

**JOURNAL OF SOCIAL AND DEVELOPMENT SCIENCES  
(JSDS)**

**Vol. 6 No. 4**

**ISSN 2221-1152**

**Published by**

**International Foundation for Research and Development  
(IFRD)**

## **Editorial**

Journal of Social and Development Sciences (JSDS) is a scholarly journal deals with the disciplines of social and development sciences. JSDS publishes research work that meaningfully contributes towards theoretical bases of contemporary developments in society, business and related disciplines. The work submitted for publication consideration in JSDS should address empirical and theoretical contributions in the subjects related to scope of the journal in particular and allied theories and practices in general. Scope of JSDS includes: sociology, psychology, anthropology, economics, political science, international relations, linguistics, history, public relations, hospitality & tourism and project management. Author(s) should declare that work submitted to the journal is original, not under consideration for publication by another journal, and that all listed authors approve its submission to JSDS. It is JSDS policy to welcome submissions for consideration, which are original, and not under consideration for publication by another journal at the same time. Author (s) can submit: Research Paper, Conceptual Paper, Case Studies and Book Review. The current issue of JSDS consists of papers of scholars from Malaysia, Indonesia, Albania, Poland, Ghana, Bangladesh, Germany and Thailand. Fiscal decentralization & poverty, environmental economics for a sustainable development, small business success, strategic plans program, revenues and levies, corporate social responsibility, experience, education & entrepreneurial success, livestock management, gendered decision-making, sustainability of rice farmers, reducing the impact of sedimentation and relocation of street vendors are some of the major practices and concepts examined in these studies. Journal received research submission related to all aspects of major themes and tracks. All the submitted papers were first assessed by the editorial team for relevance and originality of the work and blindly peer reviewed by the external reviewers depending on the subject matter of the paper. After the rigorous peer-review process, the submitted papers were selected based on originality, significance, and clarity of the purpose. Current issue will therefore be a unique offer, where scholars will be able to appreciate the latest results in their field of expertise, and to acquire additional knowledge in other relevant fields.

Prof. Nek Kamal Yeop Yunus, Ph. D.  
Editor In Chief

**Editorial Board**

**Editor In Chief**

Nek Kamal Yeop Yunus, Ph. D, University Pendidikan Sultan Idris, Malaysia

**Members**

N. Panchanatham, Ph. D, Annamalai University, India  
Somnath Sen, Ph. D, Birmingham University, UK  
Anton Miglo, Ph. D, School of business, University of Bridgeport, USA  
Mamta B Chowdhury, Ph. D, University of Western Sydney, Australia  
R. K. Uppal, International University of Contemporary Studies, USA  
Ketna Mehta, Ph. D, Welinkar Education, India  
Khorshed Chowdhury, Ph. D, University of Wollongong, Australia  
Inderjeet Singh, Ph. D, Punjabi University, Patiala, India  
Ananda Wickramasinghe Ph. D, CQ University, Australia  
Hai-Chin YU, Ph. D, Chung Yuan University ,Chungli, Taiwan  
Mohan Bhai Patel, Ph. D, N S Arts College, India  
Yapa M W Y Bandara, Ph. D, Charles Sturt University, Australia  
Pacha Malyadri, Ph. D, Osmania University, Andhra Pradesh, India  
Chux Gervase Iwu, Ph. D, Cape Peninsula University of Technology, South Africa  
Pratibha Samson Gaikwad, Ph. D, Shivaji University of Pune, India  
Mohammad Reza Noruzi, Ph. D, Tarbiat Modarres University, Tehran, Iran  
M Azhar Khan, Ph. D, Hokkaido University, Japan  
Rajendra Parsad GUNPUTH, Ph. D., University of Mauritius, Mauritius

**Table of Contents**

<b>Description</b>	<b>Pages</b>
Title	1
Editorial	2
Editorial Board	3
Table of Contents	4
Papers	5
Islamic Entrepreneurship in the Light of Maqasid Al-Shari'ah: A Critical Review <a href="#">Farida Mohammed Shehu, Nor Hayati Binti Ahmad, Al-Hasan Al-Aidaros</a>	6
Fiscal Decentralization and Poverty in Papua Province <a href="#">Suwandi, Nuralam</a>	15
"Environmental Economics for a Sustainable Development" Evaluation of Environmental and Recreational Values of the Area Lezhe -Shengjin using Indirect Approximate Method "Hedonic Price Method" <a href="#">C. Erinda IMERAJ, C. Sonila GRUDA, Ing. Zef IMERAJ</a>	22
Key Factors of Small Business Success: Literature Review <a href="#">Małgorzata Okręglicka</a>	31
Analysis of Factors Affecting the Implementation of Strategic Plan Program Development Village (RESPEK) Increase in Welfare Society in Nabire Regency <a href="#">Eduard Lodewyk Pesiwariisa, Mugiati</a>	38
The Tendency of Revenue and Levies Contributions to the PAD Jayapura before and after the Law No. 28 of 2009 <a href="#">FahrudinPasolo</a>	48
Corporate Social Responsibility of Mining Companies in Ghana: The case of Newmont Ghana Gold Limited at Ahafo <a href="#">Daniel Owusu-Ansah, Samuel Adu-Gyamfi, Edward Brenya, Yaw Amo Sarpong<sup>1</sup>, David Damtar</a>	53
Experience, Education, and Entrepreneurial Success: A View from Bangladesh <a href="#">Mahfuza Khatun, Sikandar Siddiqui</a>	72
Livestock Management and Gendered Decision-Making in Rural Cambodia <a href="#">John Walsh</a>	83
Sustainability of Rice Farmers: Farming of Rural Communities in the Spiritual Meaning Perspective of Seed Storage <a href="#">Irmayani, Darmawan Salman, Amaluddin, Sitti Rahbiah Busaeri</a>	92
Anafre River Management Based on Local Communities in Reducing the Impact of Sedimentation in Gulf of YOS Sudarso <a href="#">Annita Sari, Dahlan, Mahatma Lanuru</a>	98
A Strategic Policy Initiative for the Post-relocation of Street Vendors: Case of Surakarta, Indonesia <a href="#">Anggraeni Permatasari</a>	104

## **PAPERS**

## Islamic Entrepreneurship in the Light of Maqasid Al-Shari'ah: A Critical Review

Farida Mohammed Shehu, Nor Hayati Binti Ahmad, Al-Hasan Al-Aidaros  
University Utara Malaysia, Malaysia  
fmshehu@yahoo.com

**Abstract:** The objectives of entrepreneurship in Islam are guided by the *Maqasid Al-Shariah*. However, there is a mismatch between Islamic entrepreneurship objectives and *Maqasid Al-Shariah* based on available literatures, which have not been critically investigated. This paper presents a critical review of the literature within the Islamic entrepreneurship objectives and *Maqasid Al-Shariah* framework. The exploratory study adopting content analysis to achieve its aim found that the existing literature covered both the *Din* and *Mu'amalah* based objectives of Islamic entrepreneurship. However, there is dearth of literature that integrates the connection between objectives of Islamic entrepreneurship and *Maqasid Al-Shari'ah*. It is therefore suggested that researchers should conduct more researches to examine the integration of *Maqasid Al-Shariah* in Islamic entrepreneurship, particularly in respect to decision making in handling entrepreneurship issues.

**Keywords:** *Islamic entrepreneurship, business, Maqasid Al-Shari'ah*

---

### 1. Introduction

The different views and issues surrounding entrepreneurship contributed to the development of researches and interest in the Islamic perspective of entrepreneurship. It is observed that issues affecting entrepreneurship are still addressed with little or no consideration to Islam. Islamic entrepreneurship however, is a more actual system which is based on the *Al-Quran* and *Sunnah* of the Prophet, Peace be Upon Him (PBUH). It is therefore imagined that the objectives surrounding Islamic entrepreneurship or doing business are supposed to be directed by *Maqasid Al-Shari'ah*. However, there is a mismatch between the objectives of Islamic entrepreneurship and *Maqasid Al-Shari'ah*. This paper is therefore a modest effort to fill this gap through highlighting the variations as well as consideration for integrating the two i.e. objectives of Islamic entrepreneurship and *Maqasid Al-Shari'ah*. The paper consists of five sections. Section one provides the brief background of the issue while section two describes the Islamic entrepreneurship in terms of definition, Islamic proof of entrepreneurship and objectives of Islamic entrepreneurship. Section three provides the definition and objectives of *Maqasid Al-Shari'ah*, while section four illustrates the integration between *Maqasid Al-Shari'ah* and objectives of Islamic entrepreneurship in a conceptual framework. Section five concludes the paper.

### 2. Islamic Entrepreneurship

**Definition of Islamic Entrepreneurship:** Islamic entrepreneurship is a composition of two concepts; Islam and entrepreneurship (Gümüşay, 2015). According to Zarabozo (2007) belief in Allah (SWT) is the foundation of the complete faith of Islam followed by all other Islamic beliefs and practices. The word Islam which has its origin from the Arabic word '*Salam*' meaning peace entails submission to Allah (SWT) (Belt, 2002). The definition of Islam is clearly portrayed in a *Hadith* narrated by Abu Huraira; the prophet Peace Be Upon Him (PBUH) is asked by angel Jibril about faith, Islam and *Ihsan* (perfection) and Allah's Apostle replied, "faith is to believe in Allah, His angels, (the) meeting with Him, His Apostles, and to believe in Resurrection." Islam is "To worship Allah Alone and none else, to offer prayers perfectly to pay the compulsory charity (*Zakkah*) and to observe fasts during the month of *Ramadan*." *Ihsan* is "To worship Allah as if you see Him, and if you cannot achieve this state of devotion then you must consider that He is looking at you....." (*Sahih Bukhari*, Book 2, *Hadith* Number 47) Islamic entrepreneurship is therefore connected with belief and obedience to Allah (SWT) (Alserhan, 2011).

Entrepreneurship is all about taking risk, creativity, innovation, and management of a firm and taking advantage of market opportunities (Abu-Saifan, 2012; Bula, 2012; Eroglu & Picak, 2011). However, Binks and Vale (1990) provided a more dynamic outlook of entrepreneurship as a series of activities. Entrepreneurship

is further seen as the examination of how, by whom and with what effects opportunities to create future goods and services are discovered, evaluated and exploited (Shane & Venkataraman, 2000; Shane, 2003). Entrepreneurship is believed to compel economic growth and development in numerous countries (Hanafi, 2012). Entrepreneurship has been part of the Muslims life before the Prophet's era (Abdullah & Mikail, 2013) and during the time of the Holy Prophet (PBUH) (Hamid, 2012). The Prophet (PBUH) himself was exposed to entrepreneurial activities since when he was a young boy (Abdullah & Mikail, 2013) and he later engaged in trade with a successful business woman Khadija who later became his wife (Azmi, Basir, Muwazir, Hashim & Mohamed, 2014). According to Rice (1999) when Muslim traders travelled to far-away lands, the dwellers of the lands use to be overwhelmed by the way they carry out their businesses and social relationships which made the dwellers curious about their belief and consequently led them to accept Islam. From the foregoing, Islamic entrepreneurship enforces firm conditions on opportunities, the process of exploiting the opportunities and the end objective of the entrepreneurial process (Kayed & Hassan, 2013). The opportunity to be exploited must have a moral and ethical foundation, the means by which such opportunities are pursued and resources acquired and organized must be *halal* (permissible) and finally the ultimate goal must be to please Allah (SWT). Additionally, Muslim entrepreneurs need to realize that possessions, earnings and material goods and assets belong to Allah (SWT) and that man is only a trustee.

Islamic Proofs of Entrepreneurship: There are several proofs in the Al-Quran and *Sunnah* (teachings of the Prophet (PBUH)) that encourage entrepreneurship as well as indicate the benefits, permission and value of engaging in entrepreneurial activities. For instance, the indication of entrepreneurship is evident in *Al-Quran* (106: 1-4) where Allah (SWT) says:

*(It is a great grace from Allah) for the protection of the Quraish, (And with all those Allah's grace and protections, We cause) the (Quraish) caravans to set forth safe in winter (to the south) and in summer (to the north without any fear), So let them worship (Allah) the Lord of this House (the Ka'bah in Makkah), (He) Who has fed them against hunger, and has made them safe from fear.*

Additionally Allah (SWT) permits His servants both men and women to undertake any form of entrepreneurial activity on earth provided it does not violate the teachings of Islam. This is evident in *Al-Quran* (62:10) where Allah (SWT) says:

"And when the prayer has been concluded, disperse within the land and seek from the bounty of Allah, and remember Allah often that you may succeed."

Again, Allah (SWT) says:

"It is He who made the earth tame for you - so walk among its slopes and eat of His provision - and to Him is the resurrection" (*Al-Quran*, 67:15).

In *Al-Quran* (28:77) Allah (SWT) further says:

*But seek, through that which Allah has given you, the home of the Hereafter; and [yet], do not forget your share of the world. And do good as Allah has done good to you. And desire not corruption in the land. Indeed, Allah does not like corrupters.*

Regarding trading as a form of entrepreneurial activity, ".....Allah has permitted trade" (*Al-Quran*, 2:275). Even the longest verse in *Al-Quran* i.e. *Al-Quran* (2:282) presents indication of conduct of entrepreneurial activities saying: "O you, who have believed, when you contract a debt for a specified term, write it down..."

Furthermore, not less than 82 *Quranic* verses have linked *Iman* (faith) with good work (Al-Khayyat, 2008). For instance, Allah (SWT) says:

*Whoever does righteous deeds, whether man or woman, while he/she is a believer, We shall most certainly give a good life, and will surely give them their reward [in the Hereafter] according to the best of what they used to do (Al-Quran, 16:97).*

In addition, Allah (SWT) says:

*Anyone who does a bad deed shall be requited with no more than what is equal to it, whereas anyone, be it man or woman, who does what is right and is a believer shall enter paradise where they will all enjoy countless blessings (Al-Quran, 40:40).*

Islamic entrepreneurship, variation in abilities and capabilities among human beings and justice can be further justified in the following verse of the *Al-Quran* where Allah (SWT) says:

*And do not wish for that by which Allah has made some of you exceed others. For men is a share of what they have earned, and for women is a share of what they have earned. And ask Allah of his bounty. Indeed Allah is ever, of all things, Knowing (Al-Quran, 4:32).*

The Prophet (PBUH) explained that nine out of the ten sources of income are attainable through engaging in business activities. Furthermore, Al-Suyuti mentioned a *Hadith* narrated on the authority of Rafi' that: The Holy Prophet (PBUH) was asked: "Which are the best forms of income generation?" He (PBUH) replied, "A man's labor and every legitimate sale" (Aziz, 2011). In Islam, importance is placed on entrepreneurship where generally, every Muslim entrepreneur is charged with the responsibility of making a living by pleasing Allah (SWT) through following the teachings of Islam (Hassan & Hippler, 2014). To fulfill this responsibility, man is encouraged to do good work.

**Table 1: Summary of Related Literatures on *Din* and *Mu'amalah* Based Objectives in Islamic Entrepreneurship**

Source	<i>Din</i> Based Objective	<i>Mu'amalah</i> Based Objective
Gümüşay (2015)	To seek Allah's bounty	Prohibition of <i>Riba</i> (interest), encouraging financial partnership, prohibition of pork, alcohol or gambling, hoarding, lying and false measurement, encouraging trust and risk taking, purification of wealth by <i>Zakkah</i> . Entrepreneurial activities must be <i>halal</i> , to gain profit.
Kayed and Hassan (2013)	To please Allah (SWT)	
Juma'h, Campus and Abu-Mounes (2011)	To gain the hereafter	Prohibition of dealings with interest, encouraging profit and loss sharing arrangements, and differentiating between money and commodity, to serve the society.
Alserhan (2011)	Carrying out the will of God	Condemnation of bribery, prohibition of fraud and cheating, prohibition of interest, prohibition of certain earnings, prohibition of hoarding, avoiding waste and extravagance, payment of <i>Zakkah</i> , giving charity and cleanliness.
Saripuddin (2015)	Sincere intention (to gain the pleasure of Allah in every aspect of life)	Not to be involved in usurious practices, avoiding scam, justice and trust.
Abdullah and Mikail (2013)	Entrepreneurship is aimed to achieve the blessings and glory of Allah (SWT)	Earn a living from <i>halal</i> sources, spend earnings wisely, effective management of resources, prohibition of fraud, to act justly.
Kayed and Hassan (2010)	Intended to please the Almighty	To generate <i>halal</i> income/profit, to meet financial obligations and to contribute to the <i>falah</i> (well-being) of the Muslim <i>ummah</i> (nation) in this life and hereafter.

**Objectives of Islamic Entrepreneurship:** The objectives of Islamic entrepreneurship are derived from and guided by the *Al-Quran* and *Sunnah*. As such the objectives of Islamic entrepreneurship are not far from the principles of Islam with regards to conducting entrepreneurial activities or businesses. The principles of Islam therefore direct the objectives of Islamic entrepreneurship. Different scholars have presented the objectives of Islamic entrepreneurship differently. For the purpose of this paper, the selected literatures will be viewed from two broad objectives. The *Din* objective which entails the objective that focuses on the relationship between Allah (SWT) and man and the *Mu'amalah* objectives which constitute the relationship between man and mankind as well as man and the environment. As indicated in Table 1, the *Din* objective entails more of undertaking the business to please Allah (SWT). *Din* from the literature is the basic objective of entrepreneurship in Islam (Gümüşay, 2015; Kayed & Hassan, 2013; Alserhan, 2011; Saripuddin, 2015; Abdullah & Mikail, 2013; Kayed & Hassan, 2010). The *Din* based objective forms the foundation and the faith aspect of Islamic entrepreneurship which facilitates the achievement of the *Mu'amalah* objectives. The *Mu'amalah* based objectives bring about peaceful co-existence between man and other living thing without which there will be chaos on earth. From the literatures reviewed it is indicated that the *Din* based objectives



are foremost followed by *Mu'amalah* based objectives, and that both *Din* based and *Mu'amalah* based objectives are considered in all the literatures. Table 2 provides the critical review of the literature addressing the objectives of Islamic entrepreneurship and the integration of the objectives of Islamic entrepreneurship and *Maqasid Al-Shari'ah*. What surfaced from the review is that; there is dearth of literature on Islamic entrepreneurship as strongly tied to *Maqasid Al-Shari'ah* as only one study indicated such a link (Abdullah & Mikail, 2013).

Table 2: Summary of Findings from Critical Review

Source	Addressed Objectives of Islamic Entrepreneurship	Addressed the Integration of Objectives of Islamic Entrepreneurship and <i>Maqasid Al-Shari'ah</i>
Gümüşay (2015)	√	×
Kayed and Hassan (2013)	√	×
Juma'h, Campus and Abu-Mounes (2011)	√	×
Alserhan (2011).	√	×
Saripuddin (2015)	√	×
Abdullah and Mikail (2013)	√	√
Kayed and Hassan (2010)	√	×

√= Yes

×= No

### 3. Maqasid Al-Shari'ah

Definition of *Maqasid Al-Shari'ah*: *Maqasid* involves a class of divine objectives and moral thoughts upon which *Shari'ah* is based, such as, fairness, self-confidence, freedom, facilitation, and social cooperation (Baqtayan, 2012). According to Mohammad and Shahwan (2013), a life without objectives and direction is futile. *Shari'ah* is defined as an ordained way which covers all aspects of life such as financial and commercial among others with its unchanging bearings as well as its major means of adjusting to change (Sardar, 2003). The reference to *Shari'ah* as an ordained way is evident in *Al-Quran* (45:18), where Allah (SWT) says: "Then we put you, (O Muhammad), on an ordained way concerning the matter (of religion); so follow it and do not follow the inclinations of those who do not know".

*Maqasid Al-Shari'ah* entails the essence of human existence without the fulfillment of which life will be lived in confusion and commotion (Mohammad & Shahwan, 2013). To Al-Ghazali the *Maqasid Al-Shari'ah* is aimed at promoting well-being of humanity, which lies in protecting and safeguarding their faith (*din*), their human self (*nafs*), their intellect (*'aql*), their posterity (*nasl*) and their wealth (*mal*) (Dusuki & Abdullah, 2007). Whatever ensures and safeguards these five *Maqasid* serves public interest and is desirable (Chapra, 2000). Al-Shatibi further approves that the list and sequence by Al-Ghazali are preferred in terms of their harmony with the core of *Shari'ah* (Nyazee, 1999). *Maqasid Al-Shari'ah* is therefore repeatedly translated as the goals or objectives of *Shari'ah* (Bedoui & Mansour, 2014). The primary aim of *Maqasid Al-Shari'ah* is to serve the interest of the people, shield them from mischief and destruction and promote cooperation and mutual support (Dusuki & Bouheraoua, 2011).

Moreover, *Maqasid Al-Shari'ah* is universal as clearly indicated in the *Al-Quran* (34:28), where Allah (SWT) says:

"And We have not sent you except comprehensively to mankind as a bringer of good tidings and a warner. But most of the people do not know"

Again, in *Al-Quran* (7:158) Allah (SWT) says:

Say, [O Muhammad], "O mankind, indeed I am the Messenger of Allah to you all.....".

Furthermore, it is inclusive (encompasses all acts of responsibilities to Allah (SWT) and responsibilities regarding fellow humans and the environment which rests on solid *Quranic* foundation. This is also justified in *Al-Quran* (16:89) where Allah (SWT) says:

“.....And we have sent down to you the Book as clarification for all things and as guidance and mercy and good tidings for the Muslims.”

#### 4. The Objectives of Islamic Entrepreneurship: Integrating the Link with *Maqasid Al-Shari'ah*

Figure 1 illustrates the integration between the objectives of Islamic entrepreneurship and *Maqasid Al-Shari'ah*. The essentials of *Maqasid Al-Shari'ah* are preservation of faith, life, intellect, progeny and wealth (Dusuki & Abdullah, 2007). When any of these essentials is not met, then human life will be in chaos (Mohammad & Shahwan, 2013). This implies that when *Maqasid Al-Shari'ah* is embedded in entrepreneurship, the society as a whole will prosper. Importantly, any decision, product or service that violates any of the objectives is against the teachings of Islam and must not be accepted and adopted. Islamic entrepreneurship is regarded as part of *Ibadah* (worship) to earn the blessings and glory of Allah (SWT) (Abdullah and Mikail, 2013). This ideally should be the intention of every Muslim entrepreneur. Moreover, undertaking the business only to please Allah (SWT) is accompanied by other objectives which will make it possible for the entrepreneur to meet his needs, support the family and pay *Zakkah* among others. By so doing, the faith of the entrepreneur will be protected because the expectation is that when an entrepreneur desires to please Allah in whatever he does then he will abide by the right practices laid down by Islam. As such, the entrepreneurial activity must be *Shari'ah* compliant i.e. they must abide by the rulings of the *Al-Quran* and *Sunnah* of the Prophet (PBUH) to earn the blessings from Allah (SWT). When the whole objectives (*Din* and *Mu'amalah*) of Islamic entrepreneurship are realized, then the entrepreneur will have higher probability being successful.

Hence, in conducting the business, the entrepreneur must not deal with *Riba* (interest) in whatever magnitude (high and low) and condition (temptation and hardship) as prohibited in Islam. According to Siddiqi (2004), there are 12 verses in *Al-Quran* referring to *Riba* and the word '*Riba*' occurs three times in one verse (*Al-Quran*, 2:275), one time each from several other verses (*Al-Quran*, 2:276, 2:278, 3:130, 4:161, 30:39). The *Al-Quran*, for example, contains the following verse condemning interest:

“O you who have believed do not consume interest, doubled and multiplied, but fear Allah that you may be successful” (*Al-Quran*, 3:130).

The Prophet (PBUH) reported by Jabir; cursed the receiver and the payer of interest, and the one who records it (the contract) and the two witnesses to the transaction and said, “They are all alike in guilt” (*Sahih Muslim*, Book 10, *Hadith* Number 3881).

When the objective of not engaging in *Riba* is fulfilled, there will be harmony in societies. In addition, exploitation, subjugation, oppression and inequality among mankind will be eliminated (Saripuddin, 2015).

Figure one also highlight that to further foster a decent relationship between the entrepreneur and fellow men, the entrepreneur is not expected to engage in the production of prohibited goods and services that will affect people's lives negatively (causing diseases and death) such as pork, intoxicants, clubs and casinos. This will enhance the preservation of lives, which is very important. The prohibition of production of pork for example is evident in not less than four verses of the *Al-Quran*; 2:173, 5:3, 6:145 and 16:115. For example, in *Al-Quran* (6:115) Allah (SWT) says:

*He has only forbidden to you dead animals, blood, the flesh of swine, and that which has been dedicated to other than Allah. But whoever is forced [by necessity], neither desiring [it] nor transgressing [its limit] - then indeed, Allah is Forgiving and Merciful.*

For others like alcohol/intoxicants and gambling, Allah (SWT) in *Al-Quran* (5:91) says:

“Satan only wants to cause between you animosity and hatred through intoxicants and gambling and to avert you from the remembrance of Allah and from prayer. So will you not desist?”

Apart from affecting lives, things like alcohol/intoxicants and gambling affect faith because they divert the attention of people from praying and fasting among others. Allah (SWT) encourages that they should be avoided to become successful.

“O you who have believed, indeed, intoxicants, gambling, [sacrificing on] stone alters [to other than Allah], and divining arrows are but defilement from the work of Satan, so avoid it that you may be successful” (Al-Quran, 5:90).

With regard to the preservation of intellect, this is closely linked to the protection of lives particularly to the prohibition of intoxicants. However, the focus is the preservation of the thinking faculty. As such, the entrepreneur should not produce, distribute and encourage the consumption of intoxicants for example alcohol, wine, beer and home-made alcoholic brews. Allah (SWT) says:

“They ask you about wine and gambling. Say, “In them is great sin and [yet, some] benefit for people. But their sin is greater than their benefit.....” (Al-Quran, 2:219). A society with intellectually sound population is expected to be successful and achieve overall growth and development.

For the preservation of posterity, it is important that the entrepreneurial activity from discovery of the opportunity to the production of the product or service should create balance and ensure effective management of resources (Abdullah & Mikail, 2013). Allah (SWT) in Al-Quran (55:7) says:

“And the heaven He raised and imposed the balance”.

Production of goods and services that are hazardous to the environment is not accepted in the *Maqasid Al-Shari'ah* framework. Otherwise, future generation will be jeopardized. In this regard, even the trees and animals have to be protected. The Prophet (PBUH) said: “If any Muslim plants a tree or sows a field, and a human, bird or animal eats from it, it shall be reckoned as charity from him” (Saheeh Al-Bukhari, Book 39, Hadith 513).

Furthermore, all of the resources upon which life depends, have been created by Allah (SWT) as a trust in our care. He has ordained sustenance for all people and for all living things. Allah (SWT) says:

“And He placed on the earth firmly set mountains over its surface, and He blessed it and determined therein its [creatures'] sustenance in four days without distinction - for [the information] of those who ask.” (Al-Quran, 41:10).

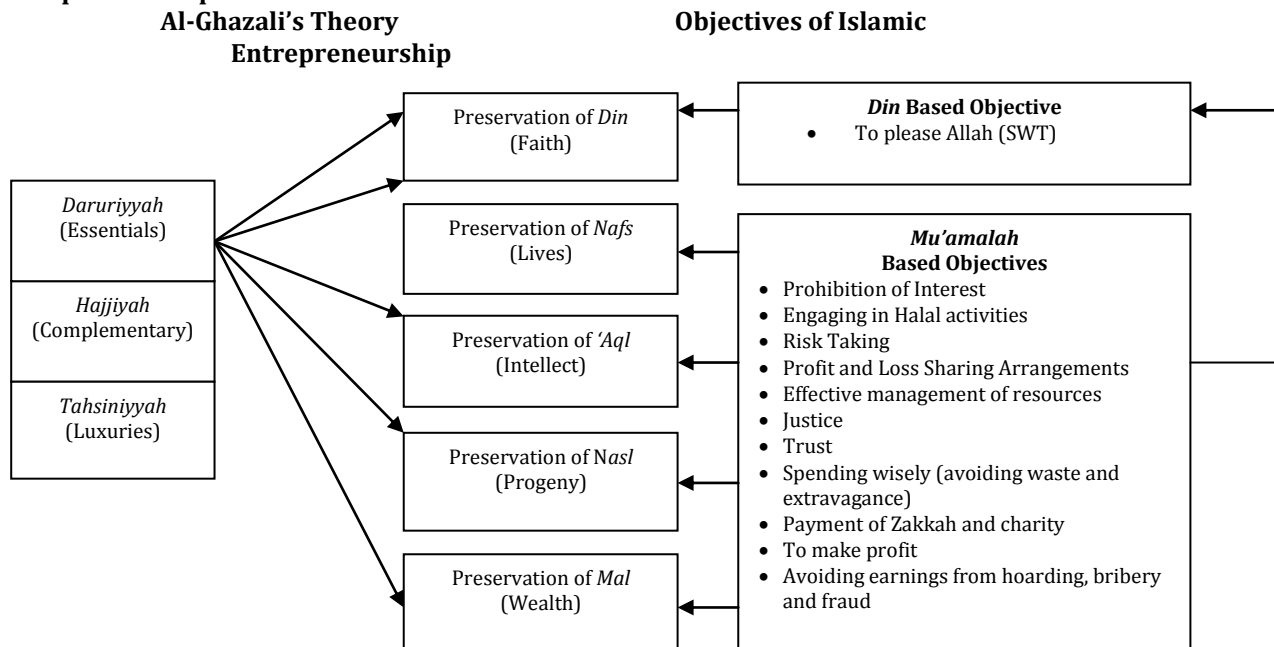
Therefore, the entrepreneur should not abuse and misuse the natural resources as each generation is entitled to benefit from them.

The last objective within the *Maqasid Al-Shari'ah* framework is preservation of wealth and it entails that the entrepreneur should utilize any product or service that encourages legitimate trade, profit and loss sharing, righteous corporation, fosters justice and trust. Such services will prevent exploitation, injustice and unequal distribution of wealth. In support of legitimate trade, Islamic financial contracts such as *Murabaha* financing is accepted within the framework and should be used as an alternative to interest-related earnings by the entrepreneur to meet the financial needs of the enterprise. This is evident in *Al-Quran* where Allah (SWT) says: “Allah has permitted trade and forbidden usury” (*Al-Quran*, 2:275). Furthermore, Al-Suyuti mentioned a *Hadith* narrated on the authority of Rafi' that: The Holy Prophet (PBUH) was asked: “Which are the best forms of income generation?” He (PBUH) replied, “A man's labor and every legitimate sale” (Aziz, 2011). *Musharakah* and *Mudharabah* arrangements are also acceptable within the *Maqasid Al-Shari'ah* framework since they are in accordance with the principle of profit and loss sharing. This is established by Hallaq (2004), who upholds that contractual and commercial transactions are blessed and promoted in Islam as these protect, help and increase wealth. Furthermore, for Allah to preserve ones' wealth, the business must not be fraudulent in any way or form. Allah (SWT) has cursed those that cheat in businesses. In *Al-Quran* (83:1-3) Allah (SWT) says: “Woe to those who give less [than due], who, when they take a measure from people, take in full. But if they give by measure or by weight to them, they cause loss.”

To further preserve wealth, Islam encourages reasonable spending as such; entrepreneurs should avoid wasteful spending and extravagance. Such encouragement is evident in *Al-Quran* (25:67): “And [they are] those who, when they spend, do so not excessively or sparingly but are ever, between that, [justly] moderate”. Excess goods or earnings can be channeled into charity because “Allah (SWT) destroys interest and gives increase for charities” (Al-Quran 2:276). “And whatever you give for interest to increase within the wealth of people will not increase with Allah. But what you give in Zakkah, desiring the countenance of Allah - those are

the multipliers” (Al-Quran, 30:39). Giving alms ensure equitable distribution of income by narrowing the mismatch between the rich and poor and meeting the needs of the society as a whole. For wealth to be further preserved there is the need for the entrepreneur to be just by treating customers equally on a fair basis. Justice is a commandment of Allah (SWT); “Indeed, Allah orders justice and good conduct and giving to relatives and forbids immorality and bad conduct and oppression.....”(Al-Quran, 16:90). Additionally, Islam considers profit motive of entrepreneurship to be halal and moral so far as it is free of interest, hoarding, bribery, speculation, monopoly, exploitation, and it is not the ultimate goal (Kayed & Hassan, 2010). Importantly, each *Mu’amalah* based objectives are meant to serve the *Din* based objective. This is as proposed in the categorization of *Maqasid Al-Sharia* by Imam Ghazali into two major divisions; the *deeni* (related to *deen: protection of faith*) and the *dunyawi* (related to this material world: protection of life, posterity, intellect and wealth), where each *dunyawi* purpose is meant to serve the single *deeni* purpose (Al-Mubarak & Osmani, 2010).

**Fig 1: Conceptual Integration between *Maqasid Al-Shariah* Framework and Objectives of Islamic Entrepreneurship**



**5. Conclusion**

This paper aims to realign the mismatch between the Islamic entrepreneurship objectives and that of *Maqasid Al-Shari'ah*, a gap in the present business practice. Through critical review of related literatures, it is found that there is a strong conceptual link between objectives of Islamic entrepreneurship and *Maqasid Al-Shari'ah*. It could be further implied that most of the past studies did not demonstrate the connection between Islamic entrepreneurship and the *Maqasid*. The authors offer new contribution by providing a new conceptual framework integrating the Islamic entrepreneurship objectives and *Maqasid Al-Shari'ah* particularly within Al-Ghazali's theory of *Maqasid Shari'ah*. It is therefore suggested that future research should empirically investigate the proposed conceptual framework to enhance the sustainability of Islamic entrepreneurship success.

**References**

Abu-Saifan, S. (2012). Social entrepreneurship: definition and boundaries. *Technology Innovation Management Review*, 2(2), 22-27.

Abdullah, S. & Mikail, S. A. (2013). Entrepreneurship and Islam: An expository study on characteristics of Muslim entrepreneur. *Proceeding of the 5th Islamic Economics System Conference: Sustainable*

- Development Through The Islamic Economics System, Faculty Economics And Muamalat, Universiti Sains Islam Malaysia, Kuala Lumpur.
- Al-Mubarak, T. & Osmani, N. M. (2010). Applications of Maqasid al-Shari'ah and Maslahah in Islamic banking practices: An analysis. Paper presented at the International Seminar on Islamic Finance. (pp.1-17). Kochi, India. Retrieved September 20th, 2015, from [http://irep.iium.edu.my/4251/1/Applications\\_of\\_Maqasid\\_Shari%60ah.pdf](http://irep.iium.edu.my/4251/1/Applications_of_Maqasid_Shari%60ah.pdf)
- Al-Quran, Arabic Text with corresponding English Meanings. (1997). Translated by Saheeh International. Riyadh: Abdulqasim Publishing House.
- Alserhan, B. A. (2011). The principles of Islamic marketing. Gower Publishing, Ltd.
- Aziz, A. & Faizal, A. (2011). Islamic finance within trading framework: The way to legitimate profit. *Munich Personal RePEc Archive*, 47769, 1-29.
- Azmi, I. A. G., Basir, A., Muwazir, M. R., Hashim, R. C. & Mohamed, H. A. (2014). Motivation of Muslim women entrepreneurs in Malaysian SMEs. Paper presented at the 4th International Conference on Management, (pp. 1-11). Bali, Indonesia.
- Baqutayan, S. (2012). The innovation of human nature in Islam. *International Journal of Social Sciences and Education*, 2(1), 162-173.
- Bedoui, H. E. & Mansour, W. (2015). Performance and maqasid al-shari'ah's pentagon-shaped ethical measurement. *Science and Engineering Ethics*, 21(3), 555-576.
- Belt, D. (2002). The world of Islam. National Geographic. Retrieved 25<sup>th</sup> September 2015 from [http://ngm.nationalgeographic.com/ngm/data/2002/01/01/html/ft\\_20020101.5.html](http://ngm.nationalgeographic.com/ngm/data/2002/01/01/html/ft_20020101.5.html).
- Binks, M. & Vale, P. (1990). Entrepreneurship and Economic Change. New York: McGraw-Hill.
- Bula, O. H. (2012). Evolution and theories of entrepreneurship: A critical review on the Kenyan perspective. *International Journal of Business and Commerce*, 1(11), 81-96.
- Chapra, M. U. (2000). The Future of Economics: An Islamic Perspective. Leicester: The Islamic Foundation.
- Dusuki, A. W. & Abdullah, N. I. (2007). Maqasid al-shari'ah, Maslahah and corporate social responsibility. *The American Journal of Islamic Social Sciences*, 24(1), 25-45.
- Dusuki, A. W. & Bouheraoua, S. (2011). The framework of Maqasid al-Shari'ah and its implication for Islamic finance. *Islam and Civilisational Renewal*, 2(2), 316-336.
- Eroglu, O. & Picak, M. (2011). Entrepreneurship, national culture and Turkey. *International Journal of Business and Social Science*, 2(16), 146-151.
- Gümüşay, A. A. (2015). Entrepreneurship from an Islamic perspective. *Journal of Business Ethics*, 130(1), 199-208.
- Hadith*. Retrieved from: <http://www.searchtruth.com>
- Hallaq, W. B. (2004). A History of Islamic Legal Theories: An Introduction to Sunni Usul al-Fiqh. United Kingdom: Cambridge University Press.
- Hamid, E. S. (2012). Initiating Islamic Entrepreneurship among Muslim Communities. Proceedings of the International Conference on Islamic Leadership-2, (pp. 23-36). Indonesia, University of Indonesia.
- Hanafi, N. (2012). Business performance of women-owned SMEs in Malaysia: Learning and entrepreneurial orientations and the mediating roles of competitive advantage. Unpublished Doctoral Dissertation, Universiti Utara Malaysia.
- Hassan, M. K. & Hippler III, W. J. (2014). Entrepreneurship and Islam: An Overview. *Econ Journal Watch*, 11(2), 170-178.
- Juma'h, A. H., Campus, M. & Abu-Mounes, R. N. (2011). An introduction to the Islamic perspectives of conducting business. *Revista Empresarial Inter Metro / Inter Metro Business Journal*, 7(1), 58-68.
- Kayed R. N. & Hassan, M. K. (2010). Islamic entrepreneurship: A case study of Saudi Arabia. *Journal of Developmental Entrepreneurship*, 15(4), 379-413.
- Kayed, R. N. & Hassan, M. K. (2013). Islamic entrepreneurship. London: Routledge.
- Mohammad, M. O. & Shahwan, S. (2013). The objective of Islamic economic and Islamic banking in light of Maqasid Al-Shariah: A critical review. *Middle-East Journal of Scientific Research*, 13, 75-84.
- Rice, G. (1999). Islamic ethics and the implications for business. *Journal of Business Ethics*, 18(4), 345-358.
- Saripuddin, S. O. Z. M. (2015). Concept of business ethics in Islam - approach to the entrepreneur. *Journal of Asian Business Strategy*, 5(1), 13-18.
- Shane, S. (2003). A General Theory of Entrepreneurship: The Individual-Opportunity Nexus. UK: Edward Elgar.

- Shane, S. & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of management review*, 25(1), 217-226.
- Zarabozo, J. (2007). What is Islam? Riyadh: Ministry of Islamic Affairs Endowments, Da'wah, and Guidance, Saudi Arabia.

## Fiscal Decentralization and Poverty in Papua Province

Suwandi, Nuralam  
University of Cendrawasih Jayapura Papua, Indonesia  
wandi1212@gmail.com

**Abstract:** In Papua province, fiscal decentralization policy had a positive impact on the potential development and regional government creativity. The effectiveness in managing regional wealth will affect to the regional revenue which can further determine the effect of fiscal decentralization and economic growth to improve on poverty. The method used is multiple linear regression analysis technique. The results showed simultaneous fiscal decentralization and economic growth has a significant effect on poverty. In partial result, the negative fiscal decentralization variable and significant fiscal decentralization on poverty means there is decreased percentage in the number of the poor people.

**Keywords:** *Fiscal decentralization, poverty, economics growth*

### 1. Introduction

**Problem back ground.** The development failure in Indonesia is caused by misleading policy has an impact widening inequality of development among regions and among income groups. This situation will be constantly threatened and overshadow the process of development in Indonesia, therefore it is vulnerable to make repeated shocks and it will cause the economic crisis, social and political that afflict most of the Indonesian nation. Regional autonomy is one of the reformation agendas, is used to dampen the upheavals caused by the imbalance of development among regions. By implementing fiscal decentralization policy through the financial balance between the central and regional government as stipulated in Law No. 33 of 2004, is expected to attend sense of fairness in the distribution of development among regional revenues and regions, thus the development gaps among regions can be reduced. According to Adi (2005), fiscal decentralization is proven to boost economic growth in regional revenue. Similarly, the results of Wong (2004) found that: there is a significant effect of economic growth in reducing poverty. Papua today is filled with paradox, on the one hand, it shows Papua has entered a new century marked by modern bureaucracy, the use of information technology, and economic activities of money which is part of the global economy. On the other hand, there are still many people who live in traditional subsistence culture and isolated. Correspondingly, Suwandi and Warokka (2013) stated, there is a significant relationship between fiscal decentralization and economic growth.

The impact of fiscal decentralization in the district / city Papua Province on the scope of macro-economic and social conditions showed, it is relatively good although it is not optimal. There are several indicators to look at the performance of regional development. First, judging from the results of the output of regional development which is reflected in the Gross Domestic Product (GDP). Data indicate that real GDP growth in the district / city in the province of Papua, over the last three years shows, its trend is increasing. The rate of economic growth in the district / city in the province of Papua in 2005 to 2010 is experienced positive growth, but it has not been able to solve the basic problems in each area, the weakness of unemployment and poverty. Almost in all areas of Papua, the economy tends to increase, but the growth has not been able to absorb a large enough number of unemployed in this region, so that the required rate of growth even further to encourage regional macro-economic performance. Fiscal decentralization will have a positive impact on reducing the number of poor people if it is followed by an increase in per capita income. The increase in revenue is a reflection of the existence of an economic growth. Any potential areas that will produce the form of goods and or services that have a value in order to increase sales and appeal to consumers. Fiscal decentralization can not only know the problem of poverty but it can be a driving force for economic growth prospects in the area of economic autonomy. The economics growth can increase the number of jobs that can reduce the number of unemployed and poor people. Increased employment can absorb lot of labors so that the poverty can be reduced.

Papua Province as one of the areas that runs the autonomy authority is reflected in its high revenue. The ratio of the fiscal decentralization Papua Province showed an average of 63.8 percent, thus it can be concluded that fiscal decentralization in Papua province worked as well. The development of fiscal decentralization has a positive impact on the establishment of local financial self-efficiency of Papua province. The level of local financial independency of Papua province in the period of 2003-2011 is categorized as self-sufficiency with an average ratio of 62.2 percent. This means that more than 50 per cent of the total expenditure of the area can be met by even, the local revenue of low fiscal capacity; illustrating there is low level of autonomy with high fiscal capacity. In other words, there is high degree of ability of self – sufficiency. Based on the description above, the issue is, whether fiscal decentralization and economic growth simultaneously and partial give effect on poverty in Papua Province. The purpose of this study is to determine the effect of fiscal decentralization and economic growth simultaneously and partially against poverty in Papua. According to the background, there is a need of acknowledgement, if fiscal decentralization and economic growth simultaneously give significant effect on poverty in Papua Province. Is the fiscal decentralization and economic growth partially giving significantly of negative effect on poverty in Papua?

## 2. Literature Review

Regional autonomy can be implemented, if there is any delegation or authorization from the central government giving to autonomous regions (Adisubrata, 1999). Regional autonomy and decentralization are two sides of one coin that cannot be separated and each gives meaning (Saragih, 2003; Mardiasmo, 2004). Autonomy means a freedom to run or perform something by a political unit or part of the territory / territories in relation to the political community or state (Devas, 1997; Saragih, 2003). In other words, decentralization is authority reduced or the deposit of part or all of the powers of the central government to local government. Decentralization can determine its own way based on its own initiative freely, as something submitted to the local authority. Kaloh (2002) said that regional autonomy should be defined as autonomy for the people of the area and not autonomous "regions" within the meaning of the regional / territorial particular at the local level. Sidik (2000) describes the same thing, that decentralization is an instrument to achieve one of the goals of the state. Beier & Ferrazzi (1998) explain that regional autonomy is generally followed by fiscal decentralization policy, as an instrument in support of local public services with the transfer of funds to the regions. Decentralization is more likely to aspects of state administration (administration aspect) (Stewart, 1988; Pidie, 1997). Litvack et al. (1998) provides arguments in favor of decentralization by saying that the best of decentralization is the most efficient public services. Fiscal decentralization is one of the main components in decentralization (Rosenstein-Rodan Paul, 1943-1957).

Fiscal decentralization policy is used by many developing countries to avoid the ineffectiveness and inefficiency of governance, macroeconomic instability, and the inadequacy of economic growth (Bahl and Linn, 1992). Fiscal decentralization is a process of distribution of budget of the higher levels of government to lower levels, to support the functions or duties of government and public service, (Bird and Vaillancourt, 2000; Manor, 1999). Oates (1972) asserts that the level of economic progress is the outcome of people's preferences conformity with the Regional Government. Fiscal decentralization policy is intended to solve the problem of shortage of income (Buentjen, 1998), addressing externalities and the redistribution of national income (Fisher, 1996), as well as stabilizing the macro economy (Davoodi, 2001). Mardiasmo and Halim (1999) explains that the principle of efficiency also as a provision must be implemented in financing management. To determine the ability of local governments to implement fiscal decentralization can be seen from a comparison of the ratio of the degree of fiscal decentralization (Wahyuni, 2008).

$$DDF = \frac{PAD}{TDP} \times 100\% \quad \dots\dots\dots (1)$$

Where:

- DDF = Level of Fiscal Decentralization
- PAD = Regional Income in Real
- TPD = Local Total Expenditure



According to the research team of Social and Political Faculty using interval scale as it is involved in Table 1 as follows (Wahyuni, 2008).

