

## Agriculture: Educational Strategies to Create Wealth in the Caribbean

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Individuals choose their occupations to meet a variety of needs, ranging from providing for their material needs to the esteem needs that cause them to feel good about themselves. Agriculture, as an occupational choice in the Caribbean, has tremendous potential for wealth creation. Advances in technology and improvements in the quality of education offered to students in agriculture are challenging the notion of the poor, uneducated farmer. This study explores the benefits of innovative educational strategies in agriculture which apply the concept of social affirmation, e.g. farmer field schools and agroparks. The conclusion is that wealth creation through agriculture in the Caribbean can only become a reality when farmers, develop a strong sense of self; work cooperatively; and, obtain improved support from the political machinery.

**Keywords:** Education, Technical and Vocational Training, Occupational Choice, Agriculture, Self-Esteem, Social Affirmation

So when you see dese ol clothes brown wid stain,  
An soaked right through wid de Portlan rain,  
Don't cas your eye nor turn your nose,  
Don't judge a man by his patchy clothes,  
I'm a strong man, a proud man, an I'm free,  
Free as dese mountains, free as dis sea,  
I know myself, an I know my ways,  
An will sing wid pride to de end o my days  
Praise God an m'big right han  
I will live an die a banana man (Jones, 1986, p. 48)

Individuals choose their occupations to meet a variety of needs, ranging from providing for their material needs to the esteem needs that cause them to feel good about themselves (Clegg, Kornberger, & Pitsis, 2010). Agriculture, as an occupational choice in the Caribbean, has tremendous potential for wealth creation. Advances in technology and improvements in the quality of education offered to students involved in agriculture are challenging the notion of Jones' (1986) "Banana Man" with his "ol clothes brown wid stain, An soaked right through wid de Portlan rain, ..." (p. 48). However, the level of wealth imagined from agriculture can only become a reality when farmers, in particular, small farmers develop a strong sense of self and have confidence in their abilities that may not have been affirmed in the classrooms of their youth; work cooperatively to maximize the community's yields; and, with improved support from the political machinery.

The instinctive declaration of Jones' (1986) "Banana Man" to the tourist wiping his face in the market and staring at him in contempt for his apparent low stature, is evidence of the pride that small farmers have in the land that they work and the food that they produce; as well as their struggle to make enough to provide for their material needs, including socially desirable attire. However, it is not only the tourist who makes assumptions of the farmer's class based on his sweat-

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stained work clothes, but locals too. A farmer's work involves long and laborious toil in the hot sun, and deep in the muddy, rain-soaked fields. In transporting his goods to the market, and selling his fresh produce, he will inevitably get some dirt on himself, and sweat from the physical activity. So, it is unfortunate that for all his hard work, tilling his land and caring for a family, producing food for his nation, and being able to afford entertainment of his liking, his occupation is usually demeaned by those who work in offices and in the city, away from the hillside fields. Additionally, the increasing promotion of the Caribbean islands as tourist destinations, offering a wide range of services to hotel guests in highly polished buildings with professionally dressed staff, located close to farming communities, has continued to challenge the status and the identity of the proud "Banana Man."

Regrettably, there is generally a negative perception of agriculture in many societies. Apart from the farmer being patronized for his attire, it has been observed that some schools have streamed students who are not academically inclined into vocational courses, such as agricultural science. This is because the profession of agriculture is not viewed as an area which needs individuals with a high level of academic excellence. Additionally, many views of agriculture have pronounced the profession as being "dirty", "back breaking" and unambitious, as the tourist assumed in the "Song of a Banana Man" (Jones, 1986).

In this information and digital age, the perception of agriculture has been crippling the development of the sector. Disappointingly, agriculture is bombarded with multiple challenges, such as low productivity possibly because of the negative perception of the industry, low use of technology, inadequate resources available to the farmer in the form of government subsidies, praedial larceny and the competitive global economic environment. Notwithstanding the fact that the practice of farming is relatively hard and gruelling, farmers are still engaged in the practice. Furthermore, some agricultural colleges are still training students to get involved in agriculture, such as the Knockalva Agricultural School, Sydney Pagon Agricultural High School, Ebony Park HEART Academy and the College of Agriculture, Science and Education. Many ambitious careers in agriculture have been filled in the sector, ranging from production and programme planning, to agro processing and export. In essence, the agricultural profession is not completely daunting, as once perceived to be.

Many small farmers today have inherited the family lands which their people have cultivated since the days of slavery. In fact, many have also not done well academically to move away from their farming community and get a job in the city. Consequently, agriculture becomes their work as they help the family to meet its needs. As difficult as their situation is, they display their resilience in using the educational skills that they have managed to attain, the family lands available to them, and the support offered through government programmes, to create their livelihood. After working in the farm over a period of time, the farmer finds a rhythm to life where he can meet his material needs and also entertain the idea of supporting a family of his own through farming. It is this time factor that allows him to accept his identity as a farmer. He may have been doing it until he could think of something else to do, but in engaging with other farmers, learning about financing options available to help farmers diversify their crops and improve yields, farming has taken on a new meaning in the eyes of the farmer. No longer is it solely an occupation of "forced labour," but rather a meaningful occupation of which the farmer can be proud. Farming is also an occupation that the governments of the Caribbean region are keen on supporting in order to feed their local and regional populations.

This study explores how the plantation history of the Caribbean has influenced the field of agriculture today, how small farmers choose farming as an identity; and, the perceptions of youth that continue to challenge their identities as farmers. It also highlights innovative programmes by

the Government of Jamaica (GoJ) that are helping farmers to change their identities from small farmers to “businessmen” and “businesswomen,” and shows how the Social Affirmation Framework can be incorporated into this development process. In order to further understand the agricultural landscape, the socio-economic context of agriculture will be discussed next.

### **The Socio-Economic Context of Agriculture in Jamaica**

It has been of great concern to many agricultural scientists and economists that even though Jamaica is blessed with fertile soil and a wonderful tropical climate, agricultural productivity, and the resulting contribution to the gross domestic product (GDP), continues to be low (Hussey, 2002). Jamaica is not unique, as global reports suggest that “despite the importance of agriculture for economic development, agriculture is yet to perform as an engine of growth in many developing countries” (Aker, 2011, p. 632).

The contribution of agriculture to Jamaica’s GDP declined over the years from 8.4% in 1996 to 5.9% in 2006, and now stands at 6.8% in 2012 according to the Statistical Institute of Jamaica (STATIN, 2011). In addition to this fluctuation in the agricultural sector, the quantity of Jamaican exports also declined. This had a serious effect on economic growth. For example, the agricultural import bill is approximately US\$1 billion (approximately J\$110 billion using current exchange rates) dollars (STATIN, 2011). Unfortunately, the agricultural balance of trade for January to September 2013, registered a deficit of approximately J\$59 billion, as imports for food was above J\$72 billion and export of food and traditional agricultural export crops was approximately J\$13 billion (STATIN, 2013). The situation is exacerbated when these deficits are occurring at a time when the exchange rate is increasing due to the effects of a new arrangement with the International Monetary Fund (IMF) since 2013. So, all the costs to the Jamaican people are increasing while the real value of agricultural goods produced are decreasing. As a result of these economic shifts, key stakeholders who wish to improve agricultural development have become wary about investing heavily in agriculture. However, improvements must be made as agriculture is the second largest employer of labour, accounting for 18.29% of the labour force (Ministry of Labour and Social Security, 2013).

Some of the reasons noted for this low productivity are the low level of education of the farmers and the outdated technology used by the farmers in their agricultural activities. For example, the Agricultural Business Information System (ABIS, 2013) reported that 4% of the registered small farmers in Jamaica had no form of education, while 57% have only attended primary school. Additionally, ABIS (2013) indicated that many farmers have not attained formal education in agriculture. According to Maitland (2011), the illiteracy level of Jamaican farmers is 33.1%. This means that only 1 in every 3 small farmers can read and understand the instructions given in training sessions, on fertilizer, animal feed, pesticides and pamphlets on crop growth and rotation. Therefore, if there is no one else in their family or in the farming community who is using the product or who is willing to assist the farmer, he may actually be undermining his productivity due to incorrect strategies. However, the encouraging news is that farmers persist in farming; and, the extension officers, assigned to them by the Ministry of Agriculture and Fisheries, provide as much assistance as possible.

The results of the investments that farmers and governments make in agriculture are mixed as the proud nature of the “Banana Man” presents diverse challenges. Apart from illiteracy, psycho-cultural issues are also major features of the agricultural landscape, causing Chung<sup>2</sup> (2004) to conclude that “behavioural change among farmers has posed a major challenge to agricultural

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extension services worldwide and particularly in resource-poor countries, such as the Caribbean” (p. 1). Some farmers actually have had difficulty adopting new ideas primarily due to these challenges. Chief among these are the methodology of implementation and financial constraints. Therefore, their illiteracy and their adherence to “tried and true” farming practices traps them into a cycle of lacking current knowledge; while their pride, distrust, and impatience with the new systems designed to assist them, may cause them to be excluded from opportunities being developed in loans and grants that could assist them in expanding their operations and/or acquiring new technologies that would increase their crop yields. These two factors, illiteracy and psycho-cultural factors, contribute to low productivity. To further understand the dynamic nature of the decline of agricultural productivity, the colonial influence in the region will be discussed in the next section.

### **The Colonial Influence on Agriculture**

One of the undeniable reasons for the low returns for agriculture is the psychological entrapment perpetuated by the colonial history that created the enterprise. Agriculture as an economic enterprise in the Caribbean was shaped by slavery. The plantation, as purported by Brathwaite (1961), consisted of “tropical territorial units set up by colonizing Europeans for mineral or crop exploitation, and the nexus and network of production was designated a plantation system” (p. 3). The plantation was the European’s “cash cow”, and essentially, the facility which assisted them to attain wealth through the exportation of the products of the plantation.

In the Caribbean, the colonial era facilitated the slave trade between the Europeans (“the white man”) and Africa (the “black man”). Manley (1975) posited that “Jamaica was the meeting place of two expropriate populations: the Britisher uprooting himself in search of quick wealth through sugar; and the African uprooted by force from his environment to supply slave labour upon which his owner’s dream of wealth depended” (p. 12). Sugarcane production proved to be a lucrative business for the Europeans, especially because they used slave labour. Slaves were treated as property and “units of production,” and were required to do many tasks. By the mid 1750’s, 9 out of 10 individuals were considered to be slaves (Dowling, 2007). Slave masters supervised slaves, and the dehumanizing work conditions amplified the death rates. These plantations operated like “factories in a capitalist society” (Lewis, 1968), where the slaves were in effect viewed as “machines” (See Morgan, 1980).

Disgusted with the oppressive system, slaves began to rebel (including the Sam Sharpe rebellion of 1831-1832) which ultimately led to the abolition of slavery. Great Britain subsequently banned slavery in all regions in 1833. Having been emancipated, free slaves – new workers, were given the opportunity to own their own lands and engage in entrepreneurial activities (Borrelli, 2002; Lewis, 1968). It must be noted however, that even after the slaves were declared “free,” in an attempt by the Europeans to retain power over them, they were forced into a period of apprenticeship. Under apprenticeship the slaves were “legally obligated to work without compensation for their former masters for up to forty-five hours per week. Their term of continued compulsory labour depended on their status. Former field slaves (praedials) were to be apprenticed for six years, while skilled apprentices and domestics (non-praedials) were to be fully free after four years” (Heuman, 2007, p.1).

The distinctions between house slaves and field slaves reinforced the idea that farming was a lower quality of work than working indoors, a view shared by Persaud (2001) who observed that, “the plantation system, the totality of institutional arrangements surrounding the production and marketing of plantation crops, has seriously affected society in Jamaica” (p. 72); laying the foundation for what exists today, particularly in agriculture (Borrelli, 2002).

Waters (1985) further posited that, “Jamaica’s class structure today reflects its history as a colonial plantation society and its beginnings of industrial development characterized by a high rate of inequality and poverty” (Waters, 1985, p. 26). Indeed, the colonial era caused great distress to the slaves in the West Indies, and the historical effects of the humiliation, has transcended the years, and it is suspected that this has been carried forward in the agricultural industry (Lewis, 1968).

Additionally, through the development of the education system and the desire among the offspring of the freed slaves to not have to do the laborious work in the fields, creativity spurred new talents to emerge. The Caribbean began to produce individuals who were very talented in the arts, and others geared towards entrepreneurial activities, which were marked by the many small businesses, including small farms that exist in the Caribbean today. In addition, scholars emerged, who engaged in the pursuit of knowledge and the scientific process which guided research and development.

Indeed, it is believed that the plantation system has caused much of the identity issues, manipulative political systems, and discreet acts of domination and control present in modern societies. Conversely, the same system has encouraged the entrepreneurial spirit, creative ability and resilience of the black people in the Caribbean. Caribbean people have exhibited determination, and a perpetual will to survive. This is evidenced in the flourishing small business enterprises created, and agricultural innovations that have occurred in many Caribbean states. Certainly, whilst the negative dimensions of the plantation system were devastating, it is worthwhile to explore how the positive dimensions of this plantation system can help to improve the state of agriculture towards creating wealth. The creativity which propelled novel ideas and the entrepreneurial spirit, can also be transferred into the agricultural sector to boost productivity. We need to capitalize on the “self” element, the resilience of the farmer towards encouraging agricultural prosperity.

Notwithstanding the notion that there are positive dimensions of the plantation which needs to be harnessed, as discussed previously, the negative dimensions could have been perpetuated not only by the impact of colonialization, but also from the shift from agriculture to industrialization as a main economic activity. The transition of agriculture in the colonial era to industrialization will be discussed next.

### **Farmers in an Industrialized and Service Economy**

The plantations, and consequently the farmers, began to lose their economic influence with the advent of the industrial revolution. The emergence of industrialization led to the notion that “labour productivity is lower in agriculture than in the industry, and hence development required the movement from the agricultural sector to satisfy labour demand and finance capital investment in the industry” (Smith & Williams, 2008, p. 6). In other words, industrialization brought forth more financial gains in a quicker and more efficient manner than agriculture. Unfortunately, to further promote the notion of industrialization, agriculture was heavily taxed (Schiff & Valdez, 1992). “Industrialization became a synonym for ‘growth,’ while agriculture was reduced to the status of a declining and passive sector- a role that discouraged agricultural development” (Smith & Williams, p. 6). Consequently, agriculture has evolved from a profession needed for survival, to a unifying, communal and economic activity, and finally to a field of low status. All of this has occurred due to the dynamic interaction between agency and structure, as the European as the agent, immersed in a web of selfishness, enabled the plantation structure to fulfil his desire for power and wealth by constraining the slaves (Giddens, 1984). Once the land was seen to be adequately raped, the next perceived source of quick cash and wealth was the production of goods in factories.

