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Empowering Youth in Agriculture: Lessons for Malaysia

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INTRODUCTION

There appears to be a renewed interest in agriculture and food security. It is a global phenomenon with many countries striving to meet the increasing demand for food due to rapid growth in world population, which is estimated to reach 9.3 billion in 2050 (FAO, 2009). The agricultural population worldwide is ageing as the average age of farmers is currently in the range of high-50s to early-60s (Leavy, 2013). Young people comprise approximately 20 percent of the total population in many developing and emerging economies, with 90 percent of them living in Sub-Saharan Africa, East Asia and South Asia. Globally, this group accounts for more than half of the world's youth (ILO, 2013). In the ASEAN countries, there are currently 213 million youth (15-34 years), constituting the largest ever cohort of youth in this region. The peak population of just over 220 million is expected in 2038 (ASEAN Secretariat, 2017).

The agricultural sector, national economies and the region will benefit from increased participation of youths. Agriculture is the bedrock for industrial and health development. If agriculture remains stagnant, then industrial growth and food security will remain a mirage. Agriculture cannot grow without the active participation of youths who constitute the agile and virile section of the population. Youths, who are the nation's potential manpower, need to be encouraged to participate in the modern agricultural sector to improve global food supply and address the issues of food security.

This chapter is aimed at discussing the important link between youth and agriculture to ensure the sustainability of food production and food security. More importantly, roping youth into the agricultural sector is an initiative to ease growing youth unemployment. In this chapter, we also look at some of the relevant policies that can be adopted to encourage more youth participation in the agricultural sector. The chapter starts off with an explanation of the important connection between youth and agriculture, followed by a discussion on the implementation of various policies to develop youth potential in agriculture, such as improving the image of the agricultural sector, agriculture extension education, having access to role models, focusing more on farming entrepreneurship, introducing urban farming, and empowering young farmers.

YOUTH AND AGRICULTURE: MAKING THE CONNECTION

There are three issues concerning the relationship between youth and the agricultural sector, namely high global youth unemployment, food security, and an ageing population employed in agriculture. Youth unemployment has been on the agenda of the International Labour Organization (ILO) since 1935, and one of its Sustainable Development Goals' targets is to "promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (United Nations, 2015). Global youth unemployment was estimated to be 3.4 million in 2013, an increase of 3.5 million or 12.6% since 2007, and global youth unemployment was estimated at 12.8% in 2018 (ILO, 2013). Youth, considered as the "most vulnerable and most powerless group in the labour market" (Lintelo, 2011), are almost three times more likely than adults to be unemployed. Much research (ILO, 2013; Bell & Blanchflower, 2011) has found negative personal impact of youth unemployment, such as feelings of worthlessness and potential idleness that may lead to increased crime rates, mental health problems, violence, conflicts and drug addiction (ILO, 2010). The combined effect of an increasing youth population and high and increasing levels of youth unemployment are often associated with insecurity, urban social unrest and political instability. For example, countries in Africa refer to the problem of youth unemployment as a matter of national security, which could be a threat to national stability if it remains unresolved (Lintelo, 2011).

Many countries, especially those in Sub Saharan Africa and Asia, are now turning to the agricultural sector to help alleviate the growing youth unemployment problem (FAO, 2014). Africa has a population of almost 200 million youth and faces a youth unemployment crisis. One of the proposed solutions for this is by engaging more young people in the agricultural sector (International Youth Foundation, 2015). The ILO supports this proposal because the demand for food will increase in tandem with the growing world population. The on-farm and off-farm sectors will need to expand, and thus create more jobs across the entire value chain.

Agriculture accounts for 32 percent of total employment globally and 39 percent in developing countries in the Asian and Pacific region (ILO, 2014). Agriculture is also a vital sector for the ASEAN community, accounting for over 25 percent of GDP in some member states and providing more than 40 percent of total employment in Myanmar and 11 percent in Malaysia. Indonesia and Malaysia are ASEAN's main palm oil producers, providing nearly 90 percent of global output (ASEAN, 2019). Malaysian youth, however, are not drawn to working in oil palm plantations. Hence, while there is a growing recognition of the agricultural sector as a solution for the problem of youth unemployment problem, the challenge is how to make the agricultural sector more appealing to youth so that careers in agriculture are perceived as lucrative.