Poverty is associated with discomfort in life, it means that the poor man lives almost always and often uncomfortable. Poverty is associated with discomfort in life, it means the poor live almost always and often uncomfortable. In every field they always become the marginalized, because they can not equate their condition with the condition of the surrounding community (Esmara, 1986). World Bank (2002) divides the poverty dimension into four main points : (1) the lack of opportunity, (2) low capabilities, (3) low level of security, and (4) low capacity. Poverty is often conceptualized in terms of income and wealth insufficiency (lack of income and assets) to meet basic needs such as food, clothing, housing, education, and health, which are all located within the economic dimension. Poverty line consists of two components, a line of food and non-food poverty (BPS, 1999).

**Table 1: Fiscal Decentralization Level – Internal Scale**

<b>Ability of Regional Financing</b>	<b>Fiscal Decentralization Level (per cent)</b>
Very bad	00.00 – 10.00
Bad	10.01 – 20.00
Enough	20.01 – 30.00
Middle	30.01 – 40.00
Good	40.01 – 50.00
Very good	>50.00

Source: R&D Depdagri–Fisipol UGM (1991)

According to Oates (1993), fiscal decentralization will be able to boost economic growth and welfare of the community, because local governments will be more efficient in the production and providing public goods. Zhang and Zou (1998) said, fiscal decentralization implemented in bamboo curtain (China) has eroded the economic growth of the region. Next, Xie et al. (1999) proved that fiscal decentralization is less favorable for development. Positive contribution of fiscal decentralization on economic performance may be caused by the weakness of research methodology used. Akai and Sakata (2002) criticized the results of research conducted Zhang & Zou (1998) and Xie et al. (1999). Furthermore, Akai and Sakata (2002) also commented on the research result of Davoodi and Zou (1998) that used data across the nation. The downside of this method is the difficulty to analyze the effects of fiscal decentralization in each country given the differences in culture, institutions, and historical experience. Myrdal (1957) suggests, the number of backwash effect is greater than the spread effect will cause imbalances among regions. Backwash effect is caused by the migration of labor and capital from poor areas to rich areas. Hirschman (1968) argued, the trickledown effect from the core region to smaller region will make the polarization effect. Research of L. Jay Helms (1985) using cross-country panel data showed that the tax of central and local government will give impact of slow regional economic growth, if the tax revenue is used for the center-regional equalization funds (Juttin, Kauffmann, Mc Donnell, Osterrieder, Pinaud & Wegner, 2004). Using cross-country data indicated that the relationship between fiscal decentralization with poverty eradication is ambiguous. Research on inequality regions in Indonesia was initiated by Islam (1999). By using secondary data of real GDP, they gave opinion during the period 1968-1997, index of inequality income is getting bigger. DKI Jakarta, East Kalimantan, West Kalimantan, Central Kalimantan, Papua, and Riau are provinces of the most prosperous ones, while the worst affected provinces are: East and West Nusa Tenggara, Bengkulu and Jambi.

Generally speaking, provinces in eastern Indonesia occupy low position of prosperity. Research of Syafrizal (2008) using data from GDP of non-oil products, between 1983 -1997 showed that the inequality index moving from 0.49 to 0.54. Indonesian inequality index when it compares with developed countries (0.49 to 0.54) and middle-income (0.46) will be in above of average. Research of (Akita, Kurniawan, Miyata (2003) used data GDP per capita of China and Indonesia with two-stage technique of nested Theil inequality decomposition, produced the following conclusions: (1) In view of efficiency, inter-regional income inequality is caused by the unequal distribution of natural resources and the poor quality of transport in some areas, (2) In China, 60% of the province shows a high income inequality, while in Indonesia half of all provinces is inequality.

**3. Methodology**

The research was conducted in Papua province involving each district / city. The object of the research are the percentage of the population of poverty, economic growth, and the degree of fiscal decentralization. Types of data used is quantitative data includes data on poverty, economic growth, and the degree of fiscal decentralization. The analysis method used in this research is multiple linear regression, which were used to determine the effect of independent variables on the following variables which can be denoted by the following functions:

$$Y = f(X_1, X_2) \dots\dots\dots (2)$$

Then, the function is transformed into multiple linear regression analysis model then it obtained an equation as follows (Gujarati, 2004):

$$Y = 0 + 1x_1 + 2x_2 + e \dots\dots\dots(3)$$

Where :

- Y = poverty or the number of poor people (percent)
- X<sub>1</sub> = fiscal decentralization (percent)
- X<sub>2</sub> = Economic Growth (percent)
- 0 = constant
- 2 = regression coefficient
- e = disturbance

**4. Discussion**

The calculation of degree of fiscal decentralization ratio can be seen in Table 2 as follows:

**Table 2: Degree of Fiscal Decentralization Ratio in Papua Province on Fiscal Year 2003-2011 (thousands of Rupiah)**

Year	Fiscal Decentralization Level (percent)	Regional Financial Ability
2003	61,10	Very good
2004	65,40	Very good
2005	67,30	Very good
2006	66,60	Very good
2007	62,00	Very good
2008	63,30	Very good
2009	63,20	Very good
2010	65,90	Very good
2011	66,50	Very good

Source: Central Bureau of Statistics 2012

Based on the multiple linear regression using the data analysis program obtained the following results:

$$\begin{aligned}
 Y &= 13.221 - 0.072 X_1 - 0.784 X_2 \\
 SE &= 1.138 \quad 0.011 \quad 0.222 \\
 T &= 11.635 \quad - 6.49 \quad - 5.041 \\
 R^2 &= 0.6060 \\
 F &= 49.765
 \end{aligned}$$

The result showed, R-square is 0.6060, means 60.60 percent of the variable of poverty has been affected by decentralization and economic growth, while the rest is explained by variables that are not included in the model. Based on estimates of fiscal decentralization on economic growth in the district / city of Papua Province, showed that decentralization has positive influence on economic growth. The results of this study support the findings of empirical Martinez & Robert McNab (2001), Mahi & Muchtar (2000), Brodjonegoro &

Vaques (2002), Dartanto & Brodjonegoro (2003), Nuralam (2010), and Suwandi & Warokka (2013). Regression result showed that the negative effect of fiscal decentralization variable is on poverty. It can be seen from coefficient of  $X_1$  is - 0.072, which means that each increase in the percentage of fiscal decentralization by 1 percent, there will be a decrease in the percentage of poor people by 0,072 percent, assuming of ceteris paribus. Variable economic growth has - 0.784, which means that each of increase in the rate of economic growth of 1 percent, there will be a decrease in the percentage of the poverty population of 0.784 percent, assuming other factors remain.

Based on regression result,  $F_{\text{calculation}}$  is 49.765 with a significant level of 95 percent ( $= 0.05$ ) and the degree of freedom 1 and 7, thus  $F_{\text{tabel}}$  is 5.14. By simultaneously process, poverty and economic growth have a significant effect on the degree of fiscal decentralization in Papua Province. Based on estimates of the economic growth from the number of poor people in the district / city in Papua, indicated that growth is negatively affected to the number of poor people. This shows that the hypothesis of "economic growth has significantly negative effect on the number of poor people in the district / city in the province of Papua" is acceptable, because statistically proven. This indicates that the higher economic growth, it will reduce the number of poor people. The results of this study support the findings of a study conducted by Strauss (2000), sponsored by the World Bank using the Indonesian Family Life Surveys (IFLS) to examine the factors that affect the welfare of the Indonesian people by using a panel survey of the 13 Provinces in Indonesia.

## 5. Conclusion

- Simultaneously, fiscal decentralization and economics growth are negative effects and significant to poverty, thus the number of fiscal decentralization fund and economics growth will be followed by poverty. It indicates that in reducing poverty level, it is needed a raise of economics growth and fiscal decentralization fund.
- Partially, variables of fiscal decentralization and economics growth are negatively influence and it is significant to poverty (percentage of poor people) in Papua province

## References

- Adi, P. H. (2005). Impact of Fiscal Desentralization on Economics Growth (Study in Regencies and Cities in Java-Bali). *Journal of Interdiscipline Development Study, Post Graduate Program UKSW. Salatiga*, 17(2-3), 23
- Akai, N. & Sakata, M. (2002). Fiscal Decentralization Contributes to Economic Growth: Evidence from State-Level Cross-Section Data for the United States. *Journal of Urban Economics*, 3, 93- 108.
- Adisubrata, W. S. (1999). Regional Autonomy in Reformatioan Era. Unit Publishing and Printing (UPP) AMP YKPN. Yogyakarta.
- Akita, T., Kurniawan, P. A. & Miyata, S. (2003). Structural Changes and Regional Income Inequality in Indonesia: A Bidimensional Decomposition Analysis. *Asian Economic Journal*, 25(1), 55-77.
- Bahl, R. W. & Linn, J. F. (1992). Urban Public Finance in Developing Countries, Oxford University Press, Oxford.
- Beier & Ferrazzi. (1998). Fiscal Decentralization in Indonesia: A Comment on Smokeand Lewis. *Word Development*, 26(12), 2201-2211.
- Bird, R. M. & Vaillancourt, F. (1998). Fiscal Decentralization in Developing Countries Desentralisasi Translated by AlmizanUlfa. PT. GramediaPustakaUtama. Jakarta.
- Brodjonegoro, B. & Vaques, J. M. (2002). An Analysis of Indonesian's Transfer System: Recent Performance and Future Prospect. Working Paper. George State University. Andrew Young School of Policy Studies.
- Buentjen, C. (1998). Fiscal Decentralization in Indonesia: The Challenge of Designing Institutions. GTZ-SfDM Project. Jakarta.
- Central Bureau of Statistics (BPS). (1999). Domestic Product Regional Bruto in Indonesia According to Business Fields.
- Dartanto, T. & Brodjonegoro, B. P. S. (2003). Impact of Fiscal Decentralization on Economics Growth and Regional Disparity in Indonesia: Analysis of Macro Economics simultaneous Model. *Journal of Economics and Development Indonesia*, 4(1).

- Davoodi, H. R. & Zou, H. (1998). Fiscal Decentralization and Economic Growth: a Cross-Country Study. *Journal of Urban Economics*, 13, 244-257.
- Davoodi, H. R. (2001). Fiscal Decentralization, IMF Research Bulletin, 2 June.
- Devas, N. (1997). Indonesia: What Do We Mean by Decentralization? *Public Administration and Development*, 17, 351-367.
- Esmara, H. (1986). Planning and Development in Indonesia. Jakarta: Gramedia Pustaka Utama.
- Fisher, R. (1996). State and Local Public Finance. Irwin Publications. Chicago.
- Helms, J. L. (1985). The Effect of State and Local Taxes on Economic Growth: A Time Series – Cross Section Approach in Wallace E Oates (Ed) The Economics of Fiscal Federalism and Local Finance. Edward Elgar. Centelham. United Kingdom.
- Hirschman, A. (1968). The Strategy of Economic Development. Yale University Press. Connecticut.
- Islam, I. (1999). Making Decentralization Work: Reaping the Rewards and Managing the Risks. UNSFIR Working Paper. Jakarta.
- Jütting, J., Kauffmann, C., Mc Donnell, I., Osterrieder, H., Pinaud, N. & Wegner, L. (2004). Decentralization and Poverty in Developing Countries: Exploring the Impact." OECD Development Centre Working Paper No. 236
- Kaloh, J. (2002). Looking for Regional Autonomy Forms. Jakarta. PT Rineka Cipta.
- Litvack, J., Jundid, A. & Bird, R. (1998). Decentralization in Developing Country. The World Bank, Washington, DC.
- Mahi, R. & Muchtar, K. (2000). Decentralization Policy in Transition Era. LPEM FE-UI, Jakarta.
- Manor, J. (1999). The Political Economy of Democratic Decentralization. Washington: World Bank, IBRD, 6.
- Mardiasmo. & Halim, A. (1999). Autonomy and Regional Financial Management. Andi. Yogyakarta.
- Martinez-Vazquez, J. & McNab, R. M. (2001). Fiscal Decentralization and Economic Growth, Working Paper 01-1, International Studies Program, Andrew Young School of Policy Studies, Georgia State University, Atlanta.
- Myrdal, G. (1957). Economic Theory and under developed Regions London: Duckworth.
- Nuralam. (2010). Influences of Fiscal Dezentralization on Expenditure Structure and Economic Growth in Regencies/Cities in Papua Province. Dissertation. Post Graduate. University of Brawijaya. Malang.
- Oates, W. E. (1972). Fiscal Federalism, Harcourt Brace Jovanovich, New York.
- Oates, W. E. (1993). Fiscal Decentralization and Economic Development. *National Tax Journal*, 16(2), 237-243.
- Pidie, A. M. (1997). Regional Autonomy and District Leader in 21 st Century. Gaya Media Pratama. Jakarta.
- Rosenstein-Rodan, P. (1943-1957). Problems of Industrialization of Eastern and South Eastern Europe. *Economic Journal*, 53, 210-211. June-September, 202-21.
- Saragih, J. P. (2003). Fiscal Decentralization and Regional Financial in Autonomy. Ghalia Indonesia. Jakarta.
- Sidik, M. (2000). Policy of National Fiscal to Support Regional Autonomy. Paper in Program Study of Magister Management in Economics Development. Yogyakarta
- Stewart, J. (1988). Understanding the Management of Local Government: Its Special Purpose, Conditions and Task. Longman Group UK Ltd.
- Strauss, J. (2000). Users Guide for the Indonesia Family Life Survey. *Wave*, 3(2). RAND.
- Suwandi, & Warokka, A. (2013). Fiscal Decentralization and Special Local Autonomy: Evidence from an Emerging Market. *Journal of Southeast Asian Research*, 20(13).
- Syafrizal. (2008). Regional Economics Theory and Application. 1 st edition. Baduouse Publishing, Padang
- Wahyuni, S. (2008). Analysis of Financial Regional Capability in Supporting Local Activities. Thesis. Yogyakarta
- Wong, J. D. (2004). The Fiscal Impact of Economic Growth and Development on Local Government Capacity. *Journal of Public Budgeting, Accounting and Financial Management*, 16(3), 413-423.
- World Bank. (2002). Decentralizing Indonesia: A Regional Public Expenditure Review, Report No 26191-IND, World Bank, Washington DC.
- Xie, D., Zou, H. & Davoodi, H. (1999). Fiscal Decentralization and Economic Growth in the United States. *Journal of Urban Economics*, 10(5), 228-39.
- Zhang, T. & Zou, H. (1998). Fiscal Decentralization, Public Spending, and Economic Growth in China. *Journal of Public Economics*, 17, 221-40.

**“Environmental Economics for a Sustainable Development” Evaluation of Environmental and Recreational Values of the Area Lezhe –Shengjin using Indirect Approximate Method “Hedonic Price Method”**

C. Erinda IMERAJ, C. Sonila GRUDA, Ing. Zef IMERAJ  
Department of Banking and Finance, Epoka University, Albania  
Qendra e Kerkimit Mjedisore (KEL), Albania  
eimeraj@epoka.edu.al

**Abstract:** The area of the project Lezhe –Shengjin has a combination of recreational tourism and industry development. Promotion of tourism and environmental values of Lezha is a bold undertaking for a region with a diversity of values. Stable ecological development impacts directly in the development of the inhabited area and in the standards of it, while reflecting also in the home prices. Project aims to identify and to study the basic areas of the ecosystem and to present the impact that has the environment to the economy, by analyzing of the home prices of those, their diversity and changes. Methodology that the project will use is based on an indirect approximate method “Hedonic Price Method”. The base of these methods lies on questioners made face to face with the residents of the region and a considerable part of the data collection would be the collaboration with the commune and municipality administration offices of the region. Firstly, the project members will identify specifically services and environmental goods that the project will assess. Meanwhile, the meeting with the head officer of the commune would be planned and a contract of collaboration with his office would be signed. An important phase of the project will be the preparation of the questioners, on which behalf, the project members are selected. It is considered to prepare around 2000 Surveys for the respective method for areas of the targeted region, Lezhe and Shengjin. Getting the result of the indirect method that will be used, as mentioned, would need the data collection of the surveys and the data taken officially from the commune of Shengjin and Municipality of Lezha. During the data collection period the project members will consider also several meetings with real estate offices of the region and ecological NGOs. All data collected will be considered to be analyzed due to “Hedonic Price Method” and the expected results are considered to conclude in direct relations between the high ecosystem standards and relatively high competitive home prices. As well the result would be a good guide for the evaluation of the agency investments. Result of the project will firstly be presented to the interest group and then will be presented at scientific seminars and conferences within and outside the country and will serve as a starting point for further studies related to this field of study. Key results would provide good material to be firstly presented and published in scientific journals.

**Keywords:** *Hedonic Price Model, Environment, House Pricing, Lezha*

## 1. Introduction

“Environment is a good, which belongs to “everybody” but belongs to “nobody” (Gundimeda, 2005). Now it has become more difficult to protect the environment and it needs high costs. The better and cleaner the environment around the living places the higher the cost of living in that environment. It is the duty of everyone to protect what is the best despite the fact that this duty in the end is attributed to the job of the administrative staff of the government. Each decade has shown an increase in the number of the population. Essential denote of the wealth and standards of living of a country is the housing development. Now the housing construction takes into consideration the environmental factors in order to raise the standard and the perspective of a better life while obtaining a sustainable development. The area of the project Lezhe – Shengjin has a combination of recreational tourism and industry development. Promotion of tourism and environmental values of Lezha is a bold undertaking for a region with a diversity of values. Stable ecological development impacts directly in the development of the inhabited area and in the standards of it, while reflecting also in the home prices. This study tempts to identify and study the basic areas of the ecosystem and to present the impact that has the environment to the economy, by analyzing of the home prices of those, their diversity and changes. Project aims to have results in two directions, firstly the identification of the recreational areas of the Shengjin- Lezhe region by resulting in the economic costs or benefits that these regions provide. These economic costs or benefits will show the direct impacts in the

standards of living of the region and more precisely in the house prices of the region. Secondly, the study will conclude in real analyzed data that absolutely will be a good guide for the future investment agencies, therefore this project will be considered to be presented and published in the interested group and scientific journal.

This study will proceed firstly with the review of the literature dealing with the subject as it was faced a great interest on the Hedonic Price methodology on the study of the house pricing around different countries in the world. The region of Lezha has been divided in five parts including Shengjin in order to arrange the survey distribution of the study. The study area will be presented with the most important environmental elements that are composed of, despite the interesting history and culture it has. Hedonic Price Method is an indirect environmental valuation method which uses different markets for placing a value on the environmental quality (Gundimeda, 2005). This study has chosen the most commonly market used which is the housing market, by using the people answers regarding their houses and the environment around them. So this study indirectly through the Hedonic Price analysis will show the willingness of people to pay in order to get the best place to live and the healthier ones. The project team firstly identified specifically services and environmental goods that the project assessed. Meanwhile, the meeting with the head officer of the commune was planned and made and resulted in high cooperation through the phases of the study project. An important phase of the project was preparation of the questioners, on which behalf, the project members were selected. It was considered to prepare around 2000 Surveys for the respective method for areas of the targeted region, Lezhe and Shengjin. All data collected were considered to be analyzed due to "Hedonic Price Method" and the expected results are considered to conclude in direct relations between the high ecosystem standards and relatively high competitive home prices. As well the result would be a good guide for the evaluation of the agency investments.

## 2. Literature Review

Environment and economy have a strong relation between them and their impacts on each other have always been part of the environmentalist and economists studies. This project was firstly initiated from the need to have real data analyses of the economic benefits or costs from the ecosystem around or the recreational areas, which should be well determined if some sites have to be increase or to be closed. Members of this project have been working on different ecological projects on the region that was specifically selected. After a detailed literature review on the studies of the subject, it was resulted that these kinds of methods have been important part of ecosystem evaluation. According to (King & Mazzotta, 2000) there exist many evaluation methods that economist may use to evaluate the beneficial ways the ecosystems affect people and their lives. Hedonic Price Method is used in the evaluation of the direct affect that the ecosystem has in the market prices. Mainly this method is applied in the house prices that would demonstrate the environmental values and gives results on the economic benefits or cots accompanied with the quality of the environment or the distance with the recreational areas. The first studies on this topics from the 1970s and all of them have been concluding in a right relation between the good environment enriched with high elements of it raise the price of the properties of that are. The proximity to parks and size of the park is associated with higher prices; the effect of size is small with approximately 0.01% increase in the price with a one percent increase in size. The size of common area is associated with statistically significance higher property prices. 1% increase in the size of common area relates with a 0.01% increase in property price. (Veie & Panduro, 2013) Urban green spaces have a positive impact on the property values and this represents a "capitalization" of park land into increased property values of proximate land owners (Noor, Asmawi, & Abdullah, 2015).

Hedonic Model and the regression analysis are the best tools to be used from the real estate professionals in order to find out the correlation between the characteristics of a property and its price, while also predicting the future prices. This technique makes easier the valuation of the properties regarding the environment around and also might help the construction companies and real estate ones to lead on the right paths of construction and properties in the right environmental elements that might raise their prices and values (Monson, 2009). But among the variables related to the environmental conditions, air quality and the noise parameters have impact in the raise of the property value and also the inside space of the rooms, the garage and a terrace would imply an increase in value (Chiarazzo, Coppola, Olio, Ibeas, & Ottomanelli, 2014). Another

study on the valuation of the urban open spaces and the elements that impact on it concluded in same results of a right correlation on the environmental indicators and income with the value of the space. While it was highlighted that prefer for open spaces had some differences across the regions depending in the properties it has, for example the quality of the open space or the air. So the results showed that there are important region differences in preferences for open spaces, which may constrain the potential for transferring estimated values between regions (Brander & Koetse, 2011). In different countries, different studies have attempt to include Hedonic Pricing and other methods on projects or researches and mainly in most of them the results came to be important not for the study itself but also to serve for the real estate or other construction companies in other researches in the future.

### The Study Area

**“At the gates of Lezha you can enter without knocking!”** Lezha, as city and bio-structure, it represents something very important and special. By geometric, geographic and ecological, Lezha is a wonderful kaleidoscope of nature, almost a kind of unparalleled ecological principality, where mountain, fields, forests, archaeological and historical monuments, the lagoon and the sea, constitute a striking unity. In this sense, Lezha is the favorite of the centuries, the synthesis of the work of nature and of people with a bright sense and art history. At the gates of Lezha can enter without knocking, knowing her face and heart can only endlessly fascinate. There is simply extreme metaphor, but automatically every Lezha viewer can look up its history, in the air of centuries, as out of Mjeda Ndre poetic breaths, who has written wonderfully and poetically for Lezha. Lezha from the four corners of the history surrounding metaphors. Every man lives among them and here lies the secret of survival itself. The ancient town of Lezha is located in a double ground: hilly field and surrounding walls cover an area of 20 hectares. Urbanism fortified city has four main areas:

- The area of the upper, those placed on top of the hill;
- The middle part area, lying on the hilly slopes;
- Part of the following area under the hill;
- Riparian area, Drini river bed and the western wall of the city.

According to the researcher K. Zhegu, each of these areas there has been a particular function and at the same time interconnected. Thus, the first area to the four, respecting the natural position to defend, have been established state institutions, territory so densely populated, handicraft-trading center and river port below, linking Lezha with all maritime routes Adriatic. Lezha urban layout is unique and unrepeatable in any of the cities Illyrian known until today. It can be said that Lezha ancient urban module is not made according to the example of cities modern in Greece, Macedonia and Epirus, but can not be characterized as a town with acropolis typologically. Illyrian urban planning period to date layout inherits the walls, defending towers, all entrances and part of the main road of the lower of the city. Within the town of Lezha preserved and ramified network of roads cross inside. From the outer, entering the city there are three, it came from the South, from the North and another third from the Northeast (Ecological Club of Lezha, 2002). Lezha has a great potential for tourism and will be an important sector in the medium and long term. Potentials, accompanied by infrastructure, comprehensive legislation and views to enhance the tourism industry in the future, it increases even more the value of this area as a place with rare resources and very convenient to welcome the tourists. Encouraging tourism and its impact on economic and social development, infrastructure and rapid development are required to precede the tourism industry, which is considered still in the early stages but a great potential. In Lezha and the beaches of Shengjin and Kune there are numerous hotels to host tourists which have traditional cuisine and specially fresh sea food. Different granted projects have been and still working on this area in order to create a regular tourist infrastructure to be served to the local and foreign tourist. This project is just a scientific one which would help the local governments and private institution to have a study on the Lezha potential and the division of the area through the specification of the environmental preferences of the residents.

### 3. Data and Methodology

The study is focused in the region Lezha- Shengjin as previously mentioned. This region of study firstly was divided from the working group into 5 different areas as follow:

- Urban Area, Lezha City
- Touristic Area of Shengjin – Tale
- Urbanized Rural Area of Ishull Lezhe – Shenkoll
- Rural Area Balldre – Torovice
- Rural Area of Zadrima

The working group designed a survey of 20 questions in order to have the needed data relating the impact of built environment and position on the choices of households and the house prices. The survey was carried primarily in the branches of the banks which operate in the region of Lezhe – Shengjin questioning the clients of them and in the administrative offices around the region. The data were collected by a group of six persons employed for this purpose for a period of 4 months and contain information on some details of the houses that they were living at, the environment around them and as well the positioning with regard to urban area, city center, touristic places and open green spaces. The table below shows the definitions of all variables used in the analysis for the study of the home prices in the area of Lezha.

**Table 1: Definitions of the Variables in the Analysis: Lezha Region**

---

AREA = the area of the Lezha region where the house is placed (one of five areas)
HOUSE_PRICE = the Market Prices of the houses in 2015
PROPERTY_AGE = age of the construction of the house
CONSTRUCTION = the quality of the construction of the house (=1 if yeas, =0 if no)
FLOOR = number of the floor of the house
ROOMS = the number of the rooms of the house
SUNLIGHT = the rooms that face the sunlight
DC = distance from the center of the city
DG = distance from the nearest green place or area
DS = distance from the nearest school
DB = distance from the beach
DH = distance from the nearest medical center
VALUE = the evaluation of the residents for their houses
MONTHLY_INCOME = monthly income of the residents
SATISFACTION = satisfaction level of the residents with the green areas around their houses

---

\*Dependent Variable is House Price = Market Price

According to the table above, the variables achieved for the analyses according to the Hedonic Model are interior and exterior. The market price is the dependent variable. The interior variables are physical characteristics of each house that affect its price, PROPERTY\_AGE regards to the years that the house has been constructed, CONSTRUCTION deals with the quality of the construction if it's a good or bad one. FLOOR deals with the number of floor that the house is placed, ROOMS regards to the number of the rooms that the house has and SUNLIGHT is expected to be an important physical characteristics which would positively affect to the price of the house. This variable deals with the number of the rooms that face sunlight during the day. The exterior variables are all variables that are around the house but affect to the price of it. DC, distance to the center of the city and the distance from the beach (DB) are considered as the most important variables that would affect the house price as also the areas of Lezha are considered to be touristic ones. Other exterior variables are the distance from the green places (DG), distance from the schools (DS) and the distance from the nearest medical center (DH). The smaller these distances the higher the prices are considered to be. While below, Table 2 shows the descriptive statistics of the study variables including mean and standard deviation.

**Table 2: Descriptive Statistics of Study Variables**



	N		Mean	Median	Mode	Std. Deviation
	Valid	Missing				
Area	520	0	1.86	1	1	1.194
Property_Age	514	6	2.27	2	3	0.711
Construction	514	6	1.4	1	1	0.491
Floor	508	12	2.56	2	1	1.621
Rooms	520	0	3.66	3	3	1.693
Sunlight	518	2	2.15	2	2	0.982
DC	518	2	12.56	10	10	11.267
DG	501	19	10.39	8	5	9.345
DS	517	3	10.14	10	10	7.208
DB	514	6	25.13	25	30	16.548
DH	509	11	10.61	10	10	7.802
Monthly_Income	503	17	3.04	3	5	1.433
Satisfaction	514	6	2.42	3	3	0.688

In the Appendix 1 are shown all the Frequency Tables of the Variables of the studies regarding the SPSS Estimation.

**Hedonic Price Method:** The Hedonic Price Method is used to estimate the value of environmental amenities that affect prices of marketed goods. Most of the studies would consider the housing prices to estimate the value of the environmental space around. The method is based on the assumption that people value the characteristics of a good, or the services it provides, rather than the good itself. Thus, prices will reflect the value of a set of characteristics, including environmental characteristics that people consider important when purchasing the good (King & Mazzotta, 2000). The hedonic pricing method may be used to value the economic benefits regarding with:

- environmental quality
- environmental amenities

Despite the fact of the nature of the environmental amenity or which recreational area would be studied Hedonic Price Method serves best to estimate its value and impact on the properties prices. However many cases showed difficulties and complications for the incorporation of the entire variety of factors affecting the environmental or land value (Pearson, Tisdell, & Lisle, 2002). In general, the price of a house is related to the characteristics of the house and property itself, the characteristics of the neighborhood and community, and environmental characteristics. Thus, if non-environmental factors are controlled for, then any remaining differences in price can be attributed to differences in environmental quality. For example, if all characteristics of houses and neighborhoods throughout an area were the same, except for the level of air pollution, then houses with better air quality would cost more. This higher price reflects the value of cleaner air to people who purchase houses in the region (King & Mazzotta, 2000). Some important issues and limitations of Hedonic Price Method:

- The Hedonic Price Method requires a large set of data in order to estimate a proper function, so large number of observations or surveys is needed.
- It is assumed that the household have the perfect information for the environment around and the prices of the properties, that's why they have had their choices.
- There is a problem of multi-collinearity. For example it is expected higher prices of properties near the city center but the air pollution around the area might be higher as well. So it would be difficult to separate these two effects.
- The environmental values and benefits are estimated just regarding the housing prices despite their larger set of values.
- It is assumed that people are willing to pay more for more environmental values, despite the other factors.
- It is assumed that people have the chance to choose their home just from the given combinations of features they prefer, despite that there would be effect of also taxes or other factors.

This project was designed as a necessity to have a real study in relation to environmental economics. Aiming a study based on hedonic price method and feasible one for our region, the project seeks to

achieve firstly an environmental awareness, to increase the education in environmental economy by contributing with a wide range of data and a real study.

#### 4. Discussion and Analysis

In general, the price of a house is related to the characteristics of the house and property itself, the characteristics of the neighborhood and community, and environmental characteristics. Thus, if non-environmental factors are controlled for, then any remaining differences in price can be attributed to differences in environmental quality. The data are analyzed using regression analysis, which relates the price of the property to its characteristics and the environmental characteristic(s) of interest. Thus, the effects of different characteristics on price can be estimated. The regression results indicate how much property values will change for a small change in each characteristic, holding all other characteristics constant. Once the data are collected and compiled, the next step is to statistically estimate a function that relates property values to property characteristics. Regression analysis is typically used to estimate the influence of various property characteristics. Regression is a fundamental operation in statistics and includes techniques for modeling and analyzing several variables at a time. Regression analysis is used for explaining the relationship between a dependent variable, usually denoted by Y, and a number of independent variables, X1, X2... Xp. The independent variables are also known as predictor or explanatory variables. In most regression analyses, the variables are assumed to be continuous. In simple regression, there is only one independent variable. However, most real world applications involve more than one variable which influence the outcome variable. A model for a set of factors determining house prices could be:

$$P = f(D, S, M, N, B, R)$$

P = Price

D = Distance from the Center

S = Distance from Green Space

M = Distance from the nearest Medical Center

N = Distance from the nearest School

B = Distance from the Beach

R = Rooms facing sunlight

This is called a hedonic price function. The regression typically uses the logarithms of the values for the various factors. A statistical analysis package such as the Regression function in SPSS can be used for the computations of the following type of equation:

$$\ln(P) = \ln \beta_0 + \beta_1 \ln(D) + \beta_2 \ln(S) + \beta_3 \ln(M) + \beta_4 \ln(N) + \beta_5 \ln(B) + \beta_6 \ln(R) + e$$

$$\text{Price} = 0.776 + \beta_1 * 0.670 + \beta_2 * 0.471 + \beta_3 * 0.460 - \beta_4 * 0.363 + \beta_5 * 0.112$$

The  $\beta$  values represent the role that each factor plays in the value of the residence. For example  $\beta_5$  is the value of each unit of proximity to the highway.

**Table 3: Descriptive statistics of the variables**

		Self Valuation of Property	Distance from the Beach	Distance from Green Space	Distance from the Center	Rooms facing sunlight
N	Valid	485	514	501	518	518
	Missing	35	6	19	2	2
Mean		43196.70	25.13	10.39	12.56	2.15
Median		40000.00	25.00	8.00	10.00	2.00
Mode		50000	30	5	10	2
Std. Deviation		20798.180	16.548	9.345	11.267	.982
Variance		432564286.6	273.822	87.333	126.947	.965
Skewness		.477	2.991	2.125	2.884	1.313
Std. Error of Skewness		.111	.108	.109	.107	.107
Kurtosis		.435	19.577	5.614	13.471	4.197
Std. Error of Kurtosis		.221	.215	.218	.214	.214
Range		145000	179	59	99	8
Minimum		5000	1	1	1	0
Maximum		150000	180	60	100	8
Sum		20950400	12915	5203	6505	1115

		Rooms	Floor	Distance from the nearest School	Distance from the nearest Medical Center
N	Valid	520	508	517	509
	Missing	0	12	3	11
Mean		3.66	2.56	10.14	10.61
Median		3.00	2.00	10.00	10.00
Mode		3	1	10	10
Std. Deviation		1.693	1.621	7.208	7.802
Variance		2.867	2.629	51.951	60.869
Skewness		1.744	1.397	1.847	1.824
Std. Error of Skewness		.107	.108	.107	.108
Kurtosis		3.663	3.111	4.824	4.013
Std. Error of Kurtosis		.214	.216	.214	.216
Range		10	10	49	49
Minimum		1	1	1	1
Maximum		11	11	50	50
Sum		1905	1303	5240	5398

The data set used to estimate the hedonic models is presented and described in this section. The models used in the present study will be estimated with data gathered from the Center or nearest medical area of Lezha. The most relevant variable is Distance from the center, Distance from the nearest School, Distance from the medical center. The house prices are not market values; they are mostly are performing on the distance from the green space or city center. Prices are highly correlation to the distance from the city center and the green areas. Our data set contains other measures of size of the dwelling aside from floor area the number of bedrooms and number of bathrooms. However, including too many size variables made it difficult to interpret the parameter estimates.

**Table 4: Estimated parameters of MLR model**

Var.	Parameter	MLR 1		MLR2	
		t-ratio	Parameter	t-ratio	
Rooms facing sunlight	0.6627894	7.619874	0.8627859	6.191874	
Distance from the Center	0.2147578	5.212241	0.2455445	5.211241	
Distance from Green Space	-	-	0.1248171	6.892121	
Distance from the nearest School	-	-	0.1114547	0.240047	
Distance from the Beach	0.1134738	9.247912	0.2341687	9.245676	
Distance from the nearest Medical Center	0.2124535	2.454871	-	-	
R2		0.63489		0.61473	
R2 adj.		0.61454		0.6332	

As shown from the table below in MLR2 the satisfaction from the green open space has a positive sign in the estimation of the observation. On the other side Distance from the nearest school shows that has a negative symbol in the parameter estimation. The relationship between dependent variable with independent variables was performed using Pearson correlation. It was found that the correlation coefficient indicated that house prices are positive and strongly significance to price (0.776), Distance from the Center (0.670), Distance from Green Space (0.471) and Medical Center (0.460), but negative relationship of the distance from the nearest School (-0.363). Meanwhile, house price is not significance to set variables. The value of F statistic is 380.696 and p-value is 0.0000, means that the model is suitable and can be fitted to the data. The coefficient of determination R2 = 0.63489 and Adj-R2= 0.61454, it shows that 63% variance in house price can be explained by living area, Distance from Green Space, Distance from the Center and Distance from the Beach.

## 5. Conclusion

Hedonic model examines the effect of characteristics of goods on their prices. The paper analysis the determinants of house prices in Lezhe-Shengjin. Hedonic regression model is engaged in the analysis. Ordinary least square method is engaged in estimating the hedonic model. The results of the hedonic model reveal that Distance from the green space, distance from the city center and distance from the beach are the most significant variables that affect the house prices. This study presents an analysis for Lezhe-Shengjin and provides important findings on the determinants of house prices. The model's accuracy in predicting house price was measured by a number of criteria. The value of R<sup>2</sup> and MSE were compared to select preferred model. By using SPSS, the R<sup>2</sup> value was increase about 2% higher than MLR. The results from such a study can also produce answers to development decisions such as what building attributes to include in an effort to generate the house prices. Using these techniques can facilitate price valuation when traditional competition models cannot be estimating. That's why this study is considered also from the Local Government and will be presented to the group of interests. This study and the indicators generated have placed the Lezha region in better perspectives of the development according to the European Union standards.

**Recommendations:** The whole infrastructure of academic and regional study will have available the first indicators of the development planning, while preserving and improving the environment. Also they will help in the architecture of the building in this context, friendly architecture or green architecture while improving also the national accounting system (MRS). This region has for the first time this kind of indicators which will be used as a reference to orient development policies or regional units focusing on two conclusions:

**Firstly:** Results of the Hedonic Price study applied in Lezha region has reflected a positive element for all public and private structures to design, development and construction. These results can be used in a manner that suits the architecture of the building (eco-friendly), focused in these directions:

- Involving of the architecture in environment.
- Connectivity or combination of the environment with the green space around.
- The emblem of nature in architecture in cultural context.
- -Environmental design to support and accept Eco-Architecture.

**Secondly:** Traditional economic indicators do not consider the state of the environment. Thus a strong economic growth can mask a rampant consumption of natural resources. Economic growth can hide the overall risk of using natural resources in the medium or low level of investment in human capital. Green (Environmental) Accounting. On one hand some governments and international institutions have sought to improve the national accounting system that existed by establishing a new form of environmental accounting. They are equipped with instruments to rate the environmental state or improve indicators that were still present. National accounting system (NAS) is the sum of accounts performed periodically by states to follow the evolution of their economy. The economic value of natural resources and their role in the production activity are not included in the NAS. Elaboration of development concept included in the macroeconomic dimension of the environment in the political decision through a specific environmental accounting is also called Green accounting. So this study will motivate the policymakers not only in the Lezha and Shengjin region through the two most important recommendations derived from the analysis of an environmental engineer as well.

## References

- Brander, L. & Koetse, M. (2011). The Value of Urban Open SpaceL Meta- Analyses of Contigent Valuation and Hedonic Pricing Results. *Journal of Enviromental Management*, 92, 2763-2773.
- Chiarazzo, V., Coppola, P., Olio, A. I., Ibeas, A. & Ottomanelli, M. (2014). The Effects of Environmental Quality on Residential Choice Location. *Procedia- Social and Behavioral Sciences*, 162, 178-187.
- Ecological Club of Lezha. (2002). Guide Lezha. Lezhe: Gjergj Fishta EBP.
- Gundimeda, H. (2005). Hedonic Price Method - A Concept Note. Chennai: Madras School of Economics.
- King, D. M. & Mazzotta, M. (2000). *Ecosystem Valuation*. US Department of Agriculture, Natural Resources, Conservation Service, and National Oceanographic and Atmospheric Administration.
- Monson, M. (2009). Valuation Using Hedonic Pricing Models. *Cornell Real Estate Review*, 7, 62-73.

- Noor, N. M., Asmawi, M. & Abdullah, A. (2015). Sustainable Urban Regeneration: GIS and Hedonic Pricing Method in Determining the Value of Green Space in Housing Area. *Procedia- Social and Behavioral Sciences* , 669-679.
- Pearson, L., Tisdell, C. & Lisle, A. (2002). The Impact of Noosa National Park on Surrounding Property Values: An Application of the Hedonic Price Method. *Economic Analysis and Policy*, 32(2), 155-171.
- Veie, K. L. & Panduro, T. E. (2013). An Alternative to the Standard Spatial Econometric Approches in Hedonic Price Models. Copenhagen: University of Copenhagen, Department of Food and Recource Economics.

## Key Factors of Small Business Success: Literature Review

Małgorzata Okręglicka  
Czestochowa University of Technology, Poland  
m.okreglicka@wp.pl

**Abstract:** The success of small businesses sector is crucial for national economies of all countries around the world. This is why the constant analysis of determinants responsible for small firm success is necessary. It allows for a quick reaction to changing business conditions and the continuous improvement of management methods. Literature review indicated that the analysis of key success factors of small businesses is a commonly undertaken subject, although it is difficult to find a comprehensive study, completely classifying the determinants of success according to certain criteria.

**Keywords:** *Small business, determinants, success factors, enterprises*

### 1. Introduction

Twenty five years after D'Amboise & Muldowney (1988) proposed the creation of a separate, specific theory for small business, the scientists still have not agreed on specific approaches to small business theory. For a long time the dynamics of small enterprises has been analyzed and theorized as if they were large enterprises. This paradigm has led small entities to adopt management principles, techniques and practices that are not adequate to their reality (Iacono & Nagano, 2009). Management theories are essentially grounded on problems from large enterprises, and that means they cannot be extended to small firms because the latter have different characteristics (Leone, 1999). The role of small business is crucial for national economies of all countries around the world. Many studies have reported that economic growth requires participation from small business units (Battilana & Casciaro, 2012). They play a fundamental role by stimulating domestic and regional economic growth, reducing unemployment, stimulating market effectiveness or innovation-based customer need fulfillment (Kaur & Sharma, 2014). The organization success can be seen to have different meanings and can have different forms, e.g. survival, profit, sales growth, return on investment, number of employed; reputation etc. (Philip, 2011). The success of small business has been defined in economic literature in various ways. In its simplest sense, it may be defined as the ability to survive or to remain in business (Lussier and Pfeifer, 2001). It is also stated that success of the organization is typically defined by such economic measures as survival rate, growth in employees, sales increase, and profitability (Hibbler-Britt & Sussan, 2015) and is determined by many essential factors.

Critical success factors in general have been one of the most actively researched topics (Lee & Ahn, 2008). They may be examined in relation to each project, market or organization type, and therefore also for small businesses. Critical success factors are: "those few things that must go well to insure the success of an organization" (Boynton and Zmund, 1984). Rockart (1982) stresses that critical business factors are the limited number of areas in which result, if they are positive or profitable, will ensure competitive performance of the business. These key factors applied to thriving enterprises may enable high organizational performance (Drucker, 1973). The variety of factors affecting the effective functioning and development of the organization is so large that it is difficult for entrepreneurs to identify these key determinants - the most responsible for the success of a small business, which increases the risk of economic activity (Gorzeń-Mitka, 2013).

### 2. Literature Review

Literature review is defined mainly as a qualitative synthesis and a fundamental step within the overall research process, which should be conducted in a systematic and transparent way. Badger et al. (2000) describe that from a methodological point of view, and according to them a review of the literature is a systematic, explicit and reproducible approach for identifying, evaluating and interpreting the existing body of publications. Research papers considered for inclusion in this literature review are: written in English,

from peer-reviewed journals, accessible through electronic management databases. The review process was performed in several stages:

- Defining research objective,
- Conducting a search on the databases, in order to retrieve the relevant articles;
- Reviewing the abstracts in order to assess the suitability of the articles,
- Critically analyzing all relevant peer-reviewed articles, important for the objective of the research.

The main objective of the study is to identify how comprehensive is the range of studies in the area of critical success factors of small business and understand the trends in literature. The literature search was based on the following keywords jointly found in title, keywords or abstract: "small business" or "small enterprises" or "small companies" or "small firm" together with "success factors" or "success determinants". Finally, all available peer-reviewed papers have been carefully reviewed looking at determinants of small business success and their classifications. It was also found necessary to include other articles/documents from the field, as they were mentioned in several occasions in the literature and constitute some of the most important papers in the general topic of critical success factors in business sector in management literature.

### 3. Results

Literature review indicated that the analysis of the factors of success of small businesses is a commonly undertaken subject, although it is difficult to find a comprehensive study, completely classifying the determinants of success according to certain criteria. Such a classification of the success factors in small businesses would be advisable due to the enormous quantity and variety of the success determinants. In the following, there are factors which were most often mentioned in the study. Jennings & Beaver (1997) stress that attribution of success or failure to small business is dynamic, complex and problematic. It is very difficult to indicate clearly the determinants that ensure effective functioning and dynamic development. Even more difficult would be to make a ranking of the validity of these factors. This is due to the fact that success factors are not obligatory for every type of organization operating in a specific environment. The nature of the enterprises, area of operation, as well as the time in which conditions are analyzed, are crucial. To achieve business success, many factors should be optimal simultaneously, since SMEs success is a multidimensional phenomenon. Both firm-internal and firm-external factors affect firm success. Entrepreneurs in successful SMEs and those in failed SMEs thought that pretty much the same factors are the most important for business success, and held the same views on the factors to be avoided in business (Philip, 2011).