Farmers, in particular Caribbean farmers who engage in agriculture, remained subject to the geo-political shifts and had little or no control over the prices of their goods on the markets (See Hilaire, 2000). However, the catalyst that was needed to rekindle and spur interest in agriculture



arrived with the advent of the Green Revolution, between the nineteenth and twentieth century. Inevitably, a low focus on agricultural production threatened to cause widespread starvation. The over-emphasis of industrialization and reduced focus on agriculture had nearly caused countries to be on the brink of famine.

As noted in Table 1 below, the global society has become more service oriented. The service sector is noted to be the highest contributor to the GDP, for all of the countries under analysis, except Trinidad and Tobago. Agriculture, for the most part is the least contributor to GDP. Unfortunately, the country that seems to have agriculture as the second highest contributor to the GDP, has been noted to be one of the poorest countries, with a struggling economy. This country is Haiti. Many factors continue to influence the struggling economy such as the country's vulnerability to natural disasters, widespread poverty and corruption, and inadequate application of technology (Central Intelligence Agency, CIA, 2014). For agriculture to prosper, keen disaster mitigation strategies must be implemented, and the focus must be on market driven production and the appropriate application of technology.

In contrast to Haiti, as noted in Figure 1, Belize and Guyana have the smallest level of arable land use and yet have enabled agriculture to contribute a significant portion to the GDP. The data has revealed that creating a productive agriculture sector is possible. Jamaica and other Caribbean countries have that potential, and so need to look beyond the constraints of perception and seek to promote a more productive sector. Food security is an imperative that Caribbean nations need to realize, capitalizing on the climate, water, and the resilient people who have the entrepreneurial spirit necessary to achieve this goal.

Table 1

*Comparison of Contribution of Agriculture to GDP among 8 countries*

Country	Land size (sq km)	Land use: % Arable land	Contribution to GDP (%)			Labour force composition (%)			Total Labour force
			<u>A</u> <sup>3</sup>	<u>I</u> <sup>4</sup>	<u>S</u> <sup>5</sup>	<u>A</u>	<u>I</u>	<u>S</u>	
Barbados	430	27.9	3.1	13.9	83	10	15	75	141,800
Belize	22,806	3.27	13	23	64	10.2	18.1	71.7	120,500
Cuba	109,820	32.3	3.8	22.3	73.9	19.7	17.1	63.2	5.233 mill
Guyana	196,849	1.95	20.7	38.5	40.8	na <sup>6</sup>	na	na	313,100
Haiti	27,560	36	24.1	19.9	56	38.1	11.5	50.4	4.81 mill
Jamaica	10,831	10.92	6.8	29.4	64.4	18	19	65	1.261 mill
Puerto Rico	8,870	6.76	0.7	48.8	50.5	2.1	19	79	1.286 mill
Trinidad and Tobago	5,128	4.87	0.3	57.7	42	3.8	33.2	62.9	621,000

<sup>3</sup> Agriculture<sup>4</sup> Industry<sup>5</sup> Services<sup>6</sup> Not available

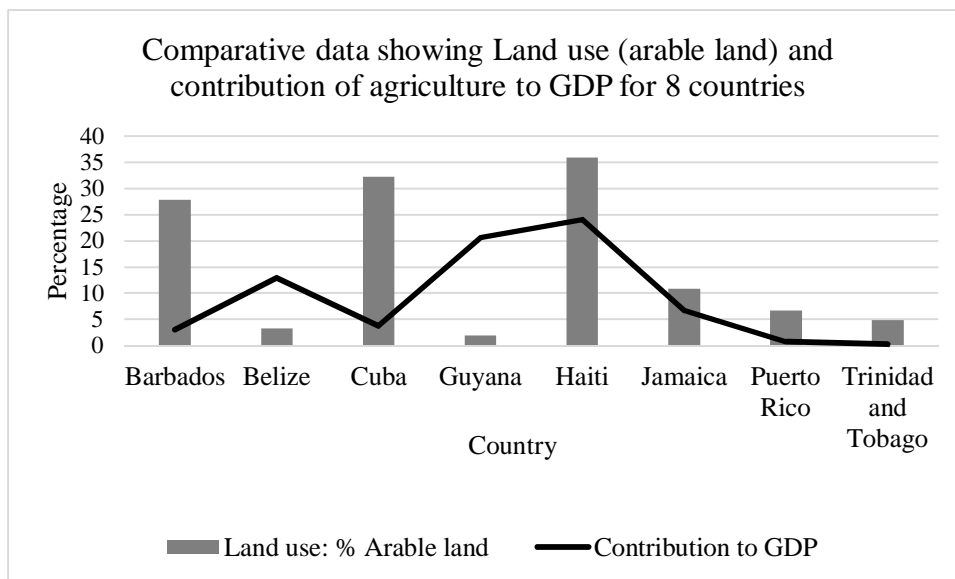


Figure 1: Comparative Data Showing Land Use (of arable land) and Contribution of GDP for 8 Countries (Source: Central Intelligence Agency, 2014 - World Fact Book)

The renewed global interest in agriculture resulted in a science-based approach through improved technology in genetics and production systems, which finally revitalized the sector (Hazell, 2001). The same is true in the Caribbean, as agriculture is still thought to be able to promote economic development (Lewis, 1950). Smith & Williams (2008) confirmed the view of other economists who “saw agricultural development as an essential component and even a precondition for growth in the rest of the economy” (p. 3).

Nevertheless, even though the need for agricultural development has been embraced as an economic activity for some Caribbean states, the sector is still being challenged by “a decline in export-oriented agriculture due to the erosion of preferential access to the European Union (EU) market, mounting food import bill, fiscal deficits and adverse balance of payments” (Smith & Williams, 2008, p. 3). Policy makers at times seem to act contrary to the well-being of the local farmers, as when imported food is purchased, the excuse is given that the imports are cheaper and as a country, globalization and trade liberation must be embraced. Unfortunately, this notion has continued to hurt small farmers as they struggle to compete with the imports. Indeed, if agricultural development is a priority, why are Caribbean states, especially Jamaica, still suffering from a high food import bill, especially when Pink (2011) reported that “Jamaica has over 114,000 hectares of inactive farmland” (p. 1)? Reports by Hilaire (2000) and others would suggest that countries like Jamaica remain victims as they are still “forced” to take cheap imports and follow other “subtle rules” structured by the international trade agreements.

Lewis (1950) postulated that agriculture can exist with industrialization in an organizational dualism. Undeniably, if the appropriate technology and the use of Information Communication Technologies (ICT) are applied to agriculture to improve efficiency, more new entrants could be attracted to the field. Unfortunately, many small farmers are not equipped with the adequate resources to facilitate high technologically supported agricultural production. However, once the institutional support is properly organized and operationalized and the perception of agriculture is managed, the use of these technologies can be facilitated to propel growth.

It is imperative that for the sake of the agricultural sector, that the youth are attracted to the field. The perception of and relevant support for agricultural development must be streamlined into a more positive avenue in order to develop knowledge of innovative technologies, rekindle the desire and love for farming to attract youth to the field. Further discussions on the perceptions of agriculture will be presented in the next section.

### **Perceptions of Agriculture**

Humans observe activities through the senses. Additionally, individuals construe or understand different experiences in diverse ways as a result of their backgrounds and mental frames. As postulated by van den Ban and Hawkins (1996), “perception is the process by which we receive information or stimuli from our environment and transform it into psychological awareness” (p. 59). Perceptions are more “relative than absolute, selective, organized and have direction” (p. 60).

