Distribution of Value in the Windward Islands to the UK Supply Chains

REPORT

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Contents of the Report

Introduction

I. Value Chain Analysis

1. The Context

- 1.1 A Brief History of Windward Islands Bananas
- 1.2 The Significance of Bananas to the Windward Islands
- 1.3 The Impact of Changing Trade Rules
- 1.4 The Fairtrade Solution

2. Methodological Considerations

- 2.1 The Fear of Competition Authorities
- 2.2 Commercial Secrecy
- 2.3 The Time Period: 2010 and 2011 also informed by 2009 and external data
- 2.4 The Impact of the Hurricane: Commercial Instability, Change and the DR
- 2.5 The Need to Protect Sources and the Anonymisation of Data

3. The Structure of the Supply Chain

- 3.1 Farmers, Winfa and the TQFC
- 3.2 Three Islands and the NFTOs
- 3.4 The Winfresh/Geest Line monopoly and shipments via the DR
- 3.5 The Ripeners
- 3.6 The Supermarkets, their island links, Price Wars and Fairtrade

4. Distribution of Value

- 4.1 Anonymisation and the use of percentages pegged to final retail values; bagging and value added
- 4.2 Farmers, workers, Fairtrade Premium and NFTOs
- 4.3 The Transport/Ripening Complex, 'raveled and unraveled'
- 4.4 Supermarkets
- 4.5 Classic Summary of Value Data

5. Analysis of Costs

- 5.1 Hired Labour and other Farmer Costs
- 5.2 Shipping Costs and BAFs
- 5.3 Ripening Costs
- 5.4 Supermarket Costs

6. A Crude Analysis of Profits

- 6.1 The 'Profit' of Hired Labour
- 6.2 Farmers' Profit; What Profit?
- 6.3 Shipping, two-way trade and the Dominican Republic
- 6.4 Ripening
- 6.5 Supermarkets
- 6.6. Summary of Profits along the Chain
- 7. The "Anomalous 22%" and Supermarket F

II. Social and Economic Impacts and the International Policy Environment

- 1. Social and Economic Impacts of the International Banana Trade
- 2. The Impacts of Trade Policy on the Island Economies

III. Conclusions and Recommendations

- 1. What Can Governments Do?
- 2. What Can Farmers and their organisations Do?
- 3. What action can be taken to influence the distribution of value?

List of Tables and Figures

Table 1: Conventional Format for Presenting Banana Value Chains

Table 2: Revised Format used in this Paper

Table 3: Changing Distribution of Value over time for a Single Supermarket

Table 4: Distribution of Value in 2011 for 4 "routes" from the Windwards to Individual UK supermarkets

Table 5: Aggregated Data for the Supply Chain in 2011

Table 6: Costs of Sustainable Production per 18.14 Kg box and Payment per box

Table 7: Profits along the Chain

Table 8: Payment and Non-Payment of FTMP in St. Lucia

Figure 1: Windward Island Banana Export Volumes and Earnings, 1997 to 2007

Acronyms and Abbreviations

ACP	African, Caribbean and Pacific States
BAF	Bunker Adjustment Factors
COM	Common Organisation of the Market
COSP	Cost of Sustainable Production
DR	Dominican Republic
FAO	Food and Agriculture Organisation
FLO	Fairtrade Labelling Organisation
FOB	Free on Board
FT	Fairtrade
FTMP	Fairtrade Minimum Price
KVI	Known Value Item
NFTO	National Fairtrade Organisation
RDC	Regional Distribution Centre
TQFC	Tropical Quality Fruit Company
WIBDECO	Windward Islands Banana Development and Export Company
WTO	World Trade Organisation
XCD	Eastern Caribbean Dollar

Introduction

For some time concerns have been expressed, particularly by Civil Society Organisations, regarding the distribution of value in international supply chains.

Rightly or wrongly, an impression has grown that traders and transformers of food or more recently giant retailing chains have been able to keep a disproportionately large share of the retail value of goods, while the people who actually grow food, whether farmers or agricultural labourers, are able to capture only very small proportions of final prices.

This perception potentially gives rise to two areas of concern:

The first is that it appears (to many individuals) ethically wrong for traders or retailers to continue to make good profits while the workers and farmers on whom whole supply chains ultimately depend seem to increasingly have to struggle to survive. A sense of ethical outrage amongst consumers and citizens has led in the last five or ten years to a number of political campaigns aimed in particular at curbing the buyer power of supermarkets in countries as diverse as the UK, Australia, the USA, India and South Africa.

The second is the very practical concern that if the financial rewards available through farming and agricultural work are reduced too far, no-one will be prepared to do the hard work necessary to grow the food on which we all depend.

Such concerns have been expressed regarding a wide variety of supply chains and those involving the production, trading, ripening and sale of bananas are no exception. This paper examines the banana supply chains from the Windward Islands to the UK. More specifically, it focuses on the supply chain between the three island states of St. Vincent and the Grenadines, St. Lucia and Dominica at the beginning of the chain and the UK at the consuming end.

The report attempts to assess the actual distribution of value as accurately as possible. It also looks briefly at how changing policy environments have affected the producing countries and it asks whether it would be either desirable or possible to intervene in order to ensure a more equitable distribution of value in the chain.

Initially the study also aimed to cover the value chain from Jamaica to the UK. Prior to 1992 Jamaican had been a major supplier to the UK's banana market. However it suffered from the same pressures as the Windward Islands when the Common Organization of Market for Bananas was introduced in the European Union (EU) in 1992-93. Jamaican production was unable to compete with Latin American production and the industry went into a decline. Jamaica, unlike the Windward Islands, did not manage to establish itself as a significant player in the UK's niche Fairtrade market (although FT certification had been achieved just before the last hurricane). By 2007 the total contribution from the Caribbean islands had fallen to less than 30% of the UK market and most of this came from the Windwards. By 2008, Jamaica had dropped out of the UK market altogether.

Jamaica has also suffered 4 hurricanes in the last five years and these have had a devastating effect on banana plantations. Given the difficulties of Caribbean island producers competing with cheap Latin American producers, the devastation of the plantations on the island and the fact that the trade has not been operating for over 3 years, it would appear unlikely that Jamaica will recommence its banana trade with the UK. According to a report in Fresh Plaza on Dec 1st 2011 however, the Jamaican Government plans "to pump \$50m into banana revival". The report quoted the Minister of Agriculture and Fisheries as saying that "the initiative is aimed at reducing Jamaica's significant expenditure on imported banana products, among other things."

In view of the fact that Jamaica has stopped exporting bananas it was decided to remove this origin from the report.

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¹ Source: jis.gov.jm

I. Value Chain Analysis

1. The Context in the Windward Islands

1.1. A Brief History of Windward Islands Bananas

The Windward Islands are more a geographical rather than a political entity, located near the southern end of the volcanic archipelago which sweeps east from Cuba in the North and then swings south around Puerto Rico until it almost joins the South American land-mass near Venezuela. In practice the term Windward Islands is often used in the context of banana discussions to refer to the three banana producing islands of Dominica, St. Lucia and St. Vincent (strictly speaking "St. Vincent and the Grenadines"). It should be borne in mind however that these are three independent states each with its own government. Although politically independent of each other, all three are part of the broader currency union which uses the Eastern Caribbean Dollar (abbreviated here as XCD). The current exchange rate with the US Dollar is approximately: 2.7 XCD = 1 US\$

Until they gained independence in 1979 (in 1978 for Dominica) the Windward Islands were colonies of the United Kingdom (more precisely they were colonies until they were granted internal autonomy in 1967 as West Indies Associated States; this happened slightly later in 1969 in the case of St. Vincent). Up until the 1920s bananas remained luxury items in the UK and were mostly imported from the Spanish-controlled Canary Islands. However, the UK began to encourage to banana production in some of its colonies, initially in Jamaica, in order to avoid dependence on the Canaries. While a banana industry was taking shape in Jamaica, in the Windward Islands the principal crop exported to the imperial power was sugar. The sugar economy however began to run into serious difficulties in the 1940s and 1950s, partly as a consequence of the expansion of domestic sugar beet production in the UK during the Second World War, when commercial shipping came under threat from German U-boat attacks.

With the decline in the sugar cane industry, an alternative industry had to be found to provide both employment and income for the people and to generate revenue to run the colonial administration. The solution was apparently found not by the administration itself but by small farmers living in the mountain valleys some of which bordered the flat lands where the large estates were located. A few small farmers had already introduced bananas and plantains for their own consumption and to sell in local markets. Bananas became an immediate success and their cultivation spread rapidly among marginal small farmers throughout the three islands. The declining estates observing the success of the small farmers decided, in some cases as late as the early 1960s, to convert their plantations from sugar to bananas and to produce on a more industrial scale for export. (In a few cases, particularly in Dominica, the estates turned to other crops, such as limes or coconuts).

As the century progressed, the Windward Islands became increasingly important as the main supplier of bananas to the UK and a UK food company, Geest, was granted exclusive rights to control the trade.

Shortly after independence the big estates were purchased by the three governments and sold to citizens in small plots typically of 5 or 10 acres. Since then plots have been resold and

sometimes combined or subdivided. It is unusual to find a farmer with more than 10 acres and many have only 1 or 2 (an acre is 0.405 hectares). The big estates occupied the flatter lands in certain coastal zones, mostly near the estuaries of rivers. However a considerable amount of cultivated land was never part of an estate and is located in small plots up river valleys or on the sides of valleys. Much of this land either is or was once also devoted to banana production.

In the 1970s and 1980s banana production boomed, good prices were paid and many farmers enjoyed considerable prosperity, in spite of the small size of their land holdings. The industry was well coordinated, was supported by agricultural extension services and had access to a reliable market in the UK, where demand for bananas continued to grow steadily. Very few people rent houses on the islands and most of the population own their own properties. During the banana boom, credit was easily available to farmers and a great many were able to extend their houses, usually taking on short-term loans and paying these off rapidly as they gradually improved their properties in a series of stages (often as their families grew). Farmers, some of whom were themselves illiterate, were also able to finance the education of their children, often to degree level with the money they earned. Many of their children ended up leaving the islands to work as doctors, lawyers or other professionals in the UK or later the USA and Canada. Some of the older farmers recall childhoods in which they went barefoot and lived in adobe houses. Independence, the break-up of the estates and the banana trade lifted them out of poverty, allowed them to build well-appointed houses with electricity, piped water and sanitation and to see their children's prospects transformed.

By 1992 the three islands of St. Lucia, St. Vincent and Dominica were together the biggest exporter of bananas to the UK, accounting for nearly half of the 545,000 tonnes consumed annually in the country (A. Smith, 2009).

In 1992 the European Union, of which the UK was and is a member, introduced its European Single Market and the Windward Islands position as the UK's principal supplier came under threat.

1.2 The Significance of Bananas to the Windward Islands

Up until the introduction of EU regulation 404/93, which finally brought bananas into the Single Market, bananas were the principal source of employment, income and foreign currency for the islands.

More than a third of arable land was devoted to banana production. There were some 24,000 small producers of bananas in the three islands, cultivating 19,000 hectares of land, and employing additional workers to help at certain stages of production. Their earnings and spending power generated additional demand for services in local economies and therefore sustained yet more employment. According to the ILO the industry directly provided 43% of employment in Dominica and 70% in St. Vincent and the Grenadines (A. Smith, 2010).

In short, bananas provided the backbone for the whole economy.

1.3 The Impact of Changing Trade Rules

The Single European Market changed this for ever. Although the Single Market was introduced in 1992, it was not until 1993 that agreement was reached on the European Banana Regime, as embodied in Regulation 404/93.

Bananas presented considerable difficulties in the negotiations which led up to the creation of the Single Market and the issues involved created such controversy that bananas had to be excluded from the Common Organisation of the Market (COM) until agreement could be reached a year later.

The UK's position and the future of the Windward Islands were at the centre of the negotiating dilemma. Several European former imperial powers had retained close trading relations with ex-colonies, whose economies had often remained dependent on supplying single commodities to the former metropolitan power, even after independence. The UK-Windward Islands banana trade was a classic case.

The European Union also included states however, such as Germany and Austria, which had never had much of an empire or whose links with ex-colonies had been disrupted as a result of defeats in two world wars (the victorious powers usually either annexing or 'protecting' the vanquished powers' colonies). Trade from countries like these was less influenced by historical links and more pragmatic and 'economically rational'. In the case of bananas, Germany and several other countries traditionally imported from Central or South America where banana production was cheap.

Although consumer prices in the UK were significantly higher than they were in several other EU countries like Germany or Denmark, this had not appeared to cause any particular problem for UK consumers. Nevertheless, it was clear that once the EU became a single market without any tariff barriers between EU member states, the much cheaper, so-called 'dollar' bananas would appear for sale in the UK at prices which were considerably lower than Windward Island prices. In time it would be almost inevitable that UK consumers would be attracted to buy the cheaper Latin American bananas and the Windward Islands would be unable to compete.

As the Windward Islands were more or less completely dependent on banana exports to the UK, this would almost certainly lead to a complete collapse of their economies. The solution to the problem was embodied in the regulation which covered the Common Organisation of the Market, Regulation 404/93. Higher levels of tariffs would be imposed on dollar bananas in the Single Market than those imposed on the ACP countries (mostly former colonies of European ex-imperial powers).

More details regarding the trade wars and WTO disputes which followed as a result of the adoption of Regulation 404/93 are provided in Section II of this paper and it is unnecessary to go into any detail here. The EU's tariff regime was challenged at the WTO by a number of Latin American banana producing states and by the US. The European banana import regime went through a series of transformations involving different combinations of tariffs, quotas and import licenses but however much the EU tried to make its regime acceptable within the

framework of the WTO, the disputes went on, until the trade instruments were finally dismantled.

Although it had not proved possible to protect the Windward Islands and other ACP states in similar positions indefinitely, at least the lengthy and tortuous history of trade wars and disputes allowed the Windwards some time to adapt. Nevertheless, the brutal reality remained that a group of small Caribbean islands with mountainous terrains, necessarily small farm sizes, high costs of labour and living and a vulnerability to hurricanes could not compete economically head to head with massive Latin American plantations in flat lands with good water supplies, better soils, cheap labour and less destructive climates.

Successive Windward Islands' governments pondered the issue of diversification but small isolated islands are at a tremendous disadvantage in a globalised economy and apart from tourism (which in itself offered only limited opportunities) there appeared to be few alternatives to bananas. The Windwards appeared to be struck with the fruit but the future of banana exporting was clearly under threat.

1.4 The Fairtrade Solution

In 1987, the farmers of the Windward Islands set up Winfa (the Windward Islands Farmers Association). The formation of Winfa represented a major step away from the old, essentially colonial, patterns of organization which had persisted even after independence.

Even as late as the early 1990s, the British company, Geest, continued to control the Windward Islands-UK banana trade but it was clear that the Company would no longer be financially viable under the new EU Banana Regime and it was sold off to WIBDECO (the Windward Islands Banana Development and Export Company) and the Irish company, Fyffes. WIBDECO was to be jointly owned by the Windward Islands' four governments (including that of Grenada which no longer exports bananas) and the banana famers themselves. At the time, it was agreed that farmers would eventually own 50% of the Company's shares; however, this informal undertaking was never honoured and WIBDECO's successor, Winfresh is today 100% owned by the islands' governments (in the form of shares).

Later Fyffes too dropped out, as part of its overall re-structuring, whereby it sold all interests worldwide in production, dropped all its Caribbean interests and focused exclusively on trading, ripening and diversification into other areas.

With this transfer of ownership and the creation of Winfa itself, the last vestiges of colonialism and of direct dependency on the old 'mother country' disappeared and the industry moved into a new epoch.

However the industry itself continued its rapid decline, with farmers abandoning banana production or even emigrating, increasingly to North America rather than the old traditional destination of the UK. From 1992 to 2007, the overall Caribbean (including Jamaican) share of the UK's banana market fell dramatically and more than 20,000 of the 25,000 Windward Island banana farmers stopped producing bananas or abandoned farming altogether (A. Smith, 2009).

Faced with this dramatic and devastating collapse of what had been the backbone of the Windward Islands economies, Winfa in particular began to look for ways out of the dilemma.

The solution was to be found in Fairtrade. The Fairtrade movement was growing throughout Europe as consumers became aware that workers and small farmers who were providing them with essential foods were often receiving levels of wages or remuneration which barely allowed them to survive. Among the citizens of European countries, those of the UK were becoming some of the greatest advocates of Fairtrade.

Fairtrade provided an alternative trade model which offered consumers the opportunity to purchase products at prices which should protect the workers or small farmers who did the hard work in the fields from being driven into relentless poverty. The two principal mechanisms for achieving this were: firstly, the fixing of a Fairtrade Minimum Price (FTMP), guaranteeing at least a minimum payment to farmers (these FTMPs are product specific and also either country or region specific); and secondly, the 'Fairtrade Premium', a levy on the commodity exported which would be reinvested in the producers' local communities. On top of this, as the Fairtrade standards were developed and elaborated, a range of additional environmental and social criteria were added including additional rules for hired labour.

Winfa discussed this new opportunity with its farmer members, developed links with the Fairtrade Foundation in London and with their help, and the help of Banana Link, promoted awareness of Fairtrade bananas among UK consumers and lobbied supermarkets to start stocking the new Fairtrade line. The initiative was an immediate success and sales of Fairtrade bananas grew rapidly. Meanwhile, back in the Windwards, Winfa facilitated the process of getting farms certified as Fairtrade suppliers.

Today almost all Windward Island producers are Fairtrade registered and all the fruit exported to the UK is Fairtrade certified.

2. Methodological Considerations

2.1 The Fear of Competition Authorities

Any analysis of the distribution of value in the supply chain must clearly depend on obtaining information about the prices at which goods change hands at each successive stage of the supply chain. Economic actors can be prosecuted for exchanging price information with other economically interested parties, as regards either the prices they pay to suppliers or the amounts they are paid by clients. Any attempt by a producer or supplier to collude in raising prices by exchanging commercial information could invite prosecution by the Competition Authorities and both large retailers and banana traders have been examined by either the UK or EU authorities in the last few years. This makes some actors extremely loath to share information with any party even if the intention is to use such information for research purposes and to publish only general accounts, which do not put into the public domain specific data like price.

While actors may be wise to be cautious, in the UK (one of the two countries implicated in this research) fear of the Competition Authorities may go beyond reasonable bounds. Two years ago, one UK supermarket refused to discuss the prices on their shelves with Banana Link staff for fear of being prosecuted even though these prices were clearly marked on shelves in their stores for anyone to see!

2.2 Commercial Secrecy

While there is a fear of being accused of 'collusion' with competitors in anti-competitive initiatives, many actors have an equal fear of commercially sensitive information being obtained without their consent by competitors and subsequently used by the competitors against them. Any buyer who is negotiating with a supplier, but who knows in advance what prices that supplier previously sold to another buyer, would be at a considerable advantage in negotiations.

This leads to a habitual reticence to share 'sensitive' information with anyone, 'just in case', and such reticence may be reinforced by internal company codes of behaviour or by corporate culture.

What is taken to be 'sensitive' information varies from business to business but also from one individual to the next. Concern about discussing even publicly available shelf prices by a UK supermarket has already been mentioned above. Another UK supermarket was recently involved in an incident with the Guardian newspaper relating to shelf prices. In September 2011 a security guard working for a UK supermarket attempted to detain a Guardian journalist who was recording prices for products in a store in his notebook. The security guard maintained (wrongly) that it was against the law for the journalist to write down any price (P. Collinson, 2011).

Other individuals who accept that shelf prices are already in the public domain may still regard volumes of sales as commercially sensitive and are reluctant to discuss amounts sold.

At the other, more obvious, end of the 'sensitivity' scale, almost everyone agrees that information about prices paid by or to anyone *along* the chain (as opposed to at the end of the chain to consumers) is commercially sensitive.

Clearly the twin fears on the part of potential informants, either of legal complications or of the potential consequences of exposure of normally closely guarded information, presented some difficulties for this research. What is perhaps more surprising than the evident reticence of some actors to share information was the willingness of others to share quite sensitive information, in varying degrees of detail.

Only 10% of stakeholders were either unavailable, for reasons unknown, or deliberately evaded all attempts to contact them by e-mail and telephone. Over 90% of those contacted were at least prepared to consider discussing the issues at stake and almost all of these were also prepared to share some potentially sensitive data. In some cases such data could only be discussed in 'ballpark terms'; others were prepared to discuss at least some precise figures; and some were prepared to retrieve detailed data from data information systems. Encouraging

potential informants to reveal precise data depended on providing cast-iron guarantees to them that the information would be used only to perform general calculations and that none of it would be publicized except in the form of aggregated percentages, without reference to real prices. It was also necessary to reassure informants that neither they nor their companies would be identified as sources of information.

Clearly this requirement will influence the way that information can be presented in this report. Not only can data be presented only in general ways but precise methodological details cannot always be made explicit.

There are a number of 'individual routes' along which a box of bananas can travel from the Windward Islands to each of the supermarkets, passing through different intermediaries. It has been possible to obtain enough information to reconstruct the prices along most of these 'routes' and to use this fairly precise information to arrive at a kind of average, which is the only picture which can be presented in this report. However, in some cases, the details of certain transactions have been unobtainable.

According to the particular details involved, there have been different ways of overcoming the lack of individual data. This might be through using comparable data which can be reasonably regarded as equivalent for specific reasons. Ideally it would be preferable to explicitly identify points where information was insufficiently precise and what justifications there were for believing that, for example, the known costs incurred by one actor might be reasonably used in place of the unknown costs incurred by another at the same level of the chain, who had proved reticent in sharing information. Unfortunately discussions of this nature would make it possible to identify individual informants in a supply chain where at certain points only small numbers of actors are involved.

2.3 The Time Period: 2010 and 2011, also informed by 2009 data

At the outset of the research it was decided to focus on the period 2009 - 2010. It was felt that informants might be more prepared to share information from the past than they would be to share current information.

However, it rapidly became apparent that there were difficulties in obtaining data from as far back as 2009. Typically informants had information available for the current and previous years on data bases which were immediately available to them or they could recall with confidence precise figures (particularly current ones). However for most informants information about prices and volumes from even as recently as two years ago was already archived and retrieving such information required an unacceptable effort. It is one thing to persuade people to reveal potentially sensitive information; it is however additionally difficult to persuade busy people to devote a full day to trawling through old data bases looking for information which will not be of any immediate use to themselves in their own work nor to the companies they work for.

While it was assumed that informants would be more reluctant to share current data, in fact they tended to be more inclined to share information from the present or from the recent past which was still fresh in their memories or which was referred to in recent e-mails.

Accordingly the focus of the research moved a year forward from the period 2009-2010 to 2010-2011. Nevertheless a certain amount of information was gathered for the year 2009 and this occasionally threw light on data obtained for subsequent years.

2.4 The Impact of the Hurricane: Commercial Instability, Change and the DR

A powerful hurricane swept through the Windward Islands at the end of October 2010, devastating banana plantations throughout St. Vincent and St. Lucia and badly damaging many plantations in Dominica. This meant that production and export largely ceased from two of the three islands.

The supermarkets in the UK which sell Windward Islands bananas have mostly developed relationships with producers in one or other of the islands. Tesco buys from Dominica, Asda traditionally from St. Vincent while the others are usually supplied by St. Lucia, an island which would normally produce around two thirds of all Windward Islands bananas. Only the individual 'route' from Dominica to Tesco remained largely unaffected by the hurricane. The other 'routes' were completely disrupted with consequences for importers and ripeners in the middle of the chain. The near total collapse of production in St. Vincent even to the present day means that Asda has in the last year sourced some of its bananas from St. Lucia.

The hurricane has not been the only problem to hit the islands' bananas. Black Sigatoka first appeared in St. Vincent and St. Lucia (though happily not in Dominica) at the end of 2009. The infection was initially limited to a few areas. In April 2010 the islands suffered a prolonged drought. This was sufficiently intense as to kill off a great many of the banana plants. Many farmers had to completely replant following the drought. Just as the first fruit was beginning to mature, the islands were hit by the hurricane. In St. Lucia there was 100% destruction of plantations and the farmers had to replant a second time. The position was hardly any better in St. Vincent.

The hurricane's winds penetrated every area and carried with them spores from the (until then) limited Black Sigatoka infection. Almost every farm was infected in two of the three islands. In St. Vincent production has almost totally collapsed as a result, while in St. Lucia the recovery from the hurricane is being badly held back by an infection which is not, as yet, being adequately controlled.

There is one bottleneck in the chain between farmers and supermarkets. Only one Company, Winfresh, exports from the Windwards to the UK. Winfresh employs the services of the Geest Line(UK) Ltd which runs a regular shipping service between the islands and the UK, stopping off *en route* at the Dominican Republic (DR). Winfresh and the Geest Line have a very close relationship. Winfresh and Fyffes each own 50% of the Geest Line and 50% of the Directors of the shipping Company are also Directors of Winfresh.

Fairtrade bananas are added to the cargo in the DR, allowing Winfresh to meet contractual obligations by supplementing Windward Islands bananas with DR bananas when Windward Islands production is insufficient to meet demand. Relations with buyers could therefore potentially continue in the aftermath of the hurricane, adding another level of complexity to the analysis below. More recently the DR has been hit by an outbreak of Black Sigatoka,

meaning that DR production is now also under threat. As St. Lucia in particular is beginning to recover from the impacts of Hurricane Tomas, the DR is coincidentally suffering from disruptions in its own production, allowing Winfresh to increase its sourcing from the Windwards without necessarily letting down suppliers in the DR.

The bottle neck in the supply chain begins to open out at the UK port of entry, Portsmouth. The fruit may be bought in Portsmouth by one of a number of ripeners but as Winfresh is also a ripener it may sell direct to supermarkets and can therefore potentially handle all the stages from export from the Windwards to delivery to UK supermarket distribution centres.

The individual 'routes' along which bananas pass (from grower, through exporter, through ripener to final retailer) are subject to continuous flux as actors along the chain seek more competitive deals or more reliable supplies. The disruption of supplies has added to flux, change and uncertainty. At the same time, while retailers are usually on the look out for better deals, they also seek stability and reliability. External factors (notably the drought, the hurricane and Black Sigatoka epidemics) and the urge to get a better deal therefore accelerate change and flux, while the search for stability and reliability of delivery provide a countervailing conservative pressure towards stability.

2.5 The Need to Protect Sources and the Anonymisation of Data

It has already been made clear that it is necessary to 'anonymise' data in the report which follows in order to protect sources. At every level of the supply chain there are a number of actors and it has already been made clear that most of these were successfully contacted and that in almost all cases some useful information was obtained. However some potential informants refused to supply any information whatsoever. This means that this report has had to have been written in such a way as to hopefully make it impossible for a reader to identify which retailer, ripener or other actor provided the information which is reported.

Actual figures and the calculations performed in order to arrive at percentages are not quoted. Percentages quoted for values along the supply chain are percentages of final shelf prices (the prices paid by consumers at supermarkets). Almost all Windward Island bananas sold in the UK are sold in bags and at different times these have contained as few as 5 fingers or as many as 10. The size of the bananas also varies with some packs of small bananas aimed at children and others at adults or families. Prices for different packs vary and quoting an individual price risks revealing which particular retailer is involved. Once a retailer is identified then a ripener is automatically indicated (since each supermarket sources from only a single ripener for Windward Islands bananas, although typically it will source from several ripeners for its entire range of bananas). Quoting a shelf price which is already in the public domain may therefore seem to be harmless, but for an informed reader such prices would potentially allow informants to be identified whether these were supermarket buyers, ripeners or others.

There is one level of the chain where 'anonymisation' is more difficult. Winfresh has a monopoly on export from the Windward Islands and transportation to the UK. However it does not have a monopoly on ripening as it is only one of four ripeners involved in the chain in the time period under consideration. It has been possible therefore to calculate the

percentage of the value going to ripeners in general without this necessarily implying that Winfresh provided the information.

Unfortunately the same cannot be said for shipping. Winfresh contracts the Geest Line which runs a circular route from the Windwards via DR to Le Havre and Portsmouth and back again. Bananas are transported to the UK and a range of other goods are exported from the UK back to the Windwards. As Winfresh and Geest Line share a number of Directors and since the fates of the two Companies appear to be completely intertwined (the route might not be viable without Windward Islands bananas and Winfresh certainly could not export bananas without the Geest Line), disentangling the value retained by the each of the two Companies is problematic. It will be possible to discuss Bunker Adjustment Factors (BAF rates -additional charges related to fuel prices) as this information is available on the Geest Line website.

3. The Structure of the Supply Chain

3.1 Farmers, Winfa and the TQFC

There are fewer than 4000 small (banana) farmers in the Windward Islands today, who cultivate a total of 3,702 hectares of land with bananas, meaning that an average holding is a little under a hectare. A little over 3,500 of these farmers are Fairtrade certified. Only these farmers can export to the UK as UK retailers normally accept only Fairtrade bananas from the Windwards. Bananas which cannot be sold as Fairtrade are sold locally, either within the islands or on neighbouring islands like Trinidad. Some 80% of all bananas produced are sold in the UK.

Almost all the Fairtrade farmers are members of Winfa (the Windward Islands Farmers Association), and sell fruit for export through "National Fairtrade Organisations". Some however sell through the very much smaller TQFC (Tropical Quality Fruit Company). TQFC operates only in St. Lucia. TQFC is Fairtrade Certified and used to sell around 20% of St. Lucia's Fairtrade bananas to Winfresh for export to the UK. However, since Hurricane Tomas, TQFC has ceased exporting to the UK and will therefore not be considered further in this document. It continues to sell some fruit to local and regional markets.

3.2 Three Islands and the NFTOs

Each of the three producing islands (St. Lucia, St. Vincent and Dominica) have a National Fairtrade Organisation (NFTO) which is owned and run by the farmers themselves. On each island Fairtrade groups elect representatives to serve on a national executive body which is responsible for negotiating directly with Winfresh on behalf of all the island producers. 90% of what Winfresh pays goes to farmers with the remainder used to finance the NFTOs work. This involves not only negotiating terms and prices and drawing up contracts but also the provision of extension services to the farmers. One of the great advantages of Fairtrade for certified farmers is that prices paid by buyers for export as Fairtrade fruit cannot be lower than the Fairtrade Minimum Price (FTMP) which is set by FLO International after consultation with growers and others. The FTMP is subject to periodic review and has changed during the period under consideration. While in theory prices paid to farmers could exceed the FTMP

they very seldom do so in the case of Windward Island bananas (more precisely all three NFTOs and the farmers interviewed in the three islands all say that the minimum price is *never* exceeded). The Windward Island FTMP is already one of the higher FTMPs for bananas in the world (among the top third) and the extent of the price gap between Windward Island and some other bananas is already an issue for some ripeners and supermarket buyers.

The situation is thus very different from that observable for Fairtrade products in other banana producing regions or in other supply chains. In Ecuador for example, during rare periods of banana shortages, the FTMP has actually been lower than world market prices, allowing some Ecuadorian Fairtrade producers the opportunity to negotiate prices which were higher than the FTMP. In other commodity chains, producers have sometimes temporarily stopped selling to Fairtrade buyers in the short term because they have been able to get higher prices on the open market but have not been able to negotiate higher prices with their traditional Fairtrade partners. This happened in the case of some Cocoa producers in Ghana for example in 2009. Alternative strategies like this are not really available to Windward Island farmers.

Although the FTMP is fixed and is "never exceeded", farmers are paid an additional premium for bagging fruit for individual supermarkets. Both the NFTOs and farmers report that these payments merely cover costs and do not provide any additional income. In some cases, farmers say that the payments are not even sufficient to cover the additional labour costs involved. In spite of this farmers prefer to bag for the supermarkets on farm as this will guarantee that they are paid the FTMP. When the fruit is not bagged, Winfresh may pay only conventional prices (around US\$ 7.00) rather than the FTMP (US\$ 9.13 in 2011; as from 01/01/2012 US\$9.23). NFTO weekly sales records for 2011 show that 22% of fruit produced by Fairtrade Certified farmers in both St. Lucia and Dominica was purchased by Winfresh at prices which were lower than the FTMP. (It seems odd that this percentage should be exactly the same on the two islands and this in turn raises the question of whether this is simply coincidence or whether it reflects Winfresh company policy). Currently no fruit in St. Vincent is being bought at Fairtrade prices by Winfresh.

No UK retailer has in the course of this research reported selling Windward Island fruit as conventional rather than Fairtrade fruit. This might create the impression that a Fairtrade Certified trader and ripener is paying farmers conventional prices for some of their Fairtrade Certified fruit and then selling it on as Fairtrade fruit in the UK. This is an anomaly which will be considered later. For the purposes of the financial analysis which follows, it is assumed that the FTMP is being paid (which is certainly true for the remaining 78% of the fruit purchased by Winfresh for sale in the UK). The issue of what happens to the elusive 22% deserves special consideration (see 6.7).

3.4 The Winfresh/Geest Line monopoly and shipments via the DR

As has already been mentioned Winfresh has the monopoly on exporting and also on shipping which it subcontracts to Geest Line. Ships call in on the Dominican Republic and can top up with DR bananas while there. DR prices are significantly lower than Windward Island prices. However neither Winfresh nor Geest Line have a monopoly on export and shipping of bananas from the DR to the UK. Winfresh has diversified its sources of bananas in order to ensure its financial survival in case of difficulties with Windward Island production. There is

some concern from farmers that Winfresh might be favouring DR bananas over Windward Island bananas because their lower prices could potentially allow Winfresh to increase its profit margins (assuming that Winfresh can obtain the same prices when it sells on to supermarkets, which is far from necessarily being the case).

However most retailers in the UK regard Windward Island bananas as a separate line from Fairtrade DR bananas and while some are prepared to accept substitution in times of difficulty the majority are not.

Whilst some farmers may have their suspicions, it is nevertheless clearly in their interests to see Winfresh maintaining its viability, as it allows them access to the UK market. In theory Winfresh could be replaced by another operator but it would seem unlikely that any company which did not have strong ties to the islands would want to take on a trade which has been under threat for some years and continues to be so. Share ownership was, under the terms of an agreement, supposed to be open to farmers and the intention was that farmers should own 50% of shares. Any dividends paid by Winfresh should therefore have also gone to those farmers who held shares. As this intention was never realized, farmers do not directly benefit from Winfresh's profitability.

There is a further complication which is that, as noted above, half of the Geest Line Directors are also Winfresh Directors and Winfresh (UK) co-owns Geest Line Ltd. (Winfresh Ltd is described in Winfresh (UK)'s published accounts as being Winfresh (UK)'s 'ultimate parent company'). Whatever deals are made between the two companies are presumably negotiated in private and it is not clear to outsiders therefore whether such deals are subject to the usual commercial pressures and constraints or whether some kind of arrangement of mutual convenience is involved.

According to Geest Line Ltd's published accounts there is a complex nesting of Companies, including a number of what are called "Related Parties". These include the Windward Isles Banana Company (UK) Ltd, Winfresh (UK) Ltd, Windward Isles Banana Company Holdings (Jersey) Ltd and a subsidiary of the latter, Geest Limited. The last two are not subject to UK Company Law but rather to Jersey rules. Jersey, one of the UK's Channel Islands, is an off-shore tax haven. Geest Line Ltd. paid no Corporation Tax to the UK tax authorities in the accounting period leading to the end of January 2010 (the last accounts available to date). However this could be attributed to the writing off of an "onerous contract".

A report in 2009 by Felicity Lawrence of the Guardian (the same UK national newspaper whose journalist was reprimanded on another occasion for noting down shelf prices in a supermarket) found that some banana companies were using Jersey as a tax haven in order to avoid UK or other taxes. She did not name Geest Line Ltd. in this article, but her focus was on mainstream trade involving the big banana trading companies and not on the relatively insignificant trade from the Windward Islands (I. Griffiths and F. Lawrence).

3.5 The Ripeners

Four ripeners were involved in ripening Windward Island bananas for the UK market in the period 2010-2012: S.H.Pratt, Fyffes, Dolefresh UK and Winfresh UK.

S.H. Pratt purchased at Portsmouth and sold to Tesco until the end of January 2012 but no longer handles Windward Islands fruit.

Fyffes did not have a contract to supply any supermarket specifically with Windward Island bananas but occasionally bought from Winfresh to top up its supplies from other Fairtrade banana sources in times of difficulty but only as a last resort to meet contractual obligations with supermarkets to supply Fairtrade bananas in general (from unspecified individual sources). Only very small quantities were involved and Fyffes would purchase from Winfresh only as a last resort given that Winfresh prices were significantly higher than its competitors and Fyffes would therefore be selling on to supermarkets at a loss.

Dolefresh UK is currently ripening for Tesco under Tesco's new Global Procurement Policy. Under this policy, which Tesco is attempting to introduce across a wide range of products, the intention is that the retailer takes control of entire supply chains, negotiating prices directly with suppliers. All other actors in the chain are either by-passed, replaced or employed as service providers, allowing Tesco to keep more of the profit in the chain or to pass on price reductions to its customers. For Tesco this has the twin advantage of allowing them to maintain the greatest possible control over quality and management at each stage of the chain, whilst also reducing costs. Dolefresh UK is, under the new scheme, therefore being paid just to provide a ripening service and can no longer, in its dealings with Tesco operate in the way that ripeners have traditionally done in the past i.e. buying bananas green at the port, negotiating their own prices, ripening and then selling on to retailers at prices which they can also negotiate.

The new approach to procurement, used by Tesco, has also been adopted by Wal-Mart's UK subsidiary, Asda, for many of its products, although not yet for bananas. (More precisely global procurement is being handled by Asda's subsidiary, IPL, located a few miles from its headquarters in Leeds.) Such Global Procurement systems could well be the future face of food retailing.

Dolefresh is also supplying Marks and Spencer (M & S), following the more traditional model, in which it buys at the UK port, ripens the fruit and then delivers it to M & S's distribution centre.

Winfresh is currently ripening all other Windward Island bananas destined for UK supermarkets. Apart from the Dominica to Tesco 'route' and the St. Lucia to M & S 'route' then, Winfresh appears to be near to establishing a monopoly not only from the Windwards to Portsmouth but now also all the way to UK supermarket distribution centres.

While the UK's and the EU's Competition Authorities would normally be concerned about any kind of monopoly, they are unlikely to be concerned about this particular one as Winfresh is very far indeed from having a monopoly over Fairtrade banana supplies to the UK and even further away from having a monopoly of banana supplies of all kinds. Seen in terms of the overall banana trade they do not so much have a monopoly as an exclusive arrangement with one country's (or more precisely three countries') growers and a nearly exclusive arrangement with another country's retailers.

3.6 The Supermarkets, their island links, Price Wars and Fairtrade

Six UK supermarkets were taking Windward Islands bananas during the time period under consideration, as follows: Asda, Marks and Spencer, Sainsbury, Tesco, Waitrose and the Coop. As a rule, Asda sources from St. Vincent, Tesco from Dominica and three of other supermarkets source from St. Lucia, the biggest producer, although there has been some flexibility in the post-hurricane period. A final supermarket (referred to later as Supermarket F) appears to be in an unusual position which will be treated separately.

The three top supermarkets, involved in the Windward Islands trade, Tesco (the biggest), Asda and Sainsbury (which vie with each other for second place in the UK's grocery market) have been locked in price wars almost from the day that the independent British chain, Asda, was purchased by the world's biggest grocery retailing chain, Wal-Mart. (So, in fact, has the other top supermarket, Morrisons, which does not purchase from the Windwards).

Bananas have been key weapons in these price wars. There are a number of items which are known in British retailing as KVIs or Known Value Items. These are items like bread and milk the prices of which retailers believe are noticed by consumers. Bananas are one of these. For a supermarket which wants to say that shopping in its stores is cheaper than shopping in those of its competitors, it is important to sell KVIs at very low prices. Consumers will notice that bananas, bread and a few other items are very cheap and they will tend to assume that everything else in the supermarket is also cheap, even though this may in fact not be the case.

Since the early 1990s at least, bananas have been used to reinforce claims that supermarkets offer good value. Throughout the 1990s and to the present day supermarkets have drastically cut prices on at least some of their conventional bananas in order to encourage shoppers to switch to their stores. In almost every case it has been Asda which has precipitated these price battles (very occasionally one of the other supermarkets has made the first move). However the other major supermarkets almost invariably follow by matching their prices. This has always been the case for at least the remaining 3 of the big 4 supermarkets: Tesco, Sainsbury and Morrisons. These usually match Asda's prices to the penny. At its most extreme point in November 2009, Asda was selling some bananas at a mere 38p/kilo (unusually on this occasion the other supermarkets did not precisely match the Asda price, although they did drop their prices to within a few pence).

In spite of these absurdly low prices, specialist offers of bananas, like Organic or Fairtrade packs, have usually not been directly affected, except that increases in the price gap between these more niche products and mainstream ones may have from time to time seduced some consumers away from the Organic and Fairtrade options. In the particular case of Windward Island bananas, different supermarkets may at different times offer them in different sizes of packs, with different numbers of fingers (anywhere between 5 and 10 fingers) and different sizes of individual bananas. These variations make price comparison difficult for the consumer. Nevertheless the big supermarkets still tend to roughly coordinate their shelf prices in terms of price per weight even for Windward Island fruit.

While the price wars have not directly impacted Fairtrade prices in most cases, they have been affected in the particular cases of fruit sold by Sainsbury and Waitrose. In 2006 Sainsbury, which traditionally used to try to maintain a reputation as the most ethical of the big 4 UK supermarkets, suffered from a series of threats to its ethical reputation by virtue of information which came into the public domain relating to its banana supply chains. The supermarket made the radical decision to go 100% Fairtrade in the hopes that this would put it beyond criticism in the future.

Whether information leaked from Sainsbury or whether its competitor arrived at the same policy decision independently is not clear. However, whichever was the case, a rival supermarket, Waitrose (a smaller but still very significant competitor), which is normally seen as being slightly exclusive, high-priced but also one of the most ethically trustworthy of all the supermarkets, made the same decision. It announced this in early 2007, just days before Sainsbury was able to do so.

When Sainsbury did switch to 100% Fairtrade bananas it also made a slightly surprising decision to offer loose Fairtrade bananas at the same prices as the conventional loose bananas offered by the other three dominant retailers. This has meant that from that time onwards it has almost invariably been selling loose bananas at a very significant loss.

While this policy has been very costly for Sainsbury, it has perhaps only been possible because it was able to obtain loose Fairtrade bananas from Colombia at prices which were very low for Fairtrade but which nevertheless fulfilled all the Fairtrade criteria and standards. In the process however, Sainsbury effectively created the conditions for a new price war within the confines of Fairtrade, something which runs counter to the whole spirit of the Fairtrade movement. Waitrose is now also selling Colombian Fairtrade loose bananas at prices which are very low for Fairtrade (e.g. at 68p/kilo on December 20th 2011).

This represents a new challenge for Windward Island bananas. In the past Windwards fruit, labelled as Fairtrade would sit on supermarket shelves close to conventional produce. Consumers could see fairly quickly that the Fairtrade offer was considerably more expensive than conventional fruit. However many of them believed that it was worth paying the extra price out of a sense of solidarity with the producers.

The new Sainsbury and Waitrose policies meant, however, that now expensive bagged Windwards Fairtrade bananas are displayed close to cheap Colombian Fairtrade bananas. For some consumers this must inevitably lead to the question "Why should I pay as much as three times more for Fairtrade bananas from the Windward Islands when I can buy Fairtrade bananas from Colombia so much more cheaply?" When Fairtrade bananas first appeared on supermarket shelves the choice was between a fairly expensive pack of Windwards bananas or possibly a fairly expensive pack of Ghanaian bananas, if indeed there was any choice at all. Now expensive Windwards bananas compete with cheaper DR Fairtrade bananas and even cheaper Ecuadorian and Colombian Fairtrade bananas, often displayed cheek by jowl in the very same store.

Consumers are therefore only likely to favour Windwards fruit if either they find them to be of preferable taste or quality or if they have some particular reason for supporting Windward Island producers.

Inadvertently therefore, instead of escaping the mainstream price war, Sainsbury's policy decision ended up opening a new front within Fairtrade itself, a niche market which had once been a haven of neutrality. In spite of this, UK consumers continue to buy the more expensive Windward Islands fruit in sufficient quantities to allow the Windwards to continue exporting to the UK.

4. Distribution of Value

4.1 Anonymisation and the use of percentages pegged to final retail values; bagging and value added

It has already been noted that sources of information need to be protected. Therefore only percentages of final retail prices will be used below. To give a very simple illustration: if the final retail value of a kilo of bananas was £1.50 and if farmers sold to exporters/ripeners at 50 pence per kilo and then these ripeners went on to sell direct to supermarkets for £1.00, then the following percentages would be reported:

Imaginary Farmer Price	Imaginary	Imaginary final price on
	shipping/ripening price	supermarket shelf
£0.50	£1.0	£1.50
Percentage of final value	Percentage of final value	Percentage of final value
retained by farmer	retained by shipper/ripener	retained by retailer
$[0.50/1.50 \times 100 =]$	[(1.00-0.50)/1.50 X 100=]	[(1.50-1.0)/1.50 X 100=]
33.33%	33.33%	33.33%

There are considerable variations in both sizes and prices of bags and when prices per kilo or per box are calculated from bags, these too are found to vary, sometimes to an impressive degree. In December 2011, one supermarket had bagged Windward Island fruit in 4 different formats. The most expensive format per kilo cost 140% of the price of the cheapest format. The most expensive bag in terms of price per kilo was also the cheapest bag in absolute terms (possibly creating the impression for the consumer that s/he was choosing the cheapest when in fact s/he was choosing the most expensive option).

Value chain studies have been carried out in the past by NGOs and others. Banana Link undertook one such study of Windward Islands Fairtrade bananas in 2007. Its findings were almost certainly based on a snapshot of one particular 'route' from farmers on one of the islands to one particular supermarket at a moment in time. Given the shortage of resources to undertake research of this nature and the resistance of companies to share sensitive information, this is likely to be the best which can be done in normal circumstances. The results of research of this nature are almost certainly useful but it is usually impossible to say

whether the results are representative of what is happening throughout a supply chain or whether the particular case investigated is, for whatever reason, unrepresentative.

For this research, which was slightly better financed (but which also suffered from a very restricted time frame to complete the work) an attempt was made to go beyond the simple 'snapshot' and to build a more representative picture.

Data from all of the individual routes from farmer to supermarket (but excluding the case of 'Supermarket F') and for each particular product line within these routes were collected and these were used to calculate weighted means for each stage along the chain. Hopefully this will have led to a more accurate understanding of the chain than can be obtained from examining only a single possible 'route' or a single product line (i.e. a particular format of bagged fruit).

In addition to producing a 'mean result', one single 'route' has also been reported over a five year time frame. While this is an interesting exercise in its own right, it is probably unwise to deduce trends from this longitudinal approach. There may be short term trends but they should be treated with caution. What appears to be happening is that actors at different stages of the chain are continuously jostling to get the best deal for themselves or their companies at any moment in time. Sometimes the ripener does better, sometimes the retailer. These changes in fortune could be reversed in subsequent financial years and should not necessarily be interpreted as implying long term trends.

4.2 Farmers, workers, Fairtrade Premium and NFTOs

Data for the beginning part of the chain up until FOB prices has been obtained from individual farmers, Ministry Officials in the islands, Winfa, the NFTOs and the Fairtrade movement (either the Fairtrade Foundation (UK) or FLO International).

The NFTOs working with Winfa are required by FLO to compile spreadsheets which are referred to as the "Costs of Sustainable Production" (COSP). These reflect actual practices, actual costs and actual prices paid. However they report only aggregated data. This means that day to day costs must have been higher for some individual farmers and lower for others. Aggregated data shows that, taken as a group, farmers are not only failing to make a profit but are actually losing money and have been for some time. When these data are examined from a distance, it is difficult to understand how farmers are managing to survive at all. However interviews with individual farmers and their representatives carried out on the islands have made it possible to provide a picture of the various survival strategies adopted by farmers. These will be discussed later in the report.

The FTMP is the minimum price which must be paid to farmers but it can in principle be exceeded. According to the information received, in practice average prices for Fairtrade fruit corresponded exactly to the FTMP, implying that higher prices could not have been paid at any time during the period under consideration. (This was confirmed by informants in the Windward Islands.)

There is however significant wastage, in that some fruit is not of sufficient quality or size to fulfil requirements. Most such fruit is sold locally or regionally but some finds its way to the UK. It has not been possible to find out any details about what precisely happens to this fruit and it has therefore not been included in the calculations below. However, clearly the more wastage of this nature there is (whether the fruit is not high enough standard to be bagged but is nevertheless still sold; or whether it has to be completely rejected, which also happens), the higher the costs which have to be taken into account in the production of fruit which can be sold 'normally'. Such costs are effectively internalized in the way that the COSPs are compiled. (Wastage actually in the UK has been factored into the calculations however).

Although FOB prices are occasionally mentioned, they do not appear to have as great a significance as they do for most supply chains. There is hardly any difference between ex-Works and FOB prices in the Windwards and even FAO Stats do not quote Windward Islands FOB prices (the fields being left empty for these cells on the FAO website).

4.3 The Transport/Ripening Complex, raveled and unraveled

As has already been explained, Winfresh handles all export and transportation from the Windwards to the UK port, Portsmouth. It also handles much of the ripening and transport to the Regional Distribution Centres (RDCs) of the UK supermarkets, which sell the fruit.

It is therefore convenient to think in terms of a Transport/Ripening Complex as a single stage in the chain. While it has not always been possible to find out how Winfresh handles pricing within the company for the different stages, it has been possible to find data on ripening and distribution from the 'routes' which are not completely controlled by Winfresh. In the aggregated data presented below prices have been apportioned based on the data which is available and it has to be assumed that for 'routes' where individual costs within the Complex cannot be unraveled, these are likely to be of the same order.

4.4 Supermarkets

Data on individual supermarkets has been obtained and these are presented both for each supermarket (with two exceptions, the first being where an item of data was missing and the second being Supermarket F, of which more later) and in the form of weighted values for all supermarkets together (excluding Supermarket F). There is no indication in this report of which supermarket is which and they are simply referred to as Supermarket A, B, C...etc.

Data is presented over a period of time for the route which ends in one supermarket. Although the same supermarket is involved for each year documented, the bananas followed different 'routes' via different ripeners in different years. Again no names will be mentioned.

4.5 Classic Summary of Value Data

In value studies of this nature in the past, the data has usually been presented in the following format (in the case of bananas often depicted with a picture of a banana divided into different segments.)

Table 1: Conventional Format for Presenting Banana Value Chains

Workers	Farmer	Exporter/Shipper	Importer/Ripener	Retailer
a %	b %	c %	d %	e %

All percentages represent the values retained at each stage of the chain (i.e. the difference between the buying and selling prices for that actor, regardless of costs, expressed as a percentage of the final retail price). The exception is the percentage figure for workers which is equivalent to this (i.e. it represents the amount workers earn per kilo or box expressed as a percentage of the final retail price; clearly the workers merely sell their labour and do not buy and sell the commodity itself).

The format used here will follow this pattern but will be slightly modified as follows:

Table 2: Revised Format used in this Paper

Chain; or	Workers	Farmer	Export/shipper	Importer/Ripener	Retailer
'Route'	a %	b %	c %	d %	e %
within chain	Producti	on Stage	Transport/Rip	bening Complex	Retailer
Cham	a + 1	o %	c + d %		e %

4.5.1 Longitudinal Results for a Single Supermarket

The first three tables show results for a single supermarket reported for three years. The first result is based on an earlier study by Banana Link and is for 2007. The second and third are results obtained during this research for the years 2010 and 2011. Each row adds up to 100%, which would relate to 100% of the final shelf price in the supermarket for that particular supply chain or individual 'route' option within an overall supply chain.

Table 3: Changing Distribution of Value over time for a Single Supermarket

	Workers	Farmer	Export/shipper	Importer/Ripener	Retailer
A Single	12 %	12 %	16 %	36 %	24 %
Supermark					
et over	Production	on Stage	Transport/Rip	pening Complex	Retail
time	24	%	5	2 %	24 %
2007					

A Single	Workers	Farmer	Export/shipper	Importer/Ripener	Retailer
Supermark	11.2 %	8.17 %	9.38 %	40.0 %	31.25 %
et over time	Production	on Stage	Transport/Rip	pening Complex	Retail
2010	19.3	7 %	49.	.38 %	31.25 %

A Single	Workers	Farmer	Export/shipper	Importer/Ripener	Retailer
Supermark	15.45 %	9.95 %	31.2 %	17.3 %	26.1 %
et over time	Production	on Stage	Transport/Rij	pening Complex	Retail
2011	25.4	1 %	48	3.5 %	26.1 %

Looking at these three years, it is interesting to note that the overall distribution of value between major stages (Production; Transport/Ripening; and Retail) have remained fairly constant. However within each stage there have been significant changes.

Overall a little more of the value has gone to the workers and a little less to the farmers whilst the percentage going to the two together did not change greatly from 2007 to 2011. The increase in the proportion going to workers rather than farmers probