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Edited
by
Wanda I. Lugo, Héctor L. Santiago, Rohanie Maharaj, and Wilfredo Colón

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Secretariat CFCS
P.O. Box 40108
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or from:

CFCS Treasurer
Agricultural Experiment Station
Jardín Botánico Sur
1193 Calle Guayacán
San Juan, Puerto Rico 00936-1118

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AN ANALYSIS OF TRAINING PRACTICES UTILIZED BY “THE AGRICULTURE NOW TRAINING UNIT” OF THE MINISTRY OF FOOD PRODUCTION FOR DEVELOPMENT OF THE AGRICULTURAL SECTOR: A CASE STUDY IN TRINIDAD AND TOBAGO

K. Gay. Agriculture Now Training Unit, Ministry of Food Production, Trinidad and Tobago

ABSTRACT: *In ‘An Analysis of Training Practices Utilized by The Agriculture Now Training Unit of The Ministry of Food Production for Development of The Agricultural Sector: A Case Study In Trinidad And Tobago,’ studies from Africa, Australia and Texas, USA along with the Latin America and Caribbean were overviewed to provide a degree of structure and theoretical underpinning for this study. Additionally, contemporary literature on strategic human resource management, training, development and international best practices formed the foundation in selecting appropriate methodology in pursuing this research. Methodologies included a balance between positivistic and phenomenological philosophies slanting towards a more qualitative approach given the numerous social issues associated with the agricultural sector regionally and locally (IICA, 2009, 2010; MFP, 2012). Both primary and secondary sources of data were used including surveys, questionnaires, semi-structured interviews, reports, journals and other appropriate literature. Professor Ken Julien (2009) states,*

“The focus has always been crops for export – whether its cocoa, coffee, sugar cane,” he added, “if you are thinking in terms of developed country status and you look around the world, the countries that do hold the status, one important criteria is that they are reasonably self-sustained in producing food for their own uses.”

Furthermore, FAO and ILO (2012) contend that training for employment is biased toward urban employment, with few rural training opportunities that effectively prepare youths for productive agricultural work. Generally, technology transfer and extension activities do not usually target ‘young people, especially young women’ (IICA, 2009; FAO and ILO, 2012). Review of the Agriculture Now Training practices reveal strategic fit with its agricultural training environment based on its requirements, resources and futuristic needs and practices employed for learning, development and mentorship. Ninety percent of APDP interns indicated that they thought of starting a business prior to coming into the programme. On the other hand, there is an increasing number of URP trainees that are desirous of starting their own backyard-home gardens versus working for farmers. Hence, this research signals an agri-entrepreneurship trend that is developing within the local agricultural sector. The programme takes into account the sectors needs, the farming community’s needs and the interns needs, collectively enshrined in both programmes. Given the constraints and scope of the paper as it pertains to the CFCS, the focus will be mainly on the APDP component of the Agriculture Now Training. Hence, the following represents a brief extract of a larger body of research conducted by the researcher.

Introduction

Food Security according to the Food and Agriculture Organization (2001) “exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle.” Thus it is the government’s responsibility and mandate to ensure food security in tandem with the Millennium Development Goals (UNDP, 2012) in the eradication of poverty. More specifically, it is the Ministry of Food Production’s role and contribution not just to the Government of the Republic of Trinidad and Tobago but also to the citizenry, as the economic rationale for this concept is such that a country must be able to adequately satisfy the consumption and nutritional needs of its people in order to be considered as possessing a degree of development.

Given the inherent characteristics of Caribbean economies, islands must seek to increase food production in order to sustain it efficiently and reduce high food import bills. Hence, human resource development (Armstrong, 2006) is crucial as people must be trained with the necessary skills set in order to produce the goods and services required to meet local consumption and press towards food security.

Company Background

The *modus operandi* of the Ministry of Food Production (MFP) is reflected in their vision statement and mandate as charged by the Government of the Republic of Trinidad and Tobago (MFP, 2012). These reveal the corporate strategy, direction and scope of the Ministry’s undertaking (Andrews, 1980; Lynch, 2009). This research is directly related to the Ministry’s Agriculture Now Training Programmes, namely the Agriculture Professional Development Programme (APDP) which interns University graduates in Agriculture and Agribusiness to increase involvement of young people in the sector. The Ministry has echoed the sentiments that these training programmes will be the catalyst to achieve the objectives of the National Food Production Action Plan 2012-2015 (MFP, 2012).

