that farmers who participated in the CCPO program have approximately 5.4% higher total household income. As an unexpected contrast with the main hypothesis that participation in the CCPO has statistically significant different effects, this result suggests that the difference is not really meaningful for non-participating members.

6. Conclusion

Based on a random sample of 336 farm households in Son La Province, Viet Nam, this paper examines the factors that influence the probability of participation in the CCPO program, as well as the impact of participation on household income per capita. Comparisons of average per capita income between participation and non-participation in the CCPO program revealed no significant difference. We used the endogenous switching regression approach to control for unobserved factors and to capture the differential impact of participation on participants and non-participants in the CCPO program. Related to the diffusion, it is important to note that sample selection bias would result if the outcome equation (income per capita) was used to estimate without considering the participant decision.

The results indicate a positive and significant influence of household head education and owning livestock on participation, as well as an impact on household income per capita. These results suggest that knowledge is a very important factor to increase the social-economic life of farmers, especially with mountainous areas and ethnic groups, thus supporting the decisions of the Vietnamese Government regarding the goals of the national program of education and training for the period 2012-2015. The goals of this program are maintaining universal education, helping children in difficulty areas and encouraging ethnic groups to go to school (Viet Nam Government, 2012). The life of farmers is very difficult if they only work on cultivation; therefore, they are better off adding to agricultural activities by raising livestock, engaging eco-tourism, and varying crops and products.

The negative significance of distance to the CCPO and the positive significance of material variables are consistent with our hypotheses, suggesting that if households are far from the CCPO and the material at the CCPO is not sufficient, farmers will not want to go to the CCPO. Hence, the question is how to improve the quantity and quality of CCPOs to attract famers? This question has been the concern of many meetings and conferences of the Vietnamese government, the local government and the VNPT. Recently, there have been an increasing number of books, magazines, and papers, and computers have been equipped with the internet. These policies are believed to increase the

availability of information and technology for farmers, especially in difficult regions, in an adequate and timely fashion.

Our estimates suggest positive self-selection in both the participant and non-participant groups, and significance only for the participant equation. This implies that farmers in both groups are better off participating in the CCPO as it could lead to a higher per capita income. However, the different effects between the expected outcome for participants and what non-participants would have achieved had they participated is not meaningful and not sufficiently high. This is based on the reality that 47.4% of the participant respondents visit the CCPO to read papers and magazines, while the rest go to make phone calls, receive post parcels or join meetings. In addition, 87% of respondents answered that the material at the CCPO is not updated and not sufficient for their desires and requirements.

References

- [1] Abdulai, A., & Huffman, W, 2014. The Adoption and Impact of Soil and Water Conservation Technology : An Endogenous Switching Regression Application.
- [2] Alene, A. D., & Manyong, V. M, 2006. The effects of education on agricultural productivity under traditional and improved technology in northern Nigeria: an endogenous switching regression analysis. *Empirical Economics*, 32(1), 141–159. doi:10.1007/s00181-006-0076-3
- [3] Amare, M., Asfaw, S., & Shiferaw, B, 2012. Welfare impacts of maize-pigeonpea intensification in Tanzania. *Agricultural Economics*, 43(1), 27–43. doi:10.1111/j.1574-0862.2011.00563.x
- [4] Asfaw, S., Shiferaw, B., Simtowe, F., & Lipper, L, 2012. Impact of modern agricultural technologies on smallholder welfare: Evidence from Tanzania and Ethiopia. *Food Policy*, 37(3), 283–295. doi:10.1016/j.foodpol.2012.02.013
- [5] Dehejia, R. H., & Wahba, S, 2002. Propensity score-matching methods for nonexperimental causal studies. *The Review of Economics and Statistics*, 84(February), 151–161.
- [6] Fuglie, K. O., & Bosch, D. J., 1995. Implications of soil nitrogen testing: a switching regression analysis. *Am J Agric Econ*, 77, 891–900.
- [7] G. Datta & J. Meerman, 1977. Household income or household income per capita. *World Bank*.
- [8] GSO, 2012. *Results of the 2011 Rural, Agricultural and Fishery Census*. General Statistic Office.
- [9] GSO, 2014. Monthly statistic. Retrieved from General Statistics Office of Viet Nam-<http://www.gso.gov.vn/default.aspx?tabid=430&idmid=3>
- [10] Heckman, J. J, 1998. Matching As An Econometric Evaluation Estimator. *Review of Economic Studies*, 261–294.
- [11] Heckman, J.J., Tobias, J.L., Vytlacil, E. , 2001. Four Parameters of Interest in the Evaluation of Social Programs. *Southern Economics Journal*, 68, 210–233.
- [12] Huffman, W. E, 2001. Human capita: education and Agriculture. In *Handbook of Agricultural Economics 1B*, ed. Bruce L, Gardner and Gordon C, Rauser. Amsterdam: Elsevier Science.
- [13] Läpple, D., Hennessy, T., & Newman, C, 2013. Quantifying the Economic Return to Participatory Extension Programmes in Ireland: an Endogenous Switching Regression Analysis. *Journal of Agricultural Economics*, 64(2), 467–482. doi:10.1111/1477-9552.12000
- [14] Lokshin, M., & Sajaia, Z, 2004. The Stata Journal. *The Stata Journal*, 282–289.
- [15] Maddala, G. , 1983. Limited-Dependent and Qualitative Variables in Economics. *New York: Cambridge University Press*.
- [16] Minh Quyen, N. M, 2009. CCPO's staffs quit job because of low income. Retrieved from <http://ictnews.vn/kinh-doanh/nhan-vien-diem-bdvhx-bo-viec-vi-thu-nhap-thap-21075.ict>
- [17] Ministers Council of Viet Nam, 1988. Decision 162/HDBT of ministers council about some policy on population and family planing on 18/10/1988. Retrieved August 27, 2014, from [http://moj.gov.vn/vbpq/Lists/Vn bn php lut/View_Detail.aspx?ItemID=2398](http://moj.gov.vn/vbpq/Lists/Vn%20bn%20php%20lut/View_Detail.aspx?ItemID=2398)

- [18] Paweenawat, S. W., & McNown, R, 2014. The determinants of income inequality in Thailand: A synthetic cohort analysis. *Journal of Asian Economics*, 31-32, 10–21. doi:10.1016/j.asieco.2014.02.001
- [19] The World Bank, 2014. Vietnam. Retrieved August 29, 2014, from <http://data.worldbank.org/country/vietnam>
- [20] Tipraqsa, P., & Schreinemachers, P, 2009. Agricultural commercialization of Karen Hill tribes in northern Thailand. *Agricultural Economics*, 40(1), 43–53. doi:10.1111/j.1574-0862.2008.00343.x
- [21] Viet Nam Government, 2012. The national program of education and training, period 2012-2015. *The Prime Minister*. Retrieved August 28, 2014, from http://vanban.chinhphu.vn/portal/page/portal/chinhphu/hethongvanban?class_id=2&mode=detail&document_id=163488
- [22] Viet Thang, 2012. The national conference of CCPO. *Ministry of Information and Communications of Viet Nam*. Retrieved August 22, 2014, from <http://mic.gov.vn/tintucsukien/tinhoatdongcuabo/Trang/HộinghịToànquốcvềĐiệnBưuđiện-Vãnhóaxã.aspx>
- [23] Yorobe, J. M., & Smale, M, 2012. Impacts of Bt Maize on Smallholder Income in the Philippines, *15*(2), 152–162.