

Optimization of Agricultural Land: A Lesson from Islamic Economics

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Abstract

Human as social being is required to earn the wealth obtained from factors of production to survive in his life. One of the important factors is land, which has been mostly used in economy such as infrastructure, agriculture and mining. Unfortunately, the use of land tends to give more benefit to capitalist or land-owner than others in today's world. It impacts to inequality distribution of income in the society faced in third world country that is mostly in Muslim countries. In Islam, administration of the land has been concerned in primary sources (Qur'an and Sunnah) and Islamic literatures and practiced into action in the state such as iqta, ihya al-mawat, zakah, rikaz, muzara'ah, salam, musaqah and other instruments. These instruments are mostly used in agricultural field in the Islamic age. Another instrument can contribute to sustainable agricultural development is tax land: al-kharaj and al-'usyr. However, the result of this study states that to optimize the agricultural land, the state and Islamic banks can contribute together to solve the farmers problem such lack of financial support, shortage of water irrigation, lack of training and technology use by integrating appropriate Islamic financing and police of land tax that gives benefit and just to the farmers.

Keywords: Optimization, Land, Agriculture, Tax, Islamic Economics

Introduction

Human as social being is required to earn the wealth obtained from factors of production to survive in his life. Hence, to fulfill and sustain their needs of life, every person in the society should be involved in a variety of economic activities in such industries as manufacturing, entrepreneurship, trade and

agriculture. The economic activities involved by human should follow certain rules and requirements that evolved through development of human civilization. In Islam, they have to comply with the ethical values and Islamic law derived from the unequivocal teachings of al-Qur'ān and Ḥadīth.

Moreover, ontological aspect of Islamic economics studies the roles of human on earth as vicegerent of Allah, which consists of 'ʿibādun (worshiper of Allah) mentioned in Surah adh-Dhariyat and Mu'tamir (English word) mentioned in Surah al-Hud 61. Besides the importance of worship, Islam commands us to prosper ardh (Earth) complied with Shari ah rules, which is mostly covered by land. Accordingly, the land has been mostly used in economy such as infrastructure, agriculture and mining. Specifically, man essentially the needs land for two purposes: agriculture and residential (Al-Mawdudi, 2011).¹ Unfortunately, use of the land tends to give more benefit to capitalist or land-owner than others in today's world. As a result, it impacts to inequality distribution of income in the society faced in third world country that is mostly in Muslim countries.

So it raises some problem in managing use of the land such as misuse of limited resources, inefficient structures and democratic deficit, land being used for many infrastructures and inadequate of fund to support optimization of land. Commonly, the land is suitable for food production to carter human life on earth. In Islam, administration of the land has been concerned in primary sources (Qur'an and Sunnah) and Islamic literatures and practiced into action in the state such as iqta, ihya al-māwat, al-khāraj, al-'ushr, zakah, rikaz, muzārah, musāqah and other instruments. These instruments are mostly used in agricultural field. By these explanations, this study attempts to trace the concept of land from Islamic economics and to improve the existence model to new model of optimizing the agricultural land in the contemporary time.

Literature Review

One of the important methods to increase growth is to use land correctly and systematically. Some lands are not used optimally

¹ Sayyid Abul A lā Mawdūd, *First Principles of Islamic Economics*, (trans) Ahmad Imam Shafaq, Ed. Khursid Ahmad (UK: Islamic Foundation, 2011), 120.

for the purpose of interest of human life, but for individual interest in generating more income. This conception is supported by Capitalism that is paradigm is based on individualism and freedom toward property ownership. So, it gives the freedom to an individual s right to own land as agent of feudalist and capitalist.²

Singh and Singh (1999) investigated the multi-objective linear programming model for optimizing land use in the north of China. The results show that if the resources are used properly, the preservation of soil and provision of food and income for rural inhabitants will be continuously improved.³ Benli and Kodal (2003) study on the optimization of land use in southeast of Antalya, Turkey. They focus on the programming for the purpose of maximizing profit obtained from agricultural lands, in spite of shortage of water.⁴ Nguyen and Egashira (2004) emphasized the increase in the use of agricultural and forest lands in Tran Yen, Japan, through appropriate land allocation for different uses.

Furthermore, D. Nikkami et al (2009) study the optimized combination of land allocation to different land uses like rangeland, orchard, irrigated farming and dry farming for purpose of minimizing soil erosion and maximizing people's net income in Kharestan, Iran. Their study uses a multi-objective Linear Programming (LP) in order to see three different land uses in optimized condition. The finding shows that the optimized condition will be happened when rangelands experience no change, the area of orchards should be increase from 561 to 2115 ha (377%), irrigated farms should be reduced from 871 to 237 ha (73%) and dry farming land should be decreased from 1050 to 129 ha (88%). So, the impact of land management and land use optimization decrease soil erosion by 3.7% and increase net income by 163 %.⁵ This study explains that the use land optimization is important to increase the economy of country.

² Ibid., 119.

³ A.K. Singh and J.P. Singh. 'Production and benefit maximization through optimal crop planning: a case study of Mahi Command', *Indian J. Soil Conserv.* 27 (1999), 152-157.

⁴ B. Benli and S.Kodal. 'A Non-Linear Model for Farm Optimization with Adequate and Limited Water Supplies: Application to the South-East Anatolian Project (GAP) Region, Agric'. *Water Manage*, 62 (2003), 187-203.

⁵ D. Nikkami, M. Shabani and H. Ahmadi, 'Land Use Scenario and Optimization in a Watershed', *Journal Applied Sciences*, 9 (2009), 287-295.

To Salasal (1998), land is a free and universal gift from Allah must be utilized to the fullest. It was also given to men for their common use as well as for the general welfare of the society. The system of land ownership is founded in the concept of trust in accordance with Islam.⁶ There are few studies related to the optimization of use land, but some studies focus on the investment of waqf land. Hasan and Abdullah (2008) intend to provide an overview on the investment of waqf land as instrument of Muslim's economic development in Malaysia. However, the study just focuses on optimizing waqf land by constructing a building with various modes of Islamic investment such as debt-best investment, equity-based investment and self-finance instrument.⁷ In addition, Nor and Mohamed (2009) for the Islamic scheme of investment of waqf land in agriculture by using *ijarah thummah*, *ijarah muntahiah bi altamlik* and *muzāra'ah*.⁸

In term of Islamic banking role, Hassan et al (2012) study the role of Islamic banking in agricultural sector from the users and non-users. This study uses descriptive and qualitative research by developing questionnaire model with 120 respondents. Finding of the study indicates that there is significant relationship between Islamic banking and agricultural sector by using modes of financing such as *ijarah*, *diminishing musharaka*, *murabaha*, *sālam* and *muzāra'ah*.⁹ By the explanations it can be summarized that to optimize the agricultural land, it should be used efficiently and effectively. In Islamic economics, there are various contracts that can be used to optimize the agricultural land.

⁶ Siti Mariam Malinumbay S. Salasal, 'The Concept of Land Ownership: Islamic Perspective', *Buletin Geoinformasi*. 2 (2) (Malaysia: Penerbit UTM, 1998), 286-287.

⁷ Zulkifli Hasan and Muhammad Najib Abdullah, 'The Investment of Waqf Land As An Instrument of Muslims' Economic Development in Malaysia', paper presented at the International Conference on Endowment Investment, 4-6 February, Dubai

⁸ Norhalizah Mohd Nor and Mustafa, O.M, 'Categorization of Waqf Lands and Their Management Using Islamic Investment: The Case of the State of Selangor, Malaysia', *Insaniah IRTI International Conference on Islamic Economics, Banking and Finance*, 18-19 August 2009, (Kedah: Kolej University Islam Kedah).

⁹ Muhammad Taimoor Hassan et al, 'Role of Islamic Banking in Agriculture Development in Bahawalpur, Pakistan'. *International Journal of Learning & Development*, 2 (3) (2012), 123-138.

Land In Islam

The land is related to term "ardh" that constitutes to human's life. The first discussion of land in the Qur'an is about human creation. It is mentioned in Surah al-Hijr, 26: "We created man from sounding clay, from mud moulded into shape". It means the land is one of the elements correspond to human's life. Furthermore, it is owned by Allah absolutely and man is a trustee to administrate it, as mentioned in Surah al-Maidah, 120: "To Allah belongs the domination of the heavens and the earth and whatever is within them. And He is over all things competent." It is also mentioned in Surah al-Rahman, 10 "And the earth He laid (out) for the creatures" and Surah al-Araf, 10 "And We have certainly established you upon the earth and made for you therein ways of livelihood. Little are you grateful." Indeed, the earth created by Allah is granted to the mankind providing their livelihood to sustain the life on the earth.

Moreover, the Qur'an mentions that the land is used for three purposes. Firstly, it is used for agricultural. It is mentioned in Surah al-Anam: "Eat of their fruit when they come to fruition and pay His due on the day of harvesting". Surah al-Baqarah, 267 states: "Believers! Spend (in the way of Allah) out of the good things you have earned and out what We have produced for you from earth". Secondly, it is used for residential (Al-Baqarah, 36), Allah says: "...and you will have upon the earth a place of settlement and provision for a time." Then, there is also a portion to the earth for build the residential for shelter, market, factory and others.

Thirdly, it is used for other needs that can be generated from earth (soil), mineral, forest etc. Surface of land is the importance factor of production that human walk, work, build houses and do everything,¹⁰ as mentioned in Surah 1, 36: "And there is for you in the earth an abode and provision for a time". From mineral, it refers to iron in these words: "And We sent down iron wherein is hardness and advantages to me". In Surah al-Shû'ara, it mentions: "We produced fire you out of the green tress, so that with it you kindle". By these explanations can be understood that the land has potential resources used for human life.

¹⁰ Afzaul ur Rahman, *Economic Doctrine of Islam*, vol. 1. (Pakistan: Islamic Publication, Ltd, 1980), 178.

The land is bestowed from Allah that should be preserved, as mentioned in Surah al-Araf, 74: "And remember when He made you successors after the "And and settled you in the land, (and) you take for yourselves palaces from its plains and carve from the mountains, homes Then remember the favors of Allah and do not commit abuse on the earth, spreading corruption" After the man get wealth from his activities in earth, he must pay due in the form zakāh and sadaqāt.