The Agriculture Now Training Unit’s core functions are as follows:

1. To provide agriculture training courses to members of the public interested in participating in the agriculture re-training programmes offered through the collaborative effort of the Unemployment Relief Programme and the Ministry of Food Production.
2. To manage the Young Professionals in Agriculture (also called the Agriculture Professional Development Programme) with agriculture and agri-business interns.
3. To facilitate the identification of employment opportunities for successful graduates from these training courses.
4. To facilitate interested graduates in setting up their own micro or small enterprises.

Research Issue

In the case of Trinidad and Tobago, petro-dollars have facilitated a rising food import bill as seen in the rise from approximately TT \$2 billion in 2006 to the current estimated value of TT \$4 billion (Trinidad and Tobago Chamber of Industry and Commerce, 2012). However, with the decline in revenues from oil, the country must begin to look inwardly as it moves towards greater development. This becomes even more crucial in light of declining reserves (IMF, 2007). In the Follow-up To the Implementation of the World Food Summit Plan of Action Report (2008) the then Ministry of Agriculture, Land and Marine Affairs indicated that several factors affect the stability of food supplies in Trinidad and Tobago.

- “Trinidad and Tobago is one of the **largest net importers of food in the Caribbean**. As a result it is susceptible to the disruptions in trade flows which can affect the stability of the food supply.
- The **aging of farmers** and the inability to attract and keep young persons in farming due to more lucrative employment in other sectors.
- Praedial larceny is a major problem which affects food production.
- Lack of capital investment in the agricultural sector due to high risk and uncertainty of returns.”

This research definitely has national strategic relevance as “the food import bill continued its upward trend, moving from TT\$ 2.8 billion in 2006; TT \$3.4 billion in 2007 and to TT\$ 4.2 billion in 2008. The value of the food import bill in 2008 represented a 23.5% increase over the previous year’s bill,” (IICA, 2010, p.7), even more detailed figures than the Chamber’s. With citizens facing an everyday crisis in purchasing food, and the government’s managerial dilemma to ensure its cost effective availability, the scenario reveals the national significance and potentially regional significance of this study as the MDG and its attainment becomes even more crucial.

The research question is as follows:

- Are the training programmes for persons in the agricultural sector achieving the government’s mandate for the Ministry of Food Production?

Research Objectives

1. To assess the current training practices applied for the training programmes of the Agriculture Now Training Unit of the Ministry of Food Production (MFP).
2. To evaluate the current training practices applied and benchmark against existing literature, theory and international best practices.
3. To review the current training practices and compare against industry norms, policies and regulations of the Government of Trinidad and Tobago.
4. To identify gaps and make relevant recommendations if and where necessary for the improvement of the agricultural sector.

Literature review

Strategic Human Resource Management

According to Armstrong (2008) strategic human resource management is “an approach to the development and implementation of HR strategies that are integrated with business strategies and enable the organization to achieve its goals.” Increased competition in the international environment has led to changes in business strategies in order to increase chances of survival (Armstrong, 2008). This becomes even more crucial in the agricultural context where the farming population is aging, youths are not readily inclined and attracted to the agricultural sector and access to resources are limited (IICA, 2009; MFP 2012; Webster, Ganpat and Chester, 2013).

As the implications of not achieving the Millennium Development Goals via reduction of poverty place international pressures on sovereign states, the effort to move towards food and nutrition security heightens. This therefore calls for organizational strategy or “direction and scope over the long-term: which achieves advantage for the organization through its configuration of resources within a challenging environment, to meet the needs of markets and to fulfil stakeholder expectations.” (Johnson and Scholes, 1989 and 1997).

Agricultural Human Resources

The 2009 Agriculture and Rural Development document was prepared by the Inter-American Institute for Cooperation in Agriculture (IICA), Food and Agriculture Organization of the United Nations (FAO) and Economic Commission for Latin America and Caribbean (ECLAC), directly speaking to the regional agricultural context with firm proclamations on the development of the human asset.