In farming communities, children learn the hardships that their parents face in making a living through agriculture. They are also aware of their parents’ educational limitations which have prevented them from obtaining a better quality of life. This can result in their parents not being able to send them to school, afford their textbooks and other critical materials for learning, which in turn contributes to their child’s underperformance on standardized tests (Anderson, 2001; Miller, 2000). However, farming parents still send their children to school from their meagre earnings with the hope that they will grow up to improve the family’s economic circumstances by getting a good education. However, the educational challenges of the parents oftentimes become the challenge of the children, in particular if they do not have older siblings to help them with homework.

As a result of the underperformance of children in farming communities on standardized tests, the students are streamed into specific areas of vocation, one of which is agriculture. Although it is a practical response for teachers to introduce their students to subjects which are more suited to their rural environment and will give them an opportunity for industry and eventually providing for themselves and others, the fact that students are assigned to agriculture after performing poorly in the other classroom subjects created the perception that the agricultural students were deficient in their intellectual ability when compared with their peers. In light of the plantation legacy, students feel that they are being relegated to the lowest place in the society when they are essentially sent back to farm the land. Consequently, this would make agricultural students a target for ridicule among their peers, causing some to resent their occupation while others see it as a challenge to improve farm yields. The difference in student response depends upon the teachers of agriculture and the parents’ reactions when they realize that their children will pursue agriculture as their career.

Research by Githuki, Laibuni and Omiti (2012), confirms that youths, especially in the Caribbean and Africa, have negative perceptions of agriculture. It also reveals that the farming population is aging. The average age of the farmer is over fifty years of age; and, 44.3% of the farmers are fifty years and over (Maitland, 2011, p. 4). As the continuity of agricultural production is vital for sustainability and food security, it is necessary to make agriculture more appealing to the Caribbean youth. However, because of the situation described above, it has been a difficult task to encourage youth to become involved in agriculture. Githuki, Laibuni and Omiti (2012), also noted that young persons (between the ages of 15 and 35) do not see agriculture as a viable business option or as a profession in which one is engaged. Unfortunately, these writers noted that some youths continue to see this career as “an employer of last resort”. They further articulated that youths do not view agriculture as an appealing career option and have stated that it “offers no prospects for a better life, lacks prestige (status) regardless of the economic outcomes” (p. 10).



Furthermore, it was proffered in an article written by Pink (2011) in a *Gleaner* article entitled “RADA’s Mission to Polish Agriculture’s Image” that the following radical view still pervades.

Farmers are men who could not manage schooling or did not go because they were born too far below the poverty line. Cane cutters come from sprawling families, they beat their wives and smell of white rum and perspiration. Agriculture is tragic, unsophisticated and backward and its participants lack the mental fortitude to do anything else. Farming is a curse that just over 200,000 Jamaicans still have to bear. (p. 1)

Therefore, when students read the thoughts of assumed experts on their family’s occupation or their “last choice” option, there is little wonder why they become increasingly negative towards agriculture as a career option, even if they could be quite successful and economically independent doing it.

Without a doubt, apart from external perceptions that have impaired agricultural development, internal perceptions of agriculture by farmers need to be also considered as factors. Ajzen, (1991) purported that farmer’s decisions are based on three main factors as expressed in the Theory of Planned Behaviour, which include attitude, social norms, and perceived behavioural control.

A farmer may not want to adopt a technology, as he may not have a positive view of the proponent of the technology. Some farmers have expressed dissatisfaction with extension officers “who come with their degrees an feel like dem betta dan we.” This attitude undoubtedly influences the farmer’s acceptance of the proposed technology, as rejection will be the only way that the farmer can maintain control over his life and his production.

The farmer also considers what other farmers in his sphere believe as acceptable agricultural practices and may choose to adhere to those social norms. Any deviation or new technology proposed, may be met with apprehension and resistance.

The perceived behavioural control is someone’s perception of the degree of challenge involved in adopting a behaviour. It has been noted that some individuals’ beliefs may vary according to their ability to achieve a particular task. Some farmers may believe that they do not have the ability to achieve higher levels of wealth and this perception can hinder their progress. Also, Ajzen (1991), stated that “self-efficacy beliefs can influence choice of activities, preparation for an activity, effort expended during performance, as well as thought patterns and emotional reactions” (p. 184). This view is also supported by Bandura (1982, 1997). Once a farmer does not believe he has sufficient control over an activity, he may not necessarily choose to adopt the technology.

Essentially, limitations in adoption of new technologies and other complex factors include culture (Palis, 2005), perceived risk of adoption, literacy rate, (Anno-Nyako, Banful, Egyir, & Owusu-Benoah, 2006), age, gender, educational background and farmers’ perception of the technology proposed for adoption (Adesina & Baidu-Forson, 1995). Akundugu, Dadzie and Guo (2012) have also posited that broad factors namely, economic, social and intuitional factors also influenced the rate at which farmers adopt the technologies. Fundamentally, the farmer, as a single unit, finds it very difficult to cope within the industry. As a result, the adoption of technologies to move agriculture forward is extremely slow, and the farmer remains trapped in the cycle of victimization in the imperfect political and social systems.

Unfortunately, many farmers have been bombarded with and have absorbed the negative perceptions of agriculture, ultimately being affected by the stereotypes. For example, a farmer once exclaimed to a group of extension officers during a training session, after he had been applauded for

knowing a concept, “Yes, cause oonu tink say farmers a eediot.” In essence, he seemed to have been insulted by the applause, as he perceived that the trainer assumed that the farmers would not understand the concept. It is believed that these daunting opinions and stereotypes that resonate among the general populace of Caribbean societies have caused a level of demotivation among small farmers. Consequently, small farmers have become wary of the systems established to help them. They also tend to be apprehensive of their peers (as noted in the rate of attrition in farmer groups), the general public and the extension agents. These negative perceptions of the farmers and their responses to outsiders or out-groups have undoubtedly combined to make the farmers less productive, as indicated by their contribution to the GDP and the number of lands left uncultivated, particularly in light of the support programmes being offered by the local governments.

Some farmers have expressed the view that they are suffering due to the dynamic markets, high incidence of praedial larceny, and competition with imports. They have stated that they find it difficult to secure markets for their produce and earn a high level of wealth. Some of them continue to feel like victims of a cruel system that has not looked out for their concerns. They see farming as a difficult practice, used to send their children to school, and/or maintain the livelihood of their family, as well as improve the “face” and perception of agriculture. As with all countries that experience colonization, the church continues to be the centre of communal life through the teaching of biblical text. Thus, some farmers interpret their work as, laborious; and acknowledge that “by the sweat of their brow, they shall surely eat bread,” based on Genesis 3:19.

Regardless of all these negative perceptions held by farmers and out-groups, a ray of hope still exists. The extension services within the Ministry of Agriculture and Fisheries have been working tirelessly with farmers to improve their livelihood towards enhancing growth in the sector. These strategies will be discussed next.

### **Reviving Agriculture through the Extension Services**

In an effort to revive agricultural development, Caribbean states have invested in agricultural extension services to assist farmers in achieving optimal production, reduce poverty, improve the farmers’ livelihood and contribute to national development (Garforth & Oakley, 1988; Lewis, 1954). The Jamaica Agricultural Society (JAS) initially started the agricultural extension service in 1897 with one Agricultural Instructor. The preliminary function of the JAS included the delivery of agricultural services to farmers in order to ameliorate their living standards in the Initialization and Structuralization period (1895-1951) (bin Yahya, 2000). This prompted the society to form and register groups of farmers into formal JAS branch societies. The JAS possessed an eminent status at the time, as the Governor was the President and the Vice Presidents were members of the community and the legislative council. The JAS devised structured programmes to address farmers’ prevailing requests for technical, financial and physical assistance. However, the majority of farmers were unable to benefit from these programmes due to the limited resources (Hoyte, 1960, p.15). Figure 2 shows the growth in the number of Instructors in specific years. It must be noted that eventually, due to budgetary constraints, the number of extension officers declined.