The second issue concerning the relationship between youth and agriculture is food security. There is food security "when all people, at all times, have both physical and economic access to sufficient food to meet dietary needs for a productive and healthy life" (FAO, 2002, p.4). There are now concerns over the availability of sufficient food to feed the growing global population. Currently, about one billion people do not have food security owing mainly to two reasons. First, it is because of the rapid increase in global population (from around 6.9 billion in 2010 to an estimated 9.3 billion in 2050), which means that the demand for food is estimated to increase by 35 percent by 2050 (FAO, 2009). Second, the food price hikes such as those seen in 2008 and 2010 reduced access to food owing to a decrease in relative purchasing power. Stabilizing food prices in general, and rice prices in particular, is one of the strategies used by successful Asian countries to achieve food security especially for the poor (Timmer, 2005).

The third issue concerning the relationship between youth and agriculture is the existence of a generational chasm in agriculture as farming is increasingly becoming synonymous with the older generation's occupation. Based on a survey on rural demographics in 2010, the average age of farmers in the US is 58 years and more than one third of European farmers are older than 65 (Johr, 2012). This trend is similar to that in Malaysia where the average age of farmers exceeds 46 years. Most of the farmers are 55 years and above and only 26 percent of farmers are in the group age of 18 to 40 years old (Abdullah et al., 2012). The situation is even more worrisome in Japan. In the early 1990s, one third of the Japanese agricultural labour force was more than 65 years of age; in 2000, they comprised more than half. In some remote upland areas of Japan, farm households are shrinking and so, the land lies abandoned (Franks et al., 1999). It is obvious that the agricultural sector has been losing a substantial section of its labour force. Unless youths replaced the old and deceased in the agricultural labour force, the shortage of manpower in the agricultural sector would lead to a shortage of food production. Incentives should be given to youths so that they would not migrate to the urban areas in search of white-collar jobs. The irony is that while there are employment opportunities galore in the agricultural sector, there are few takers.

Prima facie, the solution to these three problems may seem simple: encourage young people to take up farming or be involved in the agricultural sector. It will provide employment to the youth, ensure food security through increased production, and with more youth participation in the agricultural sector, there are greater chances of farms being passed from one generation to the next. However, the common perception of agriculture and youth unemployment is that agriculture is at risk because there is lack of youth participation; hence, strategies are needed to encourage youths to be involved to sustain the sector and, at the same time, solve the problem of youth unemployment (Anyidoho et al., 2011). Policies often concentrate only on the farm sector and production side, i.e. youth as farmers, while off-farm entrepreneurial activities that make up the agricultural sector are often ignored.

Although there has been much research on youths' lack of interest in the agricultural sector, there are not many studies that focus specifically on the attitudes of youth and their aspirations in developing and emerging economies, as well as on their views on farming as a livelihood and

employment option. Owing to the importance of sustaining food production and the capacity of the agricultural sector to absorb the ever-growing youth population, how young people respond to opportunities and whether agriculture can meet their aspirations are critical in terms of food security and future employment (Proctor & Lucchesi, 2012).

Participation of youth in the agricultural sector would not only help boost the agricultural sector but it would also reflect a more positive engagement with careers related to agriculture. Youth could facilitate the transfer of technical knowledge and technology to farmers to improve output and bring about desired behavioural change in farmers (Anaeto et al., 2012). For young people to be fully vested in society, they must be empowered with appropriate resources to enhance productivity. Thus, it is necessary to stimulate their interest and encourage their participation in agriculture to ensure sustainability of agriculture and ultimately realize the goal of food and nutrition security.