“Investing in roads, bridges and telecommunication infrastructure can create temporary or permanent jobs as well as improving transport and increasing the exchange of goods and services. This can create the foundation for more opportunities and competitiveness in rural areas. But policies should go further by giving youth access to productive assets including land and soft loans so they can start their own businesses. Such assets are currently difficult for young people and women to obtain owing to lack of collateral, or to traditions, norms or institutions, such as inheritance laws, for example, which traps them in a cycle of poverty and lack of opportunities.” (IICA, FAO and ECLAC, 2009, p.72).

Local Context

The literature does not adequately speak to the local scenario and in the context of this research; an evaluation of practices, programmes and performance was reviewed to see if reconciliation is needed in terms of what obtains in the sector versus the training mandate. Webster, Ganpat and Chester (2013) signal that there are several successful youth development models but “caution should be used when taking an approach that

overlays those that have been designed, developed, and tested only in contexts outside of the Caribbean.”

Human Resource Planning

Beardwell, Holden and Claydon (2004) defines human resource planning as “the process for identifying an organisation’s current and future human resource requirements, developing and implementing plans to meet these requirements and monitoring their overall effectiveness.” On the other hand, Torrington, Hall, Taylor and Atkinson (2011) advocate it as a strategic programming where it operationalizes and clarifies organizational strategies.

Training Brokerage

Kilpatrick, Fulton and Johns (2007, p. 14-15) introduce the concept of training brokerage as a continuum of activities designed to better match training needs and opportunities. In essence, they seek to inform providers and potential clients about needs and opportunities, whilst referring clients and providers to each other. Training is modified where necessary, negotiating content and delivery between potential clients and providers whilst developing training programs to fill gaps in the industry. They contend that “for policy makers, industry bodies and institutional investors in training, the broking model provides a mechanism by which to reduce duplication of effort in assessing training needs and developing and delivering training.”

Agricultural Planning

Planning is therefore critical to ensure labour needs requirement for the agricultural sector. Mullins (2010) though not speaking in an agricultural context, agrees with human resource planning for succession planning and organizational success, a similar theme of IICA, FAO and ECLAC (2009). Mullins contends that training programmes should be carefully planned and should reflect the priority areas. Additionally, they should start with clearly defined objectives, using appropriate training methods, incorporating an effective system of review and evaluation. In the local context MFP acts as the broker; however, local research bear gaps as it pertains to review of agricultural training practices and this research aims at highlighting some training elements and the development objectives.

Start-Ups

The failure rate of start-ups is high and the transition from being an employee to becoming an employer can often be a challenging one. Many young entrepreneurs have limited access to resources including land, labour, capital, markets and business advice. Hence, incubators provide access to these and other resources whilst preparing entrepreneurs and their businesses to become even more resilient; in essence, facilitating a supportive and enabling environment for businesses. This becomes even more crucial in an agricultural context where capital costs can be high for machinery, skilled labour is difficult to access amongst land tenure and other issues. In the article,

'Farm Incubators Help Would-Be Farmers Succeed On Their Own,' Langston (2011) pronounces that,

'Farm incubators are one answer to what many see as an increasingly pressing problem in agriculture: nurturing the next generation of farmers.... The trouble isn't lack of interest; it's that the infrastructure, money and skills, even the necessary government aid. . .are too often just out of the reach.'

Additionally Powell (2010) in *Incubating New Farmers* state that there have been high rates of success in developing new farm businesses. Whilst this may be so in a US context, in the local context, it goes beyond this scenario as there is also a stigma attached to agriculture and it is not viewed as a viable career path given its plantation history. Hence, the governmental training mandate must be seen as relevant, dynamic and competitive to attract appropriate personnel into the sector.

Incubators

InfoDev (2012) is adamant that "a thriving and competitive indigenous agribusiness sector relies on an effective innovation and entrepreneurship eco-system of flourishing and innovative enterprises." This therefore means that appropriate support systems must be in place to facilitate this type of entrepreneurial development, such as effective policies and regulation, financing and infrastructure. Incubation is the next level in developing business capacity and strengthening start-ups in a safe environment before going out to a competitive and unforgiving business environment.