When reviewing the economic literature, one should pay special attention to the company size. Although the general principles of businesses performance are basically the same for all of them, success factors vary depending on the size of the business, particularly if we compare small business to large enterprises. After literature review of the subject, it is obvious that there are many classifications of the firm success factors. Moreover, many of the discussed criteria simply identify the symptoms rather than the factors responsible for the success of the enterprise (Jennings & Beaver, 1997). Keats & Bracker (1988) proposed a success factor division for small business, arrayed in three groupings: first - general environment, second - task environment and third - personal characteristics of the small business entrepreneur. A slightly different classification was proposed by Luk (1996) who arranged success factors into three categories: personal factors, managerial factors, and environmental factors (product, market and company factors), combined into two categories - internal and external environmental factors. In turn, key determinants to be important in analyzing the business success of SMEs, identified by Indarti & Langenberg (2005), include the characteristics of the entrepreneurs, the characteristics of the company and the contextual elements of SME development. For the purpose of this article, the following classification of success factors of enterprises was adopted:

- Factors relating to individual entrepreneurs,
- Factors specific to small enterprise,
- Environmental factors.

When analyzing the success factors, the first step should be to identify those associated with the entrepreneur who represents the primary decision-making body for small business. Therefore, the researchers infer that

success or failure criteria of a small enterprise must reflect the principal stakeholder's perspective. Thus, the factors for success would reflect the fulfillment of the entrepreneur's specific inspiration. Entrialgo et al. (2000) suggest that individual personality significantly influences the success of small business organizations. The entrepreneur's personality and managerial skills, as well as technical know-how are often cited as the most influential factor on the performance of an SME (Man et al., 2002). In the work of Anggadwita & Mustafid (2014) we can find the statement that individual characteristics such as motivation, optimism, devotion to business, self-efficacy and self management can determine the success of an entrepreneur in business management. Another paper emphasizes the role of decision-making skills, relevant work experience and well-developed interpersonal skills as elements ensuring the success of the organization (Luk, 1996).

In some studies it can be found that such factors as readiness to hard work and for long hours, communication skills, interpersonal skills and business connections are important to the business success, whilst vocational and higher education is not considered by small businesspersons to be a crucial factor in achieving success (Coy et al., 2007). Small companies are specific business entities. They differ from larger entities in nearly every area of business activity. Their features such as poor capital resources, a simple organizational structure, centralized (in the person of owner) management and limited access to information and advanced technologies critically determine the manner of their functioning. That is why the scientists often discuss success factors separately for small business. First, it was found that very frequent reason for success among small businesses was their ability to identify and focus on specific market niches (DeHayes & Haeberle, 1990). On the competitive, global market, small businesses lose out to corporations which have incomparably greater human, financial and informational resources. Therefore, finding and occupying a niche market is clearly an opportunity for rapid development (Duncan, 1991).

In the age of information and rapidly changing environment, adaptability has become a priority, and that requires continuous learning. Jerez-Go'mez et al. (2005) stress that learning capability has been treated as a significant index of firm's competitiveness, especially for SMEs, which provides them a greater opportunity to achieve superior performance. Learning capability becomes the success factor by enabling the small enterprises to identify new strategies and channels or networks to operate more closely with customers, and as result allows them to differentiate themselves from their rivals (Sok & O'Cass, 2011). Additionally, by analyzing small and medium size enterprises operating in the ICT industry Salim & Sulaiman (2011) found evidence that organizational learning contributes to innovation capability and that innovativeness is positively related to business performance. Similarly, Larson (1987) accents the role of this kind of factors, indicating that innovation, growth potential, emphasis on quality and operating efficiency lead to development of the organization, whereas Bird (1989) describes innovativeness together with advanced training and risk-taking behavior as important for small business results. Schumpeter, in the most general definition, describes innovation as any possible changes in the production and distribution of goods. Innovation can be described as creative application of traits held suitable in action to business development (Lyons et al., 2007). While, for large firms, product and process innovations are the most important, small entities the most frequently implement marketing and organizational innovations (Okreglicka, 2007). It is confirmed in many studies e.g. Tohidi & Jabbari (2012) argued that organizational innovation is fast becoming a crucial factor in enterprise survival as a result of the evolution of the competitive environment.

An interesting approach to success has been proposed by Gunter et al. (1995). He found that the secret of success is the emphasis of simplicity in SME operations, which produce a narrower range of goods, sell to few customers, and have fewer suppliers. Their advantage is also created by decentralized organizational structures and simpler, faster processes (Ghosh et al., 2001). Literature review confirms that both for small companies and for medium-sized or large enterprises very important in their way to success are strategic management. It is particularly important for small companies using short-term approach to management while reducing long-term planning – crucial for doing a successful business (Mraz, 1989). Similar factors are indicated by Schilit (1986) who requires the following conditions for success: having a formal business plan, retaining a market orientation, developing a common value system, encouraging entrepreneurial approach through all levels of the company. Next, a clear mission statement and a corporate value system are recognized by Campbell (1991) as keys for a successful business. In turn, Foley (1987) emphasizes that a written business plan and constant new product development were among the



prerequisites for a successful business. On the other hand, many entrepreneurs are great at creating amazing plans but fail in the implementation and the management of people (Miles, 2014).

In the days of strong competition, customer is the center of attention of every entrepreneur. Small business can achieve an advantage in this area by quickly responding to market demands, that means by appropriate response to customer desires and requests (Hills & Narayana, 1990). There may be mentioned here such factors as a customer-oriented policy, a competitive strategy and a personal commitment from the top management (Campbell, 1991). Huck & McEwen (1991) found customer relations to be the competency most important for the success of small business. Duchesneau & Gartner (1990) stress the role of the ability to communicate well and good customer service in sales intensification. To achieve that task, the strong sales and marketing teams are necessary (Foley, 1987). There is no possibility for the organization to succeed without effectively used human resources (Lemańska-Majdzik, 2013). The starting problem is availability of skilled and well educated labor (Steiner & Solem, 1988), the basic factor creating success of the small business. Hills & Narayana (1990) pointed the role of high employee spirit and good management-employee relations which are necessary for the effective management of the organization. Evans (1986) asserted that a company success functioning in a hostile environment was directly related to human resources development, together with top management's involvement with all phases of the operation. Barkham (1989) and Pollock (1989) identified skill and attitudes, both of the managers and employees, as factors contributing to the success of an enterprise.

An unique approach was presented by Gaskill & Hyland (1989) who identified several keys to a successful business, which included performance measurement and avoiding complacency. Success should be identified with an everyday struggle with market competitors, which requires continuous improvement of methods and forms of management. Accordingly, a number of studies have reported diverse technical factors as being responsible for success in small business ventures. The technology is presently necessary to achieve high quality of goods and services, and these are a relevant element in gaining a competitive advantage (Hills & Narayana, 1990). Also, McCormack (1989) agreed that one of the most important components to a successful business was a commitment to quality. Huck & McEwen (1991) found technical knowledge to be the competency most important for the success of small business. DeHayes & Haeberle (1990) further identified the following critical success factors of technological nature: the ability to develop and sustain technological advantage and strategic use of information technology. Traditionally, when we describe the conditions for small business success the financial determinants play one of the leading roles. Schilit (1986) emphasizes here the necessity of ensuring adequate capitalization. Lack of capital, especially current capital, is one of the most significant causes of bankruptcy in small business sector. Moreover, Gaskill et al. (1993) and Osborne (1993) both presented the financial characteristics that must be overcome in order to avoid entrepreneurial failure, i.e.: undercapitalization, poor planning, lack of credibility and poor money management.

The success of the organization is formed not only by its direct action, but also due to the influence of the environment. This is why Schilit (1986) emphasizes the need for continual monitoring of the business environment. External environment factor plays a very important role also for the firm success. Alias et al. pointed that external issues are including factors such as social, economic, political issues, physical or technology advance. Social network, government support, and legality, are the key strategic dimension in external environment in business success. Networks represent a means for entrepreneurs to reduce risks and transaction costs and also to improve access to business ideas, knowledge and capital (Philip, 2011). Satisfactory government support has been shown to be important for small firm success (Yusuf, 1995), while legal aspects influence the formulation of decisions which will determine the future development (Mazzarol & Choo, 2003). Also Belassi & Tukel (1996) emphasize that factors that are related to the external environment are one of the four major groups of success factors.

#### 4. Conclusion

Nowadays, sector of small and medium-sized enterprises is indicated as a key for intensive economic development in all EU countries. The special economic policy and law regulations are created to ensure stable activity and development of small business entities. Success of small business is formed by many factors, both internal and external to the company. The internal determinants result from personality of the

entrepreneur being a driving force of small enterprise and the characteristics of the unit, radically different from the large companies in form and method of management. External factors are due to environmental influences, both competitive environment and macro-environment. Critical success factors are a changing phenomenon and require continual observation. The results of such an observation is the collection of publications, preparing by researches all around the world. The review of several scientific papers of this scope show that success factors of small enterprises constitute a frequently undertaken research topic, but results are presented partially and unsystematically, and usually refer to selected groups of conditions (financial, managerial, marketing etc.), they do not constitute a full and comprehensive compilation. The main groups of factors presented by the authors in international literature include:

- in the group of factors relating to individual entrepreneurs - interpersonal, communication and managerial skills, motivation, determination, as well as decision-making skills,
- in the group of factors specific to small enterprise - learning capability of small business, potential for innovations, a strategic approach to management, a customer-oriented policy, efficient use of human resources, having adequate financial and technological resources, as well as ability of focus on specific market niches.
- in the group of environmental factors - ability of dealing in changing law, political and economic environment.
- 

Besides, the need for more precise classification of organization success factors was noticed, which should take into account the changes that have taken place in the economy in recent years, especially after the financial crisis after 2008.

## References

- Alias, Z., Zawawi, E. M. A., Yusof, K. & Aris, N. M. (2014). Determining Critical Success Factors of Project Management Practice: A conceptual framework. *Procedia - Social and Behavioral Sciences*, 153, 61-69.
- Anggadwita, G. & Mustafid, Q. Y. (2014). Identification of Factors Influencing the Performance of Small Medium Enterprises (SMEs). *Procedia - Social and Behavioral Sciences*, 115, 415-423.
- Barkham, R. J. (1989). Entrepreneurship: New Firms and Regional Development. PhD Thesis, University of Reading (UK).
- Badger, D., Nursten, J., Williams, P. & Woodward, M. (2000). Should all literature reviews be systematic? *Evaluation and Research Education*, 14(3-4), 220-230.
- Battilana, J. & Casciaro, T. (2012). Change Agents, Networks, and Institutions: A Contingency Theory of Organizational Change. *Academy of Management Journal*, 55(2), 381-398.
- Belassi, W. & Tukel, O. I. (1996). A new framework for determining critical success/failure factors in projects. *International Journal of Project Management*, 14, 141-151.
- Bird, B. (1989). Entrepreneurial Behavior. Chicago, IL: Foresman.
- Boynton, A. C. & Zmud, R. W. (1984). An Assessment of Critical Success Factors. *Sloan Management Review*, 25(4), 17-27.
- Campbell, R. (1991). 12 keys for entrepreneurial success. *Business Economic Review*, 37(3), 19 -22.
- Coy, S. P., Shipley, M. F., Omer, K. & Khan, R. N. A. (2007). Factors contributory to success: a study of Pakistan's small business owners. *Journal of Developmental Entrepreneurship*, 12(2), 181-198.
- D'Amboise, G. & Muldowney, M. (1988). Management Theory for small Business: attempts and requirements. *Academy of Management Review*, 13, 226-240.
- DeHayes, D. W. & Haeberle, W. L. (1990). University Alumni Small Business Research Program: A Study of Emerging Businesses. Bloomington: Centre for Entrepreneurship and Innovation, Indiana University.
- Drucker, P. F. (1973). Management: Tasks, Responsibilities, Practices'. New York: Harper & Row.
- Duchesneau, D. & Gartner, W. (1990). A profile of new venture success and failure in an emerging industry. *Journal of Business Venturing*, 5, 297-312.
- Duncan, I. (1991). An introduction to entrepreneurs. *CMA Mag.*, 65(9), 32.
- Entrialgo, M., Fernández, E. & Vázquez, C. J. (2000). Characteristic of Managers as Determinants of Entrepreneurial Orientation: Some Spanish Evidence. *Enterprise and Innovation Management Studies*, 1(2), 187-205.
- Evans, P. (1986). The strategic outcomes of human resource management. *Human Resource Management*, 25, 149-167.

- Foley, P. (1987). Marketing Management Policies and Small Business: An Investigation of the Factors Contributing to Small Business Success. PhD Thesis, Council for National Academic Awards (UK).
- Gaskill, G. T. & Hyland, J. M. (1989). Starting and managing a small business. *Manage Account*, 71(6), 28-31.
- Gaskill, L., Van Auken, H. & Manning, R. (1993). A factor analytic study of the perceived causes of small business failure. *Journal of Small Business Management*, 31(4), 18. Retrieved July 2, 2008, from ABI/INFORM Global database. (Document ID: 591220).
- Ghosh, B. C., Liang, T. W., Meng, T. T. & Chan, B. (2001). The key success factors, distinctive capabilities, and strategic thrusts of top SMEs in Singapore. *Journal of Business Research*, 51(3), 209-221.
- Gorzeń-Mitka, I. (2013). Risk identification tools - Polish MSMEs company's practices. In: *Problems of Management in the 21st Century*, 7, 6-11.
- Gunter, R., Kluge, J., Kempis, R. D., Diederichs, R. & Bruck, F. (1995). Simplicity Wins. How Germany's Mid-Sized Industrial Companies Succeed. Harvard Business School Press, Boston, MA.
- Hibbler-Britt, L. M. & Sussan, F. (2015). Small business success and social capital: a multi-cultural approach. *Global Conference on Business & Finance Proceedings*, 10(1), 156-163.
- Hills, G. & Narayana C. (1990). Profile, characteristics, success factors and marketing in highly successful firms. In *Frontiers of Entrepreneurship Research*, Brockhaus, Jr, N., Churchill, N., Katz, J., Kirchoff, B., Vesper, K., Wetzel, W. (eds.), 69-80. Wellesley, MA: Babson College.
- Huck, J. F. & McEwen, T. (1991). Competencies needed for small business success - perceptions of Jamaican entrepreneurs. *Journal Small Business Management*, 29(4), 90-93.
- Iacono, A. & Nagano, M. S. (2009). Interactions and Cooperation in Local Production Systems: An Analysis of Inhibiting Factors Related to Specificities of Small Enterprises. *Journal of Technology Management & Innovation*, 4(2), 143-153.
- Indarti, N. & Langenberg, M. (2005). A Study of Factors Affecting Business Success Among SMEs: Empirical Evidences from Indonesia, Retrieved from <http://www.smmeresearch.co.za/SMME%20Research%20General/Reports/Succes%20factors%20among%20SMEs%20in%20Indonesia.pdf>
- Jennings, P. & Beaver, G. (1997). The performance and competitive advantage of small firms: A management perspective. *International Small Business Journal*, 15(2), 63-76.
- Jerez-Go'mez, P., Ce'spedes-Lorente, J. & Valle-Cabrera, R. (2005). Organizational learning capability: a proposal of measurement. *Journal of Business Research*, 58, 715-725.
- Kaur, P. & Sharma, S. K. (2014). Evaluating the Relationship and Influence of Critical Success Factors of TQM on Business Performance: Evidence from SMEs of Manufacturing Sector. *IUP Journal of Operations Management*, 13(4), 17-30.
- Keats, B. W. & Bracker, J. S. (1988). Toward a theory of small firm performance: A conceptual model. *American Journal of Small Business*, 12, 41-58.
- Kristiansen, S., Furuholt, B. & Wahid, F. (2003). Internet cafe entrepreneurs: pioneers in information dissemination in Indonesia. *The International Journal of Entrepreneurship and Innovation*, 4(4), 251-263.
- Larson, P. (1987). How to survive in Montana's slow growth economy. *Montana Business Quarterly*, 25, 16-18.
- Lee, S. & Ahn, H. (2008). Assessment of process improvement from organizational change. *Information & Management*, 45(5), 270-280.
- Lemańska-Majdzik, A. & Tomski, P. (2013). O sukcesie przedsiębiorstwa. Zeszyty Naukowe Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach, nr 98 Seria. *Administracja i Zarządzanie*, 25, 203-214.
- Leone, N. M. C. G. (1999). As especificidades das pequenas e médias empresas. *Revista de Administração*, 34(2), 91-94.
- Luk, S. (1996). Success in Hong Kong: Factors self-reported by successful small business owners. *Journal of Small Business Management*, 34(3), 68-74.
- Lussier, R. & Pfeifer, S. (2001). A cross-national prediction model for business success. *Journal of Small Business Management*, 39(3), 228-237.
- Lyons, R. K., Chatman, J. A. & Joyce, C. K. (2007). Innovation in services: corporate culture and investment banking. *California Management Review*, 50(1), 174-191.
- Man, T. W. Y., Lau, T. & Chan, K. F. (2002). The competitiveness of small and medium enterprises a conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123-142.

- Mazzarol, T. & Choo, S. (2003). A study of the factors influencing the operating location decisions of small firms. *Property Management*, 21(2), 190-208.
- McCormack, M. H. (1989). Starting your own business. *Mod Off Technol.*, 34(9), 12-14.
- Miles, D. A. (2014). Examining Forces That Impact Firms: A Factor Analysis of Endogenous and Exogenous Risk Factors and Their Effect on Small Business Enterprises. *Academy of Business Research Journal*, 2, 20-35.
- Mraz, S. J. (1989). Advice from entrepreneurs. 61(9), 125-128.
- Mynarzová, M. & Štverková, H. (2015), Veřejná podpora jako významný faktor konkurenční schopnosti malých a středních podniků na vnitřním trhu Evropské unie. In: Zborník vedeckých prác Aktuálne problémy podnikovej sféry 2015. Bratislava: Ekonomická univerzita Bratislava, Fakulta podnikového manažmentu, Katedra podnikového hospodárstva, 452-461.
- Okreglicka, M. (2007). Innovation Activities in the Microenterprise Sector - Selected Aspects. In: Information Technologies in Economics and Innovative Management. Duda, J.T. (ed.). Kraków: Wydawnictwo Naukowo-Dydaktyczne AGH. 162-168.
- Osborne, R. (1993). Why entrepreneurs fail: How to avoid the traps. *Management Decision*, 31(1), 18. Retrieved from <http://proquest.umi.com/pqdweb?did=603105&sid=28&Fmt=2&clientId=1354&RQT=309&VName=PQD>
- Philip, M. (2011). Factors Affecting Business Success of Small & Medium Enterprises (SMEs). *Amity Global Business Review*, 6(1), 118-136.
- Pollock, M. F. (1989). Controlling their Own Success, Women and Business Ownership, PhD Thesis. Rutgers State University of New Jersey.
- Rockart, J. F. (1982). The changing role of information system executive: A critical success factors perspective. *Sloan Management Review*, 24(1), 3-13.
- Salim, I. & Sulaiman, M. (2011). Organizational Learning, Innovation and Performance: A Study of Malaysian Small and Medium Sized Enterprises. *International Journal of Business and Management*, 6(12), 118-126.
- Schilit, K. W. (1986). Guidelines for entrepreneurial success. *Advanced Management Journal*, 51(3), 44 ± 8.
- Sok, P. & O'Cass, A. (2011). Achieving superior innovation-based performance outcomes in SMEs through innovation resource-capability complementarity. *Industrial Marketing Management*, 40, 1285-1293.
- Steiner, M. & Solem, O. (1988). Factors for success in small manufacturing firms. *Journal of Small Business Management*, 26(1), 651-656.
- Tohidi, H. & Jabbari, M. M. (2012). Innovation as a Success Key for Organizations. *Procedia Technology*, 1, 560 - 564.
- Yusuf, A. (1995). Critical success factors for small business: perceptions of South Pacific entrepreneurs. *Journal of Small Business Management*, 33(2), 68-73.

**Analysis of Factors Affecting the Implementation of Strategic Plan Program Development Village (RESPEK) Increase in Welfare Society in Nabire Regency**

<sup>1</sup>Eduard Lodewyk Pesiarissa, <sup>2</sup>Mugiati\*

<sup>1</sup>University Satya Wiyata Mandala, Indonesia

<sup>2</sup>University of Science and Technology Jayapura, Indonesia

\*a.mugiati@yahoo.com

**Abstract:** To examine and analyze the effect of budget planning, budgeting, budget control and socio-cultural to the success of RESPEK in Nabire Rgency. 2) To examine and analyze the factors that most dominant influence on the success of the program RESPEK in Nabire Regency. Data collection methods used was observation, interviews and questionnaires. Data were analyzed descriptively and quantitatively using Multiple Linear Regression Analysis. The sampling technique is used "Sample Saturated". The results showed that: in Partial Budget Planning factor (X1), Use of Budget (X2), the Budget Supervision (X3), Social and Cultural Rights (X4) significantly influence the success of the program RESPEK in Nabire Regency. Simultaneous and Budget Planning factor (X1), Use of Budget (X2), the Budget Supervision (X3), Social and Cultural Rights (X4) significantly influence the success of the program RESPEK in Nabire Regency .The most dominant variable that influences the success of the program RESPEK in Nabire Regency among the four variables above are factors Budget Planning.

**Keyword:** *RESPEK, Welfare Society*

## 1. Introduction

Policy development in Papua province within 5 (five) this year were directed to village-based development. Village-based development approach is one answer to the perceived inequality of community development over the years, especially with regard to the fulfillment of the basic rights of indigenous Papuans. Under the mandate of Act No. 21 of 2001 on Special Autonomy for Papua Province which emphasizes the protection of the rights of indigenous Papuans, namely the obligation to recognize, respect, protect, empower and develop the rights of indigenous peoples. In the medium-term development plan policies (RPJA4) Papua province, the substance of human development that focuses pads (people centered development) in any policy development in Papua. And one in applicability is the Strategic Plan for Village Development program (RESPEK) conducted by the local government, both at the provincial and district / city. Kartasmita (1997: 65) states that, the level of welfare is a series of activities to follow the progress of construction and development activities continue to follow up in accordance with a predetermined plan. To stimulate and sustain economic growth and to realize a just social welfare, the development approach must consider and take into account the social aspects that exist or will arise in the future. Social approach needs to be applied in conjunction with economic development strategy approach, where both should be designed and implemented in a balanced, complementary, mutually complement and reinforce each other. Suharto (2006: 3-4), suggests that at least in the construction should have and has three goals to one another intertwined, namely: Improving the availability and distribution of goods is expanding people's basic needs such as food, housing, health and protection to all members of the public.

Special Autonomy Law does not specify how the funds are to be distributed among districts / cities in Papua. The law only says that the allocation should be decided by the Special Regional Regulation (Perdatus), with priority to lagging regions.<sup>15</sup> A joint Ministry of Finance and the Minister of Internal Affairs (April 2003) went on to explain that the district / city will receive a greater share of the province because they have greater responsibility in the provision of health and education services. As a consequence, in 2004, the province reduced the allocations to their own to forty percent; previously in 2002 and 2003 the province holds a sixty percent and forty percent allocated only to the district / city. But not all parts of the district / town under the control of district / city governments concerned. Part of the funds given to the district / city governments in the form of cash grants or "fresh money". Another part is given in the form of aid programs were approved and directed by the province. Both types of flows have become part of the budget of the district / city, which could be revised by the Parliament before it is approved. Because there is no formal

commitment regarding the use of SAF, this situation complicates the administration to ensure the use earmarked for priority sectors. In line with the regulations of the central government, in 2004 the allocation mechanism was changed so that more profitable pemerintah district / city. The province only received 40 percent of SAF, while 60 percent is allocated to the district / city. However, district / city "old" and "new" are treated differently. District / city that have been established previously to obtain their entire quota earmarked in the form of cash grants. Areas received only 40 percent of them in the form of cash. The remaining 60 percent is still under provincial control and assistance will be provided in the form of a mutually agreed program between the provincial and district / city governments. Nabire district, Papua province is one of the districts that manage village development funds based on community empowerment, which is included in the program plan of village development strategies (RESPEK). In the implementation, there is a village development programs that have been implemented include the fields of education, health, economic community, village infrastructure, and so forth in Nabire. Utilization of village development funds and supervision of social welfare amounted to 66.7%. This is done in order for the financial assistance program is run in accordance with a predetermined program targets.

## **2. Literature Review**

Hasibuan (1990: 17) states that, in contrast to other management functions, the monitoring function is a task of leadership is not fully able delegated to another party. Meanwhile, other management functions can largely be delegated by the leadership to his subordinates. Strategic Plan for Village Development (RESPEK) is a design approach in order to implement development programs at village and district levels. The components of the Strategic Plan for Village Development (RESPEK), as follows: 1) funding program, 2) apparatus, 3) authority, 4) management institutions, 5) community involvement in the implementation of development at the village and district level. Sources of funding villages in the program Strategic Plan for Village Development (RESPEK) can be divided into three (3) groups, namely: 1) fund the block grant (grant) from the provincial and local governments, 2) fund the block grant (grant) of the institution donors, and 3) the specific fund sector program grant aid from the central government, provincial, and district levels. The allocation of funds from the block grant assigned them an average of Rp. 100.000.000, - (One hundred million) per village. Allocation of funds per village set based on the location of the village are easily affordable, remote villages or isolated and difficult to reach, and also the number of people in each village (Systems, Mechanisms, and Procedures Pengetolaan Village Development Fund. Robertson said that the performance measurement (2002) is defined as a process of assessing the progress of work towards the goals and objectives that have been determined, including information on the efficiency of resource use in producing goods and services; the quality of goods and services; results of activities compared with the intended meaning; the effectiveness of the measures in achieving the objectives. Halim (2002: 159), financial implementation is that the financial position of the transactions carried out by an entity that is the end result of a process of accounting. The purpose of the formulation of financial statements is to provide information about the financial position of an entity that is useful for decision. Siagian (2008: 26), the supervision is one of the most important management functions that must be performed by a leader in achieving the goals of the organization he leads. Saydam gouzali (2000: 72) proposed definition of control as stages of managerial process regarding the maintenance of the organization's activities within the limits permitted as measured by haraan-haraan there pegawai can be seen from several factors, including factors subjects (actors) control and of process factors activities.

## **3. Methodology**

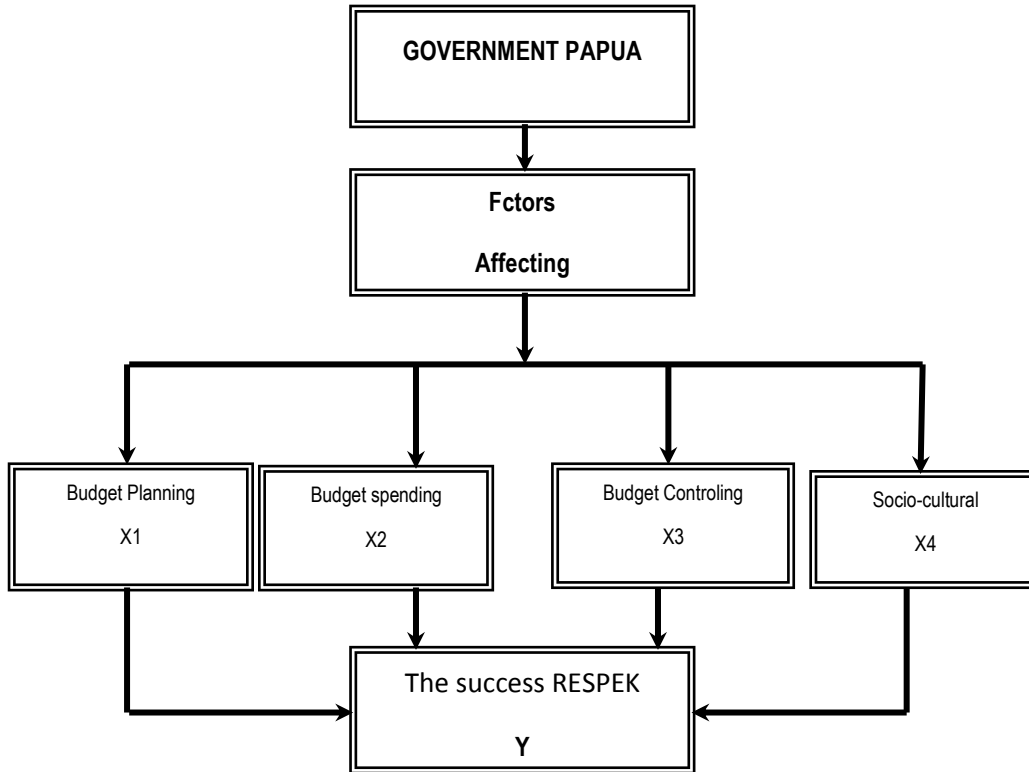
### **Hypothesis**

- Factors Budget Planning, budget spending, budget controlling, Social and Cultural Rights, partial effect on the success of the program Village Development Strategic Plan (RESPEK) in Nabire regency.
- Factors Budget Planning, budget spending, Monitoring the Budget, Social and Cultural simultaneous influence on the success of the program Village Development Strategic Plan (RESPEK) in Nabire regency.

- Budget Planning of the most dominant influence on the success of the program Village Development Strategic Plan (RESPEK) in Nabire regency.

The conceptual framework of research are as follows:

**Figure 1: Conceptual framework**



#### 4. Data analysis

**Test F For First Hypothesis:** Testing the first hypothesis ( $H_a$ ) is done by using the F test to examine the influence of independent variables on the dependent variable simultaneously. Tests conducted multiple correlation ( $R_{yx1x2x3}$ ) and continued with the generalized test for significance. Steps in doing the F test as follows:

- Formulate theoretical hypothesis ( $H_0$ ) and the research hypothesis ( $H_a$ ), namely:
  - If,  $H_0: \beta_1 = \beta_2 = \beta_3 = 0$ , meaning that the variable plan Program (X1), Program Respect (X2), and Monitoring Fund (X3) simultaneously does not affect the welfare of the community (Y) in Nabire regency
  - If,  $H_0: \beta_1 = \beta_2 = \beta_3 + 0$  means the Program Plan (X1), Respect Program (X2), and Monitoring Fund (X3) simultaneously affect the welfare of the community (Y) in Nabire Regency.
  - Determine the significance level  $\alpha$  (alpha) = 5% with degrees of freedom (k-1) and (nk) where n is the number of observations and k is the number of variables as much as 4 with a two-tailed test (two-tailed test).
- Comparing the value of F arithmetic with F table. If F arithmetic < F table, meaning  $H_0$  accepted and  $H_a$  rejected. Furthermore, if F count > F table, then  $H_0$  is rejected and  $H_a$  accepted.
- When  $F_h > F_t$ , then double tested the correlation coefficient is significant, which can be applied to the entire population.

**T test for second hypothesis:** The second hypothesis testing using t test, which is to see the effect of each independent variable on the dependent variable partially. The test is performed with the following steps:

- Formulating theoretical hypothesis ( $H_0$ ) and the research hypothesis ( $H_a$ ), namely:

- 1) If,  $H_0: SS1, SS2, SS3 = 0$ , meaning that the variable plan Program (X1), Program Respect (X2), and Monitoring Fund (X3) partially does not have a significant impact on public welfare (Y) in Nabire Regency.
- 2) If,  $H_0: SS1, SS2, SS3 > 0$  means variable Program Plan (X1), Program Respect (X2), and Monitoring Fund (X3) partially have significant influence on the welfare of society (Y) in Nabire Regency.
- b. Determining the level of significance  $\alpha$  (alpha) = 5% with degrees of freedom (nk-1) where n is the observation and k is the number of variables as much as 4 With a two-tailed test (two-tailed test).
- c. Comparing t arithmetic with t table. If  $t < t$  table, then  $H_0$  accepted and  $H_a$  rejected. Furthermore, if  $t > t$  table, bararti  $H_0$  rejected and  $H_a$  accepted

#### 4. Results and Discussion

Testing First Hypothesis: Budget planning, budget usage, Oversight budget, and positive influence on the social culture RESPEK program success. In the processing of data using linear regression, performed several steps to find the relationship between independent variables and the dependent variable, which includes budget planning (X1), the use of the budget (X2), oversight of the budget (X3), sociocultural (X4), with variable success RESPEK (Y). The regression results can be seen in the table below:

**Table 1: Regression Analysis**

Variable	Unstandardized Coefficients (B)	T hitung	Sig.	Description
(Constant)	27.202			
Budget Planning (X <sub>1</sub> )	0.440	2.627	0.014	Signifikan
use of the budget (X <sub>2</sub> )	0.585	2.308	0.029	Signifikan
Budget Control (X <sub>3</sub> )	0.309	2.283	0.030	Signifikan
Socio-culture (X <sub>4</sub> )	-0.807	-2.387	0.024	Signifikan
R		= 0.800		
R Square		= 0.641		
F hitung		= 9.989		
F table		= 2.493		
Sign. F		= 0.000		
.		= 0.05		

Source of data: Primary data are processed

Description:

- The amount of data (observations) = 30
- Dependent Variable Y (the program's success RESPEK)
- \* Significant at the 5% level

The dependent variable in this regression is the success of the program RESPEK (Y), while the independent variable is the budget planning (X1), the use of the budget (X2), oversight of the budget (X3), and socio-cultural (X4), d regression model based on the results of the above analysis is : $Y = 27\ 202 + 0.440X_1 + 0.585X_2 + 0.309X_3 + 0.440X_4 + e$ .The equation above shows that a significant figure in the budget planning variables (X1), the use of the budget (X2), oversight of the budget (X3), and socio-cultural (X4) .As for the interpretation of the equation is:

#### 1. $bo = 27\ 202$

This constant value indicates that if there is no variable budget planning, budgeting, budget control, and socio-cultural (X1, X2, X3, and X4 = 0), then the success of the program amounted to 27 202 RESPEK. In the sense that the variable success of the program RESPEK increase by 27 202 prior to or without variable budget planning, budgeting, budget control, and socio-cultural (X1, X2, X3, and X4 = 0).



**2. b1 = 0.440**

The parameter value or regression coefficient b1 shows that each variable budget planning increased 1 time, then the variable success RESPEK program will be increased by 0.440 times or in other words every increase in the program's success RESPEK needed variable budget planning for 0440, assuming independent variables others remain X2, X3, and X4 = 0) or *ceteris paribus*.

**3. b2 = 0585**

The parameter value or regression coefficient b2 shows that each variable use of the budget increased by 1 time, then the variable success RESPEK program will be increased by 0585 times or in other words every increase in variable success RESPEK program takes a variable use of the budget for 0585, assuming independent variables other remains X1, X3, and X4 = 0) or *ceteris paribus*.

**4. b3 = 0309**

The parameter value or regression coefficient b3 shows that each variable oversight of the budget increased by 1 time, then the variable success RESPEK program will be increased by 0309 times or in other words every increase in variable success RESPEK program needs a variable control budget by 0309, assuming independent variables other remains X1, X2, X4 = 0) or *ceteris paribus*.

**5. b4 = 0.002**

The parameter value or regression coefficient b4 shows that each variable sociocultural increased 1 time, then the variable success of RESPEK will increase by 0002 times or in other words every increase in variable success RESPEK needed social variables of culture for 0002, assuming independent variables other remains X1, X2, X3, = 0) or *ceteris paribus*.

**Simultaneously Hypothesis Testing (Test F):** At simultaneous hypothesis testing in this study, with the aim to determine whether the budget planning variables (X1), the use of the budget (X2), oversight of the budget (X3), and socio-cultural (X4), influence the success of the RESPEK program. In order to determine whether all the independent variables included in the model has significant influence jointly on the dependent variable used F test The following is a table showing the test results and the magnitude F table with a degree of freedom (df) 5%.

**Table 2: Hypothesis testing (Simultaneous)**

	<b>The alternative hypothesis (Ha)</b>	<b>Value</b>	<b>Status</b>
1 <sub>1</sub>	There is a simultaneous significant influence of variable budget planning, budgeting, budget control and socio-cultural program to be successful then RESPEK	F = 9.989 Sig F = 0.000 F <sub>tabel</sub> = 2.493	Ha is not rejected / Ho is rejected

Based on the table above shows that budget planning variables (X1), the use of the budget (X2), oversight of the budget (X3), and socio-cultural (X4) simultaneously affect the welfare of the community. In this test Ha is not rejected by the magnitude indicated by Fhitung 9989. This value is greater than F table (9989> 2493). This indicates that the four variables as a whole produces a strong influence on the success of the program RESPEK in Nabire district. Thus local government officials Kota Nabire in preparing the plan budgeting work unit (RASK) in their respective work units that will be used as a Plan of Municipal budget Nabire have been following the budget system performance including the disbursement of funds Respect is through community participation that is captured through consultation plan construction of the hamlet, village, sub-district and district level as well as the involvement of their staffs before the budget. With the people's aspirations and involvement of staffs in the preparation of the budget, in each work unit will be obvious purpose, have the value of the benefit to society and the apparatus arranged, can be evaluated in practice even though the budget ceiling for each unit of work has been established. So through the stages in the preparation of the budget is to make government officials Nabire City area will know the results of his efforts so as to make them feel confident and successful with budget plan made.

After testing the hypothesis by using statistical analysis showed that the variables of budget planning, budgeting, budget control, and social, cultural, simultaneously affect the success of the program RESPEK in Nabire district, then the research paper will then be carried out qualitative analysis. Qualitative analysis is not a stand-alone study, but an integral part of the previous analysis using statistical approaches. This is done in order to prove whether the results of hypothesis testing in quantitative analysis (statistical tests) can be shown on a qualitative analysis. For answers to the above questions, then used a phenomenological method. This method is used by means of observation of participants (local government officials who are competent with the budget) is with intensive interviews (to be able to uncover the orientation of the subject or the world of life), to understand the state of the social, and the latter researchers will make interpretation of the meaning derived from such activity. Based on the results of statistical analysis above found that variable budget planning, budgeting, budget control, and social and cultural simultaneously significant effect on the success of the program in improving the welfare of society RESPEK Nabire district.

**Hypothesis Testing In Partial (t test)**

**Table 2: Hypothesis Testing (Partial)**

	<b>Hipotesis Alternatif (Ha)</b>	<b>Nilai</b>	<b>Status</b>
1	Budget planning variables significantly influence the success of the RESPEK program.	t = 2.627* Sig t = 0.014 t <sub>tabel</sub> = 2.045	H12a not rejected / H12o rejected
2	Variable use of funds significantly influence the success of the program RESPEK	t = 2.308* Sig t = 0.029 t <sub>tabel</sub> = 2.045	H12a not rejected / H12o rejected
3	Budget control variables significantly influence the success of the RESPEK program.	t = 2.283* Sig t = 0.030 t <sub>tabel</sub> = 2.045	H12a not rejected / H12o rejected
4	Socio-cultural variables significantly influence the success of the RESPEK program.	t = 0.012 Sig t = 0.990 t <sub>tabel</sub> = 2.045	H15a rejected / H15o not rejected

Sumber data : Data Primer yang diolah

To indicate whether the independent variables individually have a significant influence on the dependent variable, and to prove which is the most dominant variable, then used the t test and standardized Beta coefficients. Results from these tests as shown in Table 5.9 which shows the results of the t test and the amount of t table on the significance or real level of 0.05 (95% confidence level) of two sides.

**a. Budget planning variables RESPEK:** Variable statistic budget planning has a value of 2,627. This value is greater than t table (2,627 > 2,045). Thus testing showed H12a H12o rejected or not rejected. This result shows that budget planning variables significantly influence the success of the RESPEK program.

**b. Variable Budget Usage:** Variable use of the budget has statistic value of 2,308. This value is greater than t table (2,308 > 2,045). Thus testing showed H13o H13a not denied or rejected. These results show that the use of variable budgets significantly influence the success of the RESPEK program.

**c. Variable Control Budget:** Variable feedback statistic budget has a value of 2,283. This value is greater than t table (2,283 > 2,045). Thus testing showed H14a Ho is rejected or not rejected. These results show that the variable feedback budget significantly influence behavior.

**d. Culture Social variables:** Socio-cultural variables have statistic value of -2387. This value is greater than t table (-2387 < -2045). Thus testing showed H16o H16a not denied or rejected. These results show that the socio-cultural variables significantly influence the success of the RESPEK program.

In the appendix can be seen that the most dominant variable affecting the behavior of the budget planning is variable (X1) which is indicated by the value of the greatest Beta coefficient that is equal to 0.386. This

hypothesis is supported by Sritua Arief (1993), namely: to determine the independent variable most dominant in influencing the value of the dependent variable in a linear regression model, then use the coefficient Beta (Beta Coefficient) or so-called standardized coefficient. The conclusion that can be taken based on the test results partially (t test) above the variable budget planning (X1), the use of the budget (X2), oversight of the budget (X3), and socio-cultural (X5) to the program's success RESPEK, in partial budget planning (X1), the use of the budget (X2), oversight of the budget (X3), and socio-cultural (X4) which significantly influence the success of the RESPECT program. This shows that local governments in preparing the budget plan work unit (RASK) Respect in particular the establishment of the fund for each unit of work should follow a budget system that adan with memperhatikan 4 variables. In the budget system that is applied should prioritize efforts to achieve the result or output of a cost allocation plan or the specified input. Besides the higher participation and staffs on each unit of work involved in the preparation of the budget, the better the outcome budgeting.

**Correlation (R and R<sup>2</sup>):** After testing the model, then the next step is performed to measure the correlation calculation accuracy of the regression line in explaining the variations in the value of the independent variable. Correlation analysis results obtained from the regression output mengorelasi represented by variables influence the budget planning (X1), the use of the budget (X2), oversight of the budget (X3), and socio-cultural (X4) of the RESPECT program's success, the value of R<sup>2</sup> = 0.641. This figure shows that the variation of behavior that can be explained by the regression equation is equal to 64.1% while the remaining 35.9% explained by other variables outside the model equations. In other words, 64.1% of the RESPECT program success may be influenced by the budget planning (X1), the use of the budget (X2), oversight of the budget (X3), and socio-cultural (X4). This shows that successful implementation depends on factors RESPEK sound budget planning, then use a good budget, and oversight of the budget as well as socio-cultural, thus the better the budget can be utilized by the community although limited by the set budget. R for 0800 means that the influence of the budget planning variables (X1), the use of the budget (X2), oversight of the budget (X3), and socio-cultural (X5) to the program's success RESPEK is strong enough. This suggests that if these four factors to be considered the implementation of the RESPEK program will run and managed well.

From the description above hypothesis can be explained that the government of Nabire in preparing the budget plan work unit (RASK) in particular distribution and respect in each district can understand about budget goals. It means that the government of Nabire in general in preparing the budget plan in each unit of work has been based on budget goals to be achieved. Decree No. 29 of 2002 states that Rask drafting mechanism through public aspirations based on the general policy direction, strategy and budget priorities, vision, mission, objectives and functions of the principal agencies by involving staff base in each work unit. With the participation of staffs in preparing the budget, the budget plan work unit (RASK) made will become clearer objectives, has a value of benefits or feedback for the community or officers who run easily evaluated and have followed the government policy on the development of the City Nabire.

**Budget planning factors influence the success RESPEK program:** Based on the research results through statistical test variable has a value statistic budget planning for 2627. This value is greater than t table (2,627 > 2,045). Thus testing showed H<sub>12a</sub> H<sub>12o</sub> rejected or not rejected. This result shows that budget planning variables significantly influence the success of the RESPEK program. This is consistent with what was said by Suharto (2006: 68), the policy as a statute, which is characterized by consistent and repetitive behavior, both of which make it or obey it. And it is clear that in order to achieve a goal that is maximal in running the program, of course, needs to be a good planning. Similarly, the adoption of the program which is being digalakan RESPEK by the provincial government of Papua and in particular Nabire district government would have to go through the budget planning susatu well so what is the target of the RESPEK program can be achieved. As well as the ultimate goal of the program is to improve the welfare of society can be realized in Nabire district. And planning and general policy direction (AKU) budget includes the components of the service and the expected level of achievement in any field of local government authority implemented within one fiscal year. Components and expected service is compiled based on the aspirations of the public taking into account local conditions and capabilities, including the service performance has been achieved in the previous fiscal years. It must be our common concern.

During the preparation of the general policy direction and budget are generally used to achieve a number of assumptions and is often encountered various problems, obstacles and challenges due to the limited resources available in the area. In this case, the necessary strategies or methods that are expected to facilitate or accelerate the achievement of the general policy direction and budget. Strategy and budget priorities in budgeting including policy formulation categories budget prepared under the direction of public policy and budget. The formulation of the strategy and budget priorities generally intended to overcome the problems and obstacles faced by the region in achieving the general policy direction and budget. Therefore, a clear budget planning factors required for mengatasi couples the matter. The formulation of the strategy should be geared towards the achievement of performance targets based on the ability of human resources, funds or the available technology and environmental conditions. The strategy integrates all resources available to harness the strengths and weaknesses and the opportunities and overcome the challenges. The purpose of the strategy are (1) the level of achievement in the direction of general policy budget, (2) the planning of programs and activities that are effective and efficient, (3) develop compatibility between the direction and general policies with programs and activities that are planned, (4) developing the strength and regional opportunities, (5) to overcome the weaknesses and challenges of the region, and (6) for support to achieve success. This has proved that why anggaran planning factors affect the success of the RESPECT program that is part of the government in improving the welfare of society.