In Sunnah, the ideas of land are mostly stated in operational description. It is narrated Abu Huraira: Allah's Apostle said: "Whoever has land should cultivate it himself or give it to his (Muslim) brother gratis: otherwise he should keep it uncultivated."¹¹ Indeed, Allah's Apostle commands us to cultivate the land in order to be productive, otherwise it should be idle. For the land belongs not to anybody, Aisha narrated that: The Prophet said. "He who cultivates land that does not belong to anybody is more rightful (to own it)." Urwa said, "Umar gave the same verdict in this Caliphate."¹² However, if the landowner cannot cultivate his land by himself, he can give it to his brother to cultivate it with various schemes are permissible by Islam.

As narrated by Ibn 'Umar: "Allah's Apostle rented the land of Khaibar to the Jews on the condition that they work on it and cultivate it, and take half its yield."¹³ Accordingly, it is narrated by Zaid Ibn Aslam: From his father...Umar said, "But for the future Muslim Generations, I would have distributed the land of villages I conquer among the soldier as the Prophet distributed the land of Khaibar."¹⁴ Umar meant to keep the land as *waqf* for Muslims to benefit by through the *al-khāraj*. These are related to state economy that the land cultivated should increase revenue of state by imposing tax of agricultural land to society in the form of *'ushr* (for Muslim) and *khāraj* (for non-Muslim).

There are many terms that related to agriculture as mentioned in Hadits such as *muzāra'ah*, *iqta'*, *hima*, *musāqah* and *sālam* (salaf). In *muzāra'ah*, there are a lot of controversy appear among different

¹¹ Imam Bukhari, Shahih al-Bukhari: The Translation of the Meanings of Shahih Al-Bukhari. vol. 3 no. 530, Trans, Muhammad Muhsin Khan. (Pakistan: Kazi Publication, 1986), 309.

¹² Ibid, 306.

¹³ Ibid, 409.

¹⁴ Ibid, 305.

schools of *fiqh*. The fact, this *muzāra'ah* was practice by Prophet and his companions by participating of labor and capital. Some companions of the Prophet cultivated the land on the basis of having a portion of yield. For examples, Abdul Rahman Ibn Al-Asward collaborated with Abdul Rahman Ibn Yasid in agriculture and Umar made deal with the people that if he provided the seeds, he would get half of the yield.¹⁵ Therefore, *muzāra'ah* is also form of participation and it is permissible to be done.¹⁶ However, the practice of *iqta'* was narrated by Anas:

“The Prophet called the Anshar so as to grant them a portion of (the land of) Bahrain. They said: “O Allah’s Apostle! If you grant this to us, write a similar document to our Quraish (emigrant) brothers.” But the Prophet peace be upon him did not have enough grants and he said: “ after me you will see the people giving preference (to others), so be patient till you meet me.”¹⁷

The practice continued to time of four companions of the Prophet. As Stated by Abu Yusuf this *iqta'* (Fiefs) is given to those who achieve something valuable in Islam.¹⁸ Hence, the practice of *hima* (reserve land) was reported by ‘Amr Ibn Shuaib that his grandfather got *hima* from the Prophet called as *Salabah*, after he paid the *'ushr*. However, the *hima* was stopped by Umar Ibn Khattab, because the *'ushr* he used to pay in the time of Messenger of Allah.¹⁹ Another important topic that is mentioned in hadith is about irrigation (*musāqah*), because it is regarded as important aspect in agriculture. In the case of one Anshar and Zubeir on irrigation conflict, the Prophet asked Zubeir to irrigate his land and withhold the water till it reaches the walls that are between the pits around the tress.²⁰

¹⁵ Imam Bukhari, *Shahih al-Bukhari: The Translation of the Meanings of Shahih Al-Bukhari*, vol. 3 no. 678, 301.

¹⁶ Muhammad Akram Khan, *Economic Teachings of Prophet Muhammad: A Select of Hadits Literature on Economics* (Pakistan: Darul-Ishaat, 1992), p. 43.

¹⁷ Imam Bukhari, *Shahih al-Bukhari: The Translation of the Meanings of Shahih Al-Bukhari*, vol. 3 no. 678, 331.

¹⁸ Abu Yusuf, Yaqub bin Ibrahim, *Kitab Al-Kharaj: Taxation in Islam Volume. III*, Trans. A. Ben Shemesh (Leiden: E.J. Brill, 1969), p. 75.

¹⁹ Muhammad Akram Khan, *Economic Teachings of Prophet Muhammad: A Select of Hadits Literature on Economics*, 57.

²⁰ Abu Yusuf, Yaqub bin Ibrahim, *Kitab Al-Kharaj: Taxation in Islam Volume. III*, Trans. A. Ben Shemesh (Leiden: E.J. Brill, 1969), 73.

Furthermore, there is also explanation regarding contract of *sālam*. It is another form of debt used Islamic contract related to agricultural product. It is defined as the sale of an article which will be delivered to the buyer only after a delay fixed in advance.²¹ Explicit hadith mentions about *sālam* is that “*whoever wishes to enter into a contract of sālam, he must effect the sālam according to the specific measure and the specified weight and the specified date of delivery.*”²² As a result, there are many practices of agriculture explained in Hadith.