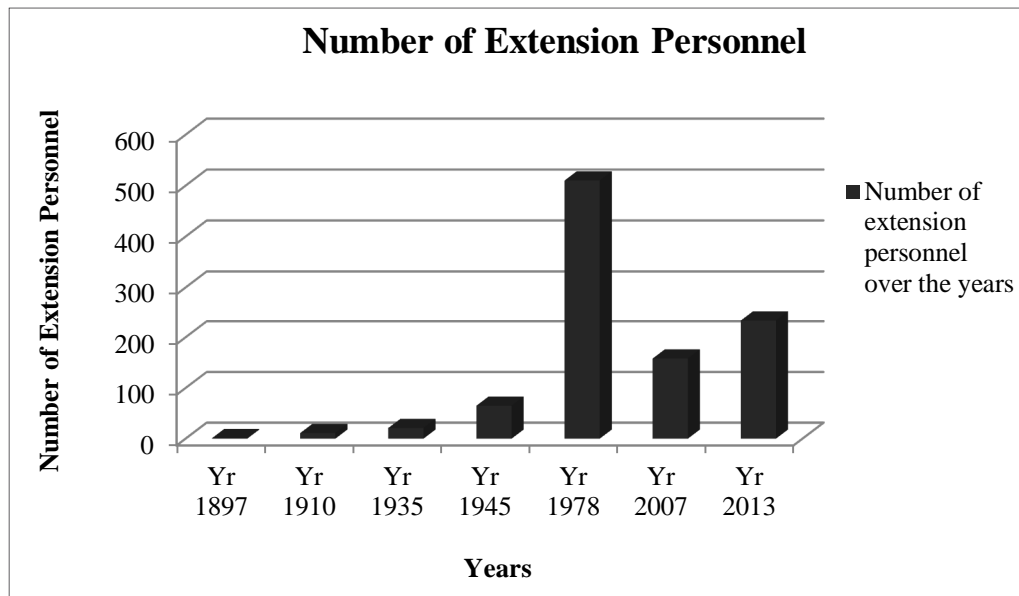


Figure 2: Number of Extension Personnel over the years: (Source: Henry and Johnson, 1979, p. 4 and bin Yahya, 2000, p. 3)

Not many farmers were formally educated in the field of agriculture as noted previously and the JAS realized that highly trained officers would be needed to disseminate technical information to farmers. Eventually, this need propelled the construction of the Government Farm School in 1910 in Hope Gardens. Today, this school is known as the College of Agriculture, Science and Education (CASE), located in the parish of Portland. This school, among other functions, primarily trains agricultural professionals. The JAS received a subvention from the government to fund its operations including the extension services of £2,000 in 1897. With time, the extension instructors expanded as trained teachers with knowledge of agriculture were recruited into the service as it became more difficult for one or a few persons to serve all the farmers (Henry & Johnson, 1979; Hoyte, 1960).

The Rural Agricultural Development Authority (RADA) was eventually established, after a series of restructuring exercises in 1990 by the Government of Jamaica through the Ministry of Agriculture. RADA, is a statutory agency which falls under the Ministry of Agriculture and has a core of 98 Agricultural Extension Officers who serve the 200,000 farmers in the island. According to its mission statement:

RADA is committed to promoting the development of agriculture in Jamaica, as the main engine of economic growth in rural communities, through an efficient, modern and sustainable extension service, which will enhance the national economy and improve the quality of life of rural farm families (Rural Agricultural Development Authority, (RADA, 2007, p. 3).

RADA is Jamaica's chief agricultural extension and rural development agency, which

(1) provides mainly non formal training programmes to farmers throughout the island; (2) aids small farmers in managing co-operative marketing solutions; (3)

disseminates information on crop and livestock production; and (4) offers agricultural service centers at strategic locations around the country (RADA , 2007, pp. 5-6).

The extension officers are mandated to provide a wide range of socio-technical and agricultural services, including the facilitation of training in the best practices of agricultural production to the farmers. They are a cadre of technical agents employed to RADA, who have been commissioned to disseminate practical agricultural technology, and improve social welfare through occasional farm visits and other participatory methods to the farmers and promote food security. It is hoped that these interventions will lead to the enhancement of the standard of living of the farmers, a better perception of agriculture, which aims to attract more youth and economic stability in Jamaica and the capture of international markets. The extension officer as postulated by Garforth and Oakley (1988), functions as an animator – a lively and convincing individual, who seeks to interact with his farmers in a meaningful way. He or she seeks to change the behaviour and mind set of the farmers and encourage them to adopt new and appropriate technologies which seeks to improve farm productivity. One of the approaches used by some of the extension officers is the Farmer Field School Methodology. This will be discussed next.

### **The Farmer Field School Methodology: A Participatory Approach**

The Farmer Field School (FFS) concept put forward by the Food and Agriculture Organization of the United Nations (FAO) involves the assembling of individuals in groups, such as the farmers, who all have a universal concern, and all gather from time to time to learn the “how and why” of a specific farming area or subject matter (Gallagher, 2003). “The Farmer Field School (FFS) is a participatory and interactive approach to social learning. It is an approach that puts together a set of principles and techniques meant to systematically enhance farmers’ abilities to investigate, analyse, innovate and learn improved farming practices” (Bwalya, 2007, p. 4). The FFS model, popularized by Agricultural Cooperative Development International and Volunteers in Overseas Cooperative Assistance (ACDI/VOCA), seeks to empower groups of farmers through experiential and discovery-based learning. It is mostly farmer-centred to support and develop the farmer’s competencies in the field as well as in perceiving agriculture as a business (Agricultural Cooperative Development International and Volunteers in Overseas Cooperative Assistance, ACDI/VOCA, 2011). Jamaica has adopted this approach on a small scale (due to limited resources), and it has been used to encourage farmers to be more business oriented by offering training in both social and business entrepreneurship.

This concept has been practised in Ghana, Indonesia, Trinidad and Tobago and Jamaica. As postulated by Feder, Murgai and Quizon (2004), “Farmer Field Schools (FFS) employ an intensive training approach ... to promote knowledge and uptake of ecologically sensible production approaches, and in particular, Integrated Pest Management which minimizes pesticide use” (p. 217). The areas of study include organic agriculture, animal husbandry, soil husbandry, as well as income-generating activities, such as handicrafts (Gallagher, 2003).

The group could be a formal one such as the JAS or Producers’ Marketing Organizations (PMO) farmer groups, or informal ones such as a group getting together to discuss a topic of similar interest. FFS is a short term group that usually lasts for the duration of the course of study. It has also been known to reinforce already established groups. FFS is different from other models such as Study Circles as it usually occurs on the farm (in the field) and has a practical approach and employs the field as the teacher, and the problems (such as the pests and diseases, incorrect farming practices) and the plants, as the training material.

In the successful cases where the FFS approach was used, farmers have been more at ease in the farm or field environments than in the conventional classrooms. The facilitator or trainer is usually an Extension Officer or a Farmer Field School graduate (Gallagher, 2003). However, keen experts from non-governmental organizations and other agencies usually assist in the dissemination of technical information.

Apart from the FFS approach, RADA has also used the lead farmer approach for years, and have engaged the lead farmers or opinion leaders in communities to be trained as FFS facilitators. The programme has been effective to the extent that, as a culture, farmers tend to trust and listen to other farmers and opinion leaders, who are also often respected, when there are levels of uncertainty in their production practices (Gallagher, 2003). Feder, Murgai and Quizon (2003) also purported that in Indonesia, “the program’s strategy was not to train all farmers in the community, but rather to rely on the spread of knowledge through farmer-to-farmer diffusion” (p. 50). As such, the opinion leaders in the farming communities are often the ones who liaise with the extension agent and diffuse these technologies. A downside to this practice is that it leads to weak ties between the extension agent and other farmers. However, the gap is still bridged between new knowledge and other farmers (Granovetter, 1973). Consequently, when new technologies are proposed, these opinion leaders are asked to encourage the use of technologies among other farmers, strategically improving the knowledge transfer and diffusion rate among farmers. Unfortunately, due to budgetary constraints and other limited resources, this participatory method is not widely practiced. It is time consuming, expensive and requires a lot of commitment from both the farmers and the extension agents. It would suit the Authority to find more sustainable ways of using this model, owing to its usefulness in practice.

Notwithstanding the financial challenges, the Ministry of Agriculture and Fisheries has implemented other initiatives such as the Agroparks in St. Thomas, St. Catherine, Manchester and Clarendon. Agroparks are plots of land engaged by a specific number of farmers, which are chosen through a rigorous selection process. These farmers cultivate priority crops such as onion, in an effort to reduce importation of that crop and other vegetables. The Agroparks seek to encourage more persons to engage in farming. This initiative gives interested persons, especially the youth and women, access to available land. These beneficiaries can also obtain reduced priced inputs, access loans, equipment and water, to produce crops.

Additionally, the Ministry of Agriculture and Fisheries has engaged the police to stem the high incidence of praedial larceny (theft of produce). Other initiatives, have been rendering technical and financial support in the form of grants and infrastructural development. Some of these agencies include the European Union, United States Agency for International Development (USAID), the Food and Agriculture Organization of the United Nations (FAO), and the Inter-American Institute for Cooperation on Agriculture to name a few. Despite limited resources as noted previously, the extension officers still make an attempt to work with the farmers, in an effort to improve agriculture’s contribution to GDP and economic development.

Generally, even though participatory methods such as the FFS are occasionally applied, the main approach used by government agencies to support farmers’ activities is a “top down approach”, geared at ensuring that agricultural production programmes are aligned with national policies. Farmers have been assisted with inputs including seeds, chemicals and fertilizers, and grant funding from donor agencies. Unfortunately, this initial assistance to encourage farmers, in some cases, has made the small farmers more dependent, rather than self-sufficient. Indeed, it has been observed, that when extension officers visit some farmers, many of them would rather receive physical benefits rather than technical advice. As such, some small farmers have seen the government as the supplier of inputs as a result of the past practices, and have not embraced



agriculture as a business activity. Consequently, the government extension officers have been working assiduously to promote agricultural development through entrepreneurship, but the institutional framework may not be totally in place to support this thrust.

It must be highlighted that, through the intervention of the Ministry of Agriculture and Fisheries/RADA, some farmers have been adopting new technologies. Even though these innovators are a marginal set, technologies such as protected agriculture; the use of green houses to produce crops such as sweet peppers, hot peppers and lettuce; mechanization; fertilization practices infused in irrigation systems; hydroponics; contour planting; and, keen soil conservation practices, have all been used by farmers and farmer groups to make agricultural production more attractive, less labour intensive and productive. The practice of farming does not have to be overly complex, as farmers are now empowering themselves. Where possible, some have sought certification through the HEART Trust/NTA<sup>7</sup>. Some farmers are now engaging in market driven production and niche marketing strategies, capitalizing on Jamaica's comparative advantage in producing certain crops, such as ginger. Additionally, it must be stated that with the Ministry's thrust of promoting import substitution, farmers have produced better levels of Irish potato (approximately 80% of the domestic demand as reported by the Databank unit in the Ministry of Agriculture and Fisheries). Undeniably through a more strategic focus, agriculture can be the star of the Caribbean economy, and importation can be reduced.

Farmers in the Caribbean have been known to be innovative in an effort to improve the processing efficiency of agricultural produce. These innovations have included the development of a sorrel machine (separating the seed from the flower), a de-feathering machine (to de-feather the chickens), a honey harvesting machine and the use of alternative sources of energy such as a form of wind energy. These innovations have essentially been birthed on the individual level and eventually extended to the community to maximize their efficient use.

Essentially, agriculture has the potential to grow, as the face of the sector continues to exhibit potential through the use of technological innovation. In essence, the appearance of agriculture is changing and more youth can be lured into the field. The next section will discuss the way forward through the Social Affirmation Framework.

### **Finding a Way Forward through Social Affirmation**

#### **The "Patronization of Agriculture"**

The society was simple before colonialism and individuals operated collectively as a unit, first unified as a family, then as a community. Agriculture was the main activity, engaged in mainly for survival. However, it would appear that as knowledge increased and societal development transcended time, these values were eroded. To some extent, the complexity of social and societal evolution combined with dynamic individual interactions had caused mankind to deviate from the ideals of community and collectivism. These same individuals, "rational beings," made the society more complex, sophisticated, "civilized" and organized. The collective unit, was then conflated to the individual, as a result of psychologism. Essentially, individuals sought to become more powerful agents, pursue personal agendas and as such, had to find ways to pursue their need for wealth by constraining other individuals.

Indeed, whilst recognizing the toil and hard work that farmers undertake in the field, the ghosts of the plantation that continue to haunt the present day profession, and the high levels of illiteracy which exist among the farmers, agriculture still has the potential to create wealth. Undoubtedly, it would be prudent to stop focussing on the negative perceptions associated with the

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<sup>7</sup> Human Employment and Resource Training Trust/National Training Agency

field and seek to perpetuate more positive solutions to encourage the sustainability of the profession.

It is important to recognise that if the society continues to (1) propagate the notion of agriculture being for the “not so bright” and illiterate individuals, (2) refer to small farmers as “peasants”, (3) focus on agriculture as a means to “reducing poverty” and not “creating wealth”; and (4) see the career as a “last resort”, this will deter potential entrants, particularly the youth from seeing agriculture as a viable career. This same vocation, which has been insulted for years, gave Europe its wealth, and as Adam Smith claimed “the prosperity of the new colony depends upon one simple economic factor – plenty of good land” (Williams, 1994, p. 4). Williams (1994) noted that the land and labour were useless, and labour had to be “commanded.” The labourers on the land were brutally described as “earth-scratchers” by Gibbon Wakefield (Williams, 1994). These misguided views and fallacious ideas must no longer be entertained, as the pride of agriculture has surpassed all these flawed perceptions.

Observations in the field have shown that farmers are very receptive to new ideas and knowledgeable about agricultural practices. Once farmers are respected and positively acknowledged for their experience, they feel respected when their identity as a farmer is affirmed. Farming is a science and the knowledge gained is done by countless “trial and error” experiments and research. Indeed, it takes a “bright” individual of prudent intelligence to be able to effectively apply beneficial results gained through experimentation to real life situations of agricultural practice.