**The use of factors influence the success of the budget RESPEK program:** Based on the research results through the use of statistical test variable has a value t statistic budget for 2308. This value is greater than t table ( $2,308 > 2,045$ ). Thus testing showed  $H_{130}$   $H_{13a}$  not denied or rejected. These results show that the use of variable budgets significantly influence the success of the RESPEK program. This is supported by what is said Darise (2006: 12), which is intended to financial management, namely that the power management of state finances is part of government power, and the power of the state financial management of presidens partially be submitted to the governor / regent / mayor as head of the regional administration. Utilization of fund management mechanism should be in the form of disbursement and distribution of the Strategic Plan for Village Development Fund (RESPEK). Accordingly clearly with the intent of the above opinion is that the management or use of financial / budget was very important, and greatly affect the success of a goal in this case is certainly related to the management of funds for Village Development Strategic Plan (RESPEK) as what has been described above.

As we all know that the State Revenue and Expenditure in essence is one of the policy instruments that are used as a tool to improve public services and the welfare of the people in the area. Therefore, the Parliament and Local Government should seek to be real and structured in order to produce a budget that reflects the real needs of society in accordance with the potential to meet the demands of the region and the creation of local budgets oriented to the interests and public accountability. In fact, until now still not create the budget structure as expected. The structure of the budget only provides information about the number of revenue sources and uses of funds. While information about the performance to be achieved, and the state of the economy and its potential is not represented clearly. The information is needed as benchmarks to be used as a reference in planning the budget. Because of the vagueness of the planning system is used for this budget cannot provide a comprehensive picture of the initiative, aspirations and real needs of the community and its resource potential. RESPEK for the allocation of funds should also be targeted and its use is also right. With the use of funds or budget appropriately in implementing this RESPEK program, will certainly support the success of the program objectives. If the funds were distributed to the public RESPEK directly is not true in this case is not the right target will certainly affect the lack of success of the program as well. And ultimately aim to improve the welfare of society will not be achieved, of course it is not we want together, therefore greatly affect the budget utilization factor of the success of the program RESPEK in Nabire regency.

**Budget control factors influence the success RESPEK program:** Based on the results of statistical tests budget control variable has a value of 2,283 t statistic. This value is greater than t table ( $2,283 > 2,045$ ). Thus testing showed  $H_{14a}$   $H_0$  is rejected or not rejected. This result shows that the budget control variables significantly influence the success of the RESPEK program. In doing surveillance we must do what performance measurement into our program, then we conduct surveillance through the results of a performance report that we receive. Robertson said that the performance measurement (2002) is defined as a process of assessing the progress of work towards the goals and objectives that have been determined,

including information on the efficiency of resource use in producing goods and services; the quality of goods and services; results of activities compared with the intended meaning; the effectiveness of the measures in achieving the objectives. Thus it is clear that the factors supervision undertaken to maximize the results of programs that run that program RESPEK.

**Socio-cultural factors influence the success RESPEK program:** Based on the test results statistic Variable t statistic Socio-cultural value of -2387. This value is greater than t table (-2387 < -2045). Thus testing showed H16o H16a not denied or rejected. These results show that the socio-cultural variables significantly influence the success of the RESPEK program. As we know that the development process is a movement that is not simple, but very complex and multidimensional to memberdaya-gunakan all human resources, natural resources, economic resources and cultural resources that exist in the community. As a goal, the development is intended to address the needs of people / communities, whether it is physical needs of the economy (the funds RESPEK), mental, spiritual and social politics. In the normative sense, the principle of social development also advocated for uniting the relationship aspect and economic policy; social, civic and personal dignity of the human family in order to support itself. Thus it is clear that social and cultural factors plays a very important in determining the success of the program RESPEK dikabupaten Nabire, because despite all of the system has been running well but without the support of social and cultural factors are good also, impossible RESPEK program will be successful. So true that penelitain results indicate that socio-cultural factors influence the success of the program kabupten RESPEK in Nabire regency.

## 5. Conclusion

Based on the results of research and discussion that has been pointed out before, it can be concluded the following:

- The results of this study simultaneously variable budget planning, budgeting, budget control, and social culture significantly influence the success of the RESPEK program. This indicates that the four variables as a whole produces a strong influence on the success of the implementation of the Strategic Plan for Village Development program (RESPEK) in Nabire district. Thus would also affect the success of the final destination RESPEK program itself is to improve the welfare of society Nabire regency.
- Based on the results through statistical test variable b has a value t statistik budget planning for 2627. This value is greater than t table (2,627 > 2,045). Thus testing showed H12a H12o rejected or not rejected. This result shows that budget planning variables significantly influence the success of the RESPEK program.
- The results of research through the use of statistical test variable has a value t statistik budget for 2308. This value is greater than t table (2,308 > 2,045). Thus testing showed H13o H13a not denied or rejected. These results show that the use of variable budgets significantly influence the success of the RESPEK program.
- Based on the results of statistical tests budget control variable has a value of 2,283 t statistik. This value is greater than t table (2,283 > 2,045). Thus testing showed H14a Ho is rejected or not rejected. This result shows that the budget control variables significantly influence the success of the RESPEK program. And for Socio-Cultural Variables have t statistik value of -2387. This value is greater than table (-2387 < -2045). Thus testing showed H16o H16a not denied or rejected. These results show that the socio-cultural variables significantly influence the success of the RESPEK program.

**Recommendations:** Based on the conclusions and limitations mentioned earlier, this study gives some suggestions for related parties both local government officials, the public, and researchers in the field of local finance. The recommendations from this study are as follows:

- In order to provide additional information and raises the initiative to conduct research in the future that became one of the sources in the development of economic science and is focused on the budget, then at the time of data collection should be at a time when local governments are drawing up the budget so that the informant obtained not only the local government officials and parliament alone, but can be obtained from the people in the hamlets, villages, and in the district at a time when people's aspirations.

- As one study materials for Nabire town government officials in the implementation of the plan to the Village Development Strategic program (RESPEK), to consider factors - factors that affect the implementation of the program so that the usual run according as expected.
- Then the general policy direction and budget strategies and priorities predetermined budget, especially
- relating to the establishment of village development budget, expected to be more flexible and the information obtained from the people in the hamlets, villages, and districts that are very priorities and needs community at a time when people's aspirations, can be programmed in the budget is being planned.

This study used two approaches, quantitative and qualitative approaches in solving problems on the same object, it is recommended that further research be carried out on the object of other research that is not only the local government officials and community alone but can be used on the object of study Other nothing to do with this research.

### **References**

- Halim, A. (2002). *The Public Sector Accounting Regional Financial Accounting*, ANDI, Yogyakarta.
- Hasibuan, M. (1990). *Human Resource Management*, PT. Mount Agung.
- Robertson, G. (2002). *Performance Review Workshop*, Jakarta: BPKP and Executive Education.
- Saydam, G. (2000). *Human Resource Management: a micro approach*
- Siagian, S. (2008). *Human Resources Management (15 prints)*. Jakarta: Earth Literacy.
- Suharto, E. (2006). *Building Society Empowering the People*. Bandung: PT. Refika Aditama.

**The Tendency of Revenue and Levies Contributions to the PAD Jayapura before and after the Law No. 28 of 2009**

FahrudinPasolo  
Indonesia  
fachrudin\_pasolo@yahoo.com

**Abstract:** This study aims to determine the tendency of growth of tax revenue levies, the contribution PAD Jayapura city before and after the Law 28 Year 2009. The research method is done through quantitative analysis using financial ratio analysis techniques Jayapura city government. The result is an average contribution of taxes to PAD both before and after the implementation of Law No.28 of 2009 showed an increase but the contribution levy decreased. However, the contribution of PAD to Total Revenue Region (TPD) showed an increase (rising).

**Keywords:** *Taxes, levies and Contributions PAD*

## 1. Introduction

During the 15 years of traveling the implementation of fiscal decentralization was not yet able to create local financial independence. Based on data from the Regional Financial Information System (MoF) Ministry of Finance, it can be argued that until 2013, the average cost of areas in Indonesia is largely dominated by the high contribution coming from the fund balance, which reached an average of 80% of total revenues area. While local revenue is an indicator of local financial independence on average only account for 18% of total regional income. While the basic requirements for successful implementation of decentralization are adequate sources of revenue to fund spending responsibilities allocated to local governments. For that, the area was given the authority to collect taxes and levies (local taxing power). Granting authority to impose taxes and levies are intended to provide services in accordance with the ability of its people. Levy taxation authority and the latter has been regulated in Law Number 28 Year 2009 on Local Taxes and Levies Act Daerah. Undang is a substitute Act No. 18 of 1997 on Regional Taxes and Levies, as amended by Act No. 34 of 2000, which effectively came into force on January 1, 2010. The Act is a strategic step to strengthen the decentralization is more ideal.

Compared to the previous regulation that Act No. 34 of 2000, under Act number 28 of 2009 on Local Taxes and Levies there is a new charge that the collection of taxes and levies new, broadening the tax base and levy, as well as flexibility in setting tax rates ( Adji et al, 2013). In addition, Act Local Taxes and Levies were recently also introduced a system of closed lists, where the regional government can not collect taxes and levies beyond those stipulated in the Act. Type a new tax for the district / city is the inclusion of two types, namely central tax Tax on Acquisition of Land and Building (BPHTB) and the Land and Building Tax for Rural and Urban sector (PBB P2) as the local tax district tax / kota. Ini a change in supporting decentralization in line with the general understanding and international experience shows that property taxes are better left to daerah sebagai source of income district / city level (Ananda, et al, 2012). In addition to the transfer of the two types of tax into the tax center district / city, there is also the transfer of the provincial tax Tax Groundwater were also transferred into the tax district / city. New taxes to the district / city the latter is a tax Swallow's Nest. Of the levy, there are four (4) types of levies districts / cities of the new levies Tera / Tera Birthday, Levy Control Tower Telecommunication Service Fees for Education and Fisheries Business Permits.

The expansion of the tax base of the district / city according to Law No. 28 of 2009 contained in the hotel tax, restaurant tax, entertainment tax, advertisement tax, and street lighting tax. Hotel diperluas tax base by supporting the inclusion of all services provided by the hotel such as sports facilities, entertainment, internet, phone, fax, copier, washing, ironing and transport as objects Taxes. Tax base expanded dengandimasukkannya restaurant food services and catering as part of the object restaurant tax. Entertainment Tax base expanded with the inclusion of a beauty contest, bodybuilding, and the like; exhibitions, circus, acrobatics and magic; the game of golf and bowling; racetrack and race a motor vehicle; as well as reflections and fitness center as part of the Entertainment Tax object. Advertisement tax base was

expanded with the inclusion of floating billboards as part of the object pajak. Basis street lighting tax was expanded with the inclusion of the use of electricity generated themselves as part of the tax object. Furthermore levy which was expanded base was Permits Disorders that optimize imposition, so it covers a wide range of levies relating to the environment that has been collected, such as Permits Disposal of Wastewater, Levy EIA, as well as levies the Health and Safety at Work (Abdullah, 2009) . Discretionary policy through Law No. 28 of 2009 to the local government be interesting to study in the city of Jayapura, given the Jayapura City is one city in the province of Papua, which relies solely PAD acquisition of the services sector, especially of Taxes and Levies

## 2. Literature Riview

Santoso and Rahayu (2005) mention that the PAD as a reception area reflects the degree of local autonomy. The larger the area the more revenue it is able to implement fiscal decentralization and reduced dependence on central government. However, the policies of fiscal decentralization that is, not necessarily be able to establish the independence of the region quickly. Funds raise for the implementation of regional development according to Wrihatnolo and Dwidjoyowiyoto (2007) can be obtained in the form of (1) taxes, (2) charges, (3) non-tax revenue, and (4) public company earnings. Of the four forms of income, can be divided into two (2) major parts, namely taxes and levies daerah. Pajak is mandatory dues paid by the individual or entity to regions without asking for any compensation based on the legislation in force and only used for finance the implementation of government and regional development (Erly, 2005). While Retribution is a levy for the payment of certain services or request permission by the local government in order to meet the needs of any person or entity (Siahaan, 2005). Tax and Retribution is a central component in the acquisition of revenue (PAD).

Landiyanto (2005) in his research on the Financial Performance and Strategies of Urban Development in the Era of Regional Autonomy in Surabaya found that reliance on the central area is still high because not optimal acceptance of PAD and not optimal revenue / profit enterprises. Until now the potential of local revenues are still focused on the acquisition of taxes and levies. It took a long time to build self-reliance in the area of finance budget spending minimal region in meeting the needs of personnel expense. Until now the region's dependence on the central government through equalization funds is still quite large. Kawung (2008) in his research found that the financial capacity of the province of North Sulawesi is still low, amounting to 30.66% of the local revenue, which means that the role of PAD is still lacking and needs to be improved. The description above shows that the financial capacity of the area represented local revenue (PAD) still focuses on the components of taxes and levies.

## 3. Methodology

The approach used in this study is that its approach positivism and rationalism. The research was conducted through a survey of taxes and levies in Jayapura before and after the enactment of Act 28 of 2009. The data were analyzed through quantitative analysis using financial ratio analysis techniques of local government. The procedure is observed from the tendency or trend of financial ratios Jayapura city before and after the enactment of Law No. 28 of 2009. There are three kinds of financial ratios Jayapura city in that period will be counted and observed, namely:

Growth Ratio Regional Taxes, Levies, and PAD

$$\text{Tax Growth} = \frac{\text{Tax}_t - \text{Tax}_{t-1}}{\text{Tax}_{t-1}} \times 100\%$$

Where:

$\text{Tax}_t$  = Realization of the tax year t  
 $\text{Tax}_{t-1}$  = Realization of the tax year t-1

Formula Levy growth ratio is as follows.

$$\text{Levy Growth} = \frac{\text{Levy}_t - \text{Levy}_{t-1}}{\text{Levy}_{t-1}} \times 100\%$$



Where:

Levy<sub>t</sub> = Realization Levyint

Levy<sub>t-1</sub> = Realization Levyint-1

Formula Growth PAD ratiois as follows.

$$PAD\ Growth = \frac{PAD_t - PAD_{t-1}}{PAD_{t-1}} \times 100\%$$

Where :

PAD<sub>t</sub> = Realization PADin the year of t

PAD<sub>t-1</sub> = RealizationPAD in the year oft-1

a.Effectiveness Ratio Regional Taxes, Levies, andPAD

$$Effectiveness\ Ratio = \frac{Realization\ Tax\ revenues}{Target\ Tax\ revenue} 100\%$$

$$Effectiveness\ Retribution\ Ratio = \frac{Realization\ retribution\ revenues}{Target\ Retrubution\ revenue} \times 100\%$$

$$Effectiveness\ PAD\ Ratio = \frac{Realization\ PAD\ Revenue}{Target\ PAD\ Revenue} \times 100\%$$

b. Regional Taxes Contributions ratio to PAD, Retribution against PAD and PAD toTotal Revenue Region

$$Texes\ Contribution_t^i\ of\ total\ taxes = \frac{Tax\ Revenue_t^i}{Total\ Tax\ REvenue_t} \times 100\%$$

$$Taxes\ Contribution_t^i\ of\ PAD = \frac{Tax\ Revenue_t^i}{Total\ PAD\ revenue_t} \times 100\%$$

$$Contribution\ Retribution_t^i\ of\ Total\ Retribution = \frac{Retribution\ Revenue_t^i}{Total\ Retribution\ Revenue_t} \times 100\%$$

$$Contribution\ Retribution_t^i\ of\ PAD = \frac{PAD\ Revenue_t^i}{Total\ PAD\ Revenue_t} \times 100\%$$

#### 4. Results and Discussion

The third trend of financial ratios Jayapura City area in the period before and after the decentralization of taxes and charges through the implementation of Law No.28 of 2009 are summarized in the following table.

**Table 1: Trend Growth Ratio, Effectiveness and Contributions Tax/Levy/PAD Jayapura At Period Before and After the Implementation of Law No. 28 Year 2009**

Ratio	Before Implementation UU No 28 Th 2009 (%)	After Implementation UU No 28 Th 2009 (%)	Trends
Average growth in Tax	30,43	37,84	Ride
Average growth Levy	16,64	8,88	Down
Average growth h of PAD	22,44	24,56	Ride
Average Effectiveness Tax	110,31	112,14	Ride
Average Effectiveness of Retribution	103,40	108,08	Down
Rata-rata Efektivitas PAD	112,83	110,04	Ride
Average contributions Tax of PAD	39,53	59,74	Ride

Average Contributions retribution of PAD	47,08	30,89	Down
Average Contributions PAD of TPD	6,33	10,53	Ride

Source :Research result

Overview of financial ratios Jayapura City area above shows that there are some conditions that are not supposed to. Some of these conditions are reduction in growth rate levies significantly in the period after taxes and levies decentralization through the implementation of Law No. 28 of 2009. Furthermore, a decrease in the ratio of PAD effectiveness and decreasing the ratio of contribution levies to PAD in the period after taxes and levies decentralization through the implementation of Law No. 28 of 2009. In addition, the increase in the ratio of the growth and effectiveness of local tax and revenue in the period after the implementation of Law No. 28 of 2009 which is not optimal. The only thing that was encouraging was the increase in the ratio of contribution of local taxes to PAD significantly in the period after taxes and levies decentralization through the implementation of Law No. 28 of 2009.

Various phenomena are not in accordance with the conditions that should happen if the Jayapura City Government take advantage of opportunities in the decentralization of central government tax revenues and charges through the enactment of Law No. 28 of 2009 is. As well as research conducted by Adj, et al (2013) in analyzing the seven districts / cities as samples in Indonesia. The result of Law No. 28 of 2009 has been able to increase local fiscal capacity on the sample area. This is seen in several indicators such as growth in revenue, growth in the realization of local taxes, taxes per capita, the ratio of tax to GDP AHB, the ratio of tax to PAD, the ratio of revenue to the total revenue, the ratio of revenue to total regional spending, and the ratio of revenue to GDP AHB in regional samples increased in 2011. It is suspected there is a possibility Command Jayapura City is not optimal menafat chances of the Act sebagaimana described by Rondinelli and Cheema (1983), that the benefits of the policy a decentralization, among others: (1) open the chance of developing the capabilities of administration greater for local government institutions and private provincial and district / city, (2) decentralization can make the administration to be more flexible, innovative and creative, (3) the decentralization of development planning and management functions allow local leaders to determine the services and facilities more effectively with the community, 4) decentralization may increase service delivery of public goods and services, and at a lower cost.

## 5. Conclusion and Recommendations

The conclusion of this study is the average contribution of taxes to PAD both before and after the implementation of Law No. 28 of 2009 showed an increase but the contribution levy decreased. However, the contribution of PAD to Total Revenue Region (TPD) showed an increase (rising). Therefore the Jayapura City Government needs to be more creative and take advantage of opportunities to improve the effectiveness corridor provided by the Act, in order to gain more optimal PAD Jayapura City in supporting the Regional Original Revenue (PAD).

## References

- Abdullah, S. (2009). Law No. 28/2009 on Regional Taxes and Levies, [syukriy.wordpress.com/10.17.2009/points-setting-laws-local-tax-and-levy-area](http://syukriy.wordpress.com/10.17.2009/points-setting-laws-local-tax-and-levy-area)
- Adj, A., Eddy, S., Candra, F. A. & Hamid, P. (2013). Evaluation of the Implementation of Law No. 28 of 2009 on Local Taxes and Levies and Its Effect on Regional Income, Statement of the Ministry of Finance Sector Assistance Team Fiscal Decentralization. Jakarta.
- Ananda, C. F., Eddy, S. & Hamid, P. (2012). Analisa Dampak Pengalihan Pemungutan BPHTB Ke Daerah Terhadap Kondisi Fiskal Daerah, Laporan Tim Asistensi Kementerian Keuangan Bidang Desentralisasi Fiskal. Jakarta.
- Erly, S. (2005). Hukum Pajak, Edisi Ketiga, Jakarta: Salemba Empat.
- Kawung, G. M. V. (2008). Analisis Kemampuan Keuangan dan Ketergantungan Daerah Provinsi Sulawesi Utara pada Era Otonomi Daerah. *Jurnal FORMAS*, 1(4).
- Landiyanto, E. A. (2005). Financial Performance and Urban Development Strategy in the Era of Regional Autonomy; Case Study Surabaya, Cures Working Paper 05/01, January 2005.
- Law No. 28 of 2009 on Regional Taxes and Levies

Law Number 32 Year 2004 on Regional Government

Siahaan, P. M. (2005). Pajak Daerah dan Retribusi Daerah Jakarta: PT. Rajagrafindo Persada,

Santoso & Rahayu. (2005). Analisis Pendapatan Asli Daerah (PAD) dan Faktor-Faktor Yang Mempengaruhinya Dalam Upaya Pelaksanaan Otonomi Daerah di Kabupaten Kediri. *Dinamika Pembangunan*, 2(1).

Wrihatnolo, R. R. & Dwidjowijoto, R. N. (2007). Manajemen Pemberdayaan, Elex Media Komputindo gramedia, Jakarta.

## Corporate Social Responsibility of Mining Companies in Ghana: The case of Newmont Ghana Gold Limited at Ahafo

Daniel Owusu-Ansah<sup>1</sup>, Samuel Adu-Gyamfi<sup>1</sup>, Edward Brenya<sup>1</sup>, Yaw Amo Sarpong<sup>1</sup>, David Damtar<sup>2</sup>

<sup>1</sup>Kwame Nkrumah University of Science and Technology (KNUST), Ghana

<sup>2</sup>National Research University Higher School of Economics, St. Petersburg, Russian Federation  
mcgyamfi@yahoo.com

**Abstract:** It is perceived by many that communities in Ghana that host large scale mining activities are affluent and outpace several other communities in terms of socio-economic development. This seems not to be the case. This notwithstanding, mining companies have an obligation to fulfil towards the communities they operate within as part of their Corporate Social Responsibility (CSR). This necessitated an assessment of the Corporate Social Responsibility of Newmont Ghana Gold Limited at Ahafo in Ghana. This paper considered relevant literature pertaining to the subject matter, the views of community members within the mining enclave of Ahafo as well as that of Newmont Ghana Gold Limited. A sample of 180 respondents was chosen through a purposive sampling technique. Key personalities including an Assemblyman, a Youth Leader, and three resettled persons were interviewed. There was also a focused group discussion among community members. The study found out Newmont has not deviated from its CSR in the region.

**Keywords:** *Corporate Social Responsibility (CSR), Newmont Ghana Gold Limited (NGGL), Ahafo Social Responsibility Agreement (ASRA), Ahafo Social Responsibility Forum (ASRF)*

### 1. Introduction

Organizations are being called upon to take responsibility for ways their operations impact societies and the natural environment (D'Amato, Sybil and Sue, 2009). This led them to adopt policies and programmes that would enable them establish a balance between meeting the needs of affected societies as well as their basic intent of profit making. These efforts drive at home the concept of Corporate Social Responsibility. This concept since its first usage has been looked at from different perspectives by states, corporations, companies and individuals. It is significant to note that in the Ghanaian society, the mining industry has been one of the leading areas. CSR is mentioned because of the environmental and human rights concerns. This coupled with calls for ethical, social and environmental responsibility from companies operating in rural areas to be ensured (Dartey-Baah and Amponsah-Tawiah, 2012) has generated further interest. However, the role mining companies' play in the area of development in Ghana has been emphasized by Ababio and Boon (2009) when they noted that such pressures are intended to make the mining companies adopt effective Corporate Social Responsibility (CSR) policies and commit more resources to the development of communities in which they operate. This is also to ensure the sustainable development of the country as a whole. Irrespective of the various research on mining and CSR on Ghana; such as Yankson's (2010) work on Wasswa West District of Ghana, Opoku et al. (2014) on Tarkwa and Seth Opoku, Amoako-Arhen and Okyere's (2014) glimpse at Tarkwa Nsuaem municipality as well as Adu-Gyamfi et al. (2015) work on Artisanal Mining and its Ramifications on the People of Prestea, little or scant research has been done on the assessment of the CSR of a rising mining giant, Newmont Ghana Gold Limited whose operation is in Ahafo catchment area of Ghana. Comparatively, contrary to other mining towns such as Perth in Australia, Johannesburg in South Africa, Noranda City in Ontario, Canada and Reno in the USA, typical mining towns in Ghana are far from affluent as stated by Opoku et al. (2014) in a research survey of the Tarkwa Nsuaem Municipality of Ghana. It should be useful to find out whether there are negative impacts of Newmont's mining operations on the communities in Ahafo. There is also the need to do an assessment on how Newmont Ghana Gold Ltd has contributed to the socio-economic development of the Ahafo mining communities.

**The mining industry and Corporate Social Responsibility in Ghana:** According to Ababio and Boon (2009), the concept of Corporate Social Responsibility can be traced back to the middle 1950s when Bowen (1953) formally used Corporate Social Responsibility to refer to 'the obligations of businessmen to pursue those policies to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society.' This traditional notion had gone through various forms but the fact still

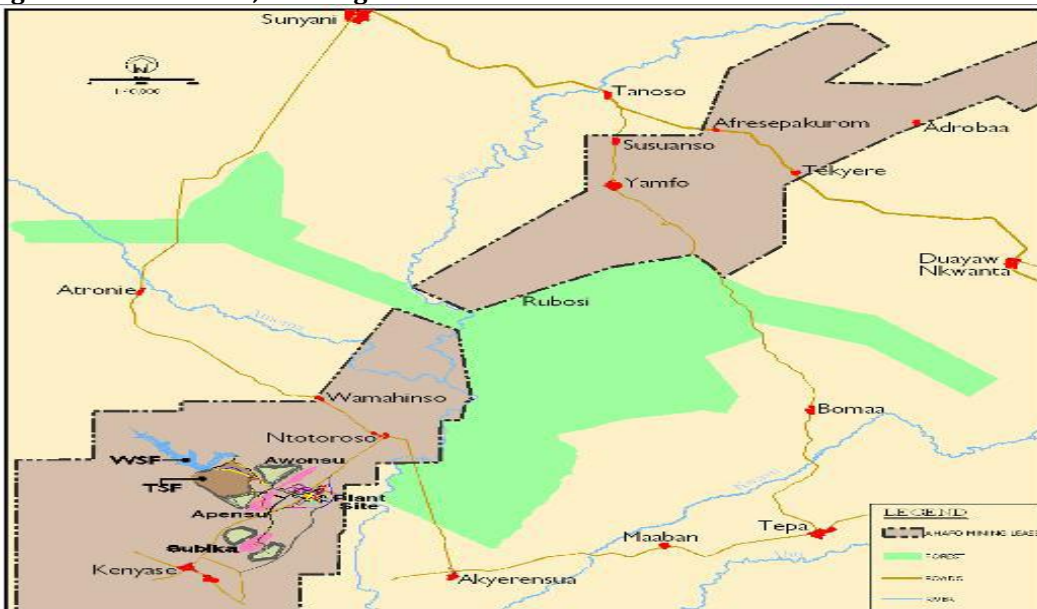
remains that companies and individuals put up efforts to achieve their business objective of profit making without neglecting the people who are affected by the company's operation. Again, Amponsah-Tewiah and Dartey-Baah (2012) acknowledge the tremendous contribution of mining companies through the provision of support for the protection of the cultural heritage of the country and enhancing community development through the provision of education, employment and other livelihood programs. They pointed out that the operations of some mining companies have also had negative impacts including erosion of cultural values and deprivation of others of their traditional livelihoods through the pollution of water bodies and the environment as well as the purchase of their farmlands (Dartey-Baah and Amponsah-Tewiah, 2012). Arko (2013) also, not differing much from this view pointed out that though the mining companies would like to believe otherwise, there is a widely held perception that their mining activities have been the cause of poverty and a lack of sustainable development in mining communities. The counter argument is that in a developing country like Ghana, poverty is generally pervasive in many communities including that do not engage in mining. Hence Boon and Ababio (2009) postulate that the operations of mining companies do not cause poverty and vulnerability.

To this end, there have been divergent views whether these mining companies do fulfil their CSR or not. This is seen in two perspectives: from the angle of the mining companies and that of members of the communities. Also concerning the members within the community, the views do vary depending on a lot of factors discussed in this paper. Before the discourse sets in, it is essential to point out that the community development approach of investing one US dollar (US\$1) for every ounce of gold produced payable quarterly; and one per centum (1%) of profit from the gold produced every year (Ahafo Social Responsibility Agreement, 2008; Kapstein and Kim, 2011; Mireku Gyimah, n.d) has been the significant model Newmont operates on with respect to its CSR agenda. This approach seems to be a means towards the fulfilment of mining CSR in Ghana as Atuguba and Dowuona-Hammond (2006) established that in the absence of a clear CSR policy, individuals, advocacy groups and public agencies seeking to hold corporations responsible to their social responsibilities usually encounter difficulties in doing so because of the absence of a readily available source document on CSR for reference. That notwithstanding, mining companies put up measures that would enable them achieve this goal with the employment of not only state laws and principles but also, in consultation with the parties affected or the mining communities to put up some regulations that are agreeable by both parties. This is what Mireku-Gyimah (n.d) explained under his partnership model that in such instance the parties come together to discuss issues of mutual interest, deliberate on their concerns and arrive at decisions that address their concerns and bring mutual benefits. Whereas Akabzaa (2004) negatively portrayed competition in the mining sector to have been breeding poor enactment of mining codes, Barfi and Asare (2008) make mention of the Minerals and Mining Act of 2006 (Act 703) which addresses various pitfalls within the mining sector with respect to CSR which fall within the interest of the local people including resettlement planning and compensation for use of land. This is purposely to address the challenges that do arise on the part of the mining communities since they are usually affected as Jenkins and Obara (2008) indicated that the Corporate Social Responsibility (CSR) programmes of these mining companies tend to give attention to community initiatives as their impact in economic, social and environmental terms is felt greatest at the local level. That notwithstanding, there has been various questions as to whether these mining companies in Ghana do fulfil their corporate social responsibility. It is in the light of this that such an assessment concerning Newmont's operation in Ahafo would have to be amply looked at.

**Overview of Asutifi District, Tano North District and Newmont Ghana Gold Ltd at Ahafo:** Asutifi and Tano North at Ahafo served as the focal point for this research and are part of the twenty-two districts of the Brong Ahafo region in the Republic of Ghana. Tano North District lies between longitude 7°00' 25', latitude 1° 45' W and 2° 15' W with a total land surface area of 876 square kilometres whereas its population as of the year 2010 was 78,415(MOFA, 2015). To the North East, it shares boundary with Offinso and to the South West it shares boundary with Ahafo Ano District in the Asante Region (*ibid*). The Asutifi District on the other hand lies between latitudes 6° 40' and 7 ° 15' N and Longitudes 2 ° 15' and 2° 45' W and has a land area of 1500 square kilometres and a population estimated in 2010 to be 110,731. It shares boundary to the north with Sunyani Municipality, Tano North District to the North East, Dormaa District to the North West, Asunafo District to the South West and Ahafo Ano North District (Asante Region) to the South East. Some of the towns in these districts are predominantly rural although urbanism is gradually setting in. Thus, their contribution to the economy of Ghana is basically from agriculture and its related activities. Food crops such as maize,

cassava, plantain, yam, oil palm, sugarcane, as well as the major cash crop of the nation, cocoa are largely cultivated in these areas. The greater numbers of the people of the area are the Asante and Brong groups of Akan. Northern settlers and people from other parts of the country have also lived in these areas for a long time. A greater proportion of children at the area up to school going age are enrolled. Newmont Mining Company has been identified as one of the largest gold producers in the world and is headquartered near Denver, Colorado. It traces its foundation back to 1921 while its public trade started by 1925. Its operation in Ghana dates back to the year 2002 when there was a transfer of concessions from the Normandy Mining to Newmont Mining Corporation (Newmont.com, 2015; Arko, 2013). Newmont's first operational site in Ghana and Africa in general is found at Ahafo. The project at Ahafo was formalized on December 19, 2003 with the signing of a foreign investment agreement between Newmont and the Government of Ghana. Actual mining commenced in January 2006 and the company poured its first gold from the soils of Ahafo on July 18<sup>th</sup>, 2006 while commercial production commenced in August the same year (Kapstein and Kim, 2011). Fig. 1 shows the mining area including the two districts of Asutifi and Tano North.

**Figure 1: Ahafo Mines, showing North and South Area.**



Source: Newmont Ghana RAP, 2009 cited in Asante- Manteaw, 2011

## 2. Data collection procedure, sampling and data analysis

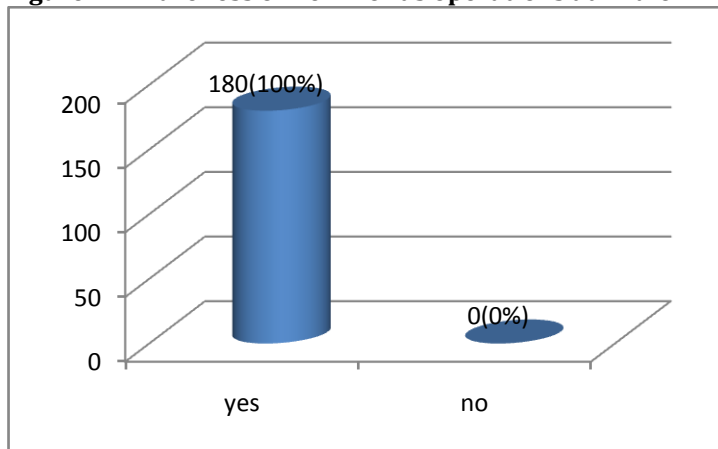
Both primary and secondary sources contributed to the research. Books, journal articles, reports and other research works helped to throw light on the subject matter backed by first-hand information obtained through the administration of questionnaires, interviews, focus group discussions and visitation to specific sites to observe happenings. A sample of 180 people within the study area was chosen to respond to questionnaires. The mining towns were chosen based on purposive sampling with the rationale that they would have the specialist knowledge (SAGE, 2006) about the mine due to their proximity with the mine site. These towns fall within the Asutifi District visa-vis Kenyasi No. 1 and 2, Ntotroso, Gyedu and Wamahinso. Asside they standing the greater possibility when it comes to awareness of the happenings in the mining company, they stand the higher chance of being affected by any negative environmental effects that could come out of the mine. Other towns that formed part of the study included Techire, Afrisipakrom, Yamfo, Adrobaa and Susuanso in the Tano North District. In order to obtain a pluralistic opinion, children (6-14 years), youth (15-39 years) and adults (40 year and above) equally represented, each consisting of sixty respondents. The purpose of including children was to ascertain their views on the pros and cons of Newmont's operation and impact on their lives and their opinion since they are the future leaders and the bearers of any futuristic repercussions whatsoever of the mining operations. The youth also represented based on such reason and also, help ascertain what Newmont is currently contributing and how it is

impacting the lives of the people in the mining area. Adults were not left out in order to establish as how the mining is impacting their lives as parents. An assemblyman, a Youth Leader and three resettled persons were also interviewed. The choice of an assemblyman and a youth leader was not only motivated by their permanent membership on the Ahafo Social Responsibility Forum but also, they serve as opinion leaders and mediate between the mining company and their respective communities. Key areas of focus to assess Newmont's socio-economic role in the region and largely its CSR included human resource development, job creation, health and environment, culture and recreation. Statistical Package for the Social Sciences (SPSS) and Microsoft excel were used to analyze the primary data collected. The views of the respondents were grouped into the key ideas, which constitute the specific research concerns. The statistical tools used included pie charts, frequency tables, bar graphs and percentages. For validity of work, keen attention was given to questionnaires and efforts were made to ensure respondents were free, sincere and opened up to air their views. The analysis was also done by strictly following what was given out by the various respondents so as not to distort the trustworthiness of research outcomes.

### 3. Results and Discussion

The knowledge of the people about the subject was first given a priority in order to obtain undiluted facts for the research. All the respondents affirmed to the fact that they are aware of the operations of the mining company. This confirms not only of effective occupation of the mining company at the region but also, that the people know of what is going on the area whether it is good or bad hence their views do reflect the realities on the grounds as far as Newmont's socio-economic responsibility is concerned.

**Figure 2: Awareness of Newmont's operations at Ahafo**

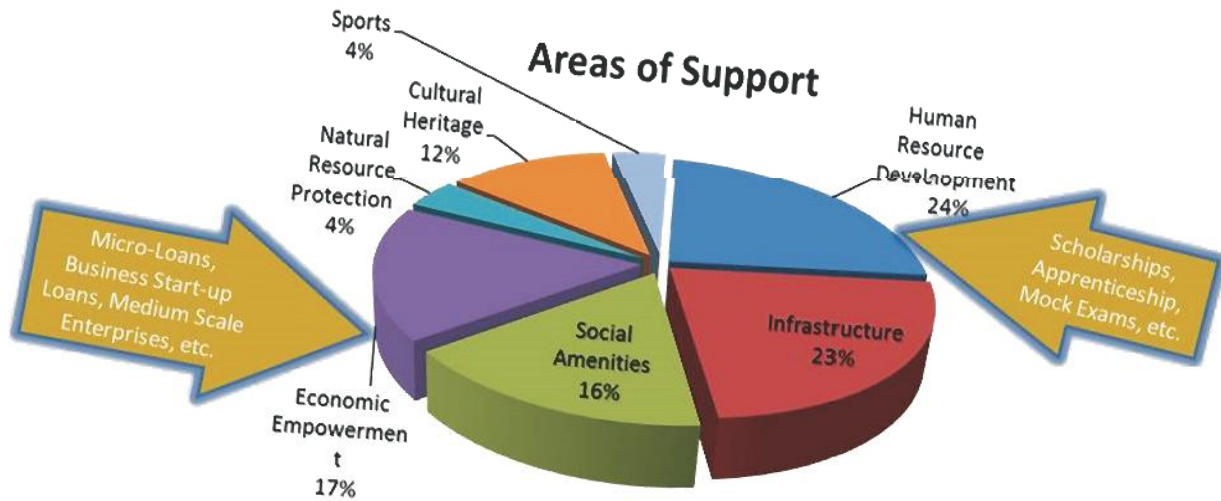


Source: Field Survey, March 2014

**Newmont and CSR:** Before Newmont started operations at Ahafo, there were various concerns raised by stakeholders and NGOs as well as interest groups such as Wassa Association of Communities Affected by Mining (WACAM) as to whether Newmont would be able to put up stringent measures to protect, sustain and promote the natural cause of events in the region of Ahafo when it proceed to actively mine. Moreover, Ghana has, although sometimes debatable with respect to implementation, a legal framework on mining CSR. Various positions concerning the implementation of mining CSR include seeing it as a philanthropic add on, others see it from a moral perspective while others still attempt to circle it around the *hard law against soft law* debate whereby Nwete (2007) indicated that the soft law has been of late embraced by many and it saves the problem of companies taking the role of government should hard law be upheld to. Not deviating from this view of operating with soft law had Newmont Ghana Gold Ltd, in consultation with the mining communities and other stakeholders came up with the Ahafo Social Responsibility Agreement. It serves as a code agreeable by all parties to ensure the smooth operation of the mining company as well as the regulation of its operations within the region. This mode of agreement among other things saw the establishment of the Newmont Ahafo Development Foundation (NADeF) in 2008 through the Ahafo Social Responsibility Agreement. According to the NADE Froport (2014);

Newmont Ahafo Development Foundation (NADeF) is a sustainable community development foundation established through an agreement between Newmont Ghana Gold Limited and the Ahafo Social Responsibility Forum (represented by 10 Ahafo Mine Communities, Local Government, Regional Government and Civil Society), as a mechanism to share values between the Company and its Stakeholders. NADeF operates in ten Ahafo Mine communities namely; Kenyasi No.1, Keyasi No.2, Ntotroso, Gyedu and Wamahinso in the Asutifi North District and Yamfo, Susuanso, Afrisipakrom, Terchire and Adrobaa in the Tano North District. The Foundation is founded through an annual contribution from Newmont comprising US\$1 per ounce of gold produced and 1% of net pre-tax profit from the Ahafo Mine with an appropriate contribution of GHC 41 million to date. It is significant to note that Newmont largely contributes towards development of the region through this foundation. That notwithstanding, prior to the establishment of NADeF, Newmont was not keeping blind eye upon development especially in cases where its operations affected the lives of the people. This is because resettlement programmes started before the establishment of this foundation.

**Figure 3: An excerpt showing Proportions of expenditure on Development**

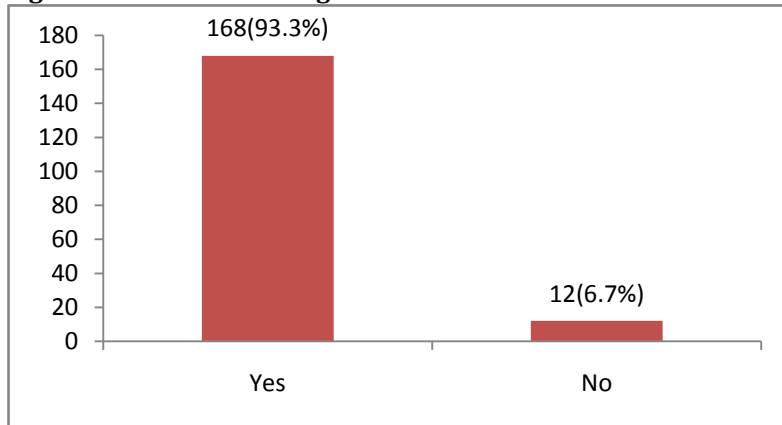


NADeF report, 2014

According to fig. 3, the annual accruals of NADeF concentrate on the various socio-economic aspects of the lives of the people within the mining community. On Human Resources development which encompasses education and job training, twenty four percent of the annual funds are channelled to it, Economic empowerment which looks at building young entrepreneur through microcredit schemes take 17 percent, infrastructure takes 23 percent, social amenities also take 16 percent, 12 percent is channelled to cultural heritage, 4 percent into natural resource protection and the remaining 4 percent into sports. This confirms the observation made on the field that the people have knowledge of Newmont's CSR, a reflection of effective attention to the development of the mining communities of Ahafo. The people within the mining community affirm to the fact that Newmont do have a CSR to fulfil as part of its operations at Ahafo. The Fig. below indicates that 168 of the respondents representing 93.3 percent acknowledge that Newmont have such obligation to fulfil against twelve respondents representing 6.7 percent who did not affirm to that. This is an indicative that the significant number of the people within the Ahafo mining Community looks up to Newmont to do justice to its CSR.



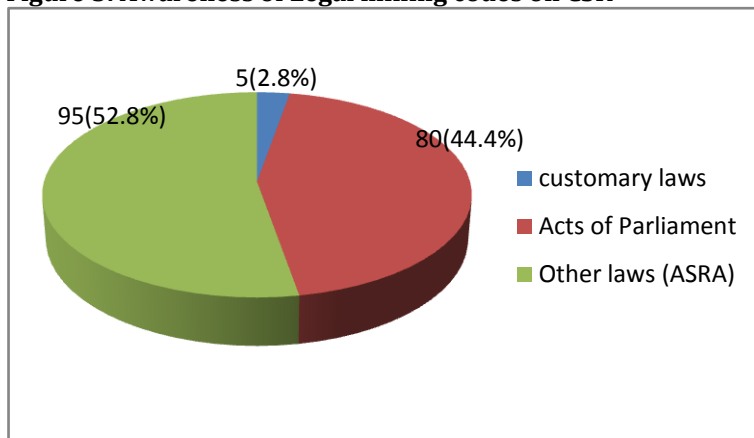
**Figure 4: Newmont Having a CSR to adhere to**



Source: Field Survey, March 2014

It would be necessary to point out that people of the mining Community are not only aware of Newmont having a CSR to fulfil towards them but also, they could point out some specific regulations that bind Newmont to remain faithful to such obligations. That notwithstanding, some respondents still held that it is the traditional customary laws that operated on the land. Apart from that which constituted a negligible opinion, ninety-five of the respondents representing 52.8 percent pointed to other laws with specific reference to the Ahafo Social Responsibility Agreement which was enacted through the Ahafo Social Responsibility Forum. This forum consists of Chiefs of the ten host communities in the mining Community, the Members of Parliament of the two Constituencies in the two mining districts, assemblyman and a youth leader from each town, the chief farmer of each of the two districts of Asutifi North and Tano North, representatives of some other groups, women leaders and some other significant personalities within the region. The greater knowledge of the people of this agreement denotes that the forum is in constant touch with the people and it putting up efforts towards the fulfilment of Newmont’s CSR in the region. Eighty respondents representing 44.4 percent on the other hand also made reference to an act of parliament as the binding law of Newmont towards the fulfilment of its CSR in the region as shown on fig. 5.