It is, hence, critical for policymakers to think beyond the idea of youth as mere manpower for agricultural production. The aspirations and the expectations of youths need to be addressed to motivate and sustain their interest in agriculture. According to Fishbein and Ajzen (1975), intentions to participate in an activity could be predicted based on a person's knowledge, observations or other information held about some issues or event. Hence, the decision to undertake agriculture as a course or a career is predicted by examining their beliefs about agriculture. However, meeting their aspirations is not adequate; this must be accompanied by opportunities that facilitate the achievement of the aspirations. It is, therefore, important for both agricultural and development policies to match these aspirations with the visions and goals of the country. Below are some of the policies that can be implemented that can help attract more youths to the agricultural sector.

Improving the Image of Agriculture

Studies on the perceptions of agriculture have a common theme, viz. agriculture is perceived only as farming. To engage more young people in the agri-food sector, agriculture needs to be promoted as a career option. Unfortunately, because the range of career pathways accessible within agri-food sectors is not well communicated to the public, this presents a barrier to attracting new people to the industry (Proctor & Lucchesi, 2012;

Nyoni, 2012). Agriculture has a cultural stereotype; jobs in this sector are believed to be ‘dead end’, ‘hard work’, or ‘not well paid’ (IDCW, 2009). Currently, a career in the agri-food sector appears unappealing because of misconceptions or lack of information. However, the 1990s saw a dynamic change in the modern retail sector in developing and emerging economies, specifically the evolution of supermarkets which penetrated both urban and rural markets (Proctor & Lucchesi, 2012). Changes in agri-food markets are producing new job opportunities, both skilled and unskilled. In the formal sector, jobs are available in agri-business processing, packaging and transport, and in modern retail. Another option is self-employment by trading agricultural raw products and processed goods for both local rural and urban markets. To increase awareness of such employment opportunities, there should be more effective dissemination of information regarding the variety of jobs generated by agriculture, including different types of agri-food chains and agri-businesses. As Nyonyi (2012) emphasizes, “Agriculture as a whole needs to be re-branded to appeal to young people, to make them see it as an avenue of wealth-creation rather than a subsistence mechanism.”

Policies should be implemented to enable young people achieve their aspirations according to their opportunity space. Opportunity space, according to Painter et al. (1994), is a term to “describe the spatial and temporal distribution of the universe of more or less viable options that a young person may exploit as he or she attempts to establish an independent life.” The factors that determine the opportunity space for a young person are institutions, policy and demand, place, as well as social and cultural norms. Sumberg (2012) suggests that the opportunity space for young people in agriculture should involve the whole agricultural sector, and not just focusing on the on-farm sector. Therefore, it is critical to recognize the changing dynamics of the off-farm sector and the implications they have for young people, and more importantly, the policies and institutional changes that have been put in place to accommodate and assist young people exploit new opportunities.

Langevang and Gough (2012) provide an example of the dynamics of changing opportunity space in a study of dressmaking and hairdressing which used to be two of the popular career choices for young rural women in Ghana. New technology has resulted in a growing demand for ‘western style’ clothing and the availability of inexpensive ready-made clothes.

This change in the industry has greatly reduced opportunities for would-be dressmakers. Similarly, the agricultural sector is evolving and the job opportunities it offers to young people are changing. With the changing aspects of the off-farm sector markets locally and globally, including increased value addition within the food chain, it is important to understand the nature and types of present and future employment opportunities, labour skill requirements and gaps (Proctor & Lucchesi, 2012). New and different employment opportunities will arise over time as farm profiles change along with institutional changes. For example, the off-farm sector has high technical capacities. If this sector is modernised and expanded, it will create more jobs opportunities in input supplies, transport, storage, packaging, financial services and quality assurance.

This evolution of the agricultural sector will have an impact on policy, the labour market, as well as education and training markets and, as Pollock (1997) observes, these changes will have an impact on young people's transition from school to the workplace. It is important to consider the impact of changing environment upon young people's aspirations, whether it reflects their ambitions and hopes and how it affects educational and occupational attainment. If this is not addressed, young people will become increasingly insecure and will continue to aspire to have more secure forms of employment despite the limitations of the labour market. Youths need to exploit new job opportunities that are supported by relevant facilities provided by the relevant authorities through education and training.