The “patronization” of farming has been encouraged with the constant creation of dependency through the consistent supply of free inputs in the past, and the expectancy which still rests in some farmers to receive such benefits. Albeit, input costs have been and still continue to be high, and the stimulants of inputs were necessary at different points to promote the industry. However, when should the “hand holding” cease? A balance needs to be created and enforced. If the “patronization” continues, some small farmers may never see farming as a business activity. It is incumbent on modern societies to change the tune of the “patronization” of agriculture and begin to instead engage in the affirmation of agriculture.

In recent times, as a result of the looming starvation in the past, and the new understanding of the possibilities of agriculture and its competitive advantage in the Caribbean, the importance of such activity has been reiterated in many spheres as the main engine of growth. However, mixed messages are being sent when the dominant global ideology is for the “organization and liberalization of trade”, promulgating an open economy, whilst acknowledging that developing countries have limited resources to compete. Essentially, powerful agents in developed countries have formed a unified force among themselves in an effort to retain the majority of the power and compete effectively. If they can unite and accomplish their trade goals, why has it continued to be difficult for the Caribbean to be unified, and also seek to gain and retain power in agricultural competitiveness? Today, do we really “know” and understand what it is to function as a unified force? It is believed, that there are issues of trust, self-security and accurate identity that still pervade among the Caribbean people and as such the idea of being a collective force is still being challenged. The Caribbean people need to cease the patronization of agriculture, affirm their resilience in the field, become a more unified force, persist and be determined to continue the pursuit of agriculture to be the ultimate creator of wealth, as will be discussed next.

### **Exploring the Potential for wealth creation**

Caribbean farmers have demonstrated extraordinary resilience in sustaining their livelihoods under very challenging circumstances. It is a testament to their strength and entrepreneurial

tendencies that agriculture as an occupation choice has endured. Important to note, are that slaves in the plantation, were given the opportunity to own their own parcel of land, usually located in the mountainous area away from the core estate, where they grew crops to sell to the Sunday markets and also to provide food for themselves and their families (McDonald, 1993). These provision grounds (both metaphorically and physically) could have provided some form of escape to the slaves, both psychologically and socially as they were empowered to provide for themselves and unleash their creativity. Additionally, another form of comfort to the slaves was their intensive involvement in building and maintaining their culture through drumming, dance and theatre (to include ways of subtly mocking the “white man”) (Henke, 1996).

Writers such as Maslow (in Clegg et. al., 2010), Deci and Ryan (2000; 2008), and others, have supported the notion that all humans are social and have the need for competence, autonomy, belongingness, affiliation, and relatedness; and that having an occupation is one way of meeting these needs. In the following section we propose a way of thinking about agriculture that affirms the farmer’s identity, in an effort to shift the thinking of all stakeholders from seeing the farmer as a labourer and now as a business owner. It is anticipated that in taking ownership of their enterprise, farmers will no longer see themselves as victims, patronized by a system, but reach out to others in their community and build collective farming communities to maximize the wealth for all.

It is proposed that the Social Affirmation Framework (Branche & Morgan, 2011; Mitchell, Elias & Branche, 2015), can be used to encourage more “positive and valued selves” within the farming community. This framework can be integrated in farmer training sessions. The Social Affirmation Framework has four components which are the collective identity, the collective esteem, the personal identity and the personal self-esteem (Branche and Morgan, 2011). The potential applicability of the framework is further discussed below.

### **The Collective Identity of Farmers**

Despite the horrific history, Caribbean people have expressed determination to overcome and recapture their rightful freedom, which was stolen during colonization. Farmers can use this element of commonality to embrace their collective identity. Throughout history, farmers have been resilient, strong, entrepreneurial, and innovative. They should seek to pursue and harness these characteristics as a collective unit. Hogg and Abrams, (1998) describe social identity as “self-descriptions deriving from membership in social categories” (p. 25). From a sociological perspective, farming shapes the farmer’s collective self, creating social and financial stability. As the farmer seeks to make decisions on how to balance the contributions of his or her harvest to self, family, community, and the government within a socio-economic environment, issues of agency and power, tend to influence this process. Indeed, agriculture in its entirety, has become a complex industry.

Farmers can leverage the strength of their collectives, as farmers who form groups that are sustained for a long period of time can lobby for benefits, projects, grant funding and loans. Some farmers have gone further to form themselves into cooperatives, where they have shared knowledge, resources and markets. The markets are volatile, but the farmers have seen the benefits of networking and sharing market intelligence, as this has enabled them to meet the demand quota, which may have been larger than their individual production.

Farmers have to see themselves as the bedrock of society, the providers of food, needed for sustenance, economic development and survival. The practice of agriculture should be promoted as a business, a scientific practice, which can be successful if the correct mindset, skills, and creativity are applied. It would be important to emphasize to farmers the power and recognition that can be gained once they function as a collective unit. A possible exploration of this framework in

developing the collective identity is the use of the FFS methodology. For example, there had been a prevailing problem of the Beet armyworm infestation on the scallion crop in the parish of St. Elizabeth. It was discovered that a number of farmers were not engaging in effective Integrated Pest Management strategies. This includes the scouting of their farms for regularly checking and monitoring the farm for pests and unusual activity. Scouting of the farms can assist farmers to detect possible infestation early and take steps to treat the pest. Since the FFS was an effective method used to influence farmer behavioural change, it was decided to use this method to encourage farmers to scout and manage their farm activities more collectively. In the FFS, farmers were divided into two groups. They scouted the demonstration farms in groups and did other group activities. Their groups were named. One group was dubbed the Defenders, and another was named the Attackers. The groups developed (1) higher levels of cohesion; (2) embraced their identity which was stimulated through multiple group activities and games; and, (3) visited and worked on each other's farms regularly to check for the pest. Farmers were encouraged to promote the effective IPM strategies in their communities. As the groups sought to monitor each farm's progress, the level of infestation of the pest in the community was eventually managed. In effect, in the domain of the collective, they achieved more.

### **The Collective Esteem of Farmers**

“Collective self-esteem is defined as the feelings of self-worth one derives from one's group memberships” (Garcia & Sanchez, n.d., p. 2). “Luhtanen and Crocker developed a measure of collective self-esteem that includes four subscales: membership, importance, public regard, and private regard. The membership subscale measures perceptions of one's worth as a social group member” (p. 2). Undoubtedly, some farmers have expressed feelings of displeasure at how they are viewed by the wider populace. This has been demonstrated by some farmers forcefully asking agents to leave their property, when they are deemed to be emanating an attitude of superiority towards the farmer. Through the acknowledgement of collective esteem, if properly constructed, some individual insecurities can be subsumed in the collective. By this, it is expected that once an individual builds his level of self-worth in a group and establishes his or her role, he or she may feel like a very valuable part of the whole or collective unit. By building the collective esteem, each group member can share their knowledge and skills to create a collective identity. Once a positive face and image of self is constructed in the farmer groups, this can be projected to the public, with the hope that it can change the general perception. Some farmer groups have been aiming to present a polished image through their high quality production, and to some extent, have created customer loyalty. The groups essentially recognized their worth to the communities they served, and acknowledged the valuable and revered assets, especially embodied in the Jamaican soil. It has been well known that the Jamaican coffee, ginger and yam, for example, have been rated as the best in quality and taste. Indeed, when farmers fully recognize the indomitable talent and spirit that can be garnered as a collective, and acknowledge and project the value of the high quality food produced, wealth can be gained and sustained, through strategic bargaining.