**Figure 5: Awareness of Legal mining codes on CSR**

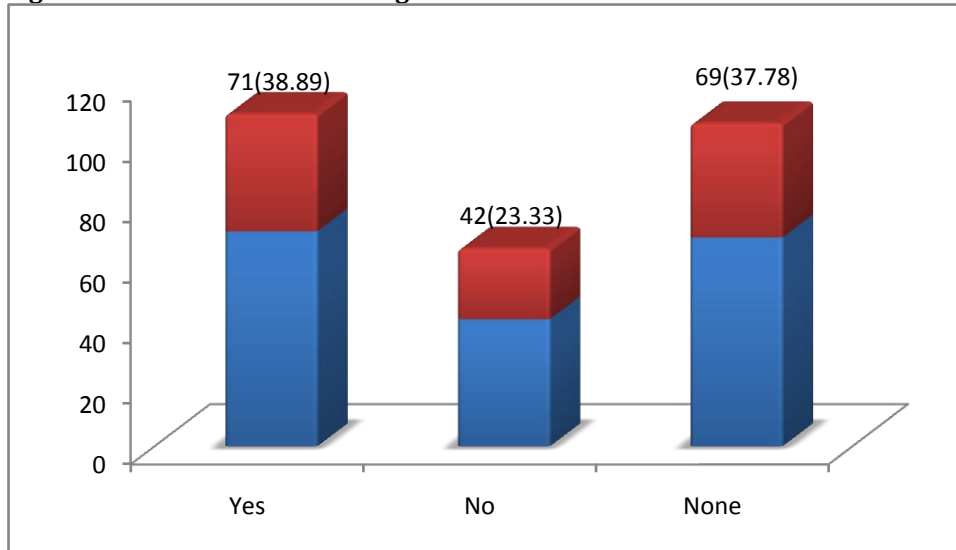


Source: Field Survey, March 2014

To find out the satisfaction of the respondents on the examples of legal codes they have given that binds Newmont to provide socio-economic development to the mining communities, sixty-nine people representing 37.78 percent did not show their view on that. Seventy-one respondents, representing 38.89 percent indicated the people are satisfied with such laws whiles fourteen of them representing 23 percent approximately indicated that they are not satisfied with such laws. The response here indicates such laws, although available, are not the major focus of the people since those who were silent on this view nearly

equals those who are aware of such binding laws. It is significant to therefore point out that some of the community members would not evaluate the performance of the mining company based on such imperatives but instead, what they see and what they get without necessarily conducting a comparative analysis between the legal codes and Newmont's adherence to them. That notwithstanding, an interview with Honourable Domfeh (2013), an Assemblyman of Wamahinso brought to light that it would be appropriate for Newmont to increase the percentage of contribution towards development of the mining Community from the one percent of their annual profit.

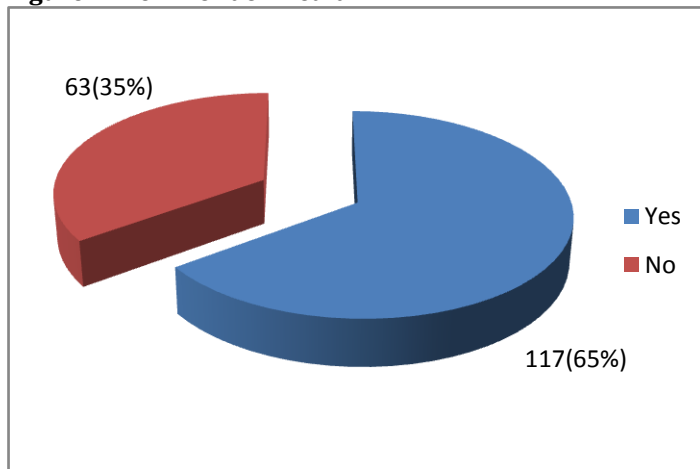
**Figure 6 Satisfaction with mining codes**



Source: Field Survey, March 2014

**Newmont on Health and Environment:** There have been questions as to whether the health of people within mining environment is not in danger. The use of heavy duty machines and locomotives emit carbon monoxide into the air always. Prior to mining in the region, inhabitants saw rain water as one of their safest drinking water but have now been advised to stop drinking them due to these emissions. The mine blasts rocks almost every day and this also contribute to such greenhouse gases. The noise that accompanies such blasting is also another issue of concern by the people within the mining environment. Chemicals such as mercury and cyanide are toxic to human life when not well kept. At instances whereby such chemicals spill over their bounds it could affect both human and animal life. For instance, there was a minor overflow of processing solution that occurred at the Newmont Ahafo Mines in 2009 but report from the Environmental Protection Agency (EPA) confirmed that it was contained within the mines and did not get into waters consumed by the residents of the area (Ghanaweb.com, 2009). It has previously been noted also that Newmont has puts up Biodiversity Management Plan in order to protect biodiversity in the mining forest environment in order to protect wildlife from its operations through the installation of wires fences and barriers (Opoku-Ware, 2010). Other measures include the storage of tailings, cyanide and crushed rocks in special facilities with mechanism to detect leakages in order to prevent overflows from reaching rivers nearby (*ibid*). Land reclamation programmes have also been put up by Newmont to return soil profitable agricultural cultivation after operations. Moreover, it is part of Newmont's operation for organizations such as the Environmental Protection Agency, Ghana Chamber of Mines and the Minerals Commission to exercise oversight over their actives to ensure the necessary checks are always in place in order not to put the lives of the people at the mining communities under danger. Despite such stringent measures, it has however been indicated that natural resources at the mining region had been comparatively altered (*ibid*). To further substantiate the validity of Newmont's effective measures towards the health of the people and environment as a whole, sixty-three of the respondents representing 35percent objected to the claim that Newmont gives such attention to the people whereas 117 of them, representing 65percent affirmed that Newmont is performing when it comes to the health of the people and environmental issues. This is vividly portrayed on fig. 7.

Figure 7: Newmont on health



Source: Field Survey, March 2014

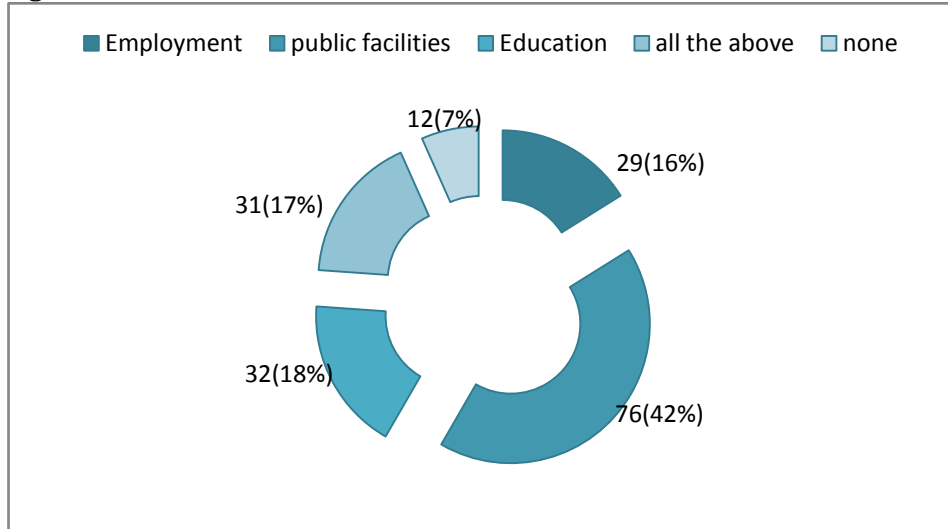
Further questioning revealed that although there have been instances where toxic chemicals spill over and attempts to put the lives of residents close to the mine at risk especially those within the villages since they use the water from rivers close by, stringent measures are always put in place to keep such spill under control. That notwithstanding, a respondent disclosed that she is not medically inclined but she still feels some diseases such as skin rashes and challenge with her vision and some residents she knows might have been triggered by the mine operations since she had lived at the area long before Newmont's operations and had never seen or faced such problems until after. This observation is not far from right since previous study by Jones Opoku-Ware (2010) noted that roads at the mining area are not tarred so the mining company conducts regular watering while rain water is no more consumed because of the blasting of rocks. He envisaged that in the next few years major diseases such as respiratory and skin diseases are likely to manifest on a large scale in the community. Through this, it could be possible that such sickness as skin diseases and impairment with vision could be attributed to the activities of the mining company.

On the side of Newmont further with environmental monitoring, the mining company is examining proposals to engage an NGO or University to provide training to local community members to either assist in or to observe formal monitoring of environmental performance and outcomes. According to the social and community development document reviewed, it is envisaged that this would also involve participation of specialist scientific organizations and companies. To add another level of assurance to this, it is planned to set up a small, imminent persons group to validate the methods and independence of the process of monitoring and testing. From the figure above, majority of stakeholders believe NGGL is doing well in their environmental compliance. NGGL, in its EIS report is committed to actively engage community interests into post-closure land use and management planning during the early stage of the mine life. According to NGGL, post-closure land use and management provide potential opportunities related to land productivity and sustainability, resource management, and livelihood enhancement. NGGL intends to collaborate to evaluate these opportunities while ensuring long-term environmental sustainability of post-closure land conditions including impact control measures and environmental monitoring.

**What the people gain from Newmont's operations:** Kaptstein and Kim (2011) established that Newmont has been a major contributor to Ghana's economy, generating nearly 10% of the Nation's total exports: 4.5% of its total foreign direct investment and 1.3% of Gross Domestic Product (GDP). They further added that Newmont directly produces some 48000 jobs in Ghana and that, it had played a significant developmental role in the communities around the Ahafo mine, and in 2009 alone, it provided 99 local companies with nearly US\$ 6 million in contracts, supporting more than 400 jobs, not including direct and mine employment. As part of its CSR agenda, Newmont Ghana Gold Ltd has sought stakeholder input and feedback regarding a wide range of community development programs and initiatives which among others include the Social Responsibility Forum, the Ahafo Linkages Programme and various Flagship Projects that aim to promote long term economic development planning such as Agricultural Assistant Programme, the Livelihood

Enhancement Programme and the Vulnerable Programme (Arko, 2013). Barfi and Asare, (2008) pointed out that Newmont's effort to develop local entrepreneurs started in 2007 with the setting up of the Ahafo Linkages Program (ALP) purposely to increase income and employment opportunities for the local communities. These inputs made by the mining company have benefited the local people in diverse ways. On the field of study, twenty nine people representing 16 percent indicated they have benefited on the grounds that Newmont had created jobs for them, seventy-six of them, representing 42 percent of the whole respondents for the research indicated that their benefit is on public facilities such as schools built by the mining company, water, toilets and health facilities, thirty-two of the respondents, amounting to 18 percent of them have benefited through education while thirty one of them representing 17 percent indicated they have benefited from all the various aspects mentioned as seen on fig. 8.

**Figure 8: Individuals' benefits from Newmont**



Source: Field Survey, March 2014

**Employment:** In order for the company to stick to its responsibility of providing jobs to the local people as well as awarding contracts to them, Kapstein and Kim (2011) disclosed that, of NGGL's 1,739 employees, 617 (36%) have been verified to be local. According to the authors, this is in line with Newmont's commitment to its Social Responsibility Agreement to employ a minimum of 35% local employees that is people from Ahafo. Also, they observed that, 'of the 2,911 contract employees, 883 (30%) are local, 1960 (67%) non-local and 68 (2%) are expatriates' indicating the involvement of the local people in the operation of the mining company. Ironically, such employment effort has not been able to meet the expectation of the people. It is therefore significant to note that Newmont is not able to employ the greater number of people within the mining communities. One interviewee about the age fifty-five from Ntotroso lamented that he has virtually gained nothing out of Newmont's presence aside the public facilities. This is what he said;

I have gotten nothing apart from the water and the public toilet I benefit from. Some of the people they have taken their lands have finished spending their monies. My worry is that I don't have the skill they need and I am also old. If they take my cocoa farm, my children and great grandchildren will have me to blame. This confirms the observation previously made by Kapstein and Kim (2011) that a higher percentage of NGGL's contracts demand skills which many of the locals do not have. It must also be noted that the Community Relations Review had reported in the year 2007 as a potential challenge to the Ahafo mine that it would not be able to meet the higher demands of local employment (Newmont Community Relationships Review Global Summary Report, 2009). From this, it is clear that not all the people in the mining communities do have jobs despite Newmont's efforts to employ about 30 percent locals to its operations. The respondents therefore pinned employment to only 29 percent. Notwithstanding, Newmont have put up measures to develop the human resource of the area to salvage that challenge of unemployment.

**Social and Human Resource Development:** The significant contribution is the public facilities which amount to 42 percent according to the respondents. This is followed by education of which 32 respondents representing 18 percent indicated they have benefited (fig. 8).Newmont Ghana Gold Limited had also contributed in other aspects of education aside from looking at the second cycle and the tertiary education. Primary and Junior High school blocks and teachers quarters had been built in some of the mining towns to ease the pressure that students had been going through previously due to poor accommodation facilities and computer laboratories being provided to some of them to enhance learning. Plates 1 to 6 show some of these contributions in public and educational facilities.

**Plate 1: Teachers quarters at Gyedu**



**Plate 2: Wamahinso D.A Primary School**



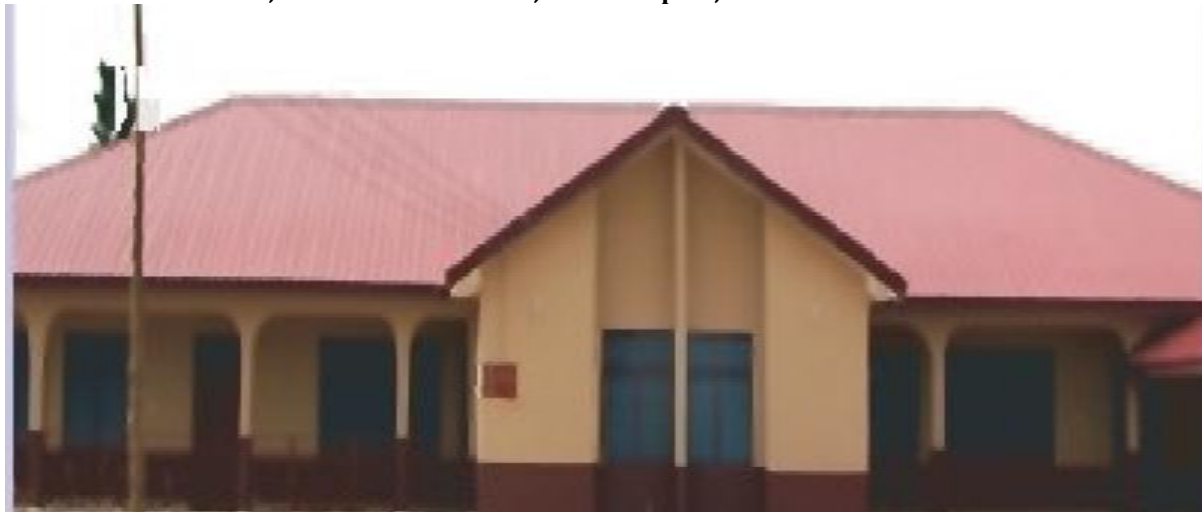
**Plate 3: Susuanso Community Library JHS**



**Plate 4: Kindergarten facility for Gyedu Basic School**



**Plate 5: General Ward, Yamfo Health Centre, NADeF report, 2014**



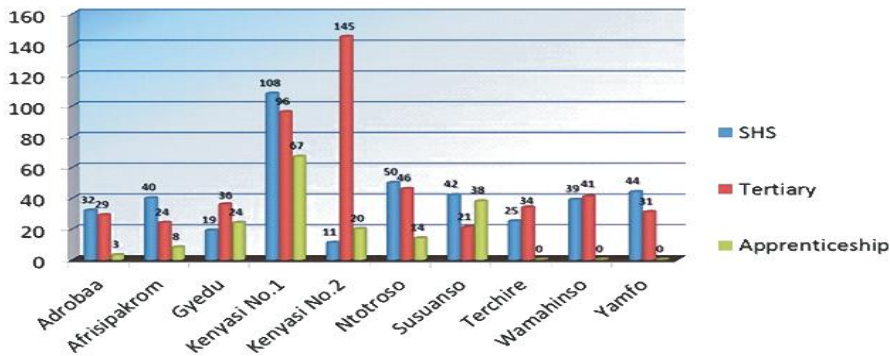
**Plate 6: 6-Unit classroom block, Kenyasi No 1 Anglican BS, Ahafo**



Plate 1-6 .NADeF reports 2013 and 2014

Figure 9: Human Resource Development Statistics

2014 Human Resource Development Statistics



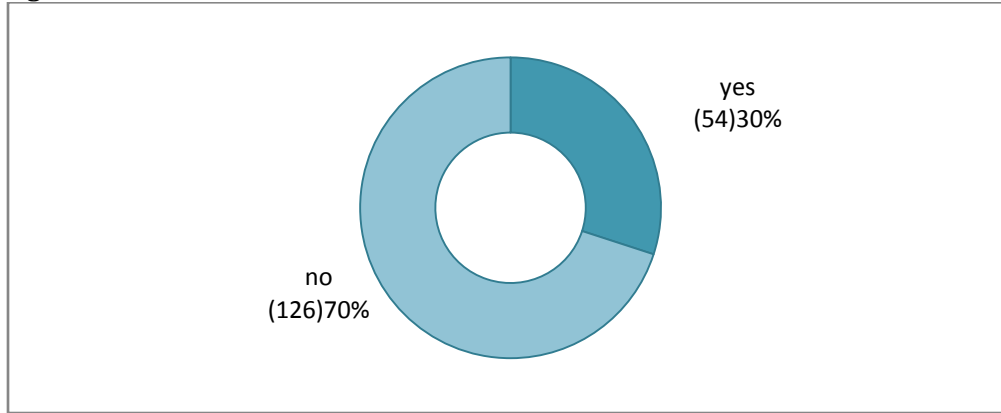
NADeF report, 2014

It is significant to note (fig. 8) that thirty-one respondents representing 17 percent also indicated they do benefit from employment, public facilities and education. Despite the pitfalls, this confirms that such areas the people have benefited are some of the key areas Newmont has been contributing to the development of the mining region. Moreover, fig. 9 indicates Newmont’s contribution towards human resource development in the mining area of Ahafo.

**Newmont on skill development:** On skill development, the Kapstein and Kim (2011) in previous literature had noted that the company has been investing in worker training. In 2009, the company spent US \$3.2 million on training and on average each worker had 150 hours of skill training. In addition to that, NGGL runs an apprenticeship program, and in 2009, 54 local apprentices were trained in a variety of occupations, with another 50 planned to be trained in coming years. In 2008, Newmont Ghana Gold Limited started to develop local entrepreneurs with the Ahafo Linkages Programme (ALP) purposely to increase income and employment opportunities for the local communities. Another body, Agricultural Improvement and Land Access Program (AILAP), according to the Kapstein and Kim, is a post-resettlement mitigation facility assisting farmers directly affected by the development of the Ahafo Mine. This body will also be further searched into in order to bring out its contributions to the development of Ahafo. On education, fig. 9 shows scholarship support given to deserving students from the region in senior high and tertiary institutions. Kenyasi No. 2 leads with 145 beneficiaries in tertiary education followed by Kenyasi No. 1 with ninety-six beneficiaries, Ntotroso, Wamahinso in that order. Kenyasi No. 1 leads in terms of senior high education with 108 beneficiaries followed Ntotroso with fifty beneficiaries in that order. Also, people are given training in apprenticeship and according to fig. 9, Kenyasi No. 1 leads with sixty-seven apprentices followed by Susuanso with thirty-eight in that order, confirming the continuation of the earlier measures Kapstein and Kim pointed out.

**Resettlement and Compensation:** Prior to mining companies starting to make profit out of their operations, the lives of people are affected whiles they start with finding a site to install equipment and proceed their operation. In this regard, people’s lives become affected hence; they have to resettle some of them sometimes. On this issue of resettlement, majority of the respondents (126 people) consisting of seventy percent had not been resettled before while fifty-four people, corresponding to thirty percent indicated that they have ever been resettled by Newmont before due to its operations. This is an indication that a relatively few of the people have been affected by Newmont’s resettlement programs as seen on fig. 10.

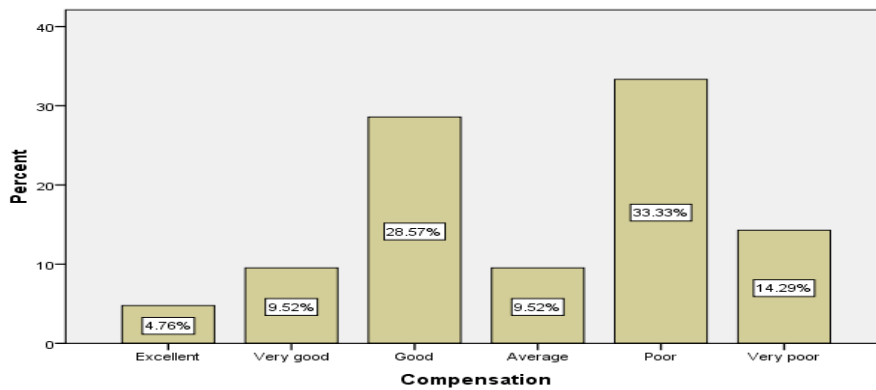
**Figure 10: Resettlement**



Source: Field Survey, March 2014

According to NGGL and some of the external stakeholders (institutions), compensation has been paid to project-affected people according to parameters and agreed rates set by the elected Resettlement Negotiation & Compensation Committee and on the basis of non-coerced, prior and informed consent. NGGL stated that people were offered choices between acceptable, fair and equitable alternatives. Compensation included full replacement cost of structures, assistance with moving personal belongings, efforts to improve former living standards and compensation for crops. Land, housing, infrastructure and other compensation were provided to the adversely affected population. Even though some of the institutional stakeholders think that NGGL is doing very well, others especially residents of host communities perceive that the company is performing poorly with regard to compensation packages.

**Figure 11: Assessment of Compensation**



Source: Field Survey, March 2014

On the contrary, some community members that have been resettled have argued that the crops grown by the farmers of the region which could have catered for the present and future generations such as cocoa and teak were underestimated by the company resulting inadequate compensation packages being given to the people affected. Moreover, compensation, according to some affected people, made no room for the land upon which the crops are cultivated. However, the land is a fixed asset which would benefit future generations in diverse way aside from cultivating crops. The harder part of the issue is the unattractive compensation of such lands that were not under cultivation. Although it may be argued that Chiefs are in charge of such lands, it does not deny the owners of such lands their entitlements. Again, the land tenure system of the region does not feature continuous cropping. There are times the land must be given rest to fallow for some years depending of the kind of farming the owner intends to practice on the land at the end. For instance, a farmer cultivating maize on a land for about five years would need to leave the land to fallow for some period of time before cocoa could be cultivated. Another observation was that the mode of payment of the compensation package did not satisfy most of the farmers by paying the premium once without any benefits in the subsequent years. This is

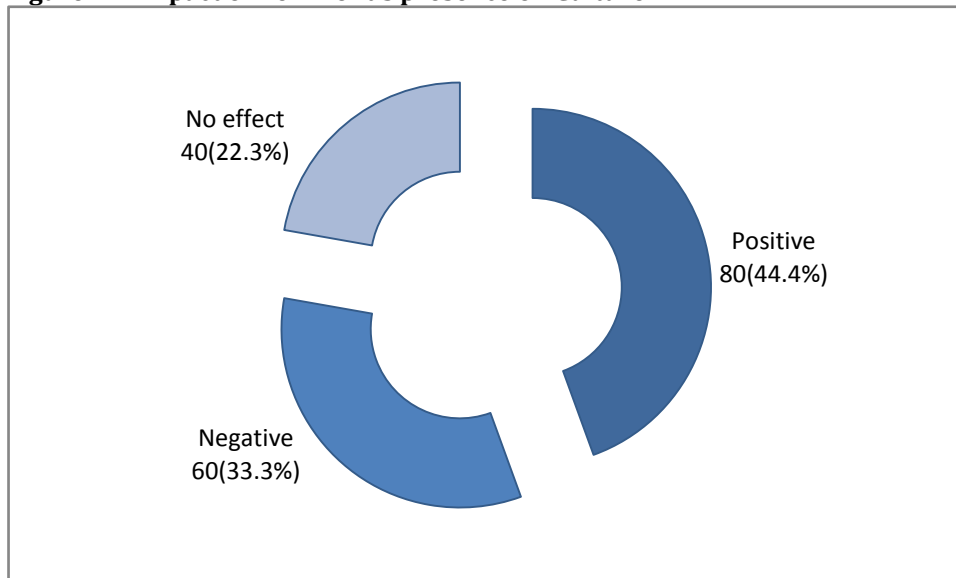


not really helping the households to sustain their means of livelihood for the rest of their lives. Most of the farmers are ignorant of the best and available opportunities to invest these compensation monies and this result in “unwise” ways of spending. They prefer monthly or yearly payments to avoid the hardship they go through after spending everything within the first year. All these add up to indicate that the compensation packages were not up to satisfaction. This confirms previous findings of Kapstein and Kim who noted that, 1700 households were resettled, with compensation including cash amounting to US\$45 million and however lamented that the biggest problem of Newmont Ghana Gold Limited at Ahafo is the fact that many households that were not affected by the mine came seeking compensation and new housing. This therefore seeks a second look at the whole resettlement programmes, crop rating probably a better means of compensating affected people either annually or monthly instead of the payment at a goal. In a Focus Group Discussion a saleswoman at the Ntotroso resettlement site indicated that;

We miss the livelihood we have lost back at the village. Over there you are close to your farm, you don't need a car to go and fetch food, and you don't need to buy vegetables all year round because you cultivate it alone. But now you have bought almost everything if all of your land was taken by the mining company (Field Survey, March 2014).

**Newmont on Cultural heritage and recreation at Ahafo:** Newmont is committed to respecting the Culture of the people within the mining communities. In this regard, to be concerned with whether the effect Newmont's presence is having at the culture of the people of the mining companies is positive or negative; forty respondents representing 22.3 percent hold the view that the presence of Newmont has had no effect on their culture. Eighty of them, representing 44.4 percent think the impact is positive on their culture while sixty of them representing 33.3 percent believe the impact on culture has been negative as shown on fig. 14.

**Figure 12: Impact of Newmont's presence on Culture**



Source: Field Survey, March 2014

Newmont had also not neglected the culture of the people as it has made it a responsibility, as spelt out in the Social Responsibility Agreement, to respect the culture of the people. It was said by Honorable, the Assemblyman of Wamahinso that the mining company indeed respects the culture of the people and do contribute to its preservation by donating to support the Apumasi festival of Ntotroso, building of Palaces and other projects for that regard (Field Survey, 2014). This is confirmed by the report of NADeF for the year 2010 whereby NADeF supported the Apumasi festival with an amount of GH¢15,000.00 (US\$10,563.38) (NADeF report, 2013). This event was coupled with sporting activities to carry the youth along as there was an organized football competition for schools in Ntotroso and its satellite communities as well as their town

teams. Communities that featured the Apumasu sports fiesta included Wamahinso, Ntotroso and Gyedu. NADeF supported this event with funds amounting to GH¢8,000.00 (US\$5,633.80) (NADeF report, 2013).

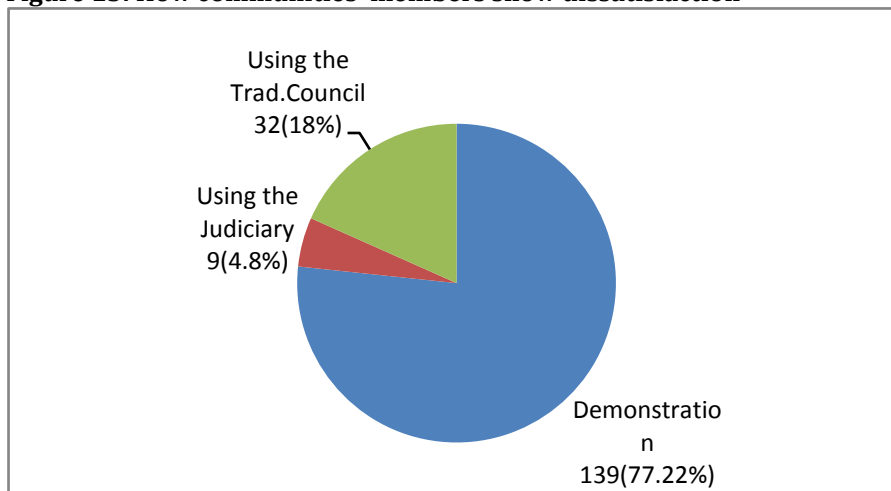
**Plate 10: Teams posed for action during the sports fiesta, Apumasu Festival 2010**



Plate 10, NADeF report, 2013.

**Newmont on Peace and Stability:** For Newmont to have peace of mind and continue to mine at Ahafo, there must be peaceful co-existence between the mining company and the people of the mining communities. In view of that, there was the need for how the people air their unhappiness towards the mining company if they are not happy with something it does. A maximum of 139 respondents, representing seventy-seven percent approximately indicated that such dissatisfaction is expressed through demonstrations. It has previously been observed in the Community Relationships Review (2000) on Newmont's operation at Ahafo that in 2006 some people near the mine revolted because Newmont do not provide them with jobs and such resistance led to the death of one person. During an interview with one Youth Leader in the mining communities, it was found out that although Newmont is employing the youth, *it would be much expedient for more of the youth to gain employment because more are still unemployed*. Nine people representing 4.8 percent said the people file lawsuits against Newmont as such instances while Thirty-two people, representing 18 percent approximately said the people do that by summoning Newmont before the traditional council for redress as shown on fig. 15.

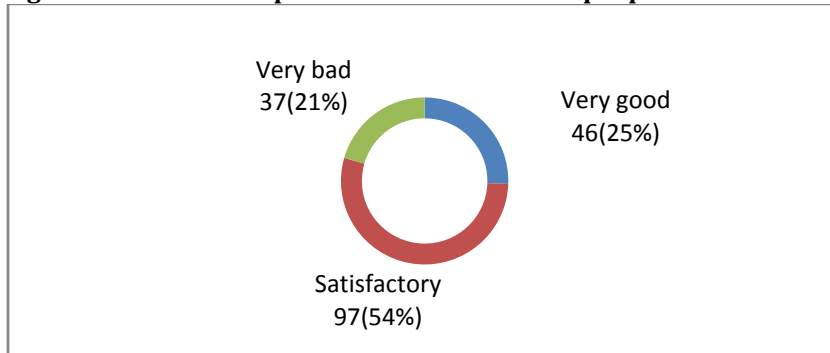
**Figure 13: How communities' members show dissatisfaction**



Source: Field Survey, March 2014

As a means of handling disagreements between Newmont and the people of Ahafo, the Ahafo Social Responsibility Agreement, among other things put up a measure of dealing with conflict with a clause that Newmont and the Community (the mining communities) agree to exercise patience and tolerance and resolve issues through dialogue and negotiations for the purpose of maintaining good working relations (Ahafo Social Responsibility Agreement, 2008). In order to further probe into the relationship that exists between Newmont and the members of the mining Community, the people indicated whether the relationship is not good at all, satisfactory or very good. Thirty-seven of the respondents representing 21 percent indicated that the relationship is very bad; ninety-seven of them representing 54 percent said it is satisfactory while 46 of them corresponding to 25 percent said the relationship is very good as shown on fig. 14.

**Figure 14: Relationship between Newmont and people**

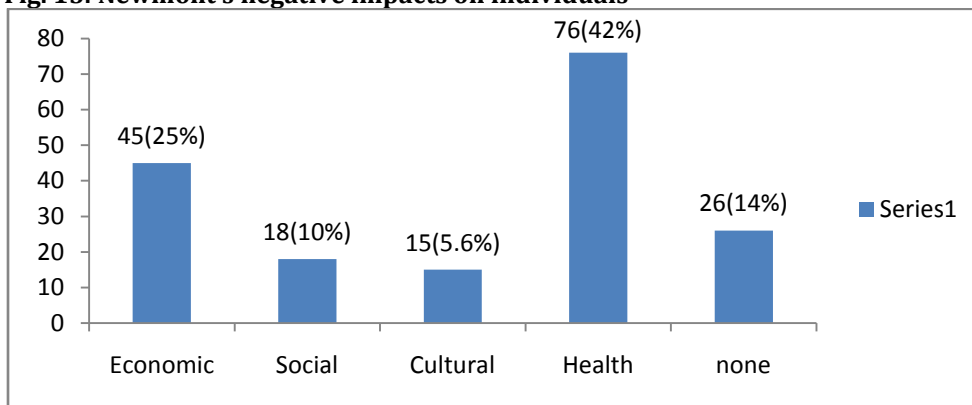


Source: Field Survey, March 2014

This indicates that largely the Newmont's relationship with the people is cordial. This is very essential as the Ahafo Social Responsibility Agreement mentions effective communication between Newmont and the mining communities at Ahafo. That notwithstanding, few people still have reservation about such relationship as they indicating that it is bad. Since they are part of the people at the grass root, it calls for Newmont and the ASRF to ensure effective grass-root participation in matters concerning the people including compensations, resettlement, employment and job training.

**Shortfalls of Newmont's operations at Ahafo:** The presence of Newmont at Ahafo has not only brought positive impacts on the lives of the people of the region. Some of the challenges that the mining had brought on the people range from economic, health and socio-cultural. In finding out which facet of human endeavour such negative impact emanate from, forty-five of them, representing 25 percent said the negative impact of Newmont's activities on the mining communities has been on their economic lives, eighteen of them, representing 10 percent indicated it is a social problem, fifteen respondents which corresponding to 5.6 percent pointed out that it is a cultural problem and seventy-six of them, representing 42 percent noted the impact has been on the health of the people of the mining communities as shown on fig. 12.

**Fig. 15: Newmont's negative impacts on individuals**



Source: Field Survey, March 2014

Specifically, some of the respondents explained that cost of living in the mining region had increased considerably. They pointed out that prior to the mining in the region, prices of goods were relatively cheaper. However, the mining has seen an influx of people from all walks of lives to seek greener pastures in the region and this had contributed to consistent increase in prices of local goods such as charcoal, oil palm, vegetables, bush meet. Non local goods such as clothing and hardware have seen their prices vehemently increased. One respondent said in a Focus Group Discussion said that *'all people know is that there is gold here so we have money and so they sell goods at higher prices. The problem here is that those who have jobs can afford them without pain but some of us without jobs and no skills to work with the mining company are at the losing end'*(Field Survey, 2014).

This is an indication that the gap between the rich and the poor is gradually widening. On the cultural front, an old woman said that *'our values are gradually wearing away because some of our taboos are broken such as sacred days and sacred grooves are no more the concern of many'*(Field Survey, 2014). This comes partly as a result of the fact that the mining company do operate without such observances as sacred days and so some people use it as a stepping stone to flout such taboos. On the other hand, people from different cultural backgrounds have settled in the region due to such mining activities and sometimes this leads to blending of cultural practices and this sometimes lowers the distinctiveness of the culture of the people in the region. On health wise, some indicated that the rise in cost of living had of late had a negative repercussion on their ability to seek medical attention. Despite the efforts put in place by the mining company to employ the local people, the challenge had been the lack of skills on the part of the locals. This leads to many grownups facing especially those above fifties finding it difficult to make earns meet due to the comparative increase in cost of living. An interviewee about age fifty-five complained that he has *'...no job to do and has no skills required by the company'* (Field Survey, 2014).

Another identified negative impact during the study was adverse repercussion of some programmes adopted by the mining company. The redundancy exercise embarked by Newmont in 2014 according to Ghanaweb.com (ghanaweb.com, 2014) consisted of 400 people from the Ahafo operations area. On the field, the Assemblyman of Wamahinso lamented that the exercise had rendered some locals jobless apart from those who are still waiting for jobs. Moreover he pointed out that *the Community Liaison Officer of Wamahinso had been affected by the exercise*. It is important to note that the role of the Liaison Officer is to mediate between the mining company and the communities. His layoff here therefore points to a break in that important role he had played earlier. It would therefore be necessary if certain positions are made entrenched by the company to preserve significant positions for effective communication purposes. This is essential because communication had previously been recommended by Ababio and Boon (2009) for the need for effective communication at the local levels. Also, Hon. Further indicated that *'it would be very necessary for the one dollar per ounce contribution by Newmont to be increased'*. Various concerns have been raised on what mining companies contribute towards socio-economic development. For instance, Stephen Yeboah (2011) of the Centre for Social Impact Studies (CeSIS) advocated for the review of confidentiality clauses by government that *'give undue advantage to mining firms'* by noting that Newmont and other multinationals despite Parliament's review of increase of royalty payment to 5 percent still pay 3 percent. This still calls for improvement of the contribution of Newmont towards development in the mining communities.

#### 4. Conclusion

Since Newmont Ghana Gold Limited started operation at Ahafo, it had immensely contributed to the socio-economic development of the mining communities of Ahafo and therefore doing well with its CSR despite the shortfalls. Since 2003, effort was made to provide the people immediately affected by the mining company's operation such as compensation for loss of farms and other resources. By 2005, people were being resettled by the mining company with houses being put up for them as well as compensation in the form of cash. The pouring of gold by the turn of 2006 helped Newmont to strengthen its Corporate Social Responsibility agenda at Ahafo. As a CSR gesture, mutual agreement between the mining communities and Newmont saw the establishment of Newmont Ahafo Development Foundation, an idea that was conceived and birthed by the Ahafo Social Responsibility Agreement. Newmont Ghana Gold Limited had not only created jobs for the people of the region but also, worked on human resource development by providing scholarships to qualified

and deserving students at second cycle institutions and the tertiary level. It has also been organizing vocational training for people of the region whereby some are being employed and the others create their own jobs. Culture and sports had not been left out as Newmont had been providing funds for the organization of such events through NADeF as well as the building of chief palaces. It has also been discovered that prior to making profit, Newmont's contribution largely focused on the immediate environment of its operation but upon firmly establishing itself it had the opportunity to broaden its tentacles and positively impact the lives of the people through human resources development, health, culture and sports. Some affected persons under Newmont's resettlement programme are not satisfied with their compensations since they have virtually spent what they were given and have no work to do. Also, poverty is another challenge on the part of those who are unable to get jobs as a result of the sharp increase in cost of living in the region.

The discussions on the mining companies which operate in Africa have severally been negative. Newmont company which operates in different continents including Africa has been listed to be performing creditably in the area of corporate social responsibility in Ghana. In particular NGGL directly and indirectly has supported some 48,000 jobs in Ghana and NGGL played a significant developmental role in the communities around the Ahafo Mine and in 2009 alone provided 99 regional companies with nearly US\$6 million in contracts, supporting more than 400 jobs, not including direct employment. Although several Authors and reports including the works of Kitula (2006), Hamann (2003), Hilson (2002), Traore (1994) among others continue to project the negative impact of mining activities especially those owned by expatriates. The Newmont example has the tendency to influence the intellectual discourse in favour of mining companies on the continent of Africa, especially South Africa which has had bad press on the nature of the relationship between mining labour (employees) and employers. The Ahafo Mine example potentially can throw some light on the broader discourse on expatriate mining in Africa. It is significant to point out that Newmont's Ahafo Mine has not yet experienced much of the worse repercussions of mining not only due to effective mechanisms but also, the relatively short time period of operation. It would therefore be necessary for Newmont to persistently put up stringent measures as part of deepening its Corporate Social Responsibility in order to prevent present and future generations of the region from tasting the woes of mining.

## References

- Adu-Gyamfi S., Owusu-Ansah, D., Brenya, E. & Damtar, D. (2016). Artisanal Mining and Its Ramifications on the People of Prestea. *Current Research Journal of Social Sciences*, (forthcoming).
- Akabzaa, T. (2004). African mining codes; A race to the bottom. *African Agenda*, 7(3), Print.
- Amponsah-Tawiah, K. & Dartey-Baah, K. (2012). Corporate Social Responsibility in Ghana. *International Journal of Business and Social Sciences*, 2(17).
- Arko, B. (2013). Corporate social responsibility in the large scale gold mining industry in Ghana. *The Business and Management Review*, 4(1).
- Asante-Manteaw, A. (2011). An appraisal of the land access processes in the mining industry in Ghana: The case of Newmont Ghana Gold Limited (NGGL) Ahafo mine. Unpublished master thesis of Commonwealth Executive.
- Attitudes of Mining Communities. (2012). A Challenge to Newmont. Tuesday, 28th August, 2012
- Atuguba, R. & Dowuona-Hammond, C. (2006). Corporate Social Responsibility in Ghana Friedrech Ebert Foundation-Ghana.
- Barfi, I. & Akrasi, G. (2008). 40 Million Euros Granted for Ministry of Lands, Forest & Mines. The Independence, April 10th, 2008.
- Boon, E. K. & Ababio, F. (2009). Corporate Social Responsibility in Ghana: Lessons from the mining sector. International Association for Impact Assessment Conference Proceedings, 2009.
- D'Amato, A., Sybil, H. & Sue, F. (2009). Corporate Social Responsibility and sustainable business; A guide to Leadership tasks and functions. Centre for Creative Leadership, Greensboro, North Carolina.
- Domfeh, K. (2013). A Miner's CSR Guideline to Reduce Social Conflict.
- Extracting Africa's Minerals. (2003). At What Cost. *African Agenda* Vol 16 No. 2, 2003.
- Ghanaweb.com. (2009). EPA: Chemical Overflow at Newmont Did Not Reach Public. General News Ghana web.Web.2009.http://www.ghanaweb.com. Accessed on 24th October, 2013.
- Hamann, R. (2003). Mining companies' role in sustainable development: the 'why' and 'how' of corporate social responsibility from a business perspective. *Development Southern Africa*, 20(2), 237-254.

- Hilson, G. (2002). An overview of land use conflicts in mining communities. *Land use policy*, 19(1), 65-73.
- Jenkins, H. & Obara, L. (2008). Corporate Social Responsibility in the mining industry- the risk of community dependence.
- Kitula, A. G. N. (2006). The environmental and socio-economic impacts of mining on local livelihoods in Tanzania: A case study of Geita District. *Journal of cleaner production*, 14(3), 405-414.
- Kapstein, E. & Kim, R. (2011). The Socio-Economic Impact of Newmont Ghana Gold Limited. Stratcomm Africa.
- Mireku Gyimah Daniel Mining and Social Responsibility: An Exemplary Model for Quality Life.
- Newmont.com. (2015). [www.newmont.com/home/default.aspx](http://www.newmont.com/home/default.aspx)
- Newmont Ahfo Development Foundation.2013 Report.
- Newmont Ahfo Development Foundation.2014 Report.
- Newmont Ahfo Development Foundation. (2008). Ahafo social responsibility agreement.
- Newmont Global Summary Report 2009, Community Relationships Review.
- Nwete, B. (2007). Corporate Social Responsibility and Transparency in the Development of Energy and Mining Projects in Emerging Markets; Is Soft Law the Answer? *German Law Journal*.Vol.8 No. 04.
- Opoku, M. S., Amoako-Arhen, A. & Okyere, A. A. (2014). Goldfields Ghana Limited, Tarkwa Mines and Community Infrastructure Development in the Tarkwa Nasuaem Municipality of Ghana. *Journal of Studies in Social Sciences*, 6(2).
- Opoku-Ware, J. (2010). The Social and environmental impact of mining activities on indigenous communities; The case of Newmont Gold (Gh) Limited (Kenyasi) in Ghana. Unpublished MA Thesis in Development Management, University of Agdaer.
- Traore, P. A. (1994). Constraints on small-scale mining in Africa. In *Natural Resources Forum*, 18(3), 207-212). Blackwell Publishing Ltd.
- Yankson, P. W. K. (2010). Gold Mining and Corporate Social Responsibility in the Wassa West District, Ghana. *Development in Practice*, 20(3).
- Yeboah, S. (2011). Has Mining Served Ghana Well? <http://www.modernghana.com>. Accessed on 24th October, 2013.
- Graphic Online. (2015). The Impact of Mining in Ghana. Assessed from <http://graphic.com.gh/features/opinion/45022-the-impact-of-mining-in-ghana.html#sthash.yPUZjKa.dpuf> on October, 16, 2015.
- Ghanaweb.com. (2014). Mineworkers kick against Newmont redundancy stance. Assessed from <http://mobile.ghanaweb.com/GhanaHomePage/NewsArchive/Mineworkers-kick-against-Newmont-redundancy-stance-311427> on September 1, 2015.

## Experience, Education, and Entrepreneurial Success: A View from Bangladesh

Mahfuza Khatun, Sikandar Siddiqui  
Jahangirnagar University, Bangladesh  
Frankfurt School of Finance & Management, Germany  
S.Siddiqui@fs.de

**Abstract:** This paper examines the impact of education on the age/earnings profiles of self-employed Bangladeshi men, using data from a survey carried out by the first author in 2010. Its results strongly support the perception that educational attainment and on-the-job experience are strongly complementary rather than mutually substitutable in increasing the likelihood of achieving a high income level. Yet the high degree of earnings heterogeneity among well-educated respondents in the sample also indicates that academic excellence is a catalyst but not a guarantor for entrepreneurial success, and that levels of education that are formally equivalent may nevertheless have very different implications for the likelihood of prosperity in business.

**Keywords:** *Education, experience, entrepreneurship*

---

### 1. Introduction

The theory of human capital, established by Becker (1964), maintains that education is an investment of presently disposable time and wealth with a view to later gains through higher earnings. Therefore, assessing the statistical relationship between educational achievement and earnings has long been an important topic in the fields of labour and human resource economics. For the time being, the majority of the related studies have concentrated on employees, as can be inferred, e.g., from the related surveys by Card (1999), Harmon et al. (2003), and Heckman et al. (2006). More recently, efforts to estimate the impact of education on earnings have also been made for entrepreneurs (see, e.g. the survey by van der Sluis et al., 2008). Yet the last-mentioned topic is of particular importance because there are indications that the value added provided by entrepreneurship to society as a whole exceeds the one accruing to the individual entrepreneur. Entrepreneurship tends to bring forward the creation of jobs and the development of new products and processes (see van Praag and Versloot, 2007), and due to these expected favourable side effects, there should be a keen interest among policy makers to stimulate entrepreneurship. If (formal) education positively affects entrepreneurial success, improving the accessibility and quality of the former may be a promising means of stimulating innovation and employment growth.