The Land Ownership in Classical Islamic Jurisprudence

In Sharah, any land that falls under state s jurisdiction is divided into the following five broad categories:²³

a. Land belonging to those who embraced Islam

This land is belonging to Muslim that was applied to both movable and immovable, and to agricultural as well as non-agricultural lands. Type of this land is called „*ushr* land and it is related „*Ushr* (land tax for Muslim). Abu Yusuf explained that inhabitants embraced Islam at the hands of the Holy Prophet and remained owners of their lands and ‘*Ushr* was levied on them.²⁴ Abu Ubayd stated the remained owner of the lands in their possession and no taxes other than ‘*Ushr* was levied on them.²⁵ This practice was initially established by the Holy Prophet and his *Khulafā al-Rāshidūn*. Its category is classified as privately ownership by individual and fit to be applied in majority of Muslim countries.

b. Land owned by those subdued into submission by force

This category of land is divided into three historical evidences in the era of the Holy Prophet and *Khulafā al-Rāshidūn*. First evidence told us there was magnanimous declaration between the

²¹ Nayla Comair-Obeid, *The Law of Business Contracts in Arab Middle East* (UK: Kluwer Law International, 1996), 29,

²² Imam Muslim, *Shahih Muslim*, vol. III, Trans. Abdul Hamid Siddiqi (Lahore: Sh. Muhammad Ashraf, 1992), 844-5.

²³ Sayyid Abul A lâ Mawdûd, *First Principles of Islamic Economics*, 122.

²⁴ Abu Yusuf, Yaqub bin Ibrahim, *Kitab Al-Kharaj: Taxation in Islam Volume. III*. Trans. A. Ben Shemesh, 82.

²⁵ Abu Ubayd al-Qasim Ibn Salam, *Kitab al-Amwal*, Trans. Noor Mohammad Ghifari (New Delhi: Adam Publisher & Distibutors, 2006), 79.

Holy Prophet and the blood-thirsty Makkans, that they could receive a general amnesty. They remained the owner of land and property, while they embraced Islam „*Ushr* was levied on their agricultural land. Second precedent happened at Khayber. This land and property is belonging to Allah and His Apostle (1/5) and the remaining portion (4/5) was distributed among the soldiers. For those who possessed the land, „*Ushr* was levied on that. Last precedent is related to case of Umar Ibn Khattab about conquered land in Syam and Iraq. Hence, the conquered land remained to the original owners who were proclaimed as *Dhimmis*. Accordingly, *Jisyah* (capital tax) and *Kharāj* (land tax) were levied on these lands.

c. Land belonging to nobody

This category of land, in possession of the state, consisted of two major classifications, namely: *al-mawāt* (wasteland) and *khālisah* (land declared as state property). *Al-mawāt* is lands located away from habitation whose owners are not traceable or the lands, which were never occupied by anybody.²⁶ To ash-Shafi’I is any land which is not cultivated or constitute, while Abu Hanifah says that *mawāt* is the land that is distant from cultivated land and it does not reach water.²⁷ *Khālisah* includes the following types of lands such as abandoned land by their owners authorizing government to put them to use as deemed fit, land annexed by Islamic state as punishment for their owners’ anti-state activities and lands declared in conquered territory.²⁸ Both lands were implemented in Islamic history that contributed to development of economic in that time. The land can be granted to society for the purpose of nation interest. If the land is not being correctly used, the state can revoke it, this happened in the time of Umar Ibn Khattab. Umar did not allow Bilal Ibn Harits to retain the entire ‘Aqiq valley, which had been gifted to him by the Prophet Muhammad, because of his failure to put the whole of it to use.²⁹

²⁶ Muhammad Akram Khan., *Islamic Economics and Finance: A Glossary* (London and New York: Routledge, 2003), 12.

²⁷ Al-Maward, *Al-Ahkam Al-Shultaniyyah: The Law of Islamic Governance*, Trans. Asadullah (Yate. London: Ta-Ha Publishers Ltd, 1996), 252.

²⁸ Sayyid Abul A lā Mawdūd, *First Principles of Islamic Economics*, 129.

²⁹ *Ibid*, 137.

d. Awarded land by the State

There are two awarded lands that that invented during the caliphate of „Umar Ibn al-Khattab, they are: 1) *Iqta* or *Individual ownership system* and 2) *Hima* or *collective land-ownership system*. The grant of *iqta* s conferred proprietary rights on the beneficiaries such that an *iqta* became *iqta tamlik*, where the owners were, free to use the land in any way they liked, while for *hima* means the land is owned by one or more tribes.³⁰ In the case of fief (*iqta*), the Imam may give the ownership right of such land to whoever revives or reclaim as happened in time the messenger of Allah who gave Zubayr Ibn Al-Awwam a piece of the unreclaimed land.³¹ Thus, lands granted on condition of cultivation and consequently of tax-payment, if left idle for three consecutive years, will be forfeited and re-allotted by the Imām.³² These categories of land are charged to ‘*ushr* tax as practice in the time of Messenger of Allah and His companions. To Abu Yusuf, the ‘*ushr* is only charged on fiefs when the granted lands require investment for digging canals, erecting farm buildings and other heavy expenses for the farming of the granted fief.³³ For dead-land which has been made into reserve (*hima*) is that which cannot be revived or converted into private property, but it may remain available for all for the purpose of growing the hay and posturing an animal.³⁴ The *hima* is granted for all Muslims, or for the poor of indigent, there are two opinions in the matters: Firstly, it is not permitted and that *hima* is only for the Messenger of Allah peace be upon him, based on narration of As-„Ab Ibn Jutsamah, that the Messenger of Allah created *hima* al-Baqi, said: “*There are no reserve (hima) except for Allah and His Messenger.*” Secondly, the *hima* created by the Imams is permitted after him (The Messenger of Allah), as he made them for the benefit of the Muslims not for himself. This practice was done by his companions such as Abu Bakr, Umar,