Agriculture Extension Education

Another way to encourage youth participation in agriculture is through agriculture extension. The philosophy of extension education is closely linked to the process of change towards development, which includes acquisition of aspects of knowledge, skills, attitudes, and values (Rahim, 2008; 2010; Maimunah, 1990; 1999). Extension can be seen from the perspective of an informal education system that provides advisory services to the community and using educational processes to bring about change (Rahim, 1995; 2008; 2010).

Agricultural extension can be defined as an ongoing process of disseminating useful information to clients, assisting them to acquire the requisite knowledge, skills and attitudes so that they can make use of the

information to increase productivity (Rahim, 2008; 2010). The effectiveness of extension services is also highly dependent on the ability of extension agents who must be qualified, know their roles and are competent as the whole extension process of transferring information is dependent on them (Shah, Asmuni & Ismail, 2013). Extension services world-wide are based on different principles. In some countries, extension programmes serve to transmit national directives to rural areas. Rural areas are perceived to be highly traditional, resistant to change, and unaware of technological advances (Engle & Stone, 1989). Many extensions approaches and strategies rely on technology transfer with top-down development without having a framework for feedback from clients (Axinn, 1988).

Extension education is also a continuing process to develop youth capacity in particular (Rahim, 1995: 2008, 2010; Hamzah & Suandi, 1994). Development in the context of developed countries is based on several aspects, such as education, economy, social and human capital (Dwyer et al., 2017).

As an informal education system, extension education is implemented without specific structures such as specific curriculum, specific time or place to control it (Worker et al., 2017; Torock, 2009; Coombs & Ahmed, 1974). Extension basically serves as informal education and focuses on improving the well-being of individuals, families and communities (Kraft, 1999; Warner et al., 1998). Extension education aims to bring about voluntary individual behavioural change by engaging him or her in the planning, implementation and evaluation of socioeconomic programmes to meet specific needs or to solve problems (Warner et al., 1998). Extension education also gives individuals, especially youth, the opportunity to explore learning experiences in specific areas (Torock, 2009).

In the early stages of extension services, the focus was on agriculture (Anaeto et al., 2012). Nowadays, extension services include other areas such as education (Dwyer, et al., 2017), economics (Evenson, 2001; Birkhaeuser et al., 1991), social (Brennan, Barnett, & Baugh, 2007; Rubio, et al., 2016), and also health (Medhanyie et al., 2012). However, extension is not limited to a specific scope or programme because extension education needs to create awareness among the community and change the behaviour of individuals by providing information and educating them (Dwyer et al., 2017). Among the areas of emphasis in programmes that indicate the scope of extension education are:

- i. Efficiency in agricultural production
- ii. Efficiency in marketing, distribution and use
- iii. Conservation, development and use of natural resources
- iv. Management of the farm and home
- v. Family life
- vi. Youth development
- vii. Leadership Development
- viii. Community development and rural development
- ix. Public affairs

The role of youth as extension agents in the agriculture industry is undoubtedly an important one since it is one of the crucial determinants of success in the agriculture industry. By bringing much needed changes to farmers, youth also play the role of change agents. To be a competent extension agent, youth should have the necessary knowledge, technical skills and personal characteristics that would contribute to successful or outstanding performance. The everyday work contexts play a very important role in developing the extension agent's professionalism. Exposure to a variety of social interactions, events and experiences helps to develop one's extension career.

Access to Role Models

It is important for youths to have access to role models like successful young farmers to gain useful tips and insight into farming. Numerous studies have shown that family influence, positive effects of role models, and personal experiences with entrepreneurship contribute to higher inclination towards entrepreneurship (e.g.: Deakins & Glancey et al., 2005; Kirkwood, 2007).