Until now, most of the research efforts directed at estimating the returns on education in entrepreneurship have related to Western industrialized countries. In contrast, this paper is an attempt to supplement the existing literature on this topic by an empirical investigation based on data from Bangladesh. The specification of the statistical model in use differs from those of many other earnings studies by allowing for multiplicative linkages between the "age" variable serving as a proxy for (potential) professional experience, and the educational attainment score by which the level of academic and/or professional qualification is being captured. With regard to the sample in use, it hence allows for additional insights as to the degree of complementarity, or substitutability, of experience and educational success. In the following section 2, the data used to this end is described in more detail, along with some background information provided to facilitate their interpretation. The empirical approach chosen, the results obtained, and their economic interpretation are provided in section 3. Section 4 concludes the paper and points towards some possible directions for future related research efforts.

### 2. Data and Background Information

**Source of Data in Use:** The data in use are based on a survey conducted by the first author in August, 2010. They consist of a cross-section of self-employed men, all of which had in common that their businesses belonged to the class of small and medium-sized enterprises (SMEs) according to the definition by the central bank of Bangladesh; see Bangladesh Bank (2010, pp. 6-7). In geographic terms, the data in use originate from

the Savar Export Processing Zone, which located in the District of Dhaka and, at the time of writing, is one out of eight export oriented industrial enclaves providing infrastructures, facilities, administrative and support services for a wide variety of enterprises (see Bangladesh Board of Investment, 2014). The main reason for this choice was the particularly high density of SMEs in that area, which greatly facilitated the collection of data. Information was gathered using the snowball sampling technique, which resembles a chain referral system in which, after addressing group initial respondents, the researcher asked them for help in identifying further ones. A key advantage of this technique is that it is inexpensive, time-saving, and highly effective if, as in this case, only a certain subgroup of the population was targeted. When interpreting the results, however, it has to be noted that the underlying data points are not necessarily representative of the population as a whole.

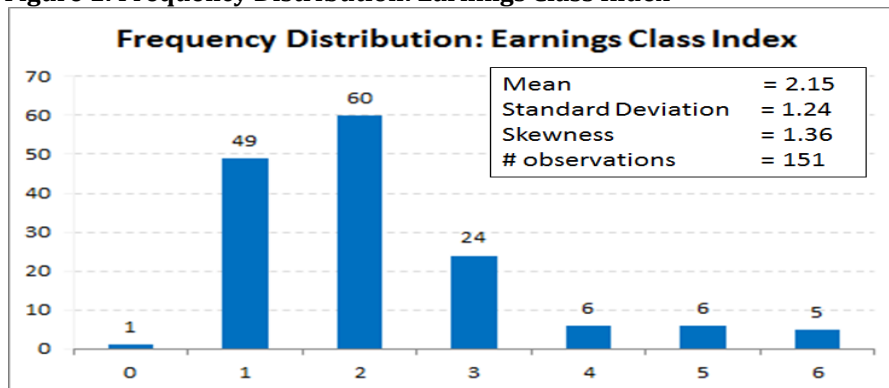
**Income Classes:** In the questionnaire underlying the survey data, the range of possible earnings levels was sub-divided into five intervals according to the following pattern:

**Table 1: Earnings classes**

(Figures in BDT = Bangladeshi Taka per month)		
Class #	Range: From above...	... up to...
0	0	10 000
1	10 000	15 000
2	15 000	20 000
3	20 000	25 000
4	25 000	30000
5	35000	

If converted at the USD/BDT exchange rate prevailing on December 31, 2010, an amount of BDT 10 000 would have been roughly equivalent to USD 141.91 (source: exchangerates.org.uk). It may, at least at first sight, appear peculiar that the income data provided by the survey respondents have been grouped in intervals rather provided as exact numbers. However, while conducting the survey, the first author realised that many interviewees did not calculate exact net income figures on a monthly (or even annual basis) and hence felt more comfortable when being asked to provide interval estimates. As Figure 1 indicates, the sample frequency distribution of earnings class indices exhibits considerable positive skewness (which is anything but uncommon for empirical earnings distributions, see Neal and Rosen, 2000), and has its mean at 2.15, which would be roughly equivalent to USD 260 per month:

**Figure 1: Frequency Distribution: Earnings Class Index**



**Educational Attainment Scores:** The educational attainment score used in this investigation reflects the different levels of the general educational system prevailing in Bangladesh. In this system, primary education usually begins at the age of 6 and usually takes five years. The following Junior Secondary and Secondary stages comprise three and two years, respectively. At the end of the 10<sup>th</sup> class, students appear at a public examination called Secondary School Certificate (S.S.C.), which marks the threshold for entrance in the higher secondary stage. The latter usually takes another two years, comprises courses in subject areas as diverse as



science, commerce, humanities, home economics, agriculture and Music, and concludes with a public examination called Higher Secondary Certificate (H.S.C.) examination at the end of class 12. After successfully completing the H.S.C., students may pursue, in accordance with their ability and aptitude, higher education in the form of Bachelor's degree courses (taking two or three years) in the colleges or the universities. Moreover, there are Master's degree courses available for holders of a Bachelor's degree, which may take between one (in the case of a Bachelor's degree with honours) and two years. To holders of Master's degrees, universities offer M.Phil and Ph.D. courses in selected subjects, which take another two (M. Phil) or three to seven (Ph.D.) years.

The general education system sketched above is supplemented by a vocational-technical education system, which is organised in three phases, viz. certificate, diploma and degree. The purpose of the certificate courses is to develop skilled workers in different vocations are of 1 – 2 years duration after 8 of schooling (class VIII) imparted in Vocational Training Institutes (V.T.I.). Moreover, there are Polytechnic and Monotechnic Institute offering diploma courses in engineering, commercial and industrial subjects, which take three years for technical and two years for commercial courses entered into after completing the S.S.C. After obtaining a Diploma-in engineering, students can further advance their educational career by enrolling for a Bachelor degree from Engineering & Technology Universities. Related courses normally usually take between two-and-a-half and three years. Degree holders may then cane roll into post-graduate studies. Moreover, holders of Bachelor's degrees, as well as H.S.C. students fulfilling entry criteria of the Institute of Chartered Accountants of Bangladesh (ICAB), can pursue a CA (Chartered Accountant) qualification.

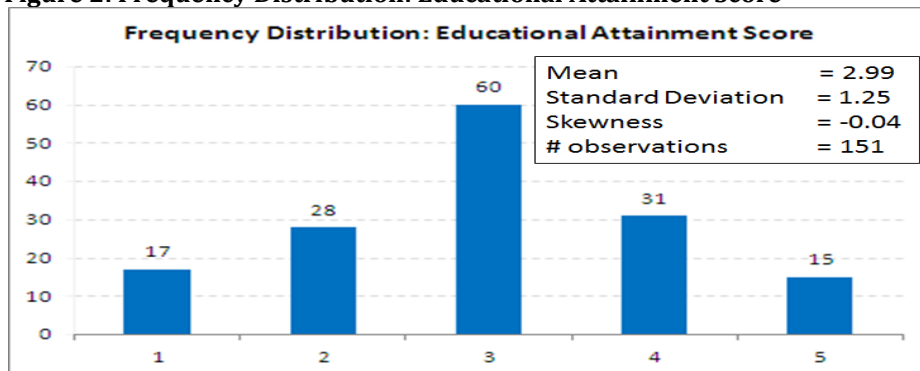
Apart from the two above components of the educational system, there is a parallel sub-system known as Madrasah Education, which teaches all the basics of education in a religious environment. It places particular emphasis offers traditionally Islamic instruction focusing on the study of the Holy Qur'an, its exegesis ("Tafsir"), the Prophetic traditions ("Hadith"), legal theory ("Usul") and jurisprudence ("Fiqh"), as well as Arabic language and literature. Students having passed the "Alim" (12<sup>th</sup> grade), may go on to pursue the equivalent of a Bachelor's degree ("Fazil") and a "Kamil" (roughly equivalent to a Master's degree) thereafter. In the following Table 2 the way in which different levels of achievement in the educational system sketched above are translated into the numerical educational attainment scores on which the results of the investigation are being based.

**Table 2: Educational attainment scores**

Score	Description
1	Below S.S.C. or equivalent
2	S.S.C. or equivalent
3	H.S.C. or equivalent
4	Graduate
5	Postgraduate

The frequency distribution of educational attainment scores, which is displayed in Figure 2 is almost perfectly symmetric and indicates that the average respondent had achieved the Higher Secondary Certificate as highest level of education achieved.

**Figure 2: Frequency Distribution: Educational Attainment Score**



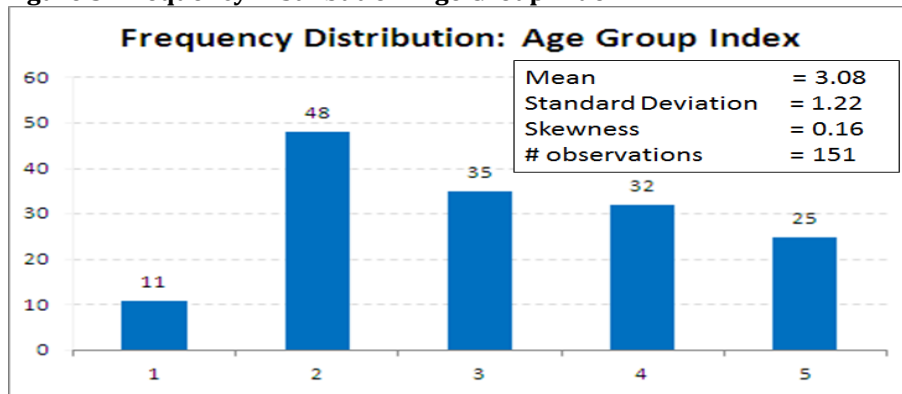
**Age Groups:** In order to capture, at least in an approximate fashion, the likely relationship prevailing between potential on-the job experience and earnings, it is nowadays common to use a respondent's age as an explanatory variable into an empirical earnings function. Previous experience suggests that, all else being equal, earnings tend to increase with age, albeit at a declining rate, up to a certain high point, beyond which they (slowly) decline again due to the gradual onset of the ageing process (see, e.g., Mazzonna and Peracchi, 2011). This pattern can be represented with some accuracy by follow Wright's (1991) example in using a linear and a squared age term. Our application follows this paragon, while at the same time taking into account an important special feature of the underlying dataset: As has been noticed, e.g., by Kabir and Chowdhuri (1981), age statements by Bangladeshi respondents tend to be heaped around multiples of 5 or 10, the main reason being that the country has introduced the (now mandatory) issuance birth certificate only a few years ago. Against this background, it makes sense to order the respondents' age statements into five-year buckets and use the categorical variable thus created an input to the model. This route was also followed in the sample underlying this paper. The age groups in use have been numbered consecutively according to the following pattern:

**Table 3: Age group (all figures in years)**

Age group index	Range: From above...	... up to...
1		25
2	25	30
3	30	35
4	35	40
5	45	

The in-sample frequency distribution of the age group index, shown in Figure 3 exhibits only slight positive skewness and indicates that the average respondent is, roughly, 33 years of age.

**Figure 3: Frequency Distribution: Age Group Index**



### 3. Empirical Approach and Results

**Empirical Approach: Ordered Probit:** In the dataset in use, the dependent variable (=income score) is not continuous but ordinal, which means that its possible realisations consist of numerical scores that establish a ranking order. A frequently used approach to estimating such models is the ordered probit model introduced by Aitchison and Silvey (1957). The main idea behind it is that there is an unobservable continuous variable  $y^*$  (here: the actual income level measured in domestic currency units), and that the particular realisation of the observable dependent variable  $y$  depends on the particular sub-interval of the real line into which the corresponding realisation of  $y^*$  has fallen. The individual, non-overlapping sub-intervals of the real line associated with the different values of  $y$  are delimited by thresholds  $\tau_0 < \tau_1 < \dots < \tau_M$ , where the number of possible realisations of  $y$  equals  $M$ . The unobservable continuous variable,  $y^*$ , is a linear combination of some explanatory variables gathered in the  $(k \times 1)$  vector  $x$ , and an error term which follows a Standard Normal distribution. Denoting by  $y_i^*$  and  $x_i^*$  the realisations of  $y$  and  $x$  pertaining to observation number  $i$ , this can be expressed as

$$y_i^* = x_i' \beta + \varepsilon_i \quad (1)$$

The realisation of the observable ordinal variable,  $y_i$ , takes on values 0 through  $M$  according to the following pattern:

$$y_i = m \text{ if } \tau_{m-1} < y_i^* \leq \tau_m \text{ with } m = 1, \dots, M, \tau_0 = -\infty, \tau_M = \infty \quad (2)$$

Here and in the following,  $\Phi(\cdot)$  denotes the cumulative distribution function of the standard normal distribution, evaluated at the term in brackets. The occurrence probability of a given outcome  $m$  can then be expressed as

$$\Pr(y_i = m) = \Phi(\tau_m - x_i' \beta) - \Phi(\tau_{m-1} - x_i' \beta) \quad (3)$$

It follows that the unknown parameters of the model,  $\tau_1 \dots \tau_{M-1}$  and the elements of  $\beta$ , can be estimated by maximum likelihood, i.e. by numerically maximizing the log-likelihood function

$$\ln \Lambda = \sum_{i=1}^N \sum_{m=1}^M I(y_i = m) \ln [\Phi(\tilde{\tau}_m - x_i' \tilde{\beta}) - \Phi(\tilde{\tau}_{m-1} - x_i' \tilde{\beta})] \quad (4)$$

with respect to the trial parameters  $\tilde{\tau}_1, \dots, \tilde{\tau}_{M-1}$  and  $\tilde{\beta}$ . In the above equation,  $I(\cdot)$  denote an indicator function which is set to 1 if the condition in brackets is fulfilled, and to zero otherwise. In order to ensure that there is a unique combination of parameter values that maximizes (4), the additional constraint  $\tau_1 = 0$  is introduced.

Upon interpretation of the results, a caveat, however, seems in place: The standard ordered probit approach considered here does not consider the selectivity issue that arises due to the fact that some individuals choose to become entrepreneurs while others prefer dependent employment. The unobservable factors that positively affect an individual's propensity to entrepreneurship may be positively correlated with those affecting entrepreneurs' earnings prospects. The ordered probit estimates, which do not take this possibility into consideration, may thus be biased and hence mistakenly ascribe to age and educational attainment some effects that are in fact due to other, unobservable, background factors. The standard solution to this problem, i.e. the selectivity adjustment due to Heckman (1979), cannot be applied here because the database in use does not include income information on a control group of dependent employees. The results obtained should hence be understood as quite a rough approximation to, rather than an exact representation of, the statistical relationship examined.

**Model Specifications under Test:** Even with only two explanatory variables available, several alternative model specifications are at hand. The most basic one, labelled model specification I in the following, would assume a linear and additive relationship between the continuous yet unobservable income indicator  $y^*$  and both the age group index and the educational attainment score. Given the considerations from section 2.4., however, allowing for a concave shape of the age/earnings profile by adding the square of the age group index appears reasonable (see specification II below). Based on the supposition that that education and work experience have complementary effects on productivity, Hauser and Daymond (1977) argue that the impact of on-the-job experience on earnings might very well be greater than average for persons with comparatively high educational achievements than for others. In order to allow for the possibility that education and on-the-job experience do actually interact in their influence on earnings, the set of model specifications tested also includes two cases in which the age group index and the educational attainment score are linked in a multiplicative manner.

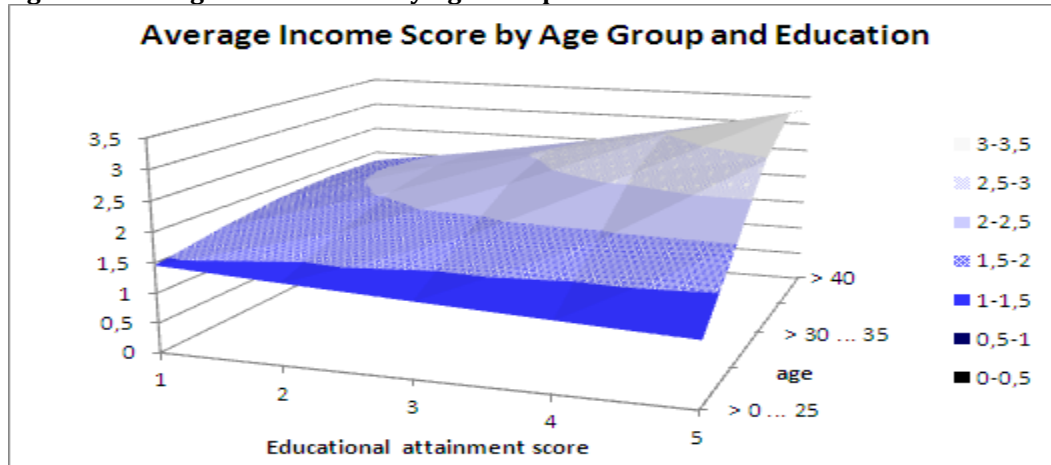
Trying to quantify a statistical relationship between a dependent variable and one or more independent variables using a rather flexible functional form, as it is attempted here, involves a tradeoff between two goals: One of them is to obtaining a reasonable goodness of fit; the other is to avoid misinterpreting some of the inevitable random variation "noise" in the data as informationally important, systematic "signals" (see, e.g., Barnett et al., 1991, p.6., and Feger, 2000, pp. 87-88), which would otherwise detrimentally affects the reliability of the resulting estimates. In models like the one used here, a common solution to this dilemma is to compare rivaling specifications in a pairwise manner, using the likelihood ratio statistic, which is based on Neyman and Perarson (1933) and can be, somewhat casually, expressed as

$$D := -2 \times \left[ \ln \Lambda_{\max} \left( \begin{array}{c} \text{more restrictive} \\ \text{specification} \end{array} \right) - \ln \Lambda_{\max} \left( \begin{array}{c} \text{less restrictive} \\ \text{specification} \end{array} \right) \right] \quad (5)$$

with  $\Lambda_{\max}$  representing the maximised value of the likelihood function  $\Lambda$  in (4). According to Wilks (1938), whenever the more restrictive specification is correct, the probability distribution of the test statistic  $D$ , given a sufficiently large sample size, can be approximated by a Chi-Square distribution with degrees of freedom equal to  $(k_2 - k_1)$ , where  $k_2$  represents the number of free parameters in the less restrictive specification and  $k_1$  the one in the more restrictive one.

**Estimation Results:** The estimation results obtained are gathered in Table 4 below, whereas Table 5 displays the outcomes of the pairwise comparisons between the model specifications under investigation. From these tests, model specification IV, in which the age group indicator and its square are linked with the educational attainment score in a multiplicative manner, and the educational attainment score is also included on a stand-alone basis emerges as most favourable and has therefore been highlighted. As a consequence, the following discussion of the results, along with their graphical representations below, is based on this variant. From the tabulated results it can already be inferred that in our sample, a statistically robust relationship between age and educational achievement on one hand, and the earnings of self-employed men on the other, exists. At first sight, however, the negative coefficient estimate referring to the educational attainment score (if seen in isolation), appears highly counter-intuitive. Yet as the three-dimensional age-education-earnings profile in Figure 4 indicates, this only implies that the correlation between educational achievement and earnings is only negative in the very youngest of the five age groups under investigation, and is so only very slightly.

**Figure 4: Average Income Score by Age Group and Education**



**Table 4: Parameter Estimate: Dependent Variable = Income Score (asymptotic t-statistics in parentheses)**

Model specification	I	II	III	IV
$\tau_2$	2.0918** (5.007)	2.1743** (4.894)	2.1781** (5.068)	2.1797** (5.099)
$\tau_3 - \tau_2$	1.1571** (9.013)	1.1715** (9.123)	1.2044** (9.174)	1.1845** (9.139)
$\tau_4 - \tau_3$	0.6897** (5.359)	0.6808** (5.337)	0.6910** (5.291)	0.6754** (5.266)
$\tau_5 - \tau_4$	0.2750** (2.570)	0.2690** (2.557)	0.2647** (2.550)	0.2643** (2.556)
$\tau_6 - \tau_5$	0.4302** (2.571)	0.4300** (2.590)	0.4253** (2.576)	0.4289** (2.556)
Intercept	0.7785*	-0.0481	3.6691**	2.0858**

	(1.937)	(-0.077)	(2.008)	(4.375)
AGE	0.3192**	1.0138**	-1.4249	-
	(3.541)	(2.574)	(-1.299)	
AGE <sup>2</sup>	-	-0.1082*	0.2510	-
		(-1.676)	(1.511)	
EDUC	0.2759**	0.2605**	-1.0517*	-0.5602**
	(3.270)	(3.023)	(-1.707)	(2.519)
AGE × EDUC	-	-	0.8661**	0.4297**
			(2.274)	(3.237)
AGE <sup>2</sup> × EDUC	-	-	-0.1278**	-0.0512**
			(-2.208)	(-2.352)
Mean Log Likelihood	-1.34552	-1.33643	-1.32180	-1.33115

Remarks: \* = significant on a 90% confidence level; \*\* = significant on a 95% confidence level.

**Table 5: Outcome of Likelihood Ratio Specification Tests**

Model	Test statistic	d.f.	p-value
(I) vs. (II)	2.75	1	0.0975*
(II) vs. (III)	4.42	2	0.1097
(IV) vs. (III)	2.82	2	0.2437
(I) vs. (IV)	4.34	1	0.0372**

Against this background, the above outcome finding has a very plausible interpretation: People can rarely, if ever, pursue high-flying academic ambitions while at the same time, take on the extraordinary efforts usually required for full-time entrepreneurship. Hence, very young people who have already progressed much further than average on the scale of academic achievement will often have not gathered the amount of on-the-job experience that is indispensable for outstanding entrepreneurial success. In age group 1, the vocational experience advantage of less educated individuals slightly overcompensates the earnings impact of higher educational attainment.

However, this lead quickly turns into its opposite as people grow older: In age groups 2 to 5, the estimated impact of educational attainment on expected earnings is high and positive. As indicated by the high degree of statistical significance observed for the related coefficients, the multiplicative linkage between age and education established in the underlying model specification strongly supports the supposition that education and on-the-job experience are complimentary factors of entrepreneurial success that mutually reinforce each other. The estimated occurrence probabilities of different earnings brackets, which are shown in Figures 5 to 9 for different values of the educational attainment score, makes this point obvious, particularly when looking at the opposite ends of the related scale. For respondents at or below the age of 25, the estimated likelihood of being in the highest income bracket is negligible (less than 0.25%) for educational attainment scores of both 1 and 5. In the age group ranging from above 35 to 40 years, the estimated probability of having ended up in the highest income bracket is a remarkable 17.2% for postgraduates but only amounts to around 1.1% for people without a S.S.C. or equivalent qualification.

Figure 5: Occurrence Probabilities for Different Income Scores

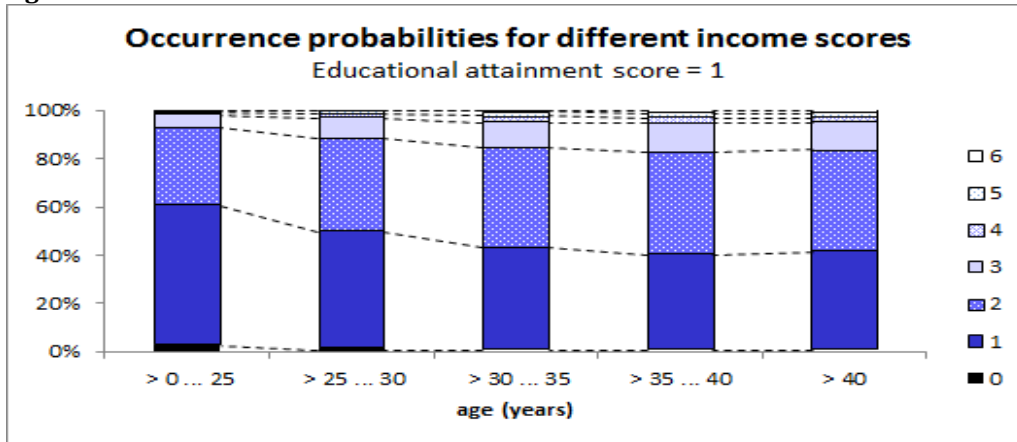


Figure 6: Occurrence Probabilities for Different Income Scores

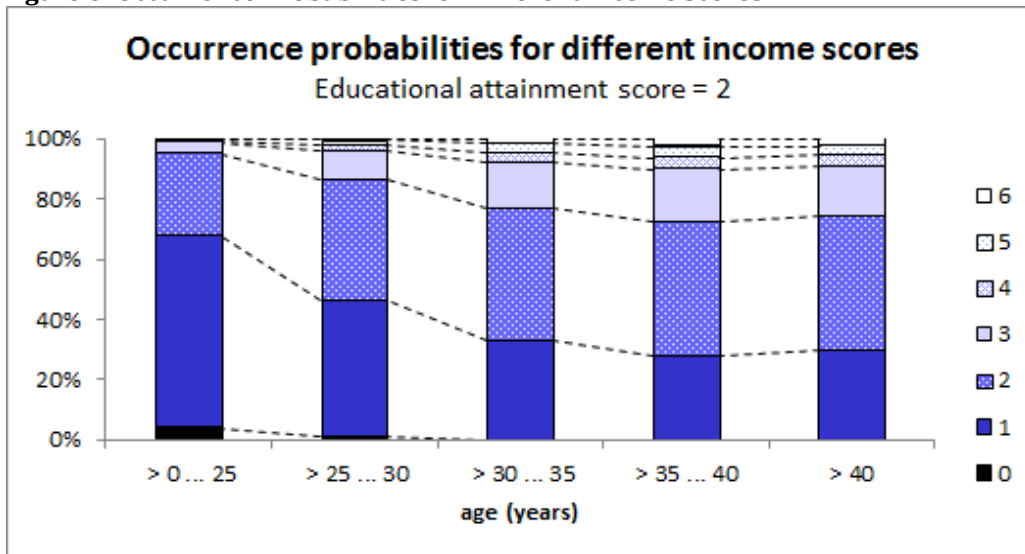
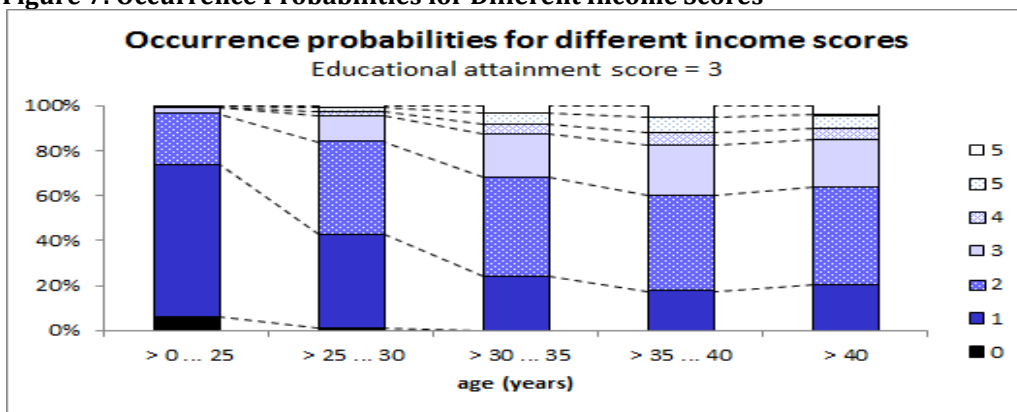
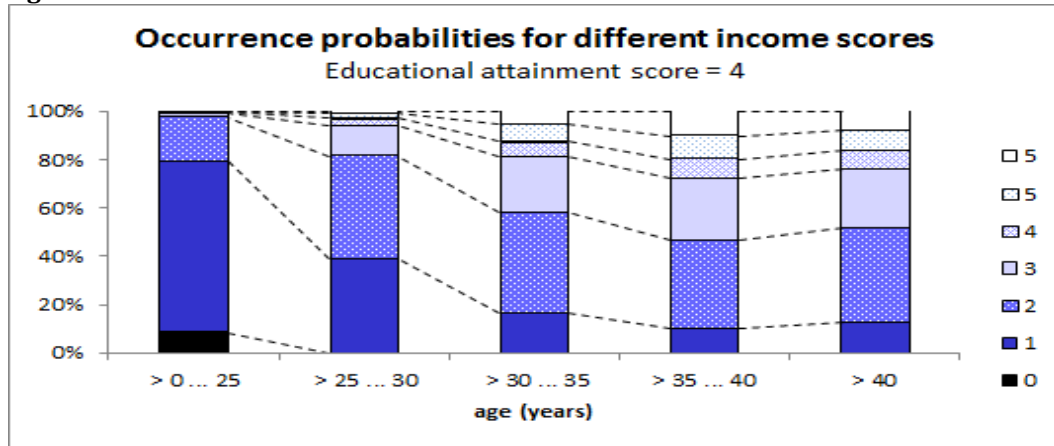


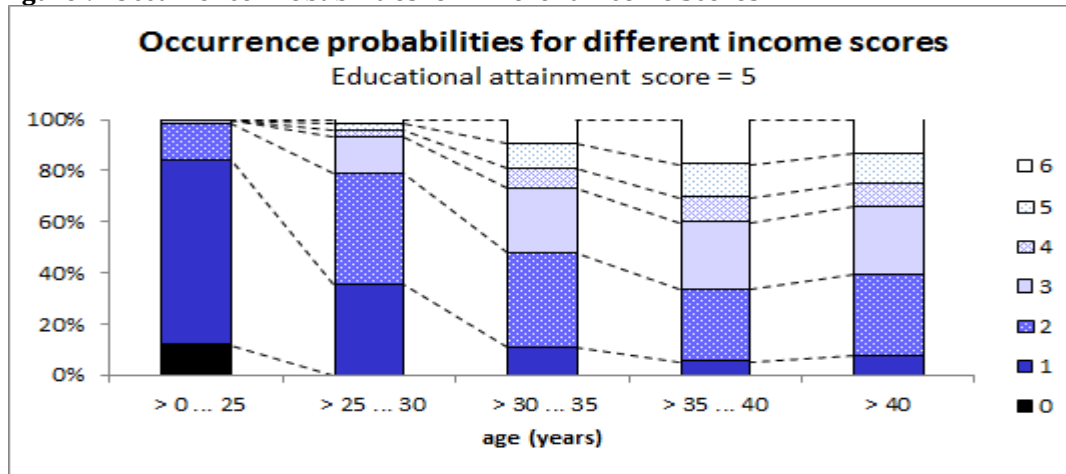
Figure 7: Occurrence Probabilities for Different Income Scores



**Figure 8: Occurrence Probabilities for Different Income Scores**



**Figure 9: Occurrence Probabilities for Different Income Scores**



Across all educational subgroups, people appear to reach the peak of their income generation potential at around 40 years. Although the imprecision of the age statements prevailing in this sample call for a cautious interpretation of the above finding, this seems to be rather early compared to corresponding estimates for Western Europe and the U.S., which often locate the peak of an average male's age/earning profile near the age of 50 (see, e.g., Casanova, 2013). However, given the overall lower average life expectancy prevailing in Bangladesh, this result does not come as a huge surprise. Finally, our estimates show that the degree of earnings inequality, too, tends to increase with educational achievement. More than an estimated 70% of the respondents having educational attainment scores of 1 (below S.S.C.) or 2 (S.S.C.) have an earnings score of 2 or below. In contrast, the earnings of self-employed men with a graduate or even postgraduate degree, especially at ages beyond 30, tend to be a lot more evenly distributed among the different categories used here. This observation suggests two complementary interpretations: On one hand, individual educational achievements significantly increases the odds of entrepreneurial success, but is by no means a guarantee for it. On the other hand, given the considerable diversity of subject areas in which an individual may specialise while at school or during tertiary education, it is quite plausible to assume that two educational qualifications that are formally equivalent may not be equally suited to foster success in business.

In the introduction, it was postulated that successful entrepreneurs create positive externalities for the societies they live in, and that promoting entrepreneurship should hence be an important objective of educational policy. Against this background, the above findings, which point to a high degree of complementarity between experience and educational attainment, suggest an important normative implication: Educational programmes aimed at providing society with entrepreneurs should aim for an early

and, as possible, seamless integration of theoretical skills acquisition and hands-on practical experience to gathered, e.g., through mandatory internships for students or by integrating first-hand experience reports by practitioners into the related curricula.

#### 4. Conclusion

This paper has examined the impact of education on the age/earnings profiles of self-employed Bangladeshi men, using data from a survey carried out by the first author in 2010. Its results strongly support the perception that educational attainment and on-the-job experience are strongly complementary rather than mutually substitutable in increasing the likelihood of achieving a high income level. Yet the high degree of earnings heterogeneity among well-educated respondents in the sample also indicates that academic excellence is a catalyst but not a guarantor for entrepreneurial success, and that levels of education that are formally equivalent may nevertheless have very different implications for the likelihood of prosperity in business.

#### References

- Aitchison, J. & Silvey, S. (1957). The Generalization of Probit Analysis to the Case of Multiple Responses. *Biometrika*, 44, 131-140.
- Bangladesh Board of Investments. (2015). Export Processing Zones. Available online at <http://www.boi.gov.bd/index.php/investment-climate-info/export-processing-zones> (retrieved January 17th, 2015).
- Bank of Bangladesh. (2010). SME Credit Policy and Programmes. Available online at <http://www.bb.org.bd/sme/smepolicye.pdf> (retrieved January 17th, 2015).
- Barnett, W., Geweke, J. & Wolfe, M. (1991). Semi nonparametric Bayese an Estimation of the Asymptotically Ideal Production Model. *Journal of Econometrics*, 47, 5-50.
- Becker, G. (1964). Human Capital. National Bureau of Economic Research, New York.
- Card, D. (1999). The Causal Effect of Education on Earnings. In: O. C. Ashenfelter and D. Card (ed.), *Handbook of Labor Economics*, 3(1), 1801-1863, Amsterdam (Elsevier).
- Casanova, M. (2013). Revisiting the Hump-Shaped Wage Profile. Working paper, University of California, Los Angeles.
- Feger, F. (2000). A Behavioral Model of the German Compound Feed Industry: Functional Form, Flexibility, and Regularity. Doctoral dissertation, University of Göttingen.
- Harmon, C., Oosterbeek, H. & Walker, I. (2003). The Returns to Education: Microeconomics. *Journal of Economic Surveys*, 17(2), 115 - 156.
- Hauser, R. & Diamond, T. (1977). Schooling, Ability, and Earnings: Cross-Sectional Findings 8 to 14 Years after High School Graduation. *Sociology of Education*, 50(3), 182-206.
- Heckman, J. J. (1979). Sample selection bias as a specification error. *Econometrica*, 47, 153-161
- Heckman, J. J., Lochner, L. J. & Todd, P. E. (2006). Earnings Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond. In: E. Hanushek and F. Welch (ed.), *Handbook of the Economics of Education*, 1, 307 - 458, Amsterdam (Elsevier).
- Kabir, M. & Chowdhury, K. (1981). The pattern of age reporting errors in the districts of Bangladesh. *Rural Demography Journal*, 8(2), 33-54.
- Mazzonna, F. & Peracchi, F. (2011). Aging, Cognitive Abilities, and Retirement. Working paper, Tor Vergata University, Rome.
- Mincer, J. (1974): Schooling, Experience and Earnings. New York (National Bureau of Economic Research).
- Neal, D. & Rosen, S. (2000). Theories of the Distribution of Earnings. Chapter 7 in: Atkinson, A.B., and F. Bourguignon, *Handbook of Income Distribution*, 379-427, Amsterdam (North-Holland).
- Neyman, J. & Pearson, E. (1933). On the Problem of the Most Efficient Tests of Statistical Hypotheses. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 231(694-706), 289-337.
- Van der Sluis, J., Van Praag, C. M. & Vijverberg, W. (2008). Education and Entrepreneurship Selection and Performance: A Review of the Empirical Literature. *Journal of Economic Surveys*, 22(5), 795-841.
- VanPraag, C. M. & Peter, H. V. (2007). What is the Value of Entrepreneurship? A Review of Recent Research. *Small Business Economics*, 29, 351-382.



- Wilks, S. S. (1938). The Large-Sample Distribution of the Likelihood Ratio for Testing Composite Hypotheses. *The Annals of Mathematical Statistics*, 9, 60–62.
- Wright, R. E. (1991). Cohort Size and Earnings in Britain. *Journal of Population Economics*, 4, 295-305.

## Livestock Management and Gendered Decision-Making in Rural Cambodia

John Walsh  
Shinwatra University Thailand  
jcwalth100@hotmail.com

**Abstract:** Agricultural households tend, around the world, to have gendered divisions of work depending on a range of historical, practical, cultural and geographic factors. Once the issue of who does what in the household is determined, it tends to remain that way and this means it is difficult to introduce development-positive changes in the household in the absence of a moment of change. This paper investigates whether there are opportunities for such change in the case of livestock management in Cambodia. A total of 200 interviews were conducted in four rural areas of Cambodia using a specially designed questionnaire. The extent and spread of livestock ownership was investigated together with the issue of who in the household takes responsibility for different aspects of that management. It is found that there is some limited scope for introducing change in households through changing the opportunities for livestock agriculture in Cambodia.

**Keywords:** *Agriculture, Cambodia, development, gendered division of labor, livestock*

### 1. Introduction

Women make production-related decisions to different extents in different societies and cultures (Acharya & Bennett, 1983). In cultures in which men hold structurally superior status positions in households, bargaining model and resource theory approaches are not as relevant as cultural approaches to understanding decision-making behavior (Kriti, Tisdell and Roy, 2003). Nevertheless, decision-making ability raises women's status and may lead to better long-term developmental outcomes, especially if it is a part of reducing gender inequality (World Bank, 2012). State agencies wishing to foster economic development should, therefore, consider ways to encourage more decision-making by women. Livestock management is an essential part of many rural household survival strategies and contains much gendered knowledge (Rocheleau, 1991; Yisehak, 2008). Are there areas of livestock management where gendered knowledge can be changed through receiving new information or having to make unprecedented decisions? This is the question that spurs the research reported on in this paper, which involved a quantitative study of women in rural households in two provinces of Cambodia. Cambodia exhibits above average levels of gender discrimination and does so more than its neighbors (Chan & Chheang, 2008) and is also a low income country entering a new era of economic development as factories open and infrastructure is built, despite spending less on education for young people in terms of GDP than any other Asian country apart from Lao PDR (ADB, 2014:53). Agriculture remains the most important sector in the economy and there is considerable scope for promoting higher levels of gender quality as a means of enhancing inclusive growth. Cambodia is also considered to be a post-conflict society, since it was devastated by warfare leading to the victory of the Khmer Rouge or Cambodian Communist Party and its subsequent rule from 1975-9. Millions of people were killed or displaced during this period and reconciliation subsequently has been partial at best. The paper continues with a review of relevant literature, a description of the methods employed in the research and then a presentation of the findings and a discussion of their meaning.

### 2. Literature Review

**Decision-Making:** The understanding of the nature of decision-making by individuals varies depending on the field of study within which the discussion takes place. Within the field of economics, decision-making is thought to be conducted within the framework of rational expectations. People collect all information necessary to make their decision, weigh up the options depending on which will yield the greatest utility in their own interest and then choose accordingly (Davidson, 1982). In some cases, the basic framework is supplemented by the concept of satisficing (Simon, 1955), which explains that not only is it impossible for an individual actually to gather all the information required to make a decision according to the rational expectations framework but that it would actually go against the interests of the individual to try to do so. Instead, people will satisfy themselves – i.e. gather some information so as to give the impression that the

process has been followed and then consider that sufficient. This may be seen in the common business practice of asking for quotes from three different companies before making a purchasing decision rather than seeking to research every possible supplier. In recent years, work on information asymmetries and their impact on decision-making by economists such as George Akerlof, Michael Spence and Joseph Stiglitz has been considered sufficiently revolutionary as to have won them the Nobel Prize for the discipline for 2001. The problems of information overload and information poverty in decision-making are linked and satisficing behaviour is a rational response to trying to find a solution.

In the social sciences, decision-making is considered to include not just behavioral aspects but also environmental factors. The utility-maximization approach derived from microeconomics is rejected because it is obvious from day-to-day experience that people will routinely sacrifice their own self-interest for that of their loved ones and will also practice deferral of satisfaction, while many decisions that people do make can only be described as non-rational or even irrational. In some cases, these decisions can be understood by incorporating into the model of decision-making behaviour variables relating to psychological, psycho-social and ideological states of mind. This has been taken to its most comprehensive extent within the field of marketing. Marketing models of consumer behaviour (which is distinct from organizational decision-making, which has its own set of practices and procedures) are powered by the commercial imperative of predicting how people will act so as to be able successfully to sell products to them and also by the computing power of contemporary machines which can integrate numerous complex variables and constructs within factor analysis that can group into lifestyle and psychographic segments a large number of individuals (Reynolds & Gutman, 1988). The model incorporates additional factors such as antecedent states, auditory and olfactory stimuli, reaction to colors, presence of other people and so forth (e.g. Donovan et al., 1994; Baumeister, 2002; Belk, 1975). It is evident, in other words, that decision-making can be a complex procedure, consisting of various stages and procedures.

For the current research, a model of decision-making is adopted that recognizes a plurality of relevant inputs and stages, from problem (or issue) recognition, information gathering, criteria evaluation, commitment and post-decision assessment and reassessment. This is a naturalistic approach to decision-making that is based on close observations of people in real-world situations (Klein & Zsombok, 1997). This features ill-defined objectives and ill-structured tasks, with people who are experienced in decision-making under constantly changing conditions and with a focus on finding solutions that are workable under current circumstances.

**Gender and Decision-Making:** As previously mentioned, there is reason to assume that gender and decision-making at the household level are interrelated. There are three strands of literature that may be used to support this hypothesis:

- Development studies: gender-based oppression remains an important area of investigation with development studies both in its own right and in terms of the practicalities of what disempowerment might mean in practice (Karl, 1995). Research in this area has, therefore, both an ideological and a practical purpose. This project focuses on the practical aspects of gendered decision-making. For example, research has indicated that the adoption of new technologies by men is more likely to be affected by the attitude towards the technology, while women are more likely to take into account behavioral control and subjective norms (Venkatesh, Morris & Ackerman, 2000). In the context of Thailand, quantitative research has indicated the relevance of gender in expectation formation and behaviour with respect to migration (De Jong, 2000).
- The second strand of literature relevant to this hypothesis is derived from the world of micro-finance initially created by the work of Muhammad Yunus and the Grameen Bank. One of the features of the micro-sized lending scheme has been that it prioritizes accepting women as clients since they are more likely to spend the money on the activities on which the application was made and to be more conscientious about making repayments on time. There is a variety of practical reasons which might explain why this could be the case. Research elsewhere certainly suggests that, particularly in the context of a developing nation with open borders such as Nepal, women are much more likely to have to remain at home and deal with dependent family members, while men are comparatively free to abandon their responsibilities (Thakur & Walsh, 2013).
- The third strand in the literature that relates to the role of women in the household may be found in the work of the British sociologist Richard Hoggart. His work (e.g. Hoggart, 1996) focuses in part on the

importance of strong women in working class households and how they are able to keep the household functioning despite numerous and unpredictable financial and other shocks. In his view, they provide the counterbalancing force to the precarious image of the peasant who, in the image conjured up by Scott (1976), wades across the landscape up to his chin in water, when any disturbances can lead to him being swept away or drowned. It is important that the international nature of Hoggart's work be stressed because there may otherwise be a tendency to concentrate on descriptions of Khmer women in the past and their relative freedoms, in reports dating back to the C13<sup>th</sup> Chinese ambassador Dakuan (2007) which can incorporate a degree of essentialism – i.e. there is something unique and essential in Khmer society that sets it apart from any others.

As a result of these different strands of the literature, it was deemed appropriate to explore the role of gender in decision-making. As suggested above, decision-making is a complex and multi-step process that evolves with respect to learning, new knowledge acquisition and changes in the external environment. However, it seems likely architecture of decision-making tasks will come into force which means people will tend to make the same decisions repeatedly, especially when the issue concerned is of some importance. This is consistent with a theory of decision-making that is related to bargaining theory (Manser & Brown, 1980). However, there is a strong strand in the literature that stresses the importance of processes rather than roles (e.g. Davis, 1976) and, if this is the case, the role of the HH would not always be paramount. This study focuses on moments of change as occasions when the settled architecture of decision-making may change – perhaps for the better if this means that women are given more decision-making power as a result and gender inequality is reduced.

**Head of the Household:** Cambodia, in common with many East Asian countries, uses a household registration system that requires families to identify a specific head of the household. This is normally the senior male member of the household, whether or not he is a permanent resident. If the previous head should die or in some other way become excluded from the household, then the status may be conferred on another member automatically in non-problematic situations or after a process of negotiation if required. In the history of Khmer (Cambodian) society, household membership and indeed familial relationships have commonly been subject to complex and fluid sets of circumstances (Jacobsen, 2008) and this has contributed to ambiguity that has continued into contemporary society, despite the various attempts at modernization that have been made. Nevertheless, the status of head of household does carry some legal implications and individuals recognize that there should be a designated individual fulfilling this role. The methodological and epistemological difficulties evident in different concepts and forms of understanding across societies (Budlender, 2003) are acknowledged.