³⁰ Sharifah Hayaati Syed Ismail al-Qudsy and Asmak Ab Rahman, ‘Effective Governance in the Era of Caliphate ‘Umar In Al-Khattab’, *European Journal of Social Sciences*, Volume 18, Number 4 (2011), 620.

³¹ Abu Yusuf, Yaqub bin Ibrahim, *Kitab Al-Kharaj: Taxation in Islam Volume. III*. Trans. A. Ben Shemesh, 62.

³² Cengiz Kallek, ‘Economic Views of Abu Ubayd’, *IIUM Journal of Economics & Management*, 6 (1) (1998), 11.

³³ Abu Yusuf, Yaqub bin Ibrahim, *Kitab Al-Kharaj: Taxation in Islam Volume. III*. Trans. A. Ben Shemesh, 73.

³⁴ Al-Mawardi, *Al-Ahkam al-Sulthaniyyah wal Wilayat al-Diniyyah*, (Beirut: Darul kutub al-„alamiyyah, 2006). p. 233.

Utsman, etc. As narrated by as-, „Ab Ibn Jutsamah that *there are no reserve (hima) except for Allah and His Messenger*, means that there should be no *hima* except for the same purposes done by Allah and His Messenger, for the poor and the indigent.³⁵

The Land Tax in Islamic Economic History

In the history of Islamic economic thought, there were several Muslim scholars who focused on the subject of land such as Abu Yusuf, Imam Mawardi and Abu Ubayd. Their conception of land is related to agricultural taxes and policies. Firstly, it is about land tax. Abu Yusuf says that the best system of taxation for *bayt al-māl* and the most adequate one to prevent injustice to tax payer is just proportion share-tax system of taxation known as *al-musaqamah*.³⁶ The rate of land tax depends on type of agriculture such as crops are naturally irrigated is 40%, crops are artificially irrigated is 10%, fruits and vegetables are 33% and summer crops is 25%.³⁷ However, *al-khāraj* was imposed on the land which trees were planted.³⁸

Abu Yusuf in his book "*al-khāraj*", mentions government responsibility on rural development projects for the largely agricultural economy of the time.³⁹ To him, the ruler of an Islamic state has the supreme responsibility to pursue every possible avenue to promote the common good for its citizens and distinct component of that is the promotion of the economic welfare of the populace.⁴⁰ However, importance discussion should be highlighted in his ideas is on financing infrastructure projects and its relation to land optimization. He says (1927, 116):

The Muslim is partners in the Tigris, Euphrates and similar larger rivers or torrents and may freely take their waters

³⁵ Ibid, 233-234.

³⁶ Abu Yusuf, Yaqub bin Ibrahim, *Kitab Al-Kharaj: Taxation in Islam Volume. III*. Trans. A. Ben Shemesh, 101.

³⁷ Ibid, 101.

³⁸ Abu Ubayd al-Qasim Ibn Salam, *Kitab al-Amwal*, Trans. Noor Mohammad Ghifari, 80.

³⁹ Muhammad Nejatullah Siddiqi and S.M. Ghanzafar, 'Early Medieval Islamic Economic Thought: Abu Yusuf (731-798 AD) Economics of Public Finance', in *Medieval Islamic Economic Thought: Filling The "Great Gap" In European Economics*, ed. S.M. Ghanzafar (USA: RoutledgeCurzon Taylor and Francis Group, 2005), 221.

⁴⁰ Abu Yusuf, Yaqub bin Ibrahim, *Kitab Al-Kharaj: Taxation in Islam Volume. III*. Trans. A. Ben Shemesh, 3-6.

from themselves and their beasts for drinking and for irrigating their fields and orchards, without restriction. However, if someone wants to open a new canal on his own land to bring water to it from a large river, he will be allowed to it only if no damage will be caused to the river by this new canal; otherwise he will be prevented.⁴¹

By the statement it can be described that the role of government agricultural projects are required to promote economic welfare. The government responsibilities are such a maintaining rivers to provide irrigation, repairing irrigation, canal and dams, recovering land that are flooded and undertaking all possible measure to enhance the welfare of farmers.⁴² To Abu Ubayd, *khāraj* is spent to meet the expenses of soldier and to pay their family allowances, while *'ushr* is (a sort of) *sadaqah* (Zakah) and it is spent on the prescribed eight heads.⁴³

Islamic Economics Proposal: Optimization of Agricultural Land

The study of agriculture land is very comprehensive in Islamic economics that is derived from sources of Islam either primary or secondary. In Islamic economics, the land can be considered as private, public and state ownership as explained and practiced from previous chapter. There are some ideas of land derived from Islamic source that can be implemented in today's world such as *iqta*, *hima* and *waqf*.