A mentoring programme is another way that can provide young people with positive experience in farming and agribusiness. Zainal (2012) shows that informal mentoring attracts more youths into agribusiness, and mentors are role models that guide and share experiences to help individuals develop themselves. Mentoring is a two-way process of knowledge transfer whereby youths learn from more experienced/senior

workers who also benefit from the new perspective of the youths they mentor (Paisley, 2015). The process of mentoring is believed to help identify and improve professional areas that require development, provide guidance and continuous learning, and enhance productivity and teamwork (Paisley, 2015). For instance, the Young Professionals for Agricultural Development (YPARD) mentoring programme for young professionals aims to attract and retain young people in agriculture as well as research and development (Paisley, 2012). It focuses on young professionals already involved and interested in careers in agriculture and agriculture research. Mentoring inspires young people to be involved in agriculture and provides them with skills, confidence and a platform to explore and make use of their talents and capabilities.

Another way behaviour can be influenced by role models is through the mass media like radio and TV soap operas. An example would be the world's first and longest running soap opera; the BBC's *The Archers* (Latchem, 2016). It was first aired in 1950 in partnership with the UK's Ministry of Agriculture, Fisheries and Food to guide farmers on how to increase their productivity in the years of food shortages following the Second World War. It went on to tackle various social issues in recent times such as genetically modified crops and rural development (Latchem, 2016). Early exposure will equip youth with valuable agricultural skills to help them master in-group processes as well as other vital life and society-building skills (Webster et al., 2013). Developing these capabilities will enable youth to easily transition into adult leadership roles and be better contributors to sustainable agricultural and rural development (World Bank, 2006, 2007 cited in Webster et. al., 2013). In Malaysia, the government sought to attract youth to the agriculture sector by introducing the bi-annual national agricultural exhibition (Malaysia Agriculture, Horticulture and Agrotourism or MAHA) in 2014 to promote agriculture and agro-based industries. Recently, it also introduced "Agro Youth" as its new focus to encourage and motivate youths and potential entrepreneurs. Malaysia also embarked on projects such as on Farmers, Livestock Producers and Fishermen's Day (HPPNK), Malaysian Agricultural Innovation Challenges (Magic), Agro Trade, Agro Based Industry, Agro Food Industry, Agro Tourism and Agro Lifestyle (Nasir, 2014).

Focus on Entrepreneurship

With the growing interest of young people in business ventures, more policies are now focusing on young agri-entrepreneurs, especially in Malaysia and Sub-Saharan Africa, to encourage youth participation in agriculture. Entrepreneurship is regarded as one of the best strategies to develop the country's economic growth by generating job opportunities, innovation and competitiveness (Van Praag & Versloot, 2007). Entrepreneurship education has been proven to be successful in strengthening the learner's intention to become an entrepreneur. Drucker (1985) and Gorman et al. (1997) argue that entrepreneurship can be taught and developed through education and training programmes. It is also found that students with a technical background like engineering and agriculture are more likely to become entrepreneurs, compared to those with social science background (Vojak et al., 2006; Mohamed et al., 2012).

Among the success factors that have led to the growth of young agri-entrepreneurs are strong government support and training programmes (Mohd et al., 2012; Mohamed et al., 2011). A good example is the Malaysia Young Agropreneur Programme introduced in 2013. It aimed at creating young agri-entrepreneurs below the age of 40 in sectors such as fisheries, crops, livestock, marketing, technology and innovation, as well as agro-tourism and agro-based industries (Kadir, 2014). The programme includes training and advice on the provision of lands, loan facilities without collateral and guarantors, and continuous guidance and mentoring by relevant authorities. To start up a business, a 30% "in-kind contribution grant" is awarded to interested youths. The remaining 70% can be accessed through fast track credit loans administered by the financial institution TEKUN National. This body plays a key role in entrepreneurial development by providing credit without any collateral and offering quick finance facilities for both new start-ups and existing businesses. In addition to financial assistance, the Malaysian government has also arranged for well-established companies to assist in promoting, developing and training young entrepreneurs in particular projects which have shorter implementation periods to attract more youths from urban areas (Adenan et al., 2015). Before starting the project, participants are given technical and hands-on training, which allows for knowledge and technology transfer. To date, the target of producing 1,000 new agropreneurs each year has been met, and since 2013, the Young Agropreneur Programme has had a total