It is evident that head of the household (HH) status indicates some influence in decision-making activities. The variable was operationalized in the following way: initially, the fieldwork team was instructed to seek out within the various villages that they visited households where women were the heads as much as possible and, when not possible, to interview a senior woman in the household. When a woman was identified as the HH, because she was divorced or widowed or never married, then this was relatively unproblematic. When a man was present and the senior woman was identified as his wife (which was overwhelmingly the most common pattern), then he would be identified as the HH. However, owing to the importance of labor migration, a question was added to determine whether the man who was designated as the HH was away from home and, consequently, the principal woman should be identified as the HH. However, a small number ( $n = 3$ ) observed during the interview that, although they lived in a household in which the male HH was away from home for a significant period of time, he nevertheless should be considered the HH because he represented the principal decision-maker in the areas investigated. Examination of the results showed an unequal distribution of the gender of the HH in the different provinces. In Takeo, 48 of the 90 HH were male (53.3%, while in Kampong Thom the figures were 76 out of 110 (69.1%) ( $n = 0.022^*$ ). This is presumed to be the result of labor migration, which has stronger pull in the poorer province and provides more opportunities for women to be HH, whether they wish to be so or not. A total of 37 respondents reported that they were married but that their husbands lived away and so they were accorded HH status. There were no significant differences between the two provinces in this regard.

### 3. Methodology

This study employs a quantitative approach to investigate the relationship between gender and decision-making behaviour with respect to livestock in a sample of rural households in Cambodia. A total of 200 questionnaires in total were completed. The sample was drawn from two different provinces of Cambodia – Takeo and Kampong Thom – so as to assess whether both inter-province and intra-province differences were influential. Consequently, two areas were identified in each province and villages sampled within each of the four areas. The samples sizes collected were as follows:

**Table 1: Sample Locations; source: Original Research; n = 200**

Province	Number of Interviews	
	Area A/B	Area C/D
Takeo	45	45
Kampong Thom	56	54

The slight under-representation of Takeo is explained by the fact that the first testing of the questionnaire and methodology took place in that province and so data collection was not so efficient at that stage. When intra-province analysis is described in the text following, areas A and B belong to Takeo province and areas C and D belong to Kampong Thom province. The interviewers were instructed to obtain a diverse selection of farm sizes within the villages that had been identified. The sampling strategy was a combination of purposive and convenience in nature. The importance of inter- and intra-provincial comparisons was indicated by both the initial pre-survey qualitative research (personal interviews) and the desk research, which saw secondary sources of information, including academic papers, information from governmental agencies and non-governmental organizations (NGOs) and reputable media sources, integrated into the project database.

**Questionnaire Development:** An initial version of the questionnaire had been developed and extensively tested in an earlier study which employed similar techniques and methodological assumptions as those that have been used in this study (Lovichakorntikul, Ngamsang & Walsh, 2013). The first version of the questionnaire was written in English and then interpreted into Khmer for the fieldwork. It was then amended for this survey with question sections on livestock ownership and management added to replace no longer needed sections. In doing so, question structures, wordings and order followed predecessors as far as possible. This questionnaire was interpreted into Khmer for testing and then implementation. In the field, its use proved to be practicable and respondents, with the usual difficulties able to be overcome were willing to contribute to the research process.

**Fieldwork:** The fieldwork was handled by a designated team, led by an experienced member of Pannasastra University in Phnom Penh, who was briefed and then trained the fieldwork team in the presence of the principal investigator. The fieldwork team was composed of undergraduate students at leading universities in Phnom Penh, the capital of Cambodia, who were recruited directly by the fieldwork supervisor on the basis of their maturity and experience, English language ability and availability for fieldwork in distant provinces. Training by the principal investigator and fieldwork supervisor was followed by one day of pilot testing involving the fieldwork team and supervisor and a representative of the funding agency. At each stage, careful note of progress was made and the method and means of conducting the questionnaires adjusted where necessary. It was determined that only minor changes were required in each case.

### 4. Results and Data Analysis

Once the questionnaires were completed, any open text questions and others where Khmer language had been used were interpreted into English and then sent to the principal investigator. The questionnaires were then checked before being entered into an industry standard software program, when double checking of data entry took place. Subsequently, various statistical tests and techniques were employed to produce the results that are reported in this paper. The principle of parsimonious investigation was employed, which requires the minimum number of variables and tests necessary to formulate hypotheses and their testing, following the lines of Occam's Razor.

**Livestock Ownership:** Most households (75.5%) possessed chickens and cattle (60.0%), while the presence of pigs (27.5%), poultry (16.0%) and buffaloes (10%) was also noticeable (see Table 2 below).

**Table 2: Livestock Ownership; Source: Original Research; n = 200**

Animal	% of households keeping animals	Ave number of animals household	Average number of animals per household	SD
Chickens	75.5	9.47	12.54	12.05
Poultry (ducks/geese)	16.0	4.24	26.50	87.33
Pigs	27.5	0.86	3.11	4.22
Sheep/goats	0	0	0	-
Cattle	60.0	1.67	2.78	1.74
Buffaloes	10.0	0.34	3.35	2.18
Fish (in pond)	1.5	6.00	400	528.77

Subsequent analysis revealed that there were some differences in household livestock management based on the area within the province.

**Table 3: Breakdown by Province of Livestock Ownership; source: Original Research, n = 200**

%age of households reporting ownership	Takeo - A	B	Kampong Thom - C	D
Chickens	84.4	68.9	66.1*	83.3*
Ducks/Geese	11.5	6.7	23.2	20.4
Pigs	26.7*	51.1*	7.1**	29.6**
Cattle	75.6	71.1	50.0	48.1
Buffaloes	0	0	25.6*	7.4*
Fish	2.2	4.4	0	0

Ducks and geese were significantly more likely to be owned in Kampong Thom (21.8%) than in Takeo (8.9%) (sig = 0.010\*; n = 200), although pigs were significantly more common in Takeo (38.9%) than Kampong Thom (18.2%) (sig = 0.001\*\*; n = 200) and so were cattle (73.3% to 49.1%) (sig = 0.000\*\*; n = 200). Interestingly, buffaloes were only found in Kampong Thom (sig = 0.000\*\*; n = 200) and the three fish ponds were found in Takeo (sig = 0.089; n = 200). On the whole, then, there is evidence of differential patterns of livestock ownership based on geographical factors. This is further indicated by the pattern of rice agriculture (see Table 4 below).

**Table 4: Area Breakdown of Rice Cultivation; source: Original Research; n = 200**

%age of households growing this type of rice	Takeo - A	B	Kampong Thom - C	D
Early Wet Season Rice	31.1*	55.6*	39.3**	1.9**
Wet Season Rice	91.1	97.8	66.1*	85.2*
Dry Season Rice	4.4	2.2	5.4	0
Receding Rice	2.2	0	41.1**	5.6**
Floating Rice	0	0	0	0

Early wet season rice was significantly more likely to be grown in Takeo (43.3%) than in Kampong Thom (20.9%) (sig = 0.001\*\*; n = 200), as was also wet season rice (94.4% to 75.5%) (sig = 0.000\*\*; n = 200), while receding rice was significantly more likely to be grown in Kampong Thom (23.6%) than Takeo (1.1%) (sig = 0.000\*\*; n = 200). It is also noticeable that the mean size of land used for rice cultivation is much higher in Kampong Thom than in Takeo, to the extent of 22,826.1 m<sup>2</sup> and 21,115.7 m<sup>2</sup> for early wet season rice and wet season rice compared to 6,629.2 and 6,557.7 m<sup>2</sup> respectively. Further, 98.0% of farmers in Takeo will conduct rice agriculture compared to 88.2% in Kampong Thom (sig = 0.003\*\*; n = 200), while 11.1% of Takeo farmers

rented additional land to grow rice, compared to 31.8% of farmers in Kampong Thom (sig = 0.000\*\*, n = 200). It is noticeable, therefore, that specific land conditions have an important part to play in patterns of agriculture. As previously noted, the presence of irrigation can make a dramatic difference in prospects for agriculture and this can be sporadically distributed across the countryside. There appear to be other factors that are equally location-specific.

**Gender and Livestock Management:** Respondents were asked questions about who was the primary career for each type of livestock kept and who made decisions about them. The tables below display the results broken down by the gender of the HH (see Tables 5-9). It is evident that women have an important role to play in managing livestock in the sample. The degree of responsibility varies from animal to animal but even in the case of cattle and buffaloes, in no more than 40% of all households were men solely or mainly charged with principal responsibility for care or decision-making (Tables 8 and 9). In the case of chickens and other poultry (Tables 5 and 6), women have majority of the responsibility for care and decision-making and their role with the pigs (Table 7) was also very evident (of course, the opinions of other household members are not available to triangulate these results). It is also noticeable that in some 10-20% of the cases, other household members have primary responsibility for taking care of livestock but they have very little or no decision-making power. It is suggested that this indicates that it is younger people or children who are involved in this category. Many of the distributions shown in these tables are statistically significant and it is evident that this is much more likely to occur in the cases of chickens and cattle, which have larger sample sizes. It seems probable that the other forms of livestock would also demonstrate statistically significant distributions if there were larger sample sizes. The statistical significance indicates that the proposition that the distribution is random can be rejected. Instead, the distributions are meaningful and may be interpreted as such. The following section provides a discussion of the findings to date.

**Table 5: Gender and the Management of Chickens; source: Original Research**

(%age)	Who decides to raise these animals?			Who bargains the price when buying?			Who takes primary care?			Who decides when to sell the animals?			Who bargains the price when selling?		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Only/mainly man	23.6	9.7	17.9	22.5	11.3	17.9	11.2	6.4	4.6	16.9	8.1	13.2	16.9	12.9	8.6
Joint	19.1	8.1	14.6	7.9	4.8	6.6	25.8	11.3	19.9	11.2	8.1	9.9	3.4	3.2	3.2
Only/mainly woman	49.4	56.4	52.3	60.7	61.3	60.9	52.8	45.1	49.7	62.9	61.3	62.3	71.9	59.7	66.8
Other HH member	7.9	6.5	7.3	9.0	3.2	6.6	10.1	17.7	13.2	9.0	3.2	6.6	7.9	4.8	2.0
Only/mainly respondent	0	9.7	4.0	0	6.4	2.7	0	6.5	2.6	0	11.3	4.7	0	4.8	2.0
Joint with other HH member	0	1.6	0.7	0	4.8	2.0	0	6.5	2.6	0	1.6	0.7	0	1.6	0.7
Mainly/only other HH member	0	8.1	3.3	0	8.1	3.3	0	6.5	2.6	0	6.4	2.7	0	9.7	4.0
N	89	62	151	89	62	151	89	62	151	89	62	151	89	62	151
Sig	0.003**			0.008**			0.001**			0.004**			0.009**		

**Table 6: Gender and the Management of Poultry (Ducks and Geese); source: Original Research**

(%age)	Who decides to raise these animals?			Who bargains the price when buying?			Who takes primary care?			Who decides when to sell the animals?			Who bargains the price when selling?		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Only/mainly man	33.3	18.2	28.1	28.6	18.2	25.0	14.3	9.1	12.6	28.6	0	18.8	14.3	9.1	12.6
Joint	9.5	18.2	12.5	4.8	9.1	6.3	14.3	9.1	12.5	4.8	9.1	6.3	4.8	9.1	6.3
Only/mainly woman	52.4	36.4	46.9	66.7	45.5	59.4	66.7	36.4	56.3	66.6	63.6	65.6	80.9	54.6	71.9
Other HH member	4.8	0	3.1	0	0	0	4.8	18.2	9.4	0	0	0	0	0	0
Only/mainly respondent	0	9.1	3.1	0	0	0	0	9.1	3.1	0	9.1	3.1	0	9.1	3.1
Joint with other HH member	0	0	0	0	9.1	3.1	0	9.1	3.1	0	0	0	0	0	0
Mainly/only other HH member	0	18.2	6.3	0	18.2	6.3	0	9.1	3.1	0	18.2	6.3	0	18.2	6.3
N	21	11	32	21	11	32	21	11	32	21	11	32	21	11	32
Sig	0.159			0.262			0.271			0.072			0.243		

**Table 7: Gender and the Management of Pigs; source: Original Research**

(%age)	Who decides to raise these animals?			Who bargains the price when buying?			Who takes primary care?			Who decides when to sell the animals?			Who bargains the price when selling?		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Only/mainly man	33.3	9.1	23.6	27.3	4.5	18.2	12.1	0	7.3	30.3	4.5	20.0	21.2	4.5	14.5
Joint	12.1	9.1	10.9	9.1	9.1	9.1	27.3	18.2	23.6	15.2	4.5	10.9	3.0	0	1.8
Only/mainly woman	48.5	45.4	47.3	57.6	54.6	56.4	45.4	50.0	47.2	45.4	63.6	52.8	66.7	63.6	65.4
Other HH member	6.1	9.1	7.7	6.1	4.5	5.5	15.2	4.5	10.9	9.1	0	5.5	9.1	4.5	7.3
Only/mainly respondent	0	9.1	3.6	0	4.5	1.8	0	9.1	3.6	0	13.6	5.4	0	13.6	5.4
Joint with other HH member	0	0	0	0	4.5	1.8	0	9.1	3.6	0	0	0	0	0	0
Mainly/only other HH member	0	18.2	7.3	0	18.2	7.3	0	9.1	3.6	0	13.6	5.5	0	13.6	5.5
N	33	22	55	33	22	55	33	22	55	33	22	55	33	22	55
Sig	0.042*			0.076			0.090			0.011*			0.124		

**Table 8: Gender and the Management of Cattle; source: Original Research**

(%age)	Who decides to raise these animals?			Who bargains the price when buying?			Who takes primary care?			Who decides when to sell the animals?			Who bargains the price when selling?		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Only/mainly man	40.3	11.7	30.0	44.2	16.3	34.2	31.2	9.3	23.3	38.2	9.3	29.7	41.6	14.0	31.7
Joint	28.6	11.6	22.5	14.3	4.7	10.8	24.7	14.0	20.8	15.8	11.6	14.3	5.2	7.0	5.8
Only/mainly woman	27.3	41.9	32.5	37.7	39.5	38.3	28.6	32.5	30.0	40.7	44.2	42.0	48.1	41.9	45.8
Other HH member	2.9	0	2.5	3.9	4.7	4.2	15.6	9.3	13.3	5.3	0	3.4	5.2	2.3	4.2
Only/mainly respondent	0	20.9	7.5	0	13.9	5.0	0	13.9	5.0	0	18.6	6.7	0	14.0	5.0
Joint with other HH member	0	2.3	0.8	0	4.7	1.7	0	7.0	2.5	0	2.3	0.8	0	2.3	0.8
Mainly/only other HH member	0	11.6	4.1	0	16.3	5.8	0	14.0	5.0	0	13.9	5.0	0	18.6	6.6
N	77	43	120	77	43	120	77	43	120	76	43	119	77	43	120
Sig	0.000**			0.000**			0.000**			0.000**			0.000**		

**Table 9: Gender and the Management of Buffaloes; source: Original Research**

(%age)	Who decides to raise these animals?			Who bargains the price when buying?			Who takes primary care?			Who decides when to sell the animals?			Who bargains the price when selling?		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Only/mainly man	35.3	0	30.0	47.0	0	40.0	23.6	0	20.0	41.1	0	35.0	53.0	33.3	50.0
Joint	17.6	33.3	20.0	5.9	33.3	10.0	35.3	33.3	35.0	5.9	33.3	10.0	5.9	0	5.0
Only/mainly woman	47.1	66.7	50.0	41.2	66.7	55.0	23.5	66.6	30.0	52.9	66.7	55.0	45.3	66.7	40.0
Other HH member	0	0	0	5.9	0	5.0	17.6	0	15.0	0	0	0	5.9	0	5.0
Only/mainly respondent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Joint with other HH member	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mainly/only other HH member	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N	17	3	20	17	3	20	17	3	20	17	3	20	17	3	20
Sig	0.671			0.431			0.627			0.365			0.505		

The roles of men and women are quite noticeable in the management of livestock (Tables 5-9 above), although there is considerable diversity within the sample. Although men are likely to take a leading role in some households in which they are HH, there are many other households in which women (and indeed other household members) seem to be leaders in determining how things take place, how and whether new types of livestock are to be managed and where information is to be sourced. However, it should also be noticed that it is not clear from these results that has the ultimate decision-making power in households – description is not always explanation. When women have responsibility for the livestock concerned, i.e. chickens and poultry, pigs and buffaloes, then their responsibility extends from decision to rise, bargaining when buying and selling and taking primary care. This is in line with the concept that livestock management involves gendered knowledge. This is further emphasized by the fact that joint responsibility is comparatively rare in all of the livestock categories considered.

**Information Gathering:** If women are to have roles in decision-making in new ways and areas, they must



have access to some information to help guide those decisions. To investigate the best ways of providing information to respondents, a series of questions was asked concerning their behaviour with respect to information gathering and use. Information-gathering was recorded to be at quite a low rate, with just 16.0% overall reporting that they had ever sought information about animals at all (n = 200). When considered by animal type, 24 respondents reported that information had been sought on chickens, while the numbers for poultry (4), pigs (15), cattle (12) and others (3) were all quite low. When asked who had searched for this information, the respondents most commonly answered that it was mostly themselves, although it cannot be discounted that they may have been unaware of information-seeking activities by other household members.

Respondents were next asked whether it was easy or difficult to find relevant information about improving livestock management and those who thought it were difficult or very difficult were then quizzed as to where the difficulties were. In fact, 72.0% of all respondents answered that it was either difficult or very difficult to obtain this kind of information and only 9.0% thought that it was easy or very easy (n = 200). It was very clear what the perceived problem was as 80.8% of respondents answered that they did not know where to look (n = 146), while there were much smaller levels of support for there being a long way to travel (8.2%), for there being no source available (13.7%), available sources are reluctant to reveal information (0.7%), available sources are reluctant to speak to women (0.7%), available sources are not well informed (14.4%) and other reasons (2.1%). There is scope, in other words, for improving the availability and quality of information in this area and making it more accessible to respondents and all of the communities considered. Respondents were next asked whether they thought there were many sources of information available about livestock management and 76.0% thought there were very few or none and only 2.0% thought there were many (n = 200). Respondents were then asked to nominate the two most important information sources to which they had access, as follows:

**Table 12: Sources of Information about Livestock Management; source: Original Research**

%age	Most Important	Second Most Important
Spouse	12.8	1.7
Other Family Member or Friend	4.8	1.7
Field Demonstration Farmers	1.6	0.9
Other Farmers	14.4	18.8
Association of the Product	3.2	5.1
Input Retailers	8.6	3.4
NGOs	19.8	17.1
Radio/TV	9.1	27.4
Government Office	8.0	17.9
Vet	9.6	6.0
Other	8.1	0
N	187	117

It is apparent that there is a diverse set of information sources that might be consulted and prominent among them are NGOs, other farmers, radio/TV and government offices. The role of the vet in this process is also worthy of consideration since such people may be called upon for various tasks and can build a relationship with farming households that facilitates information exchange on a range of issues. There is clearly scope for improving the availability and scope of information provided and for advertising what information is available

**Discussion:** It was posited that better economic development prospects for Cambodia would be achieved through reduced gender inequality and that one way of approaching this would be to examine whether decision-making in agricultural production offered status for women. It has been shown that women have responsibility for all aspects of livestock management in the sample achieved. It was also shown that the types of agricultural activities taking place in a household are determined to some extent by location-specific factors. It has also been shown that there is a need for more and better information about livestock management and, presumably, other aspects of agricultural production. Consequently, the principal that women are entitled to make important decisions has been accepted and this takes place both when women

are and are not HH. This offers a route for enhanced decision-making power for women in the household. To the extent that livestock management is culturally embedded in terms of gender-specific activities and knowledge, existing knowledge and hence decision-making events belong within the realm of culturally-influenced social relations. It is likely to be a better strategy for development agencies to try to position new decision-making roles within a different sphere of knowledge, in which it will be possible to make decisions according to different approaches. The spread of market forces into what were previously subsistence farming systems may prove to be beneficial in this case. It is also evident that the role of markets in decision-making has not yet reached the level that they might reach. People are making fairly basic decisions which are related to very specific local conditions and do not have the opportunity to make such decisions with relation to the larger perspective that access to international markets and international value chains would suggest. Those companies which would aim to make profits in this market would have a great deal to do to develop the local market so that decision-makers are better able to receive the unique propositions they are able to provide for them.

As a post-conflict country, it might have been expected that new norms could be introduced that would be more in line with the priorities of donor agencies and governments. However, Cambodian society has been recreated in a highly centralized form that has been resistant to processes of decentralization and of localized decision-making (Blunt & Turner, 2005). This has not been helpful in promoting public participation or pluralism in society and this has had an impact on provision of information to date. This is antithetical to the type of decision-making envisioned here but resolving the issue would require extensive societal change that is unlikely to occur in the foreseeable future. If decision-making is to be seen as a multi-stage process in which information is gathered and evaluated and post-decision evaluation is to take place, then there are various stages at which women can become involved in a process that is not wholly embedded in cultural norms. Bringing about greater involvement for women would be assisted by processes that disassociate them from the culture and recreate social relations on different grounds.

## 5. Conclusion

This paper indicates that there is certainly a gendered division of labor taking place with livestock management and that women have a definite and important role to play in this area. To some extent, this is not surprising since it has been documented previously that the gendered division of labor is extant in Cambodia and that it has been described through the centuries. However, the knowledge that women have a direct impact into decision-making runs counter to various forms of ideological envisaging of the world, relating for example to colonialism and the patriarchy. From a marketing perspective, it is evident first of all that it is important to have sales and distribution agents on the ground close to the potential customers. It has been shown that specific local conditions have a significant impact on the nature and extent of agriculture and so local knowledge will be important. As it has also been shown that women have important roles not just in caring for livestock but also in decision-making, then it is also evident that agents need to be able to access their opinions and the networks that they employ to make sense of the world in order to achieve success in sales. Further exploration of these issues is clearly required. The links between local conditions, class and gender relations and factors leading to uneven development should be further explored. In addition to the usual limitations relating to restrictions on time and place, this study is constrained by the fact that the fieldwork team was deliberately told to find households were HH and, if that were not possible, nevertheless to ensure that the senior woman in the household was interviewed. As a result, the demographic details of the sample vary significantly from the overall population.

**Acknowledgement:** This research was funded by CAVAC, an NGO promoting agricultural development in Cambodia and supported by AusAID.

## References

- Acharya, M. & Bennett, L. (1983). Women and the Subsistence Sector: Economic Participation and Household Decision Making in Nepal. World Bank Staff Working Papers, 526.
- Asian Development Bank (ADB). (2014). Asian Development Outlook 2014: Fiscal Policy for Inclusive Growth. Manila: ADB.

- Baumeister, R. F. (2002). Yielding to Temptation: Self-Control Failure, Impulsive Purchasing and Consumer Behavior. *Journal of Consumer Research*, 28(4), 670-6.
- Belk, R. W. (1975). Situational Variables and Consumer Behavior. *Journal of Consumer Research*, 2(3), 157-64.
- Blunt, P. & Turner, M. (2005). Decentralization, Democracy and Development in a Post-Conflict Society: Commune Councils in Cambodia. *Public Administration and Development*, 25(1), 75-87.
- Budlender, D. (2003). The Debate about Household Headship, Social Dynamics. *A Journal of African Studies*, 29(2), 48-72.
- Chan, R. & Chheang, V. (2008). Cultural Challenges to the Decentralization Process in Cambodia. *The Ritsumeikan Journal of Asia Pacific Studies*, 24, 1-16.
- Daguan, Z. (2007). A Record of Cambodia: The Land and Its People, translated with an introduction by Peter Harris. Chiang Mai: Silkworm Books.
- Davidson, P. (1982). Rational Expectations: A Fallacious Foundation for Studying Crucial Decision-Making Processes. *Journal of Post Keynesian Economics*, 5(2), 182-98.
- Davis, H. L. (1976). Decision Making within the Household. *Journal of Consumer Research*, 2(4), 241-60.
- De Jong, G. F. (2000). Expectations, Gender, and Norms in Migration Decision-Making. *Population Studies: A Journal of Demography*, 54(3), 307-19.
- Donovan, R. J., Rossiter, J. R., Marcolyn, G. & Nesdale, A. (1994). State Atmosphere and Purchasing Behavior. *Journal of Retailing*, 70(3), 283-94.
- Edwards, W. (1954). The Theory of Decision Making. *Psychological Bulletin*, 51(4), 380-417.
- Hoggart, R. (1996). *The Way We Live Now: Dilemmas in Contemporary Culture*, new ed. London: Pimlico.
- Jacobsen, T. (2008). *Lost Goddesses: The Denial of Female Power in Cambodian History*. Copenhagen: NIAS Press.
- Karl, M. (1995). *Women and Empowerment: Participation and Decision-Making*. London: UN NGLS/Zed Books.
- Klein, G. & Zsombok, C. C. (1997). *Naturalistic Decision Making*. Mahwah, NJ: Erlbaum, Lawrence, Associates.
- Kriti, T. W., Tisdell, C. & Roy, K. C. (2003). Female Participation in Decision Making in Agricultural Households in Kenya: Empirical Findings. *International Journal of Agricultural Resources, Governance and Ecology*, 2(2), 103-24.
- Lovichakorntikul, P., Ngamsang, S. & Walsh, J. (2013). The Impact of Agricultural Input Change on Gendered Decision-Making in Rice-Farming Households in Thailand and Cambodia. Paper presented at the 3<sup>rd</sup> International Conference on International Relations and Development, Chulalongkorn University, Bangkok.
- Manser, M. & Brown, M. (1980). Marriage and Household Decision-Making: A Bargaining Analysis. *International Economic Review*, 21(1), 31-44.
- Reynolds, T. J. & Gutman, J. (1988). Laddering Theory, Method, Analysis, and Interpretation. *Journal of Advertising Research*, 28(1), 11-31.
- Rocheleau, D. E. (1991). Gender, Ecology, and the Science of Survival: Stories and Lessons from Kenya. *Agriculture and Human Values*, 8(1-2), 156-65.
- Scott, J. C. (1976). *The Moral Economy of the Peasant: Rebellion and Subsistence in South East Asia*. New Haven, CT: Yale University Press.
- Simon, H. A. (1955). A Behavioral Model of Rational Choice. *Quarterly Journal of Economics*, 69, 99-118.
- Thakur, R. & Walsh, J. (2013). Space and Workplace Issues for Nepalese Female Entrepreneurs. Paper presented at the International Conference on Economics and Social Sciences, First Hotel, Bangkok.
- Venkatesh, V., Morris, M. G. & Ackerman, P. L. (2000). A Longitudinal Field Investigation of Gender Differences in Individual Technology Adoption Decision-Making Processes. *Organizational Behavior and Human Decision Processes*, 83(1), 33-60.
- World Bank. (2012). *World Development Report 2012: Gender Equality and Development*, Washington, DC: World Bank.
- Yisehak, K. (2008). Gender Responsibility in Smallholder Mixed Crop-Livestock Production Systems of Jimma Zone, South West Ethiopia. *Livestock Research for Rural Development*, 20(1), available at: <http://www.lrrd.cipav.org.co/lrrd20/1/yise20011.htm>.

## Sustainability Farmers Rice Farming of Rural Communities in the Spiritual Meaning Perspective of Seed Storage

Irmayani\*, Darmawan Salman, Amaluddin, Sitti Rahbiah Busaeri  
Hasanuddin University, Makassar, Indonesia  
\*irmaumpar@yahoo.co.id

**Abstract:** This research aims to reveal in the spiritual of meaning contained in the farming of rice seed storage of rural communities in the village at Bone-Bone. This research uses a qualitative approach in the phenomenology of perspective and will be interpreted in the definiton of the symbolic interactionism. The result of this research indicates that the stages of the storage that begins with the way collect it in the form of malai rice that has been drained in a small house with called landak. Storage at a its own will be do it because the farmer glamorize the seed of rise with no treat in vain. The seed pf rice who are stored in a place that exalted so that would prevent anyone to overstep and and even stepped deliberately because it was considered not appreciate the seed of the rice which is the source of life. This action effect has meaning that for all beings actually have a close relationship with human life itself, treated well even of plants will be upheld especially if the relationship among humans and other animals is required ethics are maintained so constantly continue in the future, involving the meaning of an action to keep the sustainability of rice farming.

**Keywords:** *Sustainability, rice farm, rural communities, meaning of spiritual, seeds storage*

### 1. Introduction

Ecological crisis that occurred at this time sourced in errors of philosophical fundamental in the understanding or the human perspective of him, nature, and human life, especially of interacting with nature. Production activity and consumer behavior will be give birth attitude and exploitative behavior. Besides that understand about materialism, capitalism, and pragmatism with the vehicle of science and technology has come to accelerate and aggravate of ecological damage in system social. According to Linn White Jr. 1967 say that sources of environmental crisis environmental crisis of human resources this time it's most influenced by beliefs about the nature. We are and destiny, is by religion, so that recommend from white, Jr, 1967 to get tradision of eastern religions in build cosmology which spiritual minded. The achievment crisis is reflection of spiritual crisis it most essential in human life, nature has been denigrated and abused on human rights for the needs of human life and create exploitation without end, Hossein considers that spiritual understanding of Islam sees nature as a figure of "life" that has the right to exist, worthy of respect and getting protection and maintenance (Hossein, 1995). This maintenance and protection which become the embodiment of human's role as caliph on earth. The nature of reality is not created by accident as the view of some western scientists, but with the right plan. Therefore, according to Islamic Spirituality looking nature has real existence, objective, and work in accordance with applicable law remain (qodar), is not the same as the view of rationality which states that the nature is artificial and virtual (illusion).

In line with the growing awareness of their thinking as natural to think makes they of embrace spirituality and respect the role of religion in social life gave birth to humans who are good grateful and not greedy manage their resources. According to David E Cooper dan Joy A. Palmer (*Spirit of The Environment*, 1998) the compile of write from variety of international scholar from various fields such as philosophy, religion, science, education, literature, antropology which agree that is spiritually minded of nature is to be real needs in our effort and save planet earth. Critical opinion by Lynn Townsend White, Jr in her thesis with title is *The Historical Roots of Our Ecologic Crisis*, published in journal science Vol. 155 (Number 3767), (1967), has explain that science and modern technology which has caused of various patology social and ecology crisis, actually, this is rooted from the jewish-christian of tradition. It is baded on the story 'creation'. Reads "Be fruitful and multiply; fill the earth and conquered it, and have dominion over the fish of the sea and the birds of the air and over every living thing that moves on the earth. according to white, say that 'subdue' and 'have dominion' became a central doctrine that encourages exploitative attitude of man over nature. For White, the doctrine is paradigmatic thought to trigger the birth of dualistic break the existential relationship of God and nature and the human and nature. He shows that the mentality of the Industrial Revolution, which is

considers only the earth resources for human consumption, it is actually much older than actuality of the engine so as to allow humans to destroy and exploit its natural of are heavily. Therefore, the Christian religion must be responsible for any environmental damage caused by the application of science and technology modern, so White suggested to embrace pantheism or religious traditions East (Islamic Spirituality) in building spiritual cosmology.

Hossein found that presenting god in every aspect activity of human is defined as the concept of thinking and acting that is associated with "the unseen" that create and organize of the human and nature. So God, human, and the third has a unitary nature and function relationship status. The relationship is a loud call to wake from the dream ego dangers of science and humanity in conquering nature. These relationships can bring humanity on the right path towards harmony with nature.

## 2. Literature Review

**Spirituality :** While a few decades the term spirituality has become a common language to describe activity the search for transcendence which is conducted by someone or individual. Spirituality comes from English language which when translate the meaning is spiritual or soul that means everything is not physical, not worldly and not in ways that are materialistic. The opine that the spiritual have four theme , followed is; (1) as a source of value, the meaning and purpose of live beyond the self, including a sence of mistery and self-transcendence. (2) a way to understand and comprehend of life. (3) inner awareness and integrated personal (Nelson, 2009). Spirituality has integrative function and harmonization involving inner unity and connectedness with other human beings as well as the broader reality that gives strength and ability of the individual to become transcendent. In termsin terms of contemporary and scientific literature, spirituality has a number of common meanings and definitions. This difference reflects the fact that spirituality is a term which has a broad of meaning, there a few domain of meaning that may differ between cultural groups, nationalities and different religions. (Dale and Daniel, 2011) divide the concept of spirituality in three forms is, follow:

- The form in spirituality of oriented God,the meaning is consideration, the view and practical of the spirituality based of theology or rests on top of the revelation of God. It can be found in virtually all forms of the practice of institutionalized religions, such as Islam, Christianity, Judaism, Hinduism, Buddhism and others.
- The form Spirituality of oriented world/nature(world-oriented), the form of spirituality based on human harmony with ecology and nature. We've seen the secret, which many once mentioned about the natural harmony with the human mind, that nature is the magnetic field that will respond to the human mind, because that man is obliged to continuously develop positive thinking that the universe give feedback positive also headed life inwardly opportunities.
- The form Spiritualistic-humanistic, who based his spiritual form in optimizing the potential of goodness and human creativity at the peak of achievement included in this achievement.

A number of scholars sees spirituality and religion as different concepts. The meaning of spirituality is involves one's relationship with that something holy, sacred, large or grand, as distinct from religion which involves adherence to the beliefs and practices (rituals) certain, although he also acknowledged that both are sometimes difficult to separate and often cannot be distinguished in theory and the research. But seperating them between spirituality and religious have advantage, it can give recognition of various flow the spirituality outside tradition and who was the people social. The reality, spirituality it's true with a skeleton idea and the culture of the west people which focused of individual and of them experience than of needs and the experience community of a wider. This contains the meaning of that spirituality will given opportunity to any individual to have a spirituality indivdially than only follow of religious mayority that applies of a community the larger. remember that the character or typology of western society that tends individualistic than collectivistic. Nelson has found that religion and spirituality have an independent effect on the development of rapid, although spirituality also has an effect on religiosity. They find the spirituality that involves orientation to help other people and do a good job, and participate in activities based on personal interest (self-interest). This contrasts with religiosity, which involves matters related to faith and institutional influences. Definition of Spirituality According to Webster's dictionary the word "spirit" comes from the Latin

noun "spirits" which means breath and the verb "spipare" which means to breathe. See the home he said, to live is to breathe, and have the means to have a breath of spirit (Hasan, 2006).

Spirituality is enlightenment in achieving the purpose and meaning of life. Spirituality is an essential part of overall health and well-being of a person. Mean of that spirituality is the foundation for the growth of self-esteem, values, morals and a sense of belonging, spirituality gives direction and meaning to life (Zohar and Marshall, 2005). Spirituality is the belief in the existence of non-physical strength that is greater than the strength of ourselves; a consciousness that connects us directly to God, or whatever we call as the source of our existence. The spirituality is not to be associated with the proximity of a person with an aspect of divinity, because according to a humanist or atheist can also have spirituality. In his book mentioned that formal religion is a set of rules and beliefs are imposed externally. He is a top-down, inherited from the pastors, prophets and holy books or implanted through family and tradition. Meanwhile spirituality is internal innate ability of the brain and the human soul, which is the deepest source of the core of the universe itself.

Spirituality in English version is spirituality, derived from the word spirit means spirit or soul. Spirituality is the impetus for all human action, then the new spirituality can be said to be the impetus for a response to the problems of contemporary society and the concrete. The new spirituality is different with a special form that is more in the form of formal teaching. In the context of Islam, in fact it can be said of the new spirituality is meant here is the life of faith itself, which in Islam is stated and derived from primary belief that "There is no God but Allah and Muhammad is the messenger of God". Recognition and testimony in the heart that does not happen incidentally but continuously throughout life and is therefore a demand for the implementation of a faith that is a call to do good and do despicable ban which also takes place continuously throughout life and eternal nature. When it manifests in the liver recognition activity, it will be humane and therefore impure, thus open to criticism and objections and on the contrary open to support from any direction. By itself the size of the demands of good and bad prohibitions are rational and follow universal humanitarian standards alone, while the confession and the testimony of faith gave a commitment basis.

Spirituality is a search for something meaningful is a search for the sacret (Snyder and Lopez, 2005). Spirituality is an effort to discover what is meaningful to humans then maintain and keep. Individuals who find the root of the meaningfulness life will try to maintain their relationships with God and looking at every aspect of his life is based on relationships built with the Lord. Various virtues (virtues) and strength (strenghts) emerged through this relationship. Build a spiritual life can not be separated from building a relationship with something meaningful. Thus, for the sake of building a spiritual life, individuals can be performed in the ritual forms of worship which constitute the means to maintain individual connectedness with God as personally meaningful to the individual, so spirituality can be measured by measuring how successful individuals in the search for something meaningful by using criteria such as oriented spirituality as spiritual well-being. Management of natural resources by spirituality Spirituality management of natural resources closely related to the concept of the tragedy of the Commons proposed, a biology and ecology (Hardin, 1968). This concept describes the environmental collapse of the commons as a result of irresponsibility and selfishness of individuals or groups of people belong together because the fight over was so eventually an extinct or in crisis. Pollution of air, water, land, and oceans caused by waste disposal modern technologies that lead to environmental degradation and disasters such as the depletion of the ozone layer, melting of polar ice, water pollution and marine, floods, landslides, mud and others showed the phenomenon of tragedy of the Commons.

This happens because of the weakness of human spirituality and slumped in a spiritual crisis deeply marked in a crisis outlook on life, ethical behavior, and the theology of religion or wisdoms cultural traditions embraced people increasingly melted and led to greed for nature to be exploited to the utmost. Spiritual crisis characterized by the view desecration of nature. Nature is not considered as being of the values of divinity, so that people do not pay attention to the ethics or binding rules and limit its relationship with nature. Nature only as object of desire to meet their needs. Along with improving standards of living and awareness of the importance of health, most people need quality rice is beneficial for health. Brown rice is a source of carbohydrates, a source of staple food is beneficial to health and is known since 2800 BC. The rice, especially brown rice, as well as the main source of carbohydrates, also contains protein, beta carotene, antioxidants and iron. Fiber brown rice is relatively easily absorbed by the intestine than wheat, so as to ease the burden

of the intestine in doing peristalsis (Indrasari and Adnyana, 2007) and the launch system of the digestive tract.

The brown rice is the leading commodity as a functional food for health. Fiber brown rice can be used to control blood sugar levels, making it the best choice for people with diabetes. Brown rice has anthocyanin pigments that act as antioxidants to prevent various diseases such as coronary heart disease, cancer, diabetes, and hypertension (Suardi, 2005). Sustainable agricultural systems in some of these commodities by maintaining local seeds that have been developed and environmentally friendly based management so that the color is retained (red). Similarly, access to markets and support the government in its management can be done by expanding the network of farmer groups gain access to information in the capital in order to maintain the supply chain is maintained. Increased food production should be done in ways that are sustainable not reduce and impair the fertility of the soil, do not increase erosion, and minimize the use of and dependence on natural resources that are not renewable, life-sustaining rural communities are equitable, increasing employment opportunities and providing community life worthy and prosperity, reduce poverty and malnutrition, does not endanger the health of people who work or live in agricultural land, and also the health of consumers of agricultural products are produced, improving environmental quality in agricultural land and rural areas and preserving natural resources and biodiversity, preserving local resources and knowledge of traditional societies as a rural community maintained their integrity.

### 3. Methodology

This type of research used in this research is descriptive, with a qualitative approach (qualitative research) which aims to understand the object under study in depth and not to make generalizations, but rather to make in-depth explanation of the meaning behind the object of study. The location study was conducted at the Bone-Bone, Enrekang, this village is an area of national level as a healthy village nationwide because of the success of its citizens to agree on the rules (Perdes) with the smoking ban anyone who lives in this village and the people immigrants who enter into this village. The informants were taken in this study is the individual households engaged in agricultural activity in the village of commodity rice is then pictured through phenomenology study that will be interpreted through spiritual meaning and interpretation of meaning through the lean concept meaning Symbolic Interactionism.

### 4. Results and Discussion

**Rice farming practices:** Rice grown in the village of Bone-Bone is a local rice which has been cultivated for generations. Since the beginning of villagers Bone-Bone has been growing rice using these local varieties. Rice took time for 6 months to be harvested to produce red rice (*Oryza nivara* sp). Rice brown rice is one kind of rice in Indonesia, which contains high nutrition. The results showed that red yeast rice extract solution containing protein, unsaturated fatty acids, beta-sterol, camsterol, stigmasterol, isoflavones, saponins, Zn and Se, lovastrin, and mevinolin-HMG-CoA. The last element is a reductase inhibitor that can reduce cholesterol synthesis in the liver. According to the Ministry of Health is mashed brown rice contains 7.3% protein, 4.2% iron, and vitamin B1 0.34%. Brown rice porridge mixed with milk is baby food recipes aged 4 months to 1 year (Suardi, 2005). Based on the nutritional content of brown rice is very good for the area food insecurity status, especially people who are malnourished. Rice with a high protein content is very useful in improving people's nutrition. Besides consuming brown rice can prevent diseases such as cancer, cholesterol and coronary heart disease with comparatively very low cost. Commodities that this area is cultivated rice plants that produce brown rice cultivated with traditional farming systems. Making the landscape terraces with mountain areas fascinate the arrangement. Livestock farming systems using mutual cooperation in preparing the land and planting rice citizens assist in this group will be the distinctive characteristics of their togetherness in harmony.

Irrigation systems are managed and fair result was never a problem in the cultivation of red yeast rice. Side stretched natural scenery of rice fields surrounded by trees that grow fast and should not be felled, it is not surprising source of clean and cool water for irrigating crops cultivated almost available all year round. Society believes that forest ecosystems such as the growth of others who also have the same right to live with human beings so that its existence should be respected. Semi-organic farming systems that are

environmentally friendly so dominating farmers in their economic behavior, utilizing natural pesticides and compost are produced resulting in rice rich in omega 3 has a high sales value and popular consumer. Seeds of red rice that will be used as planting material beforehand stored in small homes designed distinctive called Hedgehog, the seeds have been the best with expectations when planted later will produce good anyway, people's spirituality is believed that the seeds of the ovule rice should not be placed parallel to the ankles especially bypassed, seeds chosen it must be lifted in a safe place because rice is needed as a source of energy to continue life so that it appears also when they eat, then it should not be left one item because mubazzir, and spiritual Islam mubazzir it is an act of that should not be emulated.

**Spiritual Meanings of Seed Storage:** There are several procedures that must be met when providing seeds to be prepared as a planting material, namely: First is making rice seeds that are stored in a small house called hedgehog. When taking a rice seed in the person hedgehog should be in a state of pure, good men and women that anyone who will take the first seed purify themselves first. The second is a greeting upon entering the hedgehog to take seed as regards blessing and appreciation for life and those of other seeds that are in the hedgehog. The third is to prioritize the right side when entering and start making rice seed activity carefully and silently continued to mutter gratitude and some good hope for the efforts rice cultivation this season. Once the seeds have been prepared, and the left foot to bring out the seeds are then wrapped in a clean cloth and carried by means upheld (put the seeds wrapped over head). (Nene, 2012) explains that one's spirituality will be affirmed thought immaterial that are not captured by sensory and emphasizes that a person would be wise to manage their resources to manage both lust, greed becomes inevitable that the resource is not depleted and become extinct. Keeping natural resources as part of a life that benefits to be managed wisely and prudent not exploit and arbitrarily treat. This paper will refer to the perspective of spirituality in the meaningfulness of life, in which spirituality is not only limited to religious rituals practiced and limited appreciation of the ecology and the environment, but much more emphasize the meaning of life on the award on nature (meaning ecological, social, religious) aspects of life are nearby when people live and meaningful for someone else then that's true spiritual nature. Therefore this research, perspectives that are considered relevant to understanding spirituality relationship with the village communities living pattern Bone-Bone is a spiritual perspective will meaningfulness of life (the meaning of life) who gave birth to the individual who finds the roots of the meaningfulness of life by maintaining a relationship with his Lord (Nurtjahjanti, 2010).

All the Bone-Bone villagers has a horn as a storage area yields obtained mainly rice. Hedgehog as a grain storage are built to resemble traditional Minangkabau house without stairs (the stairs will be installed if going up the hedgehog house only). In the manufacture of hedgehog expected good rice seeds as planting materials and foodstuffs preserved and maintained in that condition. This hedgehog house has created a prism pole side 5 pieces, one of its functions so that the mice are not easily creep upwards. Besides, there is also the understanding of farmers that side of the pole are made into five is to remind them that our lives can not be separated from the five times it has always done every day, it is the five daily prayers were regarded as the pillar of religion should be enforced. But this time when farmers make their new hedgehog more use of tree trunk poles round. This tree grows easily in this village and have a population that much. According to the farmers of this tree has strong durability and long, not eaten by termites, and can not be skipped mice so that manufacture of new hedgehog in this village has been dominated by this tree as a pole urchin farmers. Besides, the availability of wood there has been more used to manufacture pole home-Bone Bone villagers. In addition to save the harvest, sometimes also when there are other crops, such as corn or red beans can also be stored in the hedgehog, but it will be dominated by the content of rice as the most in a hedgehog. When stored in the Hedgehog has always followed a lot of hopes of beautiful (in the liver) so that they are kept must be arranged neatly and in a clean condition and expected no wasted rice were scattered and fell in around hedgehog floor. Spiritual meanings in rice seed storage practices can be described that rice is a source energy of life deserves to be rewarded and exaltation in practice maintenance and storage. Store grain by putting it in a clean container and to avoid any disturbance is one way to exalt the rice itself. Rice grown from Markowitz panicles up Buir-grain is a life process in involves various elements and components of another life, consisting of relationships holistic between plants, nature, and humans are interlinked and shape emotional bond therein, so that the components of the with other components to support each other achieve their continuity, without sacrificing other components.



