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Utilising Permaculture to Develop Abandoned Waqf Land in Resolving Food Insecurity in Indonesia

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ABSTRACT

Purpose – This paper aims to explore the potentials of permaculture in developing abandoned waqf land to resolve the challenges of food insecurity.
Design/methodology/approach – This study uses data collected from primary sources such as Quran and Hadith, and secondary sources from books, articles, journals, web sites and e-books.
Findings – Waqf lands, in general, are still managed by traditional methods and bound to limited purposes, such as mosques, graveyards, and madrasah. Based on collected data, many waqf lands are abandoned and unproductive. However, waqf lands have many great potentials if managed and utilised productively. Waqf managers and trustees should be able to enhance productivity of waqf lands for numerous purposes, such as business centres, markets, hotels, housing and agricultural projects. This paper explores the roles of permaculture in developing abandoned waqf lands in Indonesia and highlights the importance of agriculture from the Islamic perspective. Regenerative strategic solutions for food insecurity are designed by analysing significant potentials of waqf land redevelopment via permaculture.
Practical implications - The expected outcome of this paper is to encourage the farmer and agriculture enthusiast to work with permaculture concept and researchers to explore the potential of permaculture or other regenerative method of agriculture to develop and revive the abandoned or idle waqf lands to overcome food insecurity.

Keywords: *Waqf land, Permaculture, Agriculture, Food Insecurity*

1.0 INTRODUCTION

Land, according to Islam, is a natural resource that should be used productively as part of humanity's responsibility to prosper the earth. Productive land is beneficial not only for meeting human needs, but also for maintaining the balance of natural ecosystems. Unfortunately, according to the Indonesian Ministry of Religion, 41.18 percent of Indonesia's waqf lands, or 22,706 hectares, are idle and uncertified (Ministry of Religion of Indonesia, 2021). This is a significant challenge for Muslims, especially at a time when food insecurity is widespread. During the Covid-19 pandemic in 2020, nearly 2.4 billion people worldwide were food insecure; more than 720 million were hungry, and 928 million were in a very severe stage of food insecurity (FAO, IFAD, UNICEF, WFP and WHO, 2021). It means that many among us often pass a day or more without any food to eat.

When the United Nations (UN) launched the 'Zero Hunger Mission 2030' as one of its 17 Sustainable Development Goals (SDGs), food insecurity was in a bad state; 10 million new cases were recorded each year, with 60 million new cases in the previous five years. The Covid-19 pandemic exacerbated the situation, with 148 million more people

experiencing food insecurity in 2020. This occurrence demonstrates the failure of today's modern food system (FAO, IFAD, UNICEF, WFP and WHO, 2021).

According to FAO statistics, 16.7 million Indonesians will face severe or moderate food insecurity in 2020, including 7.5 million stunted children under the age of five (FAO, IFAD, UNICEF, WFP and WHO, 2021).

Analysing waqf land abandonment and food insecurity crises, the Muslims have great responsibilities to resolve both matters at the same time. A regenerative land management that can be applied is the permaculture method. This method is quite comprehensive in terms of ecological, social, cultural and economic dynamism. This approach has succeeded to transform a barren land in Jordanian region via the 'Greening the Desert' project by Permaculture Institute.

Therefore, this study aims to analyse the permaculture approach as an effort to productively manage waqf land to overcome food insecurity, as a way to prosper the earth and empower local communities.

2.0 ISLAM, WAQF AND PERMACULTURE

Waqf is a noble philanthropic act for Muslims because the reward is constant and infinite, even after death (Chowdhury, Chowdhury, & Muhammad, 2012). In reference to a hadith narrated by Abu Hurairah:

The Messenger of Allah (ﷺ) said, "*When a man dies, his deeds come to an end except for three things: Sadaqah Jariyah (ceaseless charity); a knowledge which is beneficial, or a virtuous descendant who prays for him (for the deceased)*." (Muslim No. 1383)

According to Shaikh Ali Bassam, sadaqah jariyah (ceaseless charity) in this hadith is waqf. Thus, waqf was greatly encouraged by the companions of prophet Muhammad and *tabi'in* (Abdullah, 2016).

Waqf is a platform of philanthropy that encapsulates many aspects including agriculture, religious and spirituality, education, economy, scientific and technological development, health care, environmental protection, animal care, public infrastructures, transportation and others (Kahf, 2021). The history recorded the first waqf during the time of prophet Muhammad when a companion, Mukhairiq, made his will to give his seven orchards in Madinah for charity. The Prophet took hold of the orchards and gazetted the lands as charitable waqf. Another companion, 'Umar bin al- Khattab was advised by prophet Muhammad to endow his land, as mentioned by Abdullah bin Umar:

When `Umar got a piece of land in Khaibar, he came to the Prophet saying, "I have got a piece of land, better than which I have never got. So what do you advise me regarding it?" The Prophet said, "If you wish you can keep it as an endowment to be used for charitable purposes." So, `Umar gave the land in charity (i.e. as an endowments on the condition that the land would neither be sold nor given as a present, nor bequeathed, (and its yield) would be used for the poor, the kinsmen, the emancipation of slaves, Jihad, and for guests and travelers; and its administrator could eat in a reasonable just manner, and he also could feed his friends without intending to be wealthy by its means." (Bukhari No. 2772).

The Book of Endowment mentioned that Uthman bin Affan bought a well from a Jewish named Rumah, and gifted it as waqf (an-Nasa'i No. 3625). Date palm trees were grown around the well, and later the Saudi government took care of it under the ministry of agriculture. Half of the revenue from the palm tree orchard is distributed among the poor and orphans, while the other half is deposited to a bank account under the name of Uthman bin Affan for charitable and investment purposes. Some of the funds were used to build a luxurious hotel and business centre in the heart of Madina city (Millichronicle, 2019).

An example of modern waqf is the agricultural development of Al-Rajhi Awqaf founded by Sheikh Saleh Abdul Aziz Al-Rajhi. The headquarters are located in the south east of Buraydah City, managing three projects: Al-Batin project with 5.466 hectares of land, Durma project with 760 hectares of land, and a 30 hectares land of Al-Hayer & Al-Tawfiq project. The projects grew date palm trees as main crops with 2085 of different types. The agricultural projects were recognised as the

biggest palm tree project of the world in 2005 (Rajhi Awqaf, n.d.).

In Indonesia, Bumi Langit was established in 2014 as a waqf institution. The foundation manages idle lands and revived them with the permaculture concept. With three hectares of land, the institute is working together with the people from surrounding neighborhoods. Permaculture does not only focus on agricultural activity that is free from chemical fertilisers and pesticides, but also integrates farming with aquaculture and alternative energy to achieve sustainable living (Bumi Langit, n.d.).

2.1 The concept of agriculture in Islam

In Arabic language, agriculture can be translated as *al-filāha*, which is derived from the word *falaha-aflaha-yuflihu*, meaning victory, success, luck, and true happiness (Mulawarman, 2020). *Al-falāh* and its derivations are mentioned at least 40 times in the Qur'an (Ummah, 2018). *Muflihun* in the Qur'an (2:50, 23:1, and 31:5) refers to the guided and successful people in worldly life and hereafter; those who are truly guided by the Lord (Mulawarman, 2011). *Al-falāh* is reminded daily in adhan and *iqamah*, when the Muslims are summoned to perform prayers: *hayya 'ala al-falah* means 'hurry to success'.

Interestingly, *fallāh* (farmer) shares the same root word with *al falāh*, that is *fa', lam, alif* and *ha'* or *falaha*. The transformation of falāh becomes fallāh forming a new meaning, namely farmer (Mulawarman, 2011).