The Concept of Land in Islamic Economics

From previous explanation can be summarized that the land in Islamic economics can be classified into two important concepts: land ownership and contracts related to agriculture area. Accordingly, the private land for agriculture can be classified into two categories, namely land owned by Muslim and Non-Muslim. Both lands are levied on land tax such *'ushr* for Muslim and *khāraj* for non-Muslim. The right to reduce and increase the land tax is

⁴¹ Abu Yusuf, Yaqub bin Ibrahim, *Kitab Al-Kharaj: Taxation in Islam Volume. III*. Trans. A. Ben Shemesh, 127.

⁴² Muhammad Nejatullah Siddiqi and S.M. Ghanzafar, 'Early Medieval Islamic Economic Thought: Abu Yusuf (731-798 AD) Economics of Public Finance', p. 221.

⁴³ Abu Ubayd al-Qasim Ibn Salam, *Kitab al-Amwal*, Trans. Noor Mohammad Ghifari, p. 80.

the authority of the state, but it should consider to the ability of the land and tax payers. This category of land can be rented or sale, because it is owned by individually using for economic activities especially in agriculture.

Moreover, if the land is abandoned or not use by anybody, it will be considered as land state and public land. In *fiqh*, it is related to *al-mawāt* (wasteland) that can be granted to others in form of fief (*iqta*), reserve (*hima*) and *waqf*. In agricultural context, the fief (*iqta*) is given to people who can contribute to development of agriculture. There are many people who are experts in agricultural field, but they do not have such lands to be managed by them. So, the state can make *iqta* agreement to those people who are interested to develop the agriculture. This land is granted on condition of cultivation and consequently of tax-payment, if left idle for three consecutive years, will be forfeited and re-allotted by the state.

For reserve land (*hima*) is given for those who revive the land for the purpose of growing the hay and posturing an animal. This land cannot be converted to private property, because the state just gives the authority to the person who revives the land to be productive. However, this category of land is granted for all Muslim and for the poor and the indigent. It is also imposed on land tax. Last category is *waqf* land or public land. The lands for agriculture are given to some organizations to cultivate them and when they harvests, the share will be distributed among parties after tax payment. Hence, the profit from agriculture will be used for public interest such as building canal, irrigation etc.

Revenue from tax payment is used and allocated for the interest of society especially in agricultural project such as providing irrigation, repairing irrigation, building canal and dams, recovering land that are flooded and undertaking all possible measure to enhance the welfare of farmers. Furthermore, it is also located for improving skill of farmers by conducting such training initiated by the state. These agricultural budgets are used to optimize the agricultural land and to enhance economic welfare of the society.

Agriculture Through Islamic Modes of Financing

Agriculture works are different with other sectors in term of risk. The agricultural sector is prone to many natural risks; therefore many financiers have been discouraged from investing in this

sector.⁴⁴ Then, the agricultural sector can benefit from Islamic financing techniques in order to attract the financiers investing their fund in the agricultural business. This section attempts to find some of the modes to be used in financing of agriculture.

a. Equity Based Financing

Its mode is based on *musharakah* contract that is defined as contribution from two parties based on cash contribution or in the company with combination of cash and real asset. The derivate of this mode can be classified into three modes. Firstly, *muzāra'ah*, is partnership in farming, which one provides the land or physical inputs of production and others will manage the land based on profit share. This application is legally acceptable by the majority of the schools of *fiqh*. There are certain requirements of *muzāra'ah* to be legally viable are such as binding of contract between two parties, clear of functions and obligation among each party, location and characteristic of land must be cleared, goal of production must be defined (for crops or livestock), period of contract must be done effectively and method of distribution of output must be stated clearly in the contract.⁴⁵ Secondly, *musāqah*, is an agreement between two individuals wherein one provides the orchards or trees owned and other the labor and expertise for irrigation service and up keep.⁴⁶ Moreover, it must be specifically stated in agreement that share of enterprise output will go to the provider of labor and expertise. Thirdly, *al-musharakah al-mutanaqisah* (Diminishing partnership), consists of three contract; *musharakah*, *ijarah* and *bay'*.⁴⁷ In agricultural sector is used to finance a package of physical inputs to produce crops. The agreement between financiers and farmers must be defined clearly in term of method of payment, profit share and maturity of ownership.

⁴⁴ Mahmoud A. Gulaid, *Land Ownership in Islam: A Survey*, 44.

⁴⁵ *Ibid*, 44.

⁴⁶ *Ibid*, 47.

⁴⁷ Ahamed Kameel Mydin Meera and Dzuljastri Abdul Razak, 'Home Financing through the *Musharakah Mutanaqisah* Contracts: Some Practical Issues', *J.KAU: Islamic Economics*, 22 (1) (2009), 5.

b. Debt Based Financing

There are several Islamic contracts based on debt financing that is appropriate with agricultural sector such as *murabaha* and *sālam*. *Murabaha* is a purchase and sale that can be used to finance needs of the agricultural sector. Accordingly, the farmers require certain goods in term of its characteristic and quality, and then IBs will study specification of the goods required by the farmers. Furthermore, IBs inform the margin of profit to the farmers and then if all requirements are acceptable by the farmer, it can be continued to the contract between two parties. For *sālam*, is a type of sale that can be defined as purchase or sale of a commodity for a deferred delivery in exchange for immediate payment.⁴⁸ Some models of *sālam* have been formulated by Kaleem and Wajid (2009).⁴⁹

The models proposed by them are used a mediator or third party who enable to give an advice and to find market for agriculture. In model one, IBs can appoint middleman who can identify the potential farmers from his area. Another model is that IBs Bank opens an independent subsidiary, which deals with the farmers on behalf of the bank. Then IBs provide financing to the farmers against the recommendations of its subsidiary or middleman. On the hand it is the responsibility of the subsidiary or the middleman is to provide technical advice, monitoring and collecting the crop from farmers. Once the crop is received, the subsidiary or the middle man is responsible for selling it in the market and share the profit with the bank as per agreement.⁵⁰

On the other hands, Muneera et al (2011) proposes a hybrid of *sālam* using a *wakāla* contract.⁵¹ The IBs as the buyer will finance the farmers who need assistance to produce agricultural products. The farm size, product, quality and delivery time must

⁴⁸ Mohd. Nasir Mohd. Yatim and Amirul Hafiz Mohd. Nasir, *The Principle and Practice of Islamic Banking and Finance* (Selangor: Prantice Hall, 2007), 65.

⁴⁹ Ahmad Kaleem and Rana Abdul Majid, 'Application of Islamic Banking Instrument (*Bai Salam*) for Agriculture Financing in Pakistan', *British Food Journal*. 111 (3) (2009), 286.

⁵⁰ *Ibid*, 286.

⁵¹ Aishath Muneera et. al, 'The possibility of application of salam in Malaysian Islamic banking system', *Humanomics*, 27 (2) (2011), 145.

be clearly stated in document agreement. Then, if all *sālam* requirements have been fulfilled by the farmer, the IBs will then call the Farmers, and negotiate the price. When agreed price is determined, the agreement is signed between the Bank and the Farmer. Moreover the name of guarantor must be included in the agreement to prevent if any failure happens in process of crops.

After that IBs make independent contract to the farmers in the form of *wakālah*, meaning that when the crops harvest, the farmers will deliver the products constructively to the Bank and then as an appointed agent of the Bank, the Farmer would sell the products immediately. The profit of selling would give to IBs and then the farmers will attain the wage as mentioned in the document agreement. For the agreement must be cleared between the farmer, mediator and IBs in order give just in transaction.

c. Ijarah Based Financing

This mode of financing can be used to provide the pool of machinery, equipment and other goods to accelerate agricultural production. It can be used pure *ijarah* or *ijarah muntahiah bi al-tamlīk* (Diminishing of rental). For example, IBs provide fund for machinery required by the farmers for given period of time. The payment of rental can be monthly or decided by two parties. In maturity, the farmers will own the machine as written in agreement document.

d. Takaful for Agriculture

The crops are subject to many natural risks faced by the farmers, therefore it is needed to cover the risks by developing Islamic insurance or *takāful* in agricultural sectors. To, the purpose of agricultural insurance is to maintain the welfare of the farmers in the event of losses, to continue their productive farming following losses, to stabilize social and economic situation of the rural community etc.⁵² The agricultural sectors can be used *microtakāful*, is based on the Islamic concepts of

⁵² Mahmoud A. Gulaid, 'Financing Agriculture through Islamic Modes and Instruments: Practical Scenarios Applicability', 84

ta'awun (mutuality) and *tabarru* (donation).⁵³ Slangen (2002) says who will provide the agricultural insurance whether public or private sector.⁵⁴ Both two can be considered to administrate Islamic insurance for agricultural sectors.

The Role of State and IBs in Optimizing the Land Agriculture

Agriculture is a central livelihood to sustain human life. In Islamic economics, the role of state to promote agricultural sector can be traced in many Islamic literatures. However, it is the state obligation to provide better life for human that can be through agricultural sectors. As mentioned in previous that the land is Islam can be owned by individual, public and state.

The land should be optimized to cater human needs and to increase economic development. To optimize the land agriculture, the state can grant the land to some people who are experts or well practice either individual or organization in agricultural sectors through *iqta*, *hima* and *waqf*. Moreover, *iqta*, *hima* and *waqf* are subject to land tax that income of tax will be used for agricultural interest as implemented in the Islamic age. It is used proportional tax of agriculture, because it will benefit to state and fair to the farmer.

Furthermore, after the lands are granted by government, the farmers (individual or group) need the assistance to cultivate them in the form of partnership or rental. IBs can play role to facilitate the farmers' need. There are many Islamic modes of financing can be implemented to optimize the agricultural land such as *musharakah*, *muzāra'ah*, *musāqah*, *murabaha*, *sālam* and *ijarah*. These modes of financing must promote a just between two parties by realizing good governance in the implementation. Another important aspect to maintain the welfare of farmer is through Islamic insurance or *takāful* to prevent some unexpected events such natural disaster and climate change.

⁵³ Anja Erlbeck et al. 2011. *Microtakaful: Field Study Evidence and conceptual Issues*, viewed 23 April 2013. http://www.google.com.my/#q=scheme+of+islamic+microinsurance&hl=en&ei=_QuKUdbAG8rorAfaj4GwDw&start=30&sa=N&bav=on.2,or.r_qf.&fp=3f8806d99fdcd78f&biw=1440&bih=772.

⁵⁴ Anthon Slangen, 'Agricultural Insurance in Developing Countries A Way Forward', *International Confrencia "Agricultura Insurance and Revenue Coverage*, 13-14 May, 2002, Spain), p. 2.

By integrating the role of state and Islamic banks (IBs), it helps the farmers to increase their standard of life and helps others to sustain the life. So, there are certain steps to perform this model. First, the state will grant the lands to the people to cultivate it efficiently and effectively. Then, the state announces to Islamic banking and financial institutions to participate in managing the granted land by the government. The state takes his position as guarantor to mitigate the risks in agricultural sectors. Second, the IBs will take their parts to participate in managing the agricultural lands by several of Islamic financing modes. Hence, the government establishes agricultural department as intermediary institutions that is responsible to provide technical advice, monitoring and collecting the crop from farmers and selling it in the fresh market or the process companies.

Third, when the crops harvest, it will sell to fresh market or processing company. The profit will be shared among parties after tax payment if it is used for model 1. However, in model 2, the profit goes to IBs and then it will give a wage to the farmers as agents (*wakālah*) who sell the crops. Furthermore, in model 1 it can be used *musharakah*, *muzāra'ah* and *musāqah of financing*, while in model 2 is used *sālam bil wakālah*.

Revenue from land tax will be allocated into two categories: 1) agricultural security and 2) agricultural interest. The allocation of agricultural security is using for unexpected events such natural disaster and climate change that can damage the farmers' crops. The percentage of agricultural security depends on government decision; it may be 10% or 20%. Consequently, the allocation of agricultural interest is for the interest of society especially in agricultural project and improving skill of farmers by conducting such training initiated by the state.

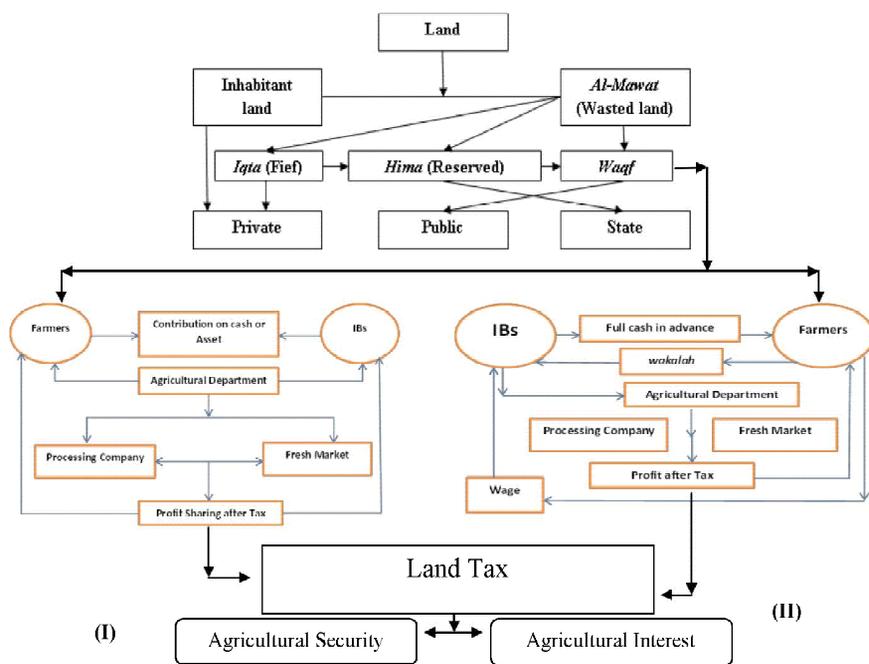


Figure 1: Model of Optimizing Agricultural Land

Conclusion

The concept of land in Islamic economics can be traced from Islamic primary and secondary sources. The land in Islamic economics can be owned by individual, public and state. Some lands are idle, without any action to cultivate it. Therefore, *al-mawāt* (wasteland) is one of important aspects studied in Islamic sources. The state will grant the land to individual or group that can revive and cultivate it into several ways such as fief (*iqta*), reserve (*hima*) and *waqf*. This is related to concept of land tax that consists of two categories, namely *al-khāraj* for non-Muslim and *‘ushr* for Muslim. Moreover, the land taxes are collected from the farmers is for their interest too. Furthermore, the revenue of land tax is allocated for agricultural project such as maintaining rivers to provide irrigation, repairing irrigation, canal and dams, recovering land to enhance the welfare of farmers. As a result, the land in Islamic economic must be productive and benefit to society welfare.

Islamic banking (IB) and financial institutions (IFs) can play role in helping the farmers by mobilizing fund to facilitate their crops. There are many Islamic modes of financing can be used for agricultural sectors such as *musharakah*, *muzāra'ah*, *musāqah*, *murābaha*, *sālam* and *ijārah*. If these modes of financing are used properly, it will help the farmers increase the harvest. So, to optimize the agricultural land, the state and Islamic banks can contribute together to solve the farmers problem such lack of financial support, shortage of water irrigation, lack of training and technology use by integrating model of Islamic financing and policy of land tax. Then, the allocation of land tax revenue should be allocated in two ways; agricultural security and agricultural interest. These two are given to the farmers in order to make sustainable agricultural development.

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