Resources

IICA, FAO and ECLAC (2009) strongly advocate the development of policies to give access to resources in a bid to increase the number of business being established in the agricultural sector, increasing youth engagement and reducing unemployment. InfoDev (2012) has approximately sixty agribusiness incubators around the world. It should be noted that the three incubators that are closest to Trinidad and Tobago are in Jamaica, Dominican Republic and Dominica. However, they are engaged information technology business activities and not agribusiness. Given this reality, it is recommended that the Government of Trinidad and Tobago explore the option of establishing an agricultural incubator. As indicated, one of the roles of the incubator is to provide access to resources; therefore government must have resources available if they are to embark upon such. Grant's Assets and Resources model (1991) can be used to assist in assessing the feasibility of establishing an agricultural incubator.

Cases

In the Texas context (McIntosh and Picou, 1985), the unemployed and underemployed were trained to become job ready using classroom and on-the-job training as an attempt to provide greater levels of skills and commitment to full-time, steady employment. However, success rates varied according to different commodity areas. On the other hand, the Nairobi (Kenya) study by Wanjiku, Mairura and Place (2010) concluded that

respondents had very good recollection of training aspects, and increased knowledge, but there were challenges to implementation of training skills due to lack of resources. In the evaluation of the training, a feedback mechanism was evident with respondents indicating the following:

“Proposed means to improve future training suggested by trainee respondents:

- *More practical and field oriented*
- *Allocate more time*
- *More networking, participation, and interaction among multi-stakeholders*
- *Follow work plans*
- *Provide resources and funding*
- *Scrutinize resource persons”*

Interestingly, the case of ISCRAF, in Africa, signals significant learning points for Trinidad and Tobago as reflected in their recommendations to improving their training initiatives after the review. Several recommendations were given despite the positive success report. The most significant of these recommendations is the sixth point that *“Relevant training evaluation systems for the agricultural domain need to be developed as it is not clear whether evaluation systems sourced from other fields are fully transferable into the agriculture field.”* Gaps exist as it pertains to the regional and local implications and as such this provides another area for potential research.

Training Practices

Training practices involves all of the elements identified throughout the literature review. More specifically it should be viewed as systematic approach to training including the recruitment, retention, teaching, mentoring, evaluating in a bid to develop the individual and collective competence and skill sets of the targeted persons (Beardwell, Holden and Claydon, 2004). It therefore calls for systems and structures both physical and institutional in a bid to achieve organizational strategy and its developmental agenda (Mullins, 2010; Armstrong 2006; 2009).

After the appropriate persons are identified, attracted and recruited, appropriate curriculum must be disseminated by suitably qualified and experienced persons using various methodologies appropriate to the literacy levels of the targeted participants (Beardwell, Holden and Claydon, 2004; Wanjiku, Mairura and Place, 2010). Whilst the medium used may vary based on training objectives, time available for delivery of content, nature of content and literacy levels (Armstrong, 2009; Garofalo, 2003), learning and development must result in positive growth thus leading to enhanced skill sets.

Agricultural Context

In the agricultural sector, a more practical approach to teaching and learning must be adopted given the nature of the industry. A mix of classroom activities should be supported by practical field work, field trips as such the author agrees with Webster,

Ganpat and Chester (2013) in their articulation that “a greater focus should be placed on experiential learning.” Teaching should be coupled with appropriate evaluation methods that would effectively assess the trainee (Beardwell, Holden and Claydon, 2004; levels (Armstrong, 2009; Garofalo, 2003). Material should not only be relevant to the course objectives but easily assessable to increase chances of replicability by the trainee so as to solidify the training that is given. Evaluation methods can be verbal, written, practical and done throughout the duration of the programme or at the end.

Mentorship should be done by appropriate agricultural stakeholders and an opportunity should be given for knowledge transfer between experienced farmers and inexperienced workers including university graduates that lack practical skills. Government’s performance would be gauged as it pertains to the standard and cost of living for the citizenry. More specifically, the Ministry of Food Production’s performance will be gauge against the National Food Production Action Plan (MFP, 2012) which it hails as the roadmap to boosting local production, reducing the food import bill and enhancing competitiveness in the sector.