The word of *aflaha* (أَفْلَحَ) originated from *al-falh* (الفلح) which mean "splitting or turning the ground". Based on this word, the farmer is referred to as *al-fallāh* (الفلاّح), because a farmer traditionally performs his agricultural activities by hoeing to split the soil, putting seeds on it, and then continuing with the usual farming processes (caring for it, making irrigation, adequate fertilisation, and so on) until the harvest is expected. These agricultural processes and activities give rise to the meaning of *al-fallāh* and *al-falāh* (Hady, 2018).

From the Islamic point of view, agricultural activities are not only rewarding for the producers, but also regarded as an act of submission to Allah. At the same time, the harvest gives benefits to the surrounding community and other creatures. It is considered as charity, as explained by prophet Muhammad:

"*There is none amongst the Muslims who plants a tree or sows seeds, and then a bird, or a person or an animal eats from it, but is regarded as a charitable gift for him*." (Bukhari No. 2320)

Moreover, agricultural activities bring the concept of *jannah* (paradise) to life, as stated in surah al-Naba, verse 16: وَجَنَّٰتٍ أَلْفَافًا (and gardens (*jannah*) of entwined growth). Sheikh Muhammad bin Shalih al-Uthaimin explained that *jannat alfafa* means lush gardens and orchards that shade each other because there are many beautiful and shady trees that cover what is underneath. The trees are dense and supporting each other, with sprinklers pouring water that comes out directly or expelled from the ground (Muhammad, 2005).

The above explanation fits well with the permaculture concept; it utilises lands with a completely natural approach. Most importantly, permaculture differs from industrial agriculture that utilises monocrop technique with no companion crop, which may harm the soil and plant with pesticides and chemical fertiliser, resulting in unhealthy products that affect the health of humans. Industrial agriculture mainly aims for profit maximisation, and neglects social responsibility.

2.2 Development of agriculture in Islam

In Islamic history, agriculture flourished successfully due to adaptation of agrarian techniques with the local needs. This adaptation is a result of integration of scientific knowledge and traditional wisdom from the Near East, Morocco and Andalusia (Bolens, 2008).

Kitab al-Filaha (Book of Agriculture) was written in the 6th century H (12 AD) by Abu Zakariya Yahya b. Muhammad or better known as Ibn Al-Awwam (died 580 H or 1185 AD) from Seville, Andalusia. This book accumulated and

refined other thoughts by other scholars in the previous two centuries. Ibn Al-Awwam revolutionised agriculture and tried to understand the knowledge about plants and their use in medicine and gastronomy through the science of botany (Olson & Eddy, 1943). It mentioned that the very first farmer who plowed and sowed the earth was prophet Adam, inspired by Allah and guided by inner instinct (Al-Awwam, nd).

Agriculture is an important sector in any civilisation, because it produces food for humans, keeping the wellbeing of life (Khuluq, Syamsuri, & Setiawan, 2020). During Prophet Muhammad's era, agriculture was encouraged and also a tool to tighten the brotherhood between Ansar and Muhajirin (Sari, 2015) (Qardhawi, 1993). He recognised the expertise and interest of Ansar tribe in agriculture, by stating أَنْتُمْ أَعْلَمُ بِأَمْرِ دُنْيَاكُم (You [the Ansar] know better about your world affairs [agriculture])" (Muslim No. 2363). The Prophet further said: *"Never does a Muslim plants a tree except that he has the reward of charity for him, for what is eaten out of that is charity; what is stolen out of that, what the beasts eat out of that, what the birds eat out of that is charity for him. (In short) none incurs a loss to him but it becomes a charity on his part*" (Muslim No. 1552a). Shaikh Al-Uthaimin explained that this hadith shows the Prophet's encouragement towards agriculture (Khuluq, Syamsuri, & Setiawan, 2020).

