"Good Agricultural Practice" – European Union (EU) Food Safety Requirements and the Windward Islands Banana Industries

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Abstract

Mad Cow Disease (BSE), genetically modified organisms, greater demand for organic produce, cloning of livestock, all enjoy the increasing fear and preoccupation of EU consumers with "safe food". EU food retailers have responded by requiring greater guarantees from suppliers that all foods supplied to them for distribution, including bananas, are safe and produced in line with their declared standards of "good agricultural practice". For the Windward Islands banana industries these new standards have become as important a competitive issue as the WTO rules and continued access to the EU market under the new EU Banana Regime. I review the evolution of these new standards and the nature of the industries response to the new imperatives .and assess their impacts on and implications for the Windward Islands banana industries.

IMPORTANCE OF BANANA INDUSTRY IN THE WINDWARD ISLANDS

The banana industry has been the mainstay of the economies of the Windward Islands of Dominica, St Lucia, Grenada and St Vincent and the Grenadines for almost fifty years. The industry has been the islands' most significant source of foreign exchange and employment during the last twenty years. In the case of St Vincent it is noted that the economic fortunes of the nation are closely linked to the performance of the agricultural sector, particularly bananas, because of multiplier effects, primarily in rural employment and transport (EDF/PMCU 2000).

Although its Gross Domestic Product (GDP) and foreign exchange contributions have declined during the last decade the banana industry remains crucial to the well being of rural communities in all the islands. All governments have pursued a policy of economic diversification including agricultural diversification with limited success.

Since the introduction of the European banana regime in 1993 and the opening up of the UK market to competition from Latin American suppliers the Windward Islands have lost their position as the dominant supplier to the British market. The industry has had to undergo tremendous changes in its organisation and production methods as it

confronted the challenges posed firstly by the new EU banana regime, then the ruling of the WTO on the legality of the preferences accorded the ACP producers in the new regime, and more latterly, the increasing requirements for all aspects of the industry operations to become compatible with EU wide food safety requirements and regulations.

The industry has struggled, so far, to meet the new requirements arising from the "safe food" movement within the EU. In this paper I review the evolution and nature of the new food safety rules. I review the institutional responses of EUREP members, WIBDECO and Windward islands banana companies to the new rules. I assess their impact on the banana industries and their performance under the new rules. Finally I consider some implications of the new paradigm for the competitiveness of the banana industries in the Windward Islands.

CHARACTERSTICS OF THE WINDWARDS BANANA INDUSTRY

In order to understand the capacity of the industry to respond to the new "safe food from farm to table" imperatives within the EU one must consider the following pertinent features of the industry. An estimated 19,000 persons are directly or indirectly dependent on the banana industry. Banana production is largely carried out by small farmers with a mean farm size of 1.7 acres (0.7ha). Family labour is important for production under such small farm conditions. Average yields are estimated at 7 metric tonnes per acre (2.0mt/ha). These industry features are comparable in the other Windward Islands.

Farmers and farm workers are not highly educated and a low level of technology is used in the production of the crop. Sensitivity to environmental concerns is low and consequently the potential for abuse of environmentally damaging substances is high. Windward Islands banana production is considered high cost when compared to Latin American competitors primarily because of the relatively low average yields per acre. There is little systematic recording of agricultural activities on the farm. Farmers rely more on their memories to recall their farming activities.

The bulk of the fruit produced is exported to the United Kingdom and the Windwards industry has targeted the more lucrative multiple (supermarket) segment of the market for 90% of total exports to maximise income. The industry cannot survive if the bulk of its fruit is marketed through the lower paying wholesale trade in the UK. *Meeting the specific requirements of the multiples is essential to the continued viability of the Windward Islands banana industry.* It is also the most important strategic issue facing the Windwards banana industry. The safe food requirements of the multiples are emerging as the single most important challenge confronting the industry.

The marketing of bananas is primarily a commercial activity circumscribed by government regulations and international treaty obligations. The guaranteed access to the EU market provided by the new WTO-consistent EU banana regime will be meaningless if the fruit exported cannot bring the desired returns to the Windwards industries. For reasons outlined below successfully meeting the EU's food safety

imperatives is necessary to the survival of the Windward industries.

EUROPEAN ENVIRONMENTAL POLICIES AND FOOD SAFETY ISSUES

Economic policies are usually driven by broad philosophical and political movements arising from peculiar national or community concerns. There is clear evidence of this in the evolution of the EU's policy on the environment. The European Commission's website (europa.eu.int/scadplus/leg/eu) notes a deterioration in the quality of life for people in Europe, especially urban areas, because of pollution, noise and vandalism. It also notes that the EU has been variously criticised for putting trade and economic development before environmental considerations. It acknowledges that the European development model cannot be based on depletion of natural resources and deterioration of the environment. Serious environmental protection actions in the EU began in 1972. Four successive action programmes based on vertical and sectoral approaches to ecological problems were implemented. Some 200 pieces of legislation, aimed primarily at limiting pollution by introducing minimum standards, were enacted during this period. The environmental focus became official EU policy with the coming into being of the treaty on European Union.

The Treaty of Amsterdam enshrined the principles of sustainable development as one of the EU aims and it made a high degree of environmental protection one of its absolute priorities. The fifth Community Action Programme on the environment 1992-2000, (EC Regulation 2078/92) established the principles of an EU strategy of voluntary action and marked the beginning of a "horizontal" community approach. This across the board approach to environmental policy was confirmed by the commission at the EU Council meeting in Vienna of 11-12 December 1998. The Community institutions were now required to take account of environmental considerations in all their other policies. This policy position was subsequently enshrined in various community acts particularly in the fields of employment energy, agriculture development cooperation, single market, industry, fisheries, economic policy and transport.

In relation to Agriculture the policy position was that sustainable agriculture must meet the related economic, social and ecological challenges and its production methods must reflect the concerns of consumers. Policy measures must comply with existing environmental legislation and meet the general objectives of community environmental policy (http://europa.eu.int/comm/agriculture/envir/index_en.htm).

This was the first concrete attempt by the EU to enshrine consumer concerns on food safety into its development agenda. It was therefore natural that food safety issues will become the subject of the EU legislative programme on environmental protection and action. In January, 2000, the EU Commission adopted a white paper on food safety in response to growing consumer concerns about food quality and safety. This white paper set out a "farm to table" legislative action programme. The white

paper detailed over 80 measures that the EU intended to adopt to ensure its food safety objectives were met. According to the EU Commission, consumers have the right to expect at a very minimum safe food. The EU's ambition was to have the safest food supply system in the world and to develop the systems that will deliver that aim. The EU was seeking a safe food chain from farm to fork, correctly regulated and effectively controlled as the road to building confidence in EU food supply. The white paper advocated: enactment of regulations laying down the principles of food law, the establishment of an EU Food Safety Authority and procedures in matters of food safety. EU Parliamentary directive No.2001/95/EC and the EU Council meeting of 3rd December 2001 dealt with general product safety requirements. EU regulations No.178/2002 provided formal enactment of the White Paper's recommendations on principles of food law, food safety authority and procedures on food safety.

The institutional approach adopted by the EU for achieving compliance with its stipulations may be summarised as follows:

- Establishment of voluntary standards covering products and risks.
- Standardization bodies set standards arising from mandates of the EU commission. (The Commission fixes the requirements that standards must meet and its mandates are guided by the work of appropriate expert committees).
- Horizontal community legislation are enacted introducing general product safety requirements and making provisions for general obligations of producers and distributors.
- Enforcement of community product safety requirements.
- Rapid exchange of information.
- Action at community level.
- Appropriate independent certification bodies, recognised by a competent authority may facilitate proof of compliance with the applicable product safety criteria.
  - Economic operators have obligations to prevent risks to consumers.
  - Additional obligations are placed on producers to adopt safety measures commensurate with the characteristics of the product. (Such obligations cover: providing consumers with information which allow them to assess risk, warning of dangerous products which may already be supplied to them, withdrawing of unsafe products from the market, product recalls when necessary and providing appropriate compensation to consumers).
  - Distributors are also obliged to cooperate with the producers and the competent authority in actions aimed at preventing risks and informing the Authority when they conclude that products supplied are dangerous to consumers. The guiding principle in this case is that "unsafe food" is either potentially injurious to health or contaminated such that it would not be reasonable to expect its use for human consumption.

The clear trend, therefore for the EU authorities, is one of increased regulation of the food trade in line with their declared food safety objectives and policies.

As is customary, when such far-reaching institutional changes are introduced, organisations emerge or evolve to deliver the requirements of the institution or to take advantage of new opportunities arising from the institutional changes. Organisations such as EUREP[1] have therefore emerged to provide certification and other services to satisfy customers and competent Authorities that food handled by their members are safe and consistent with EU requirements for product safety.

In the process, organisations, such as EUREP, develop their own institutions which overlap with or reinforce the requirements of the parent institutions that led to their birth. The emergence of EUREP standards of "Good Agricultural Practice" (GAP) and UK Multiples compliance with EUREPGAP standards proves the point that in economic activity institutions may conflict with each other, reinforce each other or may have overlapping, conflicting and or reinforcing influences on a system (King 1997, Cain 2000).

EUREP AND EUREPGAP FOOD SAFETY REQUIREMENTS

EUREP has embraced the following goals of sustainable agriculture which are consistent with EU official policy positions

To produce sufficient and affordable supply of high quality food and fiber:

- To ensure economic viability of farming
- To protect and enhance the environment
- To optimize use of natural resources
- To combine best available technology with traditional farming practice in ways suited to local conditions/capacity
- To enhance the quality of life for farmers, rural communities and society.

EUREP has developed its own standards of good agricultural practice (GAP) based on the notions that; agriculture needs to produce affordable food in a sustainable way, consumers are demanding confidence in the food they eat, retailers are the direct link to the consumers in the Food Chain and that retailers are responding to the consumers desires.

EUREPGAP, therefore, promotes the adoption of the available technology to manage a farm and to produce food according to the principles of sustainable agriculture. This includes principles of Integrated Pest Management (IPM) and Integrated Crop Management (ICM).

EUREPGAP is a set of normative documents for international certification. The documents are developed by representtatives from all stages of the food chain world-wide. It started as an initiative of retailers in 1997, the aim being to agree on standards and procedures among partners from the entire food chain. The Technical and Standards Committee, consisting of grower and retail members, has the responsibility to develop and improve EUREPGAP. EUREPGAP members established the legal entity FoodPLUS GmbH to reflect the industry control of the standard. FoodPLUS, as the global body for EUREPGAP implementation, facilitates EUREPGAP activities, serves as legal owner

[1]EUREP is an organisation that consists of most large EU retailers of food and other products. All the UK Multiples are members of EUREP and are expected to comply with the institutional arrangements of EUREP.

of the normative documents and hosts the EUREP Secretariat. The organization is independent and non-profit making, democratic, based on partnership and relies on global consultation.

Documents, Standards and Procedures

The EUREPGAP normative document consists of:

- The Protocol (the production reference standard),
- The General Regulations (process of certification and specific auditor requirements),
- The Checklist,
- The Control Points and
- Compliance Criteria (criteria and interpretations).

All is part of a contractual agreement between EUREPGAP, Certification Body and Grower or Grower Organisation. EUREPGAP's harmonised standards which specify; how and where food is grown, what was used to produce food, information required to support the guidelines, record keeping, traceability and certification. EUREP GAP requires; improved planning and farm management, record-keeping, transparency of production, traceability, independent verification, certification, increased sustainability, controlled and customer oriented agriculture, controlled safety and quality and preservation of natural habitats.

Although EUREPGAP is EU based its mandate allows it to act internationally for the certification of producers who wish to market produce through its members. It therefore seeks to establish a Global Partnership for Safe and Sustainable Agriculture.

Protocol Sections

The protocol addresses eleven areas for compliance namely record-keeping, varieties and rootstocks, site history and site management, soil and substrate management, fertilizer usage, irrigation, crop protection, harvesting, post-harvest treatments, waste and pollution management, re-cycling and re-use, worker health safety and welfare and environmental issues.

Compliance with EUREPGAP standards is expected to benefit consumers, retailers, growers, agriculture, and the environment. The expected benefits are as follows:

Benefits to Consumers

- Reduce risks to health and safety.
- Better and clear information about food origin: traceability.
- Trust in food production.
- Satisfaction of food demand in terms of quality, variety and safety.

Benefits for Retailers

- Reliable expectations of food safety and quality.
- Clear agreements with growers.
- Reduction of risks of issues relating to consumer health and safety.
- Increased confidence of consumers in food produce, *(positive purchasing attitude).*
- Compliance to the most advanced EU legislation.

Benefits for Growers

- Better and easier access to the market.
- Clear agreements with retailers.

- More opportunities for fair competition.
- Possible increase in quality and quantity.
- Possible reduction of production costs long-term.

Benefits for Agriculture

- Prevention and risk reduction of issues related to consumer health, safety and environment.
- Reduction of health risks for agricultural workers.
- Restore professional image of agriculture and gain trust.
- Compliance to the most advanced EU legislation.
- Possible harmonization of existing protocols.

Benefits for the Environment

- Awareness that in everyday practices, respect for wildlife and conservation policies are important factors for implementing a more sustainable agriculture.
- Reduce negative impact on the environment.
- Implementation of conservation management plan.

Record keeping is a milestone for implementing GAP and it is a prerequisite for traceability. The grower is required to record all agronomic activities undertaken on farm such as: variety choice, sowing conditions, spraying dates, products used and weather conditions during application. Up to date records must be available to demonstrate that all activities of production are compliant with GAP and to allow the history of products, to be traced, from farm to final consumer. Keeping a transparent record system, is essential to clarify any possible issues, particularly in terms of liability. Record keeping can help the understanding of how problems develop and preventing them in the future.

Independent verification is another pillar of EUREPGAP Compliance. The EUREPGAP Protocol asks for an external auditing on the EUREPGAP requirements. The auditing has to be performed by an independent verification Body, accredited to verify EUREPGAP protocol. Complying growers or produce marketing organisations (PMO) receive their EUREPGAP certificate.

EUREPGAP compliance consists of three components:

- Major Musts - 100% compliance is compulsory
- Minor Musts - 95% compliance is compulsory
- Shoulds - recommendation level. Granting of certificate/license is not conditioned to their compliance.

Certification Bodies

EUREP maintains a list of Independent Certification Bodies, that are allowed to certify EUREPGAP Protocol.[2] The list is continuously updated with new Certification Bodies approved by the EUREPGAP Steering Committee.

The detailed description of EUREP and EUREPGAP above highlights the level of sophistication required of agricultural producers if they are to meet the exacting standards required on the EU market as result of evolving European safe food

[2] *A list of approved independent certification. Authorities is available at www.eurep.org*

concerns. The EUREPGAP standards are the relevant ones which must be met by the Banana industry of the Windward Islands if they are to sustain their market position. What then has been the response of the Windwards banana industry to these requirements to these new requirements?

WINDWARDS INDUSTRY RESPONSES TO EU FOOD SAFETY REQUIREMENTS

The Windwards industry has responded to the new requirements in several ways. The major responses are summarised below.