Methods

Research Philosophy

Given the very nature of agriculture as it pertains to quantitative issues of production, but also bearing significant social implication a pragmatic stance was viewed as appropriate incorporating a similar epistemological position where either or both observable phenomena and its subjective meanings can be utilized. Hence, subjectivism via the phenomenologist view and positivistic objectivity, thereby finding an appropriate balance between a positivistic and phenomenological paradigm, along the methodological continuum (Hussey and Hussey, 1997).

Research Strategy

A case study strategy was deemed imperative as global food supplies have an impact locally; hence, examination of international case studies were undertaken and appropriate comparisons and conclusions were drawn. The problem of limited food supply and distribution internationally can be further exacerbated if production is not increased and if the right kinds of people don’t get involve, as trained labour and as entrepreneurs locally.

Data Collection

For the purposes of this study a hybrid approach to data collection was used as primary and secondary sources of data were utilized to glean further insight. Data was collected both qualitatively and qualitatively via surveys, questionnaires and interviews to assess quality of training delivered and whether the sector is successfully developing capacity or hemorrhaging. As it pertains to the APDP graduate programme the research explored whether people were previously involved in the sector and desire for entrepreneurship and other qualitative aspects. Primary data was gathered through the

use of a survey (Gall, Gall, and Borg, 2007) which the researcher designed and administered.

Sources of data:

Primary Data

Primary data sources included:

- Face-to-face interview with the Agriculture Now Manager (approximately 1 ½ hours long)
- Face-to-face interview with two Supervisory coordinators (approximately 1 hour each)
- Telephone interview with five farmers groups and MFP collaborators (10 minutes each)
- APDP survey instrument (administered to all 30 participants)
- URP Coordinators instrument (administered to all 10 participants)
- Participant observation

Secondary Data

McIntosh and Picou (1985) used secondary data sources used as compared to Wanjiku, Mairura and Place (2010) where both primary and secondary were used, increasing the scope and validity of the findings. This research followed the approach adopted in respect of both sources as it undertook a thorough analysis of training programmes, practices and some of the potential impact on the sector. The approach of ICRAF was appropriate for the APDP with University graduates as well as the URP Re-training programme. Secondary data was also collected from journals, books, reports and publications so as to gain and further develop the theoretical underpinning for the study.

Additionally, secondary data sources included in this study are as follows:

- Ministry of Food Production reports (2012)
- MFP-URP report (2012)
- APDP Draft policy document (2012)
- APDP Feedback sheets
- APDP Exit interview sheets
- Collaborator Assessment of Interns forms
- Intern Assessment of Collaborators forms

APDP Survey

A five point Likert Type scale can be used on the survey comprising “mutli-chotomous” questions, which allows respondents to choose one of many answer choices (Brace, 2004); this concurs with Waddington (2000) that questions requiring respondents to

indicate what items are the “most important” to “least important,” then such a scale could be set up. The APDP questionnaire comprised of questions requiring participants to choose one or more options if applicable; Likert scaled questions; Yes-No and open-ended questions. The questionnaire was administered to twenty-four persons and piloted to iron out any concerns and errors in formatting. Given there was only one minor change and “clarification” was given at the session, the pilot was adopted as the actual survey. The modification was from “Specialization” to “APDP Specialization”. Six persons were absent at that session and permission was granted to e-mail them to undertake the questionnaire. All APDP interns were interviewed in census accordance with Central Limit Theorem.

Data Analysis

The questionnaires were sorted and prepared for input in the SPSS analysis software. Quantitative analysis via tables, distribution frequencies and cross tabulation with central tendencies (mean, median, mode) were the result after analyzing data using SPSS and Microsoft Excel. Similar to the ICRAF study cross tabulations were done in this study, however in the area of relevance of training and other areas identified such as entrepreneurship. Analytical induction was pursued in qualitative analysis. The five (5) main areas of APDP in Agribusiness, Agro-processing, Aquaculture, Crop and Livestock Production, allowed for a cross tabulation of area, gender, skills confidence amongst other areas. Interview notes were read and categorized; as themes arose, analysis was done within the emergent themes. After analysis of quantitative and qualitative data, information was presented using both graphical and non-graphical forms.

Results and Discussion

Studies from Africa, Australia and Texas, USA along with the Latin America and Caribbean overview provide a degree of structure and theoretical underpinning for this study.