## 5. Conclusion and Recommendations

Making of spiritual practice rice farming as a way to exalt the presence of rice that would be a source of life energy and heralded as a form of gratitude so as to produce rice be able to provide many benefits to anyone who will receive the benefits of the commodity. 2. Internalize the spiritual aspects of the agricultural activity is an effort to build a sustainable agricultural system, because every activity in managing his farm involves the spirit of continuity between all the components that are around

**Recommendation:** Spiritual meanings is a basic for every human being. Spirituality has far more than just make sense to be anything but more of the spiritual is able to generate support and confidence that life would be happier if internalize the spiritual in all our activities so that no imbalances in the world.

## References

- Dale and Daniel, J.H. (2011). Spirituality/Religion as a Healing Pathway for Survivors of Sexual Violence. In book *Surviving Sexual Violence a guide to recovery and empowerment* (edited by Thema Bryant-Da Maryland: Rowman dan Littlefield Publisher.
- Hosseini, S. Nasr. (1995). *Man and Nature: The Spiritual Crisis of Modern Man*: Indiana University. UnwinPaperbacks.
- Hasan, Aliah B Purwakania (2006). *Psikologi Perkembangan Islam*. Jakarta: PT Raja Grafindo.
- Hardin, G. 1968. *The Tragedy of the Commons*: Science, New Series. 162(3859). American Association for the Advancement of Science.
- Indrasari and Adnyana. (2007). *Preferensi Konsumen terhadap Beras Merah*. Bogor: Iptek Tanaman Pangan 2(2).
- Nelson, J.M. (2009). *Psychology, Religion and Spirituality*. New York: Springer Science Business Media.
- Nene, (2012). *Environment and Spiritualism. Integral Parts of Ancient Indian Literature on Agriculture 1: Asian Agri-History 16(2)*.
- Nurtjahjanti, (2010). *Spiritualitas Kerja sebagai Ekspresi Keinginan Diri Karyawan untuk Mencari Makna dan Tujuan Hidup dalam Organisasi: Jurnal Psikologi Undip Vol.7,No. 1*.
- Suardi, K.D. (2005). *Potensi Beras Merah untuk Peningkatan Mutu Pangan: Jurnal Penelitian dan Pengembangan Pertanian*.
- Snyder, C.R. & Lopez, Shane J. 2007. *Positive psychology: The scientific and Practical Explorations of Human Strengths*. Lawrence: Sage Publications.
- Zohar, D. dan I. Marshall, (2005). *Spiritual Capital. Religion and Spirituality in the Quest for A Sustainable World*. Bandung: PT Mizan.

## Anafre River Management Based on Local Communities in Reducing the Impact of Sedimentation in Gulf of YOS Sudarso

Annita Sari<sup>1\*</sup>, Dahlan<sup>1</sup>, Mahatma Lanuru<sup>2</sup>  
<sup>1</sup>Yapis Papua University, Jayapura, Indonesia  
<sup>2</sup>Hasanuddin University, Makassar, Indonesia  
\*annitasarie@gmail.com

**Abstract :** The life of coastal communities is always associated with water. Anafre River estuary is one of the river estuaries that empties directly into the Gulf of Yos Sudarso. The amount of particles swept away and buried in estuary sedimentation Anafre inflicts not only the river but the Gulf of Yos Sudarso. Declining water quality of the Gulf of Yos Sudarso is caused by the influx of water from the Anafre River, whereas all Anafre River watersheds are located in close proximity to residential areas. This study aims to determine the level of public knowledge on the effects of sedimentation and community based management. Data are collected by field observations and interviews with the community, and analyzed using the qualitative descriptive method. The results showed that the community plays an active role in the maintenance and utilization of the Yos Sudarso area, because the gulf of Yos Sudarso serves as transportation routes, tourist areas, and workplaces (fishermen). The maintenance of water environment in river estuaries and the gulf is based on the principles of awareness and cooperation without ignoring the people's culture.

**Keywords:** *The Gulf of Yos Sudarso, Anafre estuary, community-based management*

### 1. Introduction

Anafre river is one of the rivers in the city of Jayapura which empties into the Gulf of Yos Sudarso. The formation of sedimentation in the Anafre river channel Anafre has caused changes in river conditions and characteristics (sandy soil), with significant the elevation difference between the upstream and downstream. The elevation difference causes sediment to drift upstream to downstream/estuary and settles. Sedimentation in the estuary is estimated to come from materials from Anafre brought to land due to deforestation in the protected forest and land use in the hillside, transported streams or runoff water and deposited on the mouth of the Anafre river. In addition, sedimentation is also due to the influx of sewage from the business district activities Ampera and household waste from residential areas. Sedimentation impacts not only the Anafre estuary but also the Gulf of Yos Sudarso. The Gulf of Yos Sudarso is an area of passenger port and capital goods as sea transportation for people moving in and out of Papua to other regions, as well as transport ships carrying containers to various destinations along the Yos Sudarso bay, Because the gulf lies in the downstream, the flow at the mouth is greater than the upstream; as a result, streams carry large sediments and materials increase in volume. The large volume of sediment transport depends on changes in the rainy and dry seasons and is also influenced by human activity. The high activity in the waters of the gulf of Yos Sudarso area indirectly causes a decline in water quality. The Gulf of Yos Sudarso is a coastal region that is open access, common property, and subject to activities of coastal communities and complex dynamics. Sustainable development in the region requires an integrated and sustainable approach that includes community participation. Furthermore, the approach does not take into account the interaction between ecological principles and culture. This is feared to cause imbalance in the management areas that are not environmentally friendly. This study aims to determine the level of public knowledge on the effects of sedimentation and community-based water management.

### 2. Literature Review

Estuary is the most downstream part of the river that directly meets the sea. As a part of the river, it is affected by tides. River water with varying chemical and physical characteristics mix with lake water in coastal wetlands that are affected by tides and storms just like estuaries along the oceanic coasts. These freshwater estuaries also provide many of the ecosystem services and functions that brackish estuaries do, such as serving as natural filters for runoff and providing nursery grounds for many species of birds, fish, and

other animals. Society is a unit consisting of people who live in certain areas and work together in groups, based on the same culture to achieve the same interests. While a society has generally the same territory with geographical boundaries that have been set, these limits are an indication of the existence of a community group. A human society is a group of people involved in persistent social interaction, or a large social grouping sharing the same geographical or social territory, typically subject to the same political authority and dominant cultural expectations. Human societies are characterized by patterns of relationships (social relations) between individuals who share a distinctive culture and institutions; a given society may be described as the sum total of such relationships among its constituent members. In the social sciences, a larger society often evinces stratification or dominance patterns in subgroups. Community-based management can be defined as a system of natural resource management in a place where the local people in the area are actively involved in the management of natural resources contained therein (Kay and Alder, 1999). Community-based management can be categorized into two groups : traditional and neotradisional (Dahuri, 2003). Traditional community-based management is generally based on customs and traditions that have been in the community for a long time, for example SASI in Maluku (Nikijuluw, 2002). While neotraditional community-based management is performed under rules established by the community itself or facilitated by the government or relevant stakeholders.

### 3. Methodology

Data collection is done by combining various methods of research; i.e., interviews, focus group discussions (FGD), observation, and literary search for secondary data. Target respondents interviewed are fisherman and people who live along the Anafre river, as well as the Kayopulau fishermen communities in the Gulf of Yos Sudarso.

**Data Analysis:** The collected data will be analyzed using the descriptive qualitative method. Descriptive Qualitative research is a procedure that uses descriptive data in the form of words written or spoken by the people and actors that can be observed. Qualitative approach, is a research procedure that produces descriptive data in the form of speech or writing and behaviors that can be observed from the subject itself (Moleong, 2000).

Sampling Location: samples were collected at the Gulf of Yos Sudarso region, and the estuary of Anafre River, both are located in Jayapura City.

Figure 1 : Sampling Location



### 4. Results

Geographical conditions, Hydrology and Climate: Jayapura city is the capital of Papua province, with an area of about 940 km<sup>2</sup>, or about 0.22% of the total area of the Province of Papua. The city is geographically located

at 10 28'17.26" - 30 58'0.28" south latitude and 137 34'10.6" - 141 0'8.22" east longitude. It is also located at the edge of the Gulf of Yos Sudarso with the following borders (Source: BPS Jayapura City, 2010):

- a. Pacific Ocean in the north
- b. Arso district in south
- c. State of Papua New Guinea (PNG) to the east
- d. Depapre Sentani District and Jayapura regency in the west

The climate of Jayapura City is tropical wet. The average air temperature ranges from 30°C minimum temperature to 29°C, and a maximum air temperature of 31.8°C. Rainfall varies between 45-255 mm/year with the rainy days on average between 148-175 days of rain/yr. Humidity varies between 79% - 81%. According to the records of the 2005 Jayapura Region V Meteorology and Geophysics bureau, the city's average air temperature is between 23.0° C - 32.2° C. Air humidity ranges between 77% - 82%, with the highest rainfall in March 2005 recorded at 500 mm and the lowest in December 2005 at 100 mm. Hydrology conditions in Jayapura is generally parallel to the direction of flow of its major rivers, namely Acai River, Entrop River, Anafre River, Kloofkamp River, APO River, Tami Dok IX River, all of which flow into the Pacific Ocean, except for one river namely Kampwolker Buper river that empties to Sentani Lake. The rivers located in the city of Jayapura that generally flows to the north and south are separated by a morphological topography which stretches from west to east, so as to separate the flow of surface (Surface run-off) at two macro rain catchment areas. Jayapura city has 17 rivers, namely: North Jayapura District: Anafre river, Kloofkamp, APO, Yapis dan Dok IX; North Jayapura District: Acai river, Siborogonyi, Entrop I, II, III dan Hanyaan; Abepura District: Kampwalker river, Buper river; and Muara Tami District : Tami river, Skamto river, and Buaya river.

The condition of the Anafre River and the Gulf of Yos Sudarso: In my previous study, I found that the brownish color and smell of the water are due to a mixture of mud and organic and inorganic wastes from streams that empty into the sea. Brightness value is below the limit of water quality standards: water under 1 meter depths is murky due to a brownish color due to the suspended sludge/soil washed from the river flow, while water at station 3 (Lantamal X) and station 4 (Rear Terminal) is still in good condition. The value of the average temperature at each research location is almost the same range, namely 29° - 30°C. The temperature at each station is in a good/normal state. The DO value of the results of the research study at any location in a good/normal state with values >5 for marine life as well as for marine tourism. The COD value is still in the category of good/normal. The value of metal content of copper (Cu) in stations 3 (Lantamal X), 4 (Rear Terminal), and 5 (Estuary) fall into the category of normal with average values ranging from 0,48 - 0,79, and for Station 1 (Bridge) and 2 (DPRD) levels of copper in the water can still be tolerated, with the value of the content at 1.22 to 2.47 in the category of slightly polluted. The Salinity values at each station are in the good/normal state for freshwater, brackish, and sea water. Sedimentation conditions in the Gulf of Yos Sudarso models show the conditions in which sediments out of the Anafre river are composed of coarse sand, the spread of suspended sediments coming out of the river Anafre is confined to the mouth of the river. The distribution of suspended sediment will move further towards the sea through the Gulf of Yos Sudarso and reaches seagrass beds and coral reefs on the Kayupulau if sediment materials out of the Anafre river are composed of mud (silt and clay) (Sari & Dahlan, 2015).

**Figure 2: Models of Sedimentations out of the Anafre river to Gulf Yos Sudarso**



**Utilization Society:** Results obtained by analysis on Kayu pulau Communities shows that the majority of local communities there work as a civil servant in Jayapura and fishing is a side job, with other side jobs which include driving taxi boats. The use of clean water is provided by PDAM, facilities and infrastructure are also readily available and complete, public services such as early childhood education and city cleaning services are available, and people generally use oil stoves for cooking. Low quality housing is evident in Kayupulau, as there are still houses which discharge wastes directly into the water. People are aware that water is really important for them. The interviews results showed that Anafre River and the Gulf Yos Sudarso is very important to the people (75%); while 25% respondents stated that these waters is important (Figure 3). The estuary of Anafre River and the Gulf of Yos Sudarso become very important due to their locations because they are used for transportation, recreation, inspiration, medicinal sources, fishing, and to sustain modern living necessities. Estuaries also act as nurseries for baby fish, better known as juveniles. On the Gulf there are Coral reefs and seagrass that act as shelters where fish can find food and protect themselves from predators. Coral reefs and seagrass provide protection against shoreline erosion and inundation from the ocean.

**Figure 3: The Importance of the Anafre River and the Gulf of Yos Sudarso**

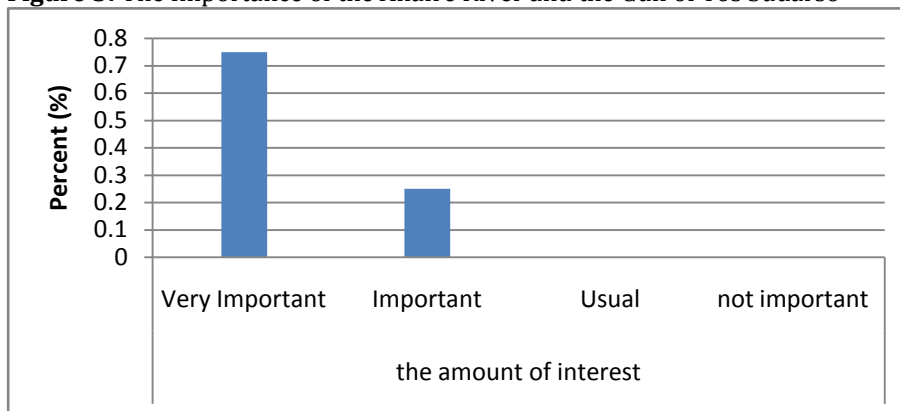
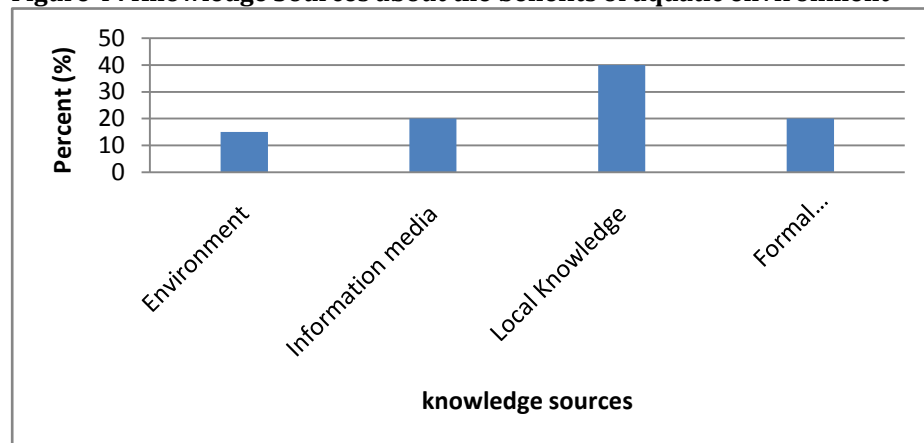


Figure 4 shows respondents' perceptions or local wisdom on the importance of keeping the river and sea clean (45%). Local Wisdom refers to the cumulative and complex bodies of knowledge, know-how, practices and representations that are maintained and developed by peoples with extended histories of interactions with the natural environment, or how young people inherit knowledge from their parents about how to protect waters and why waters is really important for them. For example, the Kayupulau community keeps the Gulf of Yos Sudarso clean because they believe that it is gifted by God so they must protect the water. Besides that, if the sea is clean, the coral is healthy and can increase fish population. Concerning sources of information, most respondents (20%) obtain information from the Media and formal/informal sources. This

means most of their knowledge come from the internet, radio dan television. Other sources from which respondents get information about keeping their environment is formal education and from the environment (10%).

**Figure 4 : Knowledge Sources about the benefits of aquatic environment**



Concerning the utilization of the estuary and Gulf of Yos Sudarso areas, in view of the number of visits to the area, based on data analysis obtained, 30% of the local population conduct fishing activities at the site for both consumption and sale, 45% utilize the area for transportation, and 10% utilize the area for other activities, for example tourism.

**Impacts of degradation of Water Quality:** The environmental impacts of sedimentation include the following: loss of important or sensitive aquatic habitat, decrease in fishery resources, loss of recreational attributes, loss of coral reef communities, human health concerns, changes in fish migration, increases in erosion, loss of wetlands, nutrient balance changes, circulation changes, increases in turbidity, loss of submerged vegetation, and coastline alteration. Litter scattered on the beaches and floating in the Gulf of Yos Sudarso and estuarine waters is a problem, particularly non-biodegradable litter. It tangles in the appendages of marine life and is harmful to divers and beach users. Some fishing techniques may also cause habitat destruction. Blast fishing and cyanide fishing, which are illegal in many places, harm surrounding habitat. Dynamite fishing is another destructive method for gathering fish. Sticks of dynamite, grenades, or homemade explosives are detonated in the water. This method of fishing kills the fish within the main blast area, along with many unwanted reef animals. The blast also kills the corals in the area, eliminating the reef's structure, destroying habitat for the remaining fish and other animals important for reef health. Catching fish has become increasingly difficult in the estuary and the Gulf of Yos Sudarso, because the waters in both the estuary and the gulf have suffered silting and pollution, and also because the water is smelly, brown and contain garbage (domestic waste).

**Community based Management:** Based on these conditions the local governments, NGOs and several other stakeholders have conducted public awareness campaigns about the importance to keep the waters (sea and river) clean and healthy. However, these activities have been merely incidental. Dredging is one solution to reduce sedimentation in the mouth of the Anafre river. It is done 2 times a year (based on interviews in 2015). The purpose of dredging is to avoid a buildup of sediment washed downstream from upstream, so as not to encourage the particles to enter waters. Sediments accumulate due to the discharge of water from upstream to downstream (the current velocity in the river mouth is 0.02 sec), not only is sediment piled but wastes from household waste are also piled on the Anafre river. The local community in Kayupulau understands how important water is for them, so they always clean up rubbish and maintain the cleanliness of their household environment. A good habit is being promoted in this community (e.g. not throw trash into the water). This initiative is also supported by the Provincial Office for Hygiene and Gardening Services (DKP) by routinely transporting the garbage every week and procure trash bins in every household.

## 5. Conclusion

Conditions in the field indicate that the utilization of the river flow is not in accordance with government regulations; for instance, the regional banks of the river should not be used for various purposes but in fact they have been used for settlement, and many people dump wastes directly into the river. The magnitude of these impacts is in fact beneficial to the people, in that the local community has been doing maintenance in order to keep the rivers and the gulf of Yos Sudarso from sedimentation and pollution. In utilizing and maintaining the river and the Gulf of Yos Sudarso, many of the locals do it by tradition inherited from generation to generation, but some also do so by using relatively-new technology. Local environmental conditions have an influence on the way people use and maintain the rivers and the gulf of Yos Sudarso.

## References

- Dahuri, R. (2003). *Keanekaragaman Hayati Laut. Aset Pembangunan Berkelanjutan Indonesia*. Gramedia Pustaka Utama. Jakarta.
- Kay, R. & Alder, J. (1999). *Coastal Management and Planning*, E & FN SPON, New York.
- Moleong, L. J. (2000). *Metode Penelitian Kualitatif*. Bandung: Remaja Rosda Karya.
- Sari, A. & Dahlan, M. (2015). Pola Sebaran Sedimen di Teluk Yos Sudarso Kota Jayapura. *Prosiding Simposium Nasional Kelautan dan Perikanan*. Presented at October 5th 2015. Hasanuddin University. Makassar, 15-22.
- Nikijuluw, V. P.H. (2002). *Rezim Pengelolaan Sumberdaya Perikanan*. P3R. Jakarta

## A Strategic Policy Initiative for the Post-relocation of Street Vendors: Case of Surakarta, Indonesia

Anggraeni Permatasari  
President University, Jababeka-Bekasi, Indonesia  
anggraeni@president.ac.id

**Abstract:** Street vendors have emerged as a form of social response to maintain the survival of communities in going through economic challenges. However, street vendors have begun to have an uncontrolled growth; hence create social issues, particularly in large cities. In Surakarta, Indonesia, the relocation process of street vendors has been successfully executed by the municipal government. They have successfully managed to make street vendors agree to peacefully move to another area. Apparently, the relocation program is only sustained for several years. Most of street vendors have returned to their previous location, creating a huge chronic problem. This brief study aims at utilizing system thinking approach, using a causal loop diagram, to provide a framework for managing changes and complexity in the relocation process and to identify strategic indicators that may occur after relocation. The results are expected to contribute a defined framework for decision making process based on an analysis over the complex and dynamic systems of the relocation program. The results indicate that the municipal government of Surakarta may need to begin to formulate innovative activities through an improved public education and an enhanced street vendors' empowerment.

**Keywords:** *Street Vendors, Post-relocation, System Thinking, Causal Loop Diagram*

### 1. Introduction

Surakarta is a municipal located in the Central Java province, Indonesia. The municipality has been known by its marketing tagline "the Spirit of Java" due to its eco-cultural assets. Historically, it was first established in 1946, covering an area of 4,406.06 ha. Administratively, the municipality consists of five subdistricts, *i.e. Laweyan, Serengan, Pasar Kliwon, Jebres and Banjarsari*. During the last ten years, Surakarta has rapidly grown many sectors within its jurisdiction, *e.g. industry, services, education, housing, tourism and trade*. During 2003-2010 the number of street vendors in Surakarta tend to decrease; however, since 2010 the number has begun to increase over time. In 2012, the number of street vendors in Surakarta has reached 2,950 people. Looking at these figures, the municipal government began to see the phenomenon of street vendors as having a potential value to the development of informal economy sector. In the same year, the municipal government received the Best City Award in the conference of Partnership for Democratic Local Governance in Southeast Asia (DELGOSEA), Bangkok, Thailand. The award was obviously a clear appreciation over the relocation policy of street vendors. However, the government also began to realize that there are complex problems that occur after the relocation program. In fact, as stated by Sterman (2002), "... (t) he most cases of policy resistance arise from dynamic complexity, the often counterintuitive behavior of complex systems that emerges from the interactions of the agents over time."

Theoretically, street vendors have been recognized as people who may have contributed to economic development through informal sectors. In Surakarta, the municipal government has been trying to develop economic activities of the informal sector by empowering street vendors. It facilitates activities that are not covered by law but publicly have a track of production activities, *e.g. property, production capacity, contracts, and related taxes*. Informal economy itself refers to "all economic activities by workers and economic units that are in law or in practice not covered or insufficiently covered by formal arrangements" (ILO, 2007). The sector basically does not have a negative connotation, but has in fact often been recognized as promoting ilegal activities into the economic development of a country. Meanwhile, Kayuni & Tambulasi (2009) have stated that there is a strong relationship between formal and informal sectors. In other words, informal sector has a possibility to develop, same as formal sector. Besides, informal sectors may actually impact to the increase of regional revenues. Therefore, the municipal government of Surakarta has to cooperate with street vendors in a two-ways partnership in developing and controlling the growth of informal sector. This research aims at developing a policy framework over the challenges met by either local government or private stakeholders who share the responsibility of sustaining the informal sector. In particular, this paper attempts to look at the



complex problem of street vendors in a holistic way for proposing a framework for strategic policy initiatives, which may act as anticipation to any negative impacts after the relocation program of street vendors.

## 2. Literature Review

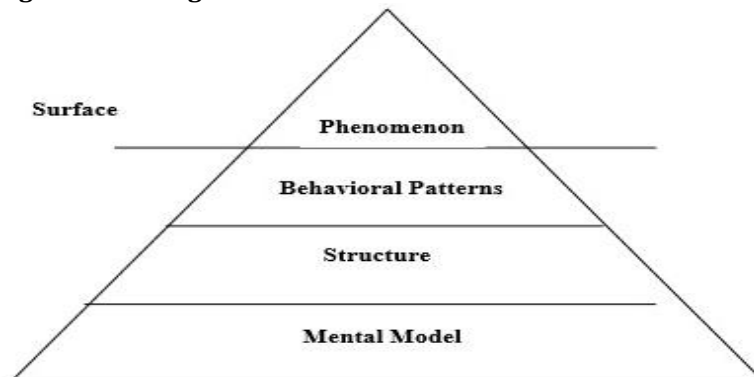
**System Thinking:** As the resistance to a policy being implemented has become a critical concern in any ongoing policy development, it is important to understand the root cause of a resistance. Sterman (2002) has stated that “... (p)olicy resistance most often arises because our mental models systematically lead us to incorrect inferences about the dynamics of even the simplest systems”. System itself refers to interconnected elements that have constructed a specific behavior in a given period of time. Besides, it has particular function and purpose. Based on these understandings, system thinking supposedly refers to the ability of understanding and influencing a complex system. Anderson & Johnson (1997) have revealed practical guidance of system thinking since its conceptual understandings to building causal loops. In particular, they establish the guidance based on the understanding of a system as “...(a) group of interacting, interrelated or interdependent components that form a complex and unfied holistic. System Thinking is a language, too, that offers a way to communicate about dynamic complexities and interdependencies” (Anderson & Johnson, 1997).

Furthermore, system thinking is purposely designed to help people to see the reality of a complex situation that occurs in a dynamic way. The method focuses on a holistic point of view and attempts to recognize the relationships between problems as a path. The steps of building a system thinking analysis include:

- a) Take a look at potential formulas
- b) Identify key variables and possible main actors within the structure of a system.
- c) Create a chart of variables based on their Behaviour Over Time (BOT)
- d) Identify the structure of system to establish a causal loop diagram (CLD)

The principles of system thinking include: (1) thinking broadly; (2) balancing short and long term perspectives; (3) recognizing the natural system as a dynamic, complex, and interdependent; and (4) counting on factors being measured. A system thinking process begins with an iceberg phenomenon. The phenomenon is a distinguished way to see problems in a deeper manner. Practically, a problem is constructed from its pattern of behavior; the pattern of behavior will then be structured and hence form a system. The structure is basically developed from a particular approach in system thinking, which is widely known as a mental model as the basis of a problem (Figure 1).

**Figure 1: Iceberg Phenomenon**



Source: Anderson and Johnson 1997

In addition, Richardson (1998) has stated that “...(b)ehavior over time graphs help people to focus on patterns of change over time rather than on single events. They help students think about the underlying causes of those changes”. In other words, BOT GRAPHS function is useful to see the variables or indicators influencing a problem in the pattern of behavior based on different timescales. The scales may determine behavioral trends. A BOT chart requires three things, *i.e.* indicators/variables, timespans and resource-perspective trends. On the other hand, CLD is used to find a leverage point as the strategic indicator to change an existing system. Thus, CLD function is supposed to formulate a strategic indicator of things for being conducted in a

long run to have a significant impact on a system. It includes strategic planning, formulating arguments of activities, formulating strategic objectives and sub-objectives, and formulating subsequent activities. Practically, CLD has four creation steps, *i.e.* (1) listing variables or indicators that are considered important; (2) thinking and writing down the reasons why they occur and what consequences that will appear; (3) creating the cause-and-effect pattern between variables/indicators that form a CLD; and (4) checking BOT again, expanding the CLD until there is no more relationship.

**Street Vendors Relocation Program:** The existence of street vendors in Indonesia is frequently assumed as an issue of illegal business activities, and hence treated as a crime. Street vendors have no legal status to operate their businesses, and therefore continuously disturbed by the authority. In fact, the proliferating activities of street vendors may cause a chaos over public facilities. Basically, the large number of street vendors in Indonesia is triggered by several motivations, *i.e.* 1) the increase of labor force in a city; 2) a limited number of employment opportunities in the city, 3) a percentage discrepancy between labor force and employments, 4) an excessive number of urban migration to big cities (Mitullah, 2003; Chen 2005; Permatasari et al., 2014). Furthermore, the relocation program of street vendors refers to a process to move street vendors' trading site from a public space that has been determined by government as a prohibited site for any trading activities (Setia, 2009). Street vendors basically resist a relocation program because they need a direct access to actual and potential clients. Besides, their activity has become a major source of livelihood. Then, there is an effort by municipal authorities to evict them as a violation of their fundamental human rights (Kayuni & Tambulasi (2009). Thus, relocating street vendors requires synergy and integration between stakeholders and developmental sectors, because "*the government's major challenge was how to control street vending so that it shouldn't negatively affect the development of its urban center*" (Kayuni & Tambulasi, 2009).

### 3. Methodology

This study aims at analyzing broader issues of the dynamic and complex phenomenon of street vendors in Surakarta, with a particular focus on the impact after relocation process. System thinking with causal loop diagram is taken in conducting the analysis. System thinking itself is taken due to its potential capability in dealing with complexity, ambiguity and mental models underlying the presence of most social, economic, ecological, and political challenges (Anderson & Johnson, 1997; Sterman, 2002; Thanh & Kambiz, 2015). System thinking analysis is helpful to find potential problems that may arise after the relocation of street vendors. This research takes trends as secondary data to analyze variables/indicators in creating Causal Loop Diagram (CLD). The CLD is taken to see the leverage points within the complexity of post-relocation problems (Anderson & Johnson, 1997). Besides, it is taken to develop the framework of strategic variables for being used as intervening variables in any strategic policy initiative during the post-relocation of street vendors.

### 4. Result & Analysis

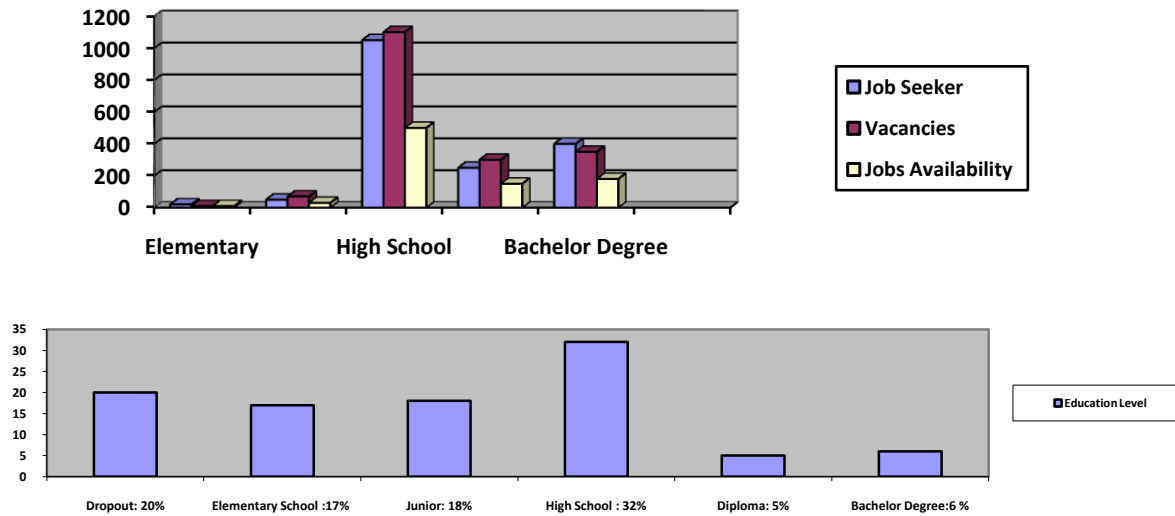
**The Post-relocation of Street Vendors:** The existence of street vendors triggers several negative impacts, *e.g.* traffic jam and infrastructure chaos, *etc.* On the other hand, it offers a positive impact to the increase of informal economic growth. In general, street vendors are known as people who offer their goods and services for sale in a public area, especially on the pedestrian or main road area (Mitullah, 2003; Chen, 2005). In fact, being a street vendor is considerably an employment opportunity. Street vending is manageable by people as their self-sufficient income sources, usually without either possessing the possession or a clear legal status. The complex dilemmatic challenges have triggered the intervention by Surakarta municipal government to solve the dynamic system in the phenomenon of street vendors. After the infamous relocation program, the municipality meets further issues that requires strategic solutions. The main issues after the relocation program is founded on the emerging dynamic complexities, *e.g.* the increasing number of population and poverty, and the limited number of jobs availability and educated people.

**Population and poverty:** According to a socio-economic survey conducted in 2011, the population density in Surakarta was 13,354 persons/km<sup>2</sup>. Meanwhile, the population in 2010 was 503,421 people, with a dependency rate at 66 per cent. Records from the 1880 census indicated the population of 124,041 inhabitants. Population has grown around 0.565 per cent per year in the last 10 years. With its population density, Surakarta has the highest density of inhabitants in Central Java (the average density in the province is 992 persons/km<sup>2</sup>). At national level, Surakarta is the 8<sup>th</sup> most populous city in Indonesia, despite having the

13<sup>th</sup> smallest area, and the 22<sup>nd</sup> most populated city among 93 municipalities and five administrative cities in the country. Furthermore, *Pasar Kliwon* is the most populous district in Surakarta, which covers one-tenth of its total area, while *Laweyan* is a district with the lowest density. During 2000-2010, the population growth of Surakarta was 0.25 per cent, well below the rate of population growth in Central Java (0.46%). Kompas News (2011) in an article “*Increased Population Becoming Threat*” has indicated that Indonesia’s population has been worryingly increasing, amounting to approximately 240 million people with a 1.49 per cent growth rate. It is stated as having a serious threat because due to the low human quality. If it is not properly controlled, the growth may bring some further impacts, especially on the availability of food, energy, and education as well as health services.

**Jobs Availability and Job Seeker.** In improving the economic growth of informal sectors, Surakarta municipal government has created a set of policies to support the creation and expansion of employment opportunities. However, there is in fact an unbalanced situation between demand and supply in the labor market. Vacancies tend to be getting bigger than job availability, job seekers or unemployment (Figure 2).

**Figure 2. Surakarta: Job Seeker, Vacancies, Availability versus Education Level in 2011**



Source: [www.bps-surakarta.go.id](http://www.bps-surakarta.go.id)

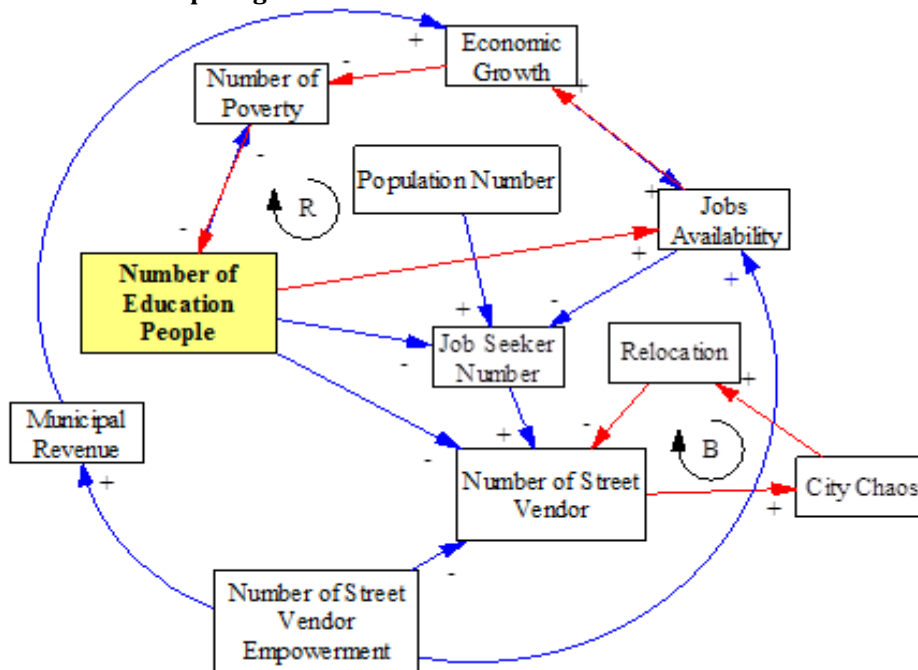
The condition indicates a need to put a serious concern due to the less number of additional vacancies available, while the number of employed workforce is too small. Required solutions may regard to why people who are looking for a work cannot be recruited following available vacancies. The number of residents who work within the city of Surakarta in 2011 was 249.368 people, covering 49.71 per cent of the entire town population.

**Education:** Low educational level and the lack of jobs available have encouraged rural people to migrate from their villages to large cities (urbanization). However, the presence of villagers in large cities is not properly supported by a sufficient human capacity and expertise. Thus, it is difficult for them to get a decent job (Figure 2). In fact, the particular reasons may have explained why becoming street vendors has been the first option for a living (Wijayanti, 2011). Solopos News (2011) in an article “*Overcoming unemployment, educational institutions altered composition*” write that the municipal government of Surakarta may have been changing the applicable education policy in Indonesia. The policy is expected to overcome the problem of high unemployment. It was first announced by Atmojo Dwi H. as the Head of High and Vocational School Division, the Agency of Education, the District of Sukoharjo. In a following article, Anung I. Susanto as the Head of the Regional Development Planning Board (*Bappeda*), the Government of Surakarta stated that “...(o)ne of the

efforts that has been implemented to reduce poverty is a governmental intervention conducted by the government in education, health and social services.”

**Causal Loop Diagram:** The map of events occurred in the community is possible to explore through a causal loop diagram. Causal loop diagram shows that number of educated people is a strategic point indicator as the leverage point for the dynamic problem being investigated over street vendors. The increasing number of educated people would enhance the skills and capabilities of quality people. The effect of such a strategic indicator would cause the decreasing number of unemployments/job seekers, because the community members may get recruited according to their expertise. The decreasing number of unemployment or job seekers would then reduce the number of street vendors. At a higher level, the availability of job opportunities in Surakarta may indicate a good opportunity for other large cities in reducing the number of street vendors in their own regions. On the other hand, the availability of decent jobs would make people to have a higher income in parallel with the economic growth. The growth would then decrease the number of poverty. It seems that if the number of poverty has decreased following the economic growth, people may pay for the education cost of their children. At the government level, economic growth would support the increase of regional revenues in the municipality of Surakarta, meaning that the government would have more budget allocation to create further strategic policy planning for all levels of education (Figure 3).

**Figure 3: Causal Loop Diagram for the Relocation of Street Vendors**

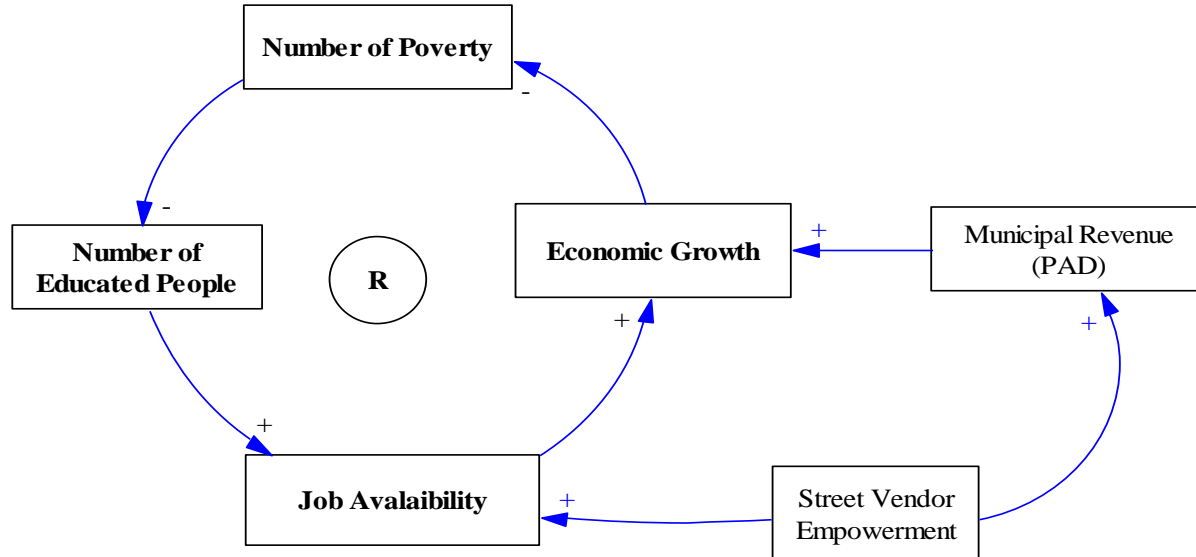


Notes: S/+ : Similar, O/- : Opposite, R: Reinforcement, B: Balancing

The decreasing number of educated people may have directly caused the increasing the number of street vendors and a variety of other problems, *e.g.* poverty and job seekers. Next, there are several factors influencing the decline of education in Indonesia. *i.e.* physical facilities, low quality of teachers, lack of opportunities, lack of relevant educations, low vision, low moral knowledge, and high education cost. If the government puts a further intervention towards education, it would automatically and actively affect all existing variables in the causal loop diagram. Hence, problems related to street vendors would gradually be resolved. As a following step, municipal government may need to start to think about any activities, including interventions, required to properly enhance the educational level of the community in Surakarta. From the results of causal loop diagram analysis (Figure 4), it seems there is a causal relationship between indicators of street vendors’ dynamics that indicate a reinforcing loop (R). At the first loop diagram, the number of street vendors is seen as a potential driver to an empowered economy of the people. A nurtured empowerment would positively contribute to the regional revenues of the municipality. With the increase of regional

revenues, the government of Surakarta has an opportunity to increase the budget allocation for future empowerment programs for street vendors. In other words, street vendors may have a sustained opportunity to promote and grow their businesses (Thayrun, 2012). It is interesting to reveal that there is a causal relationship among indicators in the Figure 4, forming a mutually reinforcing system. Each indicator has been contributing to the success of other indicators. In fact, those interrelated indicators form a circular copy of causal relationship, whether it is strengthening or weakening each other. In Hikmawan's work (2011), education has been stated as having a critical importance to a nation's competitiveness. Besides, education is a key solution for eradicating poverty in medium and long terms. In other words, education is the path to the progress and achievement of social and economic welfare.

**Figure 4: Strategic Policy Initiative for the Post-relocation of Street Vendors**



Notes: S/+ : Similar, O/- : Opposite, R: Reinforcement, B: Balancing

### 5. Conclusions and Implications

Systems thinking is taken to view a problem through a holistic point of view. Based on a system thinking analysis, policy makers may see the problem as widespread and intact. This brief study attempts to explain the complex and dynamic model of relocation program in Surakarta. The model is supposed for being developed further, and may therefore contribute in the form of a framework for decision making. Besides, it may support the capacity development for local government and private stakeholders or stakeholders who share the responsibility of sustaining the system. Looking at the proposed system thinking analysis, the municipal government of Surakarta may begin to formulate innovative activities for improving the public education sector and empowering street vendors. The particular focuses on education and empowerment programs are purposely taken to improve the capabilities of street vendors in fulfilling the gap of job availabilities. Besides, it clearly aims that every strategic policy analysis that is founded system thinking approach may produce an opportunity to gain feedback in creating dynamic effects of the system in a longer term after the relocation process.

### References

Anderson, V. & Johnson, L. (1997). *System Thinking Basics: From Concepts to Causal Loops*, Pegasus Communications, Inc

Buletin Tata Ruang. (2010). *Tokoh Profil: Ir. Joko Widodo Jadikan Solo Eco Culture City*, BPS Kota Surakarta.

BPS Kota Surakarta. (2011). *Surakarta dalam Angka 2011*. Surakarta, BPS.

Chen, M. (2005). *The Business Environment and the Informal Economy: Creating Conditions for Poverty Reduction*. Draft Paper for Committe of Donor Agencies for Small Enterprise Development Conference on Reforming te Business Environment, November 2005, Cairo, Egypt.

- Hikmawan, P. (2011). Kebijakan Pendidikan bagi Masyarakat Miskin. Available at <http://hikmawansp.wordpress.com>
- ILO. (2007). Labour and Social Trends in Asean 2007: Integration, Challenges and Opportunities. Bangkok: ILO.
- Kayuni, H. M. & Tambulasi, R. I. C. (2009) Political Transitions and Vulnerability of Street Vending in Malawi, Theoretical and Empirical Researches in Urban Management.
- Mitullah, W. V. (2003). Street Trade In Kenya The Contribution Of Research in Policy Dialogue and Response. Paper Prepared for Presentation at the Urban Research Symposium on Urban Development for Economic Growth and Poverty Reduction. Sessions on Dimensions of Poverty and Livelihoods, Group C on Informal Economy, Panel on Urban Responses to Street Traders: A comparative Perspective from India, Kenya an South Africa; Organized by the World Bank, Washington, DC.
- Permatasari, A., Putro, U. S. & Nuraeni, S. (2014). Strategic Analysis Relocating Street Vendor through 3D Negotiation Case Study : Street Vendor Surakarta, Indonesia. *Procedia - Social and Behavioral Sciences*, 115, 436-443.
- Puspita, H. S. D. (2007). Demokrasi Imajinasi dalam petanahan. *Jurnal Hukum dan Pembangunan*, 37(3).
- Richardson, G. (1998). Getting Started with Behavior Over Time Graphs, Creative Learning Exchange
- Setia, R. M. (2009). Ekonomi Informal Perkotaan: Sebuah Kasus Tentang Pedagang Kaki Lima Di Kota Bandung. *Jurnal Analisis Sosial*, 14(1).
- Sterman, J. D. (2002). System Dynamics: Systems Thinking and Modeling for a Complex World, Working Paper Version, Massachusetts Institute of Technology Engineering Systems Division.
- Thanh, V. M. & Kambiz, M. (2007). Systems Thinking for Sustainable Tourism in the Cat Ba Biosphere Reserve of Viet Nam, School of Integrative Systems The University of Queensland, Australia.
- Thayrun, Y. (2012). Jokowi Pemimpin Rakyat Berjiwa Rocker, Noura Books, Jakarta.
- Wijayanti, A. R. (2011). Studi Kasus Relokasi PKL Monumen 45 Banjarsari dan Peran Mahasiswa Perencanaan Wilayah dan Kota dalam Usaha Mewujudkan Keberhasilan Pembangunan Kota, Makalah KOMPI.