During the period of Islamic caliphates, agricultural activities were considered noble jobs and highly encouraged. Umar bin Al-Khattab, for example, introduced many policies to promote agriculture, including cultivating and maximizing the use of abandoned lands, managing government protected and conquered lands, and developing the water irrigation system (Jaribah, 2006). Harun Al-Rasyid reduced agricultural taxes, and in some cases, abolished them (Hasyimi, 2014). He appointed Abu Ubaid (Al-Qasim bin Sallam bin Miskin bin Zaid al-Harawi al-Azadi al-Baghdadi) as Qadi (judge) in Tarsus. Abu Ubaid wrote a book entitled *Kitab al-Amwal* and suggested improvement in agricultural policies. Among them, the *iqta'* (Islamic practice of tax farming) of desert land and the official declaration of individual ownership of fertilized barren land, were incentives to increase agricultural production (Karim, 2014).

2.3 Current development of waqf land

Waqf institutions had a great role in the history and civilisation of Muslims. Among them are the institutions to spread knowledge and culture, and provide space for scholars, fiqh experts and humanists to develop their knowledge and expertise. Waqf also used to fund other institutions including the places of worship (masjid), centers for reading and writing (*katatib*), schools (madrasah), and libraries (*maktabah*) (Triyanta & Zakie, 2015).

Indonesia is a country with the world's largest Muslim population: 230 million people, or roughly 87 percent of the total population. Compared to other Muslim nations, Indonesia has the greatest potential for waqf development. The adoption of Waqf Law Number 41 of 2004 provides impetus for the advancement of waqf management in Indonesia, especially with the adoption of Government Regulation Number 42 of 2006, which governs the implementation of Law Number 41 of 2004 (KNKS, 2019).

In reality, the economic values and benefits of waqf land have not increased proportionately with its potential. The Indonesian Waqf Agency (BWI) stated in 2021 that the potential for waqf assets in Indonesia per year reached 2000 trillion, with 420,000 hectares of waqf land. Meanwhile, according to data from the Ministry of Religion's Waqf Information System (2020), Indonesia has 54,991.16 hectares of waqf land spread across 412,590 locations. Only 58.96 percent were certified; 44 percent of waqf assets are only for mosques, 28.06 percent for musholla, 4.44 percent for graveyards, 3.77 percent for boarding schools, and 9.02 percent for other social functions (Kemenag, n.d.)

Based on the percentage of the use of waqf land, it can be concluded that the use for the purposes of worship infrastructure, in this case mosques and musholla, is very dominant. On the other hand, waqf purposes other than worship infrastructure rank the lowest. The

use for worship infrastructure is acceptable but it will not be optimal without considering the needs in the local community. For example, if the number of mosques in a particular area is more than necessary, it is better for the Muslim communities in the area to utilise their waqf lands for other productive and efficient purposes.

Meanwhile, 41.04% of waqf land does not have a certificate, which is equal to 34.385 hectares and spread in 169,310 locations (Kemenag, n.d.). This data shows that the management of waqf in Indonesia is still not optimal. As a result, quite a lot of waqf assets have been neglected, unproductive or lost (Munir, 2018). So that the function of waqf as a socio-economic tool has not been realised. The reasons are waqf land management is still minimal and handled by people who do not understand the rules of waqf. So it is very necessary for skilled and professional personals to manage and develop waqf assets to benefit the community (Riyanto, 2017).

Waqf land, in macro perspective, can also be used for other economic activities, such as hospitals, shops, agriculture, farming, industry, mining, real estate, hotels, restaurants, and others. These are the alternatives to optimise the function of waqf lands (Azhar, 1992). To be specific, abandoned waqf land can be utilised for developing agricultural sectors by applying the permaculture approach to eradicate food insecurity.

2.4 The Role of Nazir in developing Waqf Land

The existence of waqf managers (nazir) and a solid administrative team is critical in waqf management in order to maximise the role of waqf. Waqf, if professionally managed, has the potential to develop the community's socio-economy. The waqf's progress is determined by the management's leadership and good governance. Therefore, the management team should be encouraged to achieve their highest level of performance.

The management of waqf carried out by nazir in a professional manner provides opportunities for the development of waqf to be more productive, as well as providing opportunities to apply the modern management principles. Within this framework, the nazir must strive to present the best possible performance of waqf (Kasdi, 2014). The parameters that nazir can be professional are (1) *amanah* (trustworthy), (2) *shiddiq* (truthful), (3) *fathanah* (intelligent), (4) *tabligh* (transparency) (Djunaedi, 2005).