Agriculture Now Training Unit

The Agriculture Now Training Unit (ANTU)’s Annual Report (2012) and an interviews with the Programme Coordinator and Supervisory Coordinators revealed the projected impact of ANTU’s programmes on the performance of the sector in alignment with the National Food Production Action Plan (2012 – 2015). This supports the position of Johnson and Scholes (1989), Andrews (1980) and Armstrong (2006, 2009) that strategy provides direction and scope for an organization over the longer-term. It is anticipated that these programmes would provide not only train semi- skilled workers for employment in the sector but also mentor young agribusiness entrepreneurs.

The Agriculture Professional Development Programme

The Agriculture Professional Development Programme was created to assist in stopping the hemorrhaging that existed in the sector as a result or young professionals being

unable to find appropriate employment in the sector. With a vision *“to assist Trinidad and Tobago to become a more food-secure nation through the creation of a globally competitive workforce of agricultural graduates through professional and technical skills enhancement within a motivational and structured environment,”* the programme is designed to bridge the gap that existed between the knowledge and experience gained by persons with Bachelors in Agribusiness with those who have pursued Bachelors in Agriculture.

IICA, FAO and ECLAC (2009) insist that, *“policies should go further by giving youth access to productive assets including land and soft loans so they can start their own businesses. Such assets are currently difficult for young people and women to obtain owing to lack of collateral, or to traditions, norms or institutions, such as inheritance laws, for example, which traps them in a cycle of poverty and lack of opportunities.”* In the context of the APDP, it bridges the gap not only in educational learning but builds an infrastructure whereby stakeholders are better managed and university graduates have an opportunity to tap into networking and resource opportunities.

APDP Intern Profile

At the time of the survey, the programme comprised of 30 persons. The surveyed population indicated that all 30 interns were between the ages of 23 to 29 years at the time of the instrument: (1)- 23yrs; (5)- 24yrs; (8)- 25yrs; (7)- 26yrs; (5)- 27yrs; (3)- 28yrs and (1)- 29yrs with 13 males and 17 females, 43.3% and 56.7% respectively.

Specialization

The programme allows interns to specialize in one of five areas based on their interest as such the results indicated (3) Crop Production; (9) Livestock Production; (1) Aquaculture; and (13) Agribusiness and (4) Agro-processing.

Academic Qualifications

The minimum entry requirements for the programme is a degree in Agriculture or Agribusiness and survey results revealed (3) Majors Agriculture; (14) Majors Agribusiness; (3) Bsc Agriculture and (10) Bsc Agribusiness. For the 17 persons who possessed Majors in Agriculture or Agribusiness, the following combination of Majors and Minors existed as seen in Table 1 below.

Table 1. APDP Academic Qualifications.

APDP Academic Qualifications Undergraduate Breakdown	Post-graduate Breakdown
4 Major Environmental and Natural Resource Mgt 1 Major Geography 1 Major Agriculture 5 Minor Entrepreneurship 1 Minor Gender Studies 3 Minors Communication Extension and Entrepreneurship 1 Minors International Relations and Communication Extension 1 Minors Sociology and Entrepreneurship	4 Msc Tropical Animal Science and Production (Pursing) 4 Msc Agri Food Safety and Quality Assurance (Pursuing) 1 Msc Marketing and Agribusiness (Pursing) 1 MBA (Pursuing) 1 Marketing 1 Msc Industrial Innovation Entrepreneurship and Management

Source: Author's Research (2012)

Programme Design

The one year internship is built in phases to include an

- Induction- which provides general exposure to the sector during the six weeks period of classroom sessions; videos; guest lectures; field trips and debates.
- Production Phase- which allows interns to work with crop, livestock or aquaculture producers for a period of five months to strengthen practical skills set
- Processing Phase-which provides eight weeks of exposure to value added processing activities in the agribusiness sector.
- Specialization Phase - which allows interns to be exposure in their specific areas of interests such as agribusiness marketing, policy, trade or even back into production or processing.
- Professional Developmental modules- provide business training to develop the entrepreneurial skills set. Modules covered include Project Management; Business Plan Development; Financial Management and Executive Leadership.

It should be noted that whilst strategic human resources theory (Torrington, Hall, Taylor and Atkinson, 2011; Johnson and Scholes, 1989 and 1997; Beardwell, Holden and Claydon, 2004) and best practice allude to a "customized approach" in dealing with persons, the Ministry of Food Production has gone a step further to develop a customized internship which allows interns to specialize not just in the five areas identified before but more specifically they are allowed to specialize even further within their category such that no more than two or three persons may graduate with the same experience by virtue of the type of operations that they may be attached too. Additionally, persons in crop production may choose, short or long term; field or protected agriculture amongst other options. The checks and balance as it pertains to maintenance of standards and consistency is the internship phase specifications. The Ministry must be commended for this novel approach.

Reasons for applying to the Programme

Table 2. Reasons for applying to APDP.

Reasons for Applying to APDP	
Didn't have a job	1
Didn't have a job; wanted to learn more agriculture	1
Didn't have a job; wanted a practical programme	1
Didn't have a job; wanted to start own agribusiness; wanted a practical programme	1
Didn't have a job; wanted to start own agribusiness; wanted to learn more agriculture; wanted a practical programme	2
Wanted to start own agribusiness	2
Wanted to learn more agriculture	5
Wanted a practical programme	3
Wanted to learn more agriculture; wanted a practical programme	5
Wanted to start own agribusiness; wanted a practical programme	4
Wanted to start own agribusiness; wanted to learn more agriculture	1
Wanted to start own agribusiness; wanted to learn more agriculture; wanted a practical programme	4

Source: Author's Research (2012)

Left Job

21 persons in the surveyed population indicated that they left their jobs to undertake this programme whilst 9 indicated that they did not. Of the 21 persons (5) Wanted a change of environment; (14) Wanted additional training; (9) Was not involved in agriculture but none indicate For more money. Of the 21 persons 12 were engaged in the agricultural sector whilst 9 persons were not. A further breakdown and can be seen below:

- Wanted a change of environment (2)
- Wanted additional training (7)
- Was not involved in agriculture (5)
- Wanted a change of environment; wanted additional training (3)
- Wanted additional training; was not involved in agriculture (4)

On-the-Job (OJT) Programme

23 of the 30 APDP interns were employed through the OJT programme prior to enrolling in the internship. 6 persons spent less than 6 months; 7 persons spent 6-12 months; 1 intern spent 12-18 months and 9 interns spent 18-24 months. Of the 23 persons previously employed in OJT, 18 were attached to agribusiness enterprises whilst 5 were not as reflected below:

Agricultural attachments:

- 9 Ministry of Food Production
- 5 UWI Dept of Food Production

- 2 ECIAF Campus UTT
- 1 Agricultural Development Bank
- 1 Ministry Food Production; Agricultural Society Trinidad and Tobago (ASTT); Ministry of Education

Non-Agricultural Attachments:

- 1 San Fernando Corporation
- 1 Ministry of Education
- 1 Moruga Secondary School
- 1 Ministry of Science and Tertiary Education & Ministry of Social Development
- 1 Eric Williams Sciences Complex

10 of the 23 former OJT's indicated "Yes" they left OJT to join APDP whilst 13 said "No." A breakdown of the reasons for the 10 persons leaving OJT for APDP are as follows:

- For more opportunities 2
- For more opportunities; wanted exposure in areas of interests 3
- For more opportunities; wanted exposure in areas of interests; wanted more practical 4
- Wanted exposure in areas of interests; wanted more practical 1

APDP Customization Approach

"The customization approach is relevant within the agricultural context, however, due to the entrepreneurial nature of the interns, placement may not always be in line with personal preference in terms of a business enterprise and relevant experience," according to one agribusiness intern. Interviews with management indicate some level of challenge with respect collaborators that are open to mentoring potential agribusiness entrepreneurs who can one day become their potential competition.

100% of respondents indicated that they have never engaged in a customized training programme prior to APD. Additionally a crosstabulation between their views on the relevance of the customization approach and whether they thought that APDP would equip them with the skills to start their own business, reveal amazing results in that 90% thought that it would help them and that the training via the customization approach was relevant and appropriate to the local context.

Table 3. Crosstabulation between the relevance of customization and skills to start their business.

Relevance of customization* starting business Crosstabulation Count				
		Start business		Total
		No	Yes	
relevance	Very Irrelevant	0	1	1
	Irrelevant	0	1	1
	Relevant	1	11	12
	Very Relevant	2	14	16
Total		3	27	30

Source: Author's Research conducted through questionnaire research method (2013)

Those who thought that the customization method was relevant to the agricultural sector in Trinidad and Tobago thought it would help them in their future endeavours. A crosstabulation was also done between their views on the relevance of customization and whether the training and exposure would help in their future endeavours and the results can be seen as follows where 14 interns strongly agreed. The difference between this and the previous crosstabulation is that 'future endeavours' may not necessarily include setting up a business.

Table 4. Crosstabulation between the relevance of customization and future endeavours.

Relevance * future endeavours Crosstabulation Count					
		Future endeavours			Total
		Neutral	Agree	Strongly Agree	
Relevance	Very Irrelevant	0	0	1	1
	Irrelevant	1	0	0	1
	Relevant	1	8	3	12
	Very Relevant	1	5	10	16
Total		3	13	14	30

Source: Author's Research conducted through questionnaire research method (2013)

Recommendations and Conclusion

A review of the Agriculture Now Training programmes and practices employed reveal gaps that can potentially hinder the programmes; hence, the following reflects a few of the recommendations made to assist in addressing the gaps identified.

Remuneration

Given the minimum wage received by URP workers, efforts should be made to ensure timely payments as failure to do so can mean that persons are unable to attend sessions, thereby defeating the purpose of the training exercise. So too a similar situation of late payments obtained in an APDP context and has led to high attrition, a situation further exacerbated by more attractive opportunities and remuneration out of the agricultural sector.

APDP Programme Design

Given some interns felt that the five-months Production Phase was too long, ANTU may want to review the design of the programme in shifting some of the time spent in the primary production phase to spend more time in the Processing Phase.

Review Youth Incentive

The Youth Agricultural Incentive (MFP, 2011) should be possibly be increased from \$30,000 or have second tier / phase of youth incentive for youths who may have accessed it, started their business and looking to go on to another phase. Should the incubator be established, youths in the incubation programme can be given special consideration via a grant or second tier of incentives, particularly for those that would have gone through APDP and join the incubator. This would allow for strengthening the government's investment in youth in agricultural sector as public funds were and continue to be used in the APDP a programme designed to develop agribusiness entrepreneurs according to the programme objectives.

The research compared the two Agriculture Now training Programmes against the programmes' objectives, taking into account multiple stakeholders' views of the programmes and suggests that indeed the Ministry of Food Production has designed two timely and innovative programmes in a strategic attempt to combat the food import bill, inflation, unemployment and youth engagement challenges. Hence, the sentiments echoed by the Ministry as it pertains to these programmes acting a catalyst to achieving the National Food Production Action Plan (MFP, 2012) can be supported by this research, which is the first official piece of academic research undertaken to access the training practices utilized by the Agriculture Now Training Unit, of the Ministry of Food Production for development of the agricultural sector in Trinidad and Tobago.

In light of these gaps, recommendations were made (few of which mentioned above) to review the training remuneration, staffing, administrative structures, culture and youth incentives alongside the establishment of an agricultural incubator. There has been radical change in government's policy to focus on youth and labour, after which incremental changes where youth and labour have become consistent themes in government's agricultural policy, and they are constantly reviewing ways to improve the youth and agricultural labour context. Additionally, the approach utilized in the programme is very collaborative with key stakeholders consulted and incorporated in

the process as an integral component in the creation of an innovative agricultural workforce within a modernized agricultural sector.

Ninety percent of APDP interns indicated that they thought of starting a business prior to coming into the programme. On the other hand, there is an increasing number of URP trainees that are desirous of starting their own backyard-home gardens versus working for farmers. Hence, this research signals an agri-entrepreneurship trend that is developing within the local agricultural sector.

Future studies may seek to map the strategic levels of impact of training on the sector as it pertains to increases in actual food production and the nation's goal of food and nutrition security; achievement of the Millennium Development Goals and reduction of high food import bill. These can all be severely compromised if proper monitoring and evaluation are not undertaken in a timely manner.

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