- Introduction of grower certification schemes since 1996, with clearly defined standards, procedures, and compliance criteria.
- Farm-gate prices are now dependent on certification status of farmers with "certified growers" receiving better prices.
- Rapid expansion in the certified grower base between 1997 and 2000 to comply with requests of the UK multiples that all suppliers of product to them be industry-certified growers.
- WIBDECO reissuing and constant updating of codes to practice for banana producers. Growers are expected to adopt these changes as soon as they are issued. (Wibdeco 1997, 1998).
- Establishment of a Windward Island Certification Authority to independently audit certified growers and advise industry officials of significant non-compliance.
- Implementation of an EU and UK multiple supported Production Recovery Programme (PRP), which provided financial support for banana growers so that they may make the on farm investments necessary to achieve the certification standards. This support involved minimum guaranteed prices paid by the industry for 18 months from August 1998 to February 2000. Resources were also provided under various STABEX funded industry programmes, notably for building appropriate packing sheds.
- Many farmers have abandoned banana production and are abandoning because of their inability or unwillingness to adjust to the new production requirements.
- Attempts to introduce systematic and structured record keeping by banana producers with the design and distribution of farm record data sheets.
- Mandatory reporting of pesticides used on farm whenever fruit is delivered for export.
- Reduction in the range of recommended pesticides and the rates of usage of some chemicals. For example, the WIBDECO recommendation for using nematicides has been adjusted from three applications per year to a single application as required. Farmers are encouraged to assess the level of nematode infestation before applying neamticides.
- Encouragement of integrated pest management and integrated crop management practices on banana farms.
- Promotion of "fair trade" schemes which emphasize reduced pesticide usage, improved worker health and safety and minimum grower prices consistent with actual costs of production.
- Introduction of pilot projects and studies to assess the viability of organic banana

production in the Windward Islands.

The success of many of the initiatives outlined above has been patchy and industry wide adoption has been inconsistent. This low rate of adoption may be attributed to an absence of a pervasive culture of preserving the environment, low levels of education and training of farmers and farm workers, inadequate extension and technical support resources and the low levels of actual financial support from donors and industry resources for the safe food initiatives required.

A more detailed examination of farmers response to some of WIBDECO's revised recommendations on pesticide use (Wibdeco 1998), illustrates some of the difficulties which are likely in meeting the new standards.

"Personnel involved in the supervision, preparation of mixture and pesticide applications must be properly trained in the management of these compounds". Only a very small proportion of the persons involved in these activities have the requisite training. None of the banana companies or associations have the financial resources to mount the grower and worker training required.

"Control and application records." Producers must keep adequate records of treated areas, application rates and number of cycles for each pesticide used. Many attempts have been made in the Caribbean to institute record keeping on farm activities. There have been few recorded instances of successful and sustained record keeping schemes employed by small producers. Several record keeping schemes and instruments have been introduced and made mandatory for certification of banana farmers. The level of consistent and accurate record keeping observed is far below the desired level. Without the maintenance of accurate records the traceability requirement is severely compromised.

Other industry prescriptions cover storage, usage, mixtures and application of pesticides. These various prescriptions are ideally suited to estate or large farm operations and present considerable difficulty for small farm operations. If the industry cannot get its farmers to meet the standards specified then there is the real risk that most small farmers will have to leave the industry since the Associations and companies will be unable to guarantee the safe food stipulations. Alternatively the industry may have to establish a system whereby all pesticide applications are made by trained teams of applicators who will be hired by growers to meet their pest control needs.

Some Implications of the New Food Requirements

Many banana farmers in the Windward Islands feel that they are selling good fruit to the European customer based on the appearance and eating quality of the fruit. What these farmers do not fully appreciate is the new reality that an EU marketed banana is more than "good, clean looking fruit". The conditions under which the fruit is produced, packed and marketed are now equally important attributes of the product. A good banana is now one which is produced using verifiable integrated crop and pesticide management principles, properly packed and

appropriately labeled and fully traceable from supermarket shelf to the farm.

Production of these good bananas today requires a higher level of training and sophistication from the banana farmer. It requires greater compliance with grower certification standards that can survive the scrutiny of EUREPGAP accredited certification bodies. It also requires national legislation that mirrors what obtains in the EU. These requirements for safe bananas are intensifying at a time when real prices received by banana growers are declining. Farmers are now required to do more for less. There has been far-reaching restructuring undertaken in all the banana companies and Growers' Associations in the Windward Islands during the last three years as they strive to grapple with increased debt and lower prices arising from the various adjustment initiatives in the EU markets since 1993. All are required to "fully commercialise" their banana industry operations and to dismantle inefficient systems and policies sustained prior to the 1993 EU banana regime.

In the case of the St. Vincent Banana Growers' Association it has undergone a significant industry restructuring process (including debt restructuring) in the last year. The extension personnel serving the industry have been reduced because the industry is unable to sustain the same level of extension support staff. The pricing policies now imposed on the industry leaves it with very little additional monies to finance the grower development activities (extension, grower monitoring and certification) required if the industry is to meet its safe food imperatives.

The days are now past when the Association can accumulate funds that can be channeled into extensive grower improvement schemes. The EU's Special Framework of Assistance (SFA) for Traditional ACP banana suppliers (Council Regulation EC 856/1999) permits granting of technical and financial assistance to adapt production to the requisite quality and safety standards. Procedures for accessing such assistance are usually cumbersome and drawn out and have tended to discourage efforts to obtain these funds. The Windwards industry has also not yet adequately developed a coherent and consistent action programme which could make the industry ready at the farm level to meet the requirements of the "safe food" revolution.

At another level, the costs of certification of farms and producer organisations for EUREPGAP certification and compliance are tremendous. As one Fyffes executive intimated it is cheaper to make a non compliant farm compliant than to meet the certification costs (Yudin 2002). High certification costs can become an additional barrier to trade for the Windward Island banana industry given the difficulty it faces in almost instantaneously transforming its banana farming population into EUREPGAP compliant farmers and workers. Countries and producers that can achieve the desired level of compliance with EUREPGAP standards have a better chance of enjoying the benefits of trade with the EU.

The EU food safety standards also have significant implications for efforts to diversify the agricultural sector in the Windward Islands. Any other food product intended for export to the EU is likely to face similar difficulties to what was enumerated above.

Increasingly regional consumers are also requesting compliance with standards similar to those of the EU. This globalisation in mandatory standards for agricultural produce is an extremely urgent issue for the Agriculture sector in the Windward Island which is not yet adequately recognised and incorporated into the various agricultural development plans and policies of the Windward Islands.

CONCLUSION

EU food safety rules and the compliance requirements that flow from these rules are now a significant determinant of the competitiveness and survival of the banana industry in the Windward Islands. The industry is ill equipped at this time to respond adequately to the new imperatives. As revenues decline and even aid financing becomes scarcer the industry faces potential demise if its capacity to comply with these rules are not enhances. The banana industry faces daunting challenge and far reaching changes in the culture and thinking of banana industry personnel is required. As was done in the EU Governments and all other stakeholders must derive and implement new rules and practice that will foster an industry better able to compete in the new environment.

As Windward Island Governments explore agricultural and economic diversification initiatives, they will find that similar conditions and conditionalities will determine the capacity to market agricultural produce that are safe from "farm to fork". National resources must be mobilised and directed towards meeting the requisite standards if they are to create and sustain a viable and diversified export agriculture industry.

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Glossary

EU: European Union
EUREP: European Retailers and Producers Association
EDF/PMCU: European Development Fund Project Management and Coordination Unit
WIBDECO: Windward Islands Banana Development and Exporting Company
EUREP GAP: EUREP Good Agricultural Practice.
ACP: African Caribbean and Pacific Countries
WTO: World Trade Organization.
UK: United Kingdom.
IPM: Integrated Pest Management
ICM: Integrated Crop Management