of 3,963 youth registered (Adenan et al., 2015). Apart from the success of attracting youth into agribusiness, the Young Agropreneur Programme has also succeeded in encouraging youths to put into practice efficient modern agricultural technologies. This suggests that there are promising prospects for increased youth involvement in the agricultural sector if the policy goes beyond the focus on youth and their direct involvement in farming. Recognising that agriculture is not just on-farm work and giving more emphasis to the off-farm sector would help to address the concern of sustaining agriculture and supporting the aspirations of young people.

Youth Engagement Through Urban Farming

The rapid growth of cities, particularly in developing countries, places an enormous demand on urban food supply systems. Through urban farming practices, agriculture products, crops, horticulture, livestock, fisheries and herbs are available for self-consumption or for sale within the city areas. Urban Agriculture (UA) or Peri-Urban Agriculture (UPA) can be referred to as growing plants or raising livestock within and around the cities (FAO, 2012). The produce can be either consumed by the producers themselves or sold to the local community through urban market outlets. Because they are locally produced, urban farm products incur less transportation and packaging costs, thus making them relatively cheaper, besides being fresher (this being particularly true for perishable foods). It is essential for farmers to equip themselves with the necessary economic, social, health and environmental knowledge in order to make the right decisions regarding principles and methods of urban planting systems (Zainal & Hamzah, 2017).

Malaysia has been drawn by policymakers to improve urban life by promoting UA or UPA. Urban farming is one of the options promoted in Malaysia to secure food availability for the nation by 2020 (Tiraieyari et al., 2017). Several scholars in Universiti Putra Malaysia (UPM) have been researching in this area since 2015, in line with the UPM's goal to provide educational services and outreach programmes to the community.

UPM is among the public universities that promote urban agriculture in Malaysia. Findings from various studies on the involvement of youth in urban farming indicate that youth were very enthusiastic to participate in urban agriculture programmes developed by the university (Tiraieyari et al., 2017). Tiraieyari and Hamzah (2015) highlight promoting the

UA programme which encourages students to participate voluntarily. This voluntary behaviour does not only depend on the persons involved themselves, but personal and situational factors (such as motivation) also need to be taken into considerations (Tiraieyari & Krauss, 2018). On top of that, moderating factors like age, gender, participation in campus as well as academic achievement also affect volunteering intention (Tiraieyari et al., 2019). Hence, the right strategy needs to be adopted after considering all these factors in order to attract more youth to engage in urban farming.

Urban farming is an important part of the youth development programme as it can provide employment and income for young people. This is an opportunity that should be embraced by youth living in big cities where poverty is frequently an issue. Small agribusinesses taking part in urban farming help to generate income. They can stimulate the economy by providing the local community with employment opportunities. Young farmers are more likely to be innovative in their market strategies to maximize profit and are able to adapt quickly to whatever the demand that arises.

From the perspective of health, an increasing number of people living in urban areas or who have migrated there suffer from illnesses as a result of malnutrition and other diet-related issues such as obesity, diabetes, etc. By bringing healthy and fresh products from farms to local communities, the nutritional value of the food is assured. In fact, farming or gardening also provides more work-out, making the participant healthier and fitter. A study from the United States has showed that the introduction of an urban farming programme influenced young people in Buffalo, New York, to consume more fruits and vegetables. This clearly shows that urban farming is beneficial in encouraging healthy eating habits, especially of youth; more studies in this area would be helpful (Subhashni Raj et al., 2017).

Urban farming also addresses the issue of scarce nutritious food, particularly in urban areas where the cost of living is high. Processed or “express” food becomes a staple for many urban people who are more focused on their jobs rather than a healthy lifestyle. This is where urban farming comes in useful. By eliminating the middleman, fresh and nutritious farm products are readily available at lower prices within the community. This also creates more awareness of sustainable agriculture and the importance of a healthy eating lifestyle at the same time.

EMPOWERING YOUTH IN AGRICULTURE

The word “empowerment”, which has different meanings to different people, is key to one of the most effective strategies to provide young people with opportunities to develop competence and be gainfully employed. The task of youth development professionals is to provide opportunities for young people to develop the requisite competencies to become successful, contributing members of their community (Pittman & Wright, 1991). According to Webster (1998), ‘to empower’ can have three meanings; (i) to give official authority or legal power, (ii) to enable, and (iii) to promote self-actualization or influence. In terms of the youth development process, the third definition is the most suitable, whereby empowerment itself is a strategy to develop competencies in the youth. The other definitions of “empowerment” can be quite effective when the youth already have the competencies to achieve the outcome.

Empowering young people is important because it leads to competence, and competence itself is linked to self-esteem (Harter, 1993). Additionally, in a study conducted by DiBenedetto (1992), young people identified nine factors that influence their feeling of empowerment;

1. Non-authoritarian adult leadership
2. Being able to experience and exercise power
3. Receiving education and training
4. Participating in critical analysis of issues
5. Experiencing an environment of safety, closeness and appreciation
6. Being able to honestly express opinions and emotions
7. Accepting diversity
8. Developing a voice
9. Being able to take action

According to Blanchard et al. (1996), there are three major keys to empower young people. Firstly, we should share information with young people about all the aspects, including budgets and the policies of the projects they are involved in. Besides, sharing such information will help young people understand better about managing their affairs while conveying the message of trust. Sharing information will encourage young

people to act more responsibly, taking ownership of their place in society. Secondly, it is important to create autonomy within prescribed boundaries. This means the youth development professional must outline the outer limits to the young people concerned so that they should stay within certain parameters. The third is to examine the role of the youth development professional. It is similar to that of a facilitator helping young people to achieve their goals and develop their competencies in order to feel empowered. Hence empowerment is a process undertaken by the youth development professional who is tasked with overseeing the process of how things are planned and executed and what young people should learn. Regardless of how an attempt at empowerment turns out, it is something that belongs to the youth. In Malaysia, not much research has been done specifically in the empowerment of youth in agriculture. Nevertheless, some of young people's involvement in the agriculture sector can be seen through their active participation in agropreneurs (Saili et al., 2018), as well as in their voluntary work on farms (Tiraieyari & Hamzah, 2015).

How to Empower Young Farmers in Agriculture?

The involvement and participation of young farmers in agriculture is now seen as a crucial factor to sustain the agriculture sector locally and globally for years to come. It is essential that young farmers are empowered so that they can act to increase productivity and also to improve their quality of life.

Youths need to feel empowered, and their voices need to be heard. This can be done by forming young farmers' clubs and making more venues available for youth participation and representation at all levels of the policy-making process. The ways that young people can be part of policy development can range from informal social media discussions to more formal meetings with stakeholders in agriculture (Paisley, 2015). However, Lintelo (2011) argues that more formal and regular interactions between youths and policymakers (who may be on policy-making bodies and advisory groups) are more effective than informal and irregular discussions. This requires the presence of active voices representing the needs of youths in the agricultural sector, both in rural and urban areas. Youth representatives should be properly trained and well informed in various aspects of policy-making, such as how to communicate with policymakers, developing policy briefs and how to be fully engaged in

the whole policy development process (Paisley, 2015). It is also important that the government show support and commitment in training youth representatives, for instance, by allowing them access to high level policy discussions.

Lave and Wenger's (1991) work on communities of practice can be used to explore the young farmers' experience. Communities of practice (COP) are groups of people who share a concern or a passion for something that they do, and learn how to do it better, as they interact regularly. Young farmers' careers can be viewed as a process of lifelong 'self-designed apprenticeship' (Arthur et al., 1999).

Lave and Wenger's (1991) model of COPs originates from a social theory of learning. A COP is: *...a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice. A community of practice is an intrinsic condition for the existence of knowledge, not least because it provides the interpretative support necessary for making sense of its heritage. Thus, participation in the cultural practice in which any knowledge exists is an epistemological principle of learning* (Lave and Wenger, 1991, p. 98).

The 'Agro' COP can be adapted from COP models to effect "mutual engagement", "a negotiated enterprise", and "a repertoire of negotiable resources" accumulated over time (Wenger, 1998, p. 126). These three dimensions of a COP establish the extent an individual is 'a competent participant, an outsider or somewhere in between' (Wenger, 1998, p. 137). Within these three dimensions, a COP jointly connects working, learning and sharing information. In a COP, learning becomes an important activity which sustains the primary practice. Successful farming depends on more than one's academic qualification and technical competence. Empowered young farmers are individuals who can understand and address issues like power relations, ideology, and culture within various agro-communities of agricultural practice, the extension agent, the researcher or the NGO.

Young farmers will be empowered if the extension agents are empowered first. The role of the extension agent in facilitating and inspiring young farmers is undeniably important in sustaining the agriculture sector. They are the change agents who sustain the synergistic working relationship among farmers, the government, private organizations, NGOs and the community at large. According to Havelock (1973), there are four primary ways by which each person can act as a change agent; first, he

can be as a catalyst. Most people do not want change; they want to keep things the way they are even when outsiders know that change is required. Precisely for this reason, the change agent is needed just to overcome the inertia. He does not necessarily have the answer, but being dissatisfied with the status quo, he is keen to bring about change. Second, the change agent acts as a solution giver. Being an effective solution giver involves more than having a solution. The change agent must know when and how to offer it, and be alerted to help the client adapt to his needs. Third, the change agent can be as a process helper. Most clients are not experts on how to change; they can be greatly helped by people who are skilled in the various processes of problem-solving. Fourth, the change agent can act as resource linker. The linker refers to the person who brings people together, who helps clients find and make the best use of resources within and even outside their system. The extension agent can be considered as an empowered person if he represents the entire system of mechanisms expected of the change agent.

Therefore, empowerment is a construct shared in many areas, including community development, psychology, education, and economics. Empowerment is also a process that engages the power of young farmers to strive for success and motivates them to improve their own lives. Young farmers will be empowered if the extension agents are empowered first. The extension agent must be equipped with technical knowledge, as well as human resources. A competent extension agent can empower young farmers to move forward to perform better in Malaysian agriculture.

CONCLUSION AND WAY FORWARD

A growing body of research indicates that meaningful youth involvement is essential for good governance and decision-making in the agricultural sector. Encouraging youth to take up careers in the agricultural sector in order to make them useful members of society is an important developmental task since youth are the pillars of economic development, and they should be groomed as future leaders, professionals, technocrats and skilled workforce. It is crucial to ensure collaborative effort between the government, industry and the education sector towards putting in place an efficient support system for youth to be involved in the agricultural sector. Such a collaboration could enhance the image of careers in the agriculture sector, and at the same time, change the agricultural landscape into one

that is modernised, mechanized, focusing more on entrepreneurship to create better employment opportunities for young people.

It is recommended that students from secondary schools and tertiary institutions who pursue agriculture and agricultural related programmes be exposed to practical training and be well informed regarding the prospects of agriculture. Hands-on programmes on agriculture extension training, urban farming training, entrepreneurship training and enterprise management skills should be incorporated into the curricula of tertiary programmes to provide students with up-to-date knowledge and technology in agriculture.

Young people are the leaders of tomorrow. Hence, creating meaningful opportunities to engage them within their communities is an important step towards making them useful members of the society at large. This requires the gearing of agricultural programmes towards encouraging young people to develop into adults who feel they are genuinely useful members of their community. Therefore, to evoke their enthusiasm for agriculture as a career path, youth must be engaged in modern agriculture activities such as agropreneurship and urban farming, along with the adult leaders in their respective communities.

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