### **The Personal Identity of Farmers**

Hogg and Abrams (1988) articulated that “personal identities usually denote specific attributes of the individual and are essentially tied to and emerge from close and enduring personal relationships” (p. 25). Brewer (1991) further purported that “personal identity is the individualized self – those characteristics that differentiate one individual from others within a given social context” (p. 5). The personalized self is usually manifested in the different roles individuals play in

groups. Essentially, the individual is not necessarily separated from, but seeks to interact within groups, depending on the required salience of identity.

Indeed, from a psychological perspective (“the self”), agriculture for the farmer is his or her career, work, and a form of income generation to support self and family. Farming is essentially a farmer’s life, livelihood, of which his or her identity and purpose has been carved and accepted. Some farmers have become the land, as they have embraced the rugged, strong and productive nature the land assumes.

Farmers play multiple roles, as family leaders, church members, and community leaders. It is, therefore, very important that farmers are aware of themselves, conscious of their talents, knowledge and skills, so that they can share these elements to improve the collective identity of their groups. Their talents need to be harnessed and developed towards building their confidence and thus enhancing the contributions of each group.

### **The Personal Esteem of Farmers**

Unfortunately, due to perceived issues of self- efficacy, literacy and real challenges of the volatile agriculture sector, a farmer’s self-esteem may be prone to vulnerability. Regardless of these prevailing issues, it is important to recognize the possibilities and not focus on the limitations. Farmers are not victims, as they have emerged from the past with creative and innovative ideas that can propel the industry forward, guided by strong agents. Farmers are resilient, as the laborious activity that is involved in agriculture is not easy for many to engage in. Certainly, farmers have to be keen decision makers, strong and smart, to survive in this field. To their credit, many have been able to have this value and self-worth in the industry. Farmers need to understand and embrace their essence, realize their purpose as the bedrock of society’s survival, accepting their immense worth and contribution to the nation’s development. Indeed, the society needs to develop a vision towards embracing more positive perceptions of farmers, as without them, we will perish.

As noted in Figure 3, farmers need to have a strong sense of self towards developing a sense of collective identity. This includes engaging in knowledge sharing, communities of practice, and ultimately building social capital owned and managed by the group. This level of professionalism can eventually open a plethora of networking opportunities to improve the marketing of the produce from these farmer groups. Ultimately, once the group improves their creativity, productivity, production and networking elements, wealth can be realized.



As noted in Figure 3, the Social Affirmation Framework can be applied as follows.

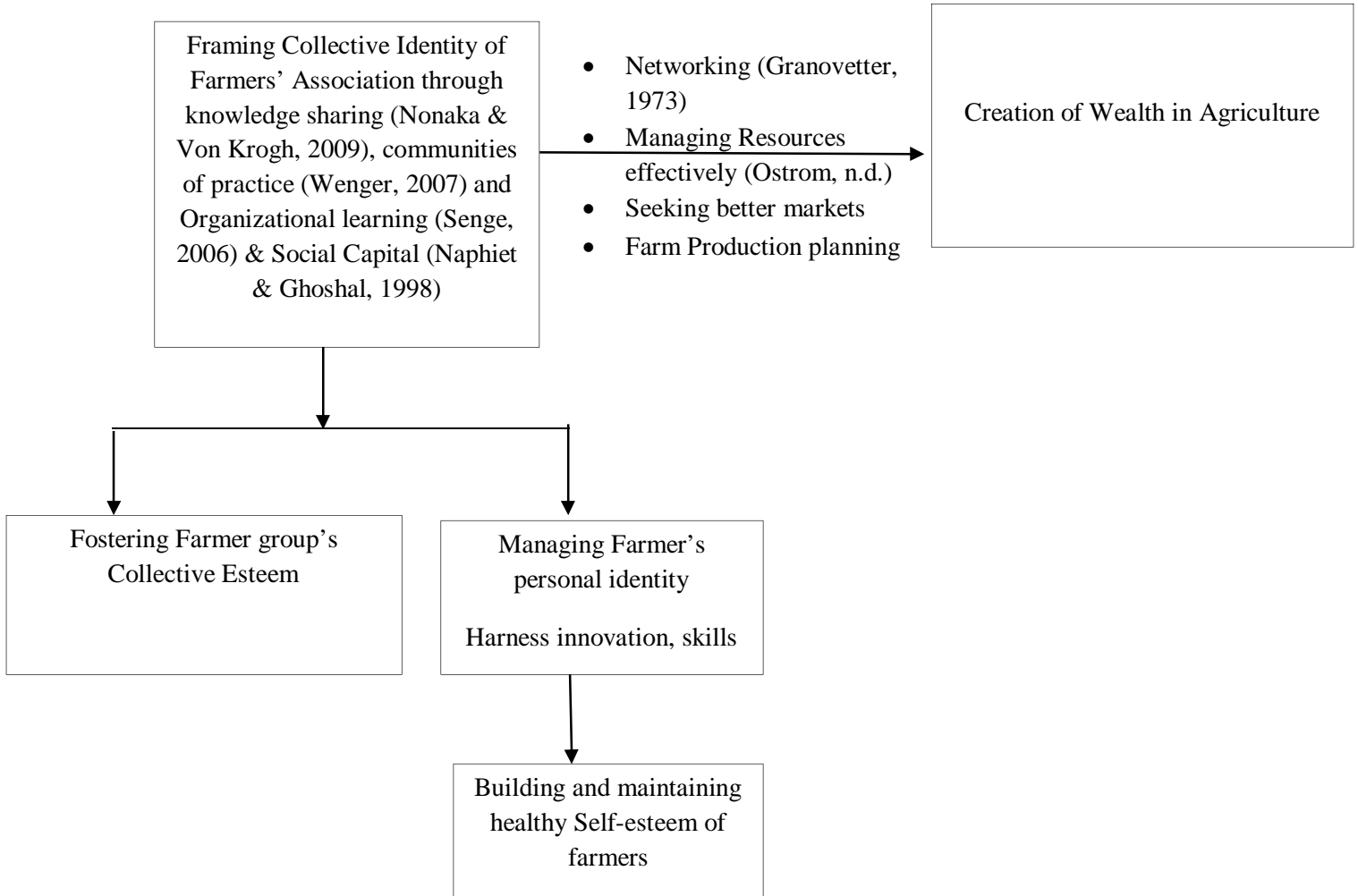


Figure 3: Towards an Integrated Model: Application of Social Affirmation Framework to improve Agricultural Wealth

**Conclusion**

As articulated in the Newswatch programme on Television Jamaica (2014) by Mike Henry, Member of Parliament, “we need to think ourselves out of poverty and dependency...” Agriculture has the potential to create wealth now more than ever, as the technology has made it more efficient, and a lot more sophisticated. To support this thrust, the industry has to receive the necessary institutional support to create self-sufficiency instead of dependency. As noted in Figure 3, small farmers, especially need to view agriculture as a business, and it is believed that once this is realized, wealth can be gained. Through effective networking, group marketing and production planning, farmers can accrue more benefits than they could ever imagine. The key is to develop competent farmers who understand the power of the collective unit. Indeed, the more positive the image of farming, then the more likely that young people will begin to see farming as an enterprising career and not as a last option. Those who are in it will want to stay.

Agriculture has evolved tremendously over the years and production practices have significantly improved through the use of technology. Indeed, it is time that Caribbean people affirm their strengths, and improve their self-worth, by becoming aware of and managing their personal and collective identities, so that everyone can reap the rewards of agricultural wealth. As Bob Marley reminds us in song, we need to “emancipate ourselves from mental slavery, none but ourselves can free our minds” (Garvey, 1937), and essentially recapture and own our land, and start visualizing the wealth that is truly ours.

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