According to the Muhammad Aziz (2014), there are two competencies that must be possessed by a nazir, namely, *Diniyah* Competencies and *Kifayah* Competencies. *Diniyah* competencies are related to religion, for instance shariah knowledge and it's experience, the understanding of waqf institutions, and the ability in preaching and conveying Islamic teachings to mankind. While the *Kifayah* competencies is competence that refers to *nazir*'s ability to maintain, safeguard, protect, utilize, develop, invest and distribute the results of waqf profits to those who are entitled to receive it (Aziz, 2014).

It is stated in Act No. 41 year 2004 concerning about waqf, in article 11 explains that nazir has 4 roles, namely administering waqf assets; manage and develop waqf property in accordance with its purpose, function, and designation; supervise and protect the waqf property; and report the implementation of duties to the Indonesian Waqf Board (BWI). Moreover, nazir can be in the form of individuals, organisations or legal entities.

3.0 PERMACULTURE AND FOOD INSECURITY

Agriculture has been the main source of income for Islamic countries since the time of Prophet Muhammad, followed by *Khulafa al-Rasyidin*, Umayyah, Abbasiyah, and continues to be so today. Even Bill Gates, the world's third richest person who made his fortune in the technology industry, now owns the most farmland in the United States (Estes, 2021).

However, since agriculture has been industrialised, the very first food crisis happened in 1973 and the worst after it broke again in 2006-2008 (Golay, 2010). It is clearly stated that industrialisation is a process of

socio-economic change that changes the livelihood system of an agrarian society into an industrial society (Investopedia, 2021). In Industrialisation, there is a change in human philosophy where humans change the view of their social environment to be more rational (actions are based on consideration, efficiency, and calculation, no longer referring to morals, emotions, habits or traditions). According to research, there are factors that become a reference for industrial modernisation and company development. Starting from a favorable political and legal environment for industry and trade, it can also be with diverse and abundant natural resources, as well as human resources that tend to be low-cost, have the ability and can adapt to their work (Abbott, 2003).

In addition, since 2015, there is not a significant change of the pattern for food insecurity, and as for some-low- and middle-income economies, for instance Sub-Saharan Africa and South Asia, hunger and undernourishment (two indicators of severe food insecurity) are on the rise. Meanwhile, in developed countries, such as Europe and the US, the number of adults and children who are becoming obesity and or overweight is unparalleled (SESRIC, 2020).

According to Christophe Golay (2010), the cause of food insecurity is increasing demand from the middle class in emerging countries, less food production, the production of biofuels, and the rising price of oil. Other than that, difficult economic conditions, poverty, conflicts, lack of adequate infrastructure, weak commodity prices, and adverse climatic conditions are also factors of food insecurity (SESRIC, 2020).

In 2020, Food and Agriculture Organization (FAO) classified all countries in Sub-Saharan Africa except Gabon either as 'low-income food deficit countries (LIFDC)', 'countries in crisis requiring external assistance (CCREA)', or as both. LIFDC are those who are living poor, while countries requiring external assistance are those that lack resources to manage and respond to their problems (SESRIC, 2020).

TABLE 1.

Low-Income Food Deficit Countries (LIFDC) and Countries in Crisis Requiring External Assistance (CCREA)

Afghanistan	Djibouti	Mozambique	Togo
Bangladesh	Gambia	Niger	Uganda
Benin	Guinea	Senegal	Uzbekistan
Burkina Faso	Guinea-Bissau	Sierra Leone	Yemen
Cameroon	Kyrgyzstan	Somalia	Iraq
Chad	Libya	Sudan	Nigeria
Comoros	Mali	Syria	Pakistan
Côte d'Ivoire	Mauritania	Tajikistan	Libya

LIFDC LIFDC in crisis requiring external assistance Countries in crisis requiring external assistance

Based on the Global Food Security Index. Indonesia is ranked 65 out of 113 countries. Its natural resources and resilience is at the low level which ranked 109, while quality and safety food is ranked 89 (Food Secutiry Index, n.d.).

Based on the data above, moving towards regenerative agriculture is required to respond to the current agriculture challenges and provide sufficient food and nutrition. To be regenerative, there is a need to fulfill the present and future generation's food security by focusing on the production of environmentally nutritious and healthy food as well as the impacts on socio-economy. One of the regenerative approaches in agriculture is Permaculture.

Permaculture has evolved into a global agricultural movement. It not only provides healthy food without the use of chemical fertilisers, pesticides, or Genetically Modified Organisms (GMO), but it also helps to keep the soil and environment healthy. It can be viewed as a rural and urban socio-cultural transformation by providing food for self-sufficiency and entrepreneurship opportunities (Fiebrig, Bach, & Gruber, 2020). Permaculture is a sustainable agriculture solution that is a promising alternative to industrial agriculture, with a high potential for avoiding negative social and environmental consequences (Fergusin & Lovell, 2014).

Permaculture is manageable in various ecological lands as it mimics the concept and design of nature (Fergusin & Lovell, 2014). One of the works done by Zaytuna Farm is Greening the Desert. It takes place in Jordan and started in 1999. This project is a proof that permaculture is able to reverse the desertification and bring back life to desolate barren lands (Zaytuna, n.d.).

Another living proof of a successful permaculture project in reviving abandoned and barred land is Bumi Langit Institute. Located in Yogyakarta, since 2001 the project was established. The result is fabulous, the farm becomes green, they can manage livestock, and utilize the alternative energy (Bumi Langit, n.d.).

Furthermore, the permaculture concept brings the teaching and guidance of the Book of Agriculture (Kitab al-Filaha) to life, by practising the theories and putting them into action. As a result, permaculture is one of the solutions to food insecurity and is ideal for managing abandoned waqf land wherever it may be.

3.1 Permaculture

Permaculture is an integration of Permanent Agriculture and Permanent Culture. Permanent agriculture involves family gardens, agriculture, agroforestry, animal management and aquaculture in increasing land fertility, income and production and being sustainable for now and the future. Permanent Culture can be defined as an effort to empower nature and humans to create a strong, stable and sustainable culture (Permatil, 2018).

Permaculture was introduced by David Holmgren and Bill Mollison in the 1970s in Tasmania, Australia. This concept was introduced as a response to an unsustainable approach in the process of producing food, especially the industrialised agricultural, including energy production methods, forests, modern urban governance and modern lifestyles. Permaculture integrates various strategies and techniques of agriculture so they can mutually support each other and can be maintained as much as possible automatically (self-maintaining). The permaculture approach is very comprehensive not only covering agriculture but also social, cultural and economic (Permatil, 2018).

Permaculture consists of three ethics and 12 principles. These ethics and principles are the main basis for every permaculture project to achieve Permanent Agriculture and Culture.

Earth Care, People Care and Fair Share are ethics that need to be considered. Earth care emphasises on protecting the earth and everything that lives on it. All forms of activities that destroy the earth are prohibited (Permatil, 2018).

People Care ensures that there is equality, respect and opportunity for every individual involved in permaculture activities, because everyone has the right and access to land, water, food and health, and humankind is the central point of the concept (Permatil, 2018).

Fair Share is the process of shifting one's perspective from a focus on money to a focus on "quality of life." Food security, water, shelter, transportation, energy, education, life, opportunity, and human rights are all examples of quality of life. Only a healthy economy, natural environment, culture, and society can achieve this (Permatil, 2018).
Permaculture principles are used to guide the creation of permaculture design and the implementation of permaculture strategies and practises. There are 12 principles of permaculture, as follows:

TABLE 2.
12 Principles of Permaculture

No	Principles	Details
1	Observe and interact	Aims to design farms, houses and gardens to be in harmony with nature.
2	Catch and store energy	Good design will reduce or even eliminate the need for non-renewable or unsustainable energy, because natural energy can be caught and stored.
3	Obtain a yield	Aims to manage short and long-term production results to remain useful

		both for oneself, the community and the interests of economic transactions.
4	Apply self-regulation and accept feedback	Ways to improve the quality of oneself, land, ecosystem, and community to obtain a more efficient and effective production system from time to time.
5	Use and Value of renewable energy and resources	How renewable energy and resources can be available not only now but also in the future so as to create an independent and strong community.
6	Produce no waste	It does not produce waste that ends up as pollution but instead optimizes the utilization of existing waste as a creative medium with a Reuse and recycle approach.
7	Design from pattern to details	How to design projects in harmony with nature to produce effective and efficient projects.
8	Integrate rather than segregate	An integrated system combines various different elements to work together in one unified system for more optimal
9	Use small and slow solutions	Small systems are easier to maintain at first. This means it is easier to maximize product yields.
10	Use and Value diversity	The existence of biodiversity and animals in an ecosystem will make it more healthy and balanced.
11	Use edges and value the marginal	Process Utilizing every inch of land to make it productive.
12	Creatively use and respond to change	Change is something that will continue to be present in life. Succession and evolution is a natural change process that can be utilized by humans to improve the quality of the permaculture system from time to time.

3.2 Waqf Land Model in Developing Permaculture

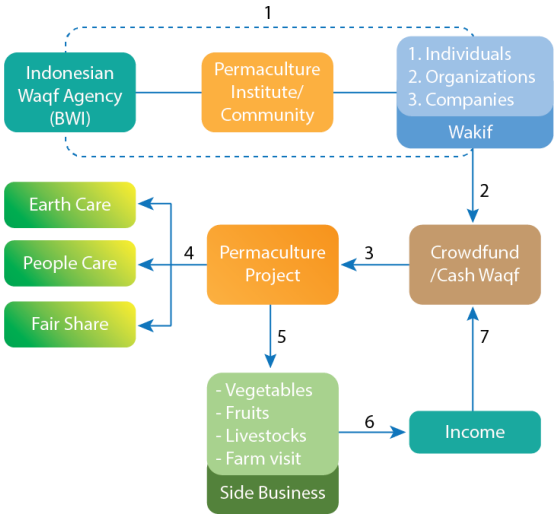

FIGURE 1.
Waqf Land Model in Developing Permaculture

The figure above is the modus operandi to utilise abandoned waqf land. The details will be:

1. A collaboration between Indonesian Waqf Agency (BWI) and Permaculture Institute/community to identify the abandoned waqf land. The data found then need to be discussed with the *wakif*, whether it as individuals, organisations, or companies. Both BWI and Permaculture Institute/community should be able to convince the *wakif* so that they can manage the waqf land.
2. This project needs some funds in preparing the land and being ready for the project. The funding can be collected through cash waqf
3. The Permaculture project is being operated by Permaculture Institute/Community as manager (*nazir*). The nazir should be appointed during the first stage and has responsibility to report to BWI.
4. The yield that is able to be harvested can be divided into two categories, the ethics of permaculture. and side-business.
5. If there are any yields left after step (4), the nazir can sell them to the market to generate income. They can also give extra services such as farm visits with entrance fees.
6. The businesses will generate the income.
7. The income will be channelled to the Permaculture Project again.

4.0 CONCLUSION

The golden history of Islam has demonstrated that waqf and agriculture are closely intertwined to the prosperity of Muslims and humanity in general. Islamic history also provides inspiration to seek realistic solutions for this era's crises, especially the alternatives to the agricultural industrial system which has existed for nearly 250 years. This system not only causes hunger and food insecurity, but also induces great damage to the earth's ecosystem, such as soil, water, and air pollution, which threatens human survival due to its massive use of chemical fertilisers, herbicides, pesticides, and GMOs.

Permaculture, which is part of regenerative agriculture, offers agricultural management that is in harmony with nature rather than against it, which is not only a solution to food insecurity but also a component of improving the earth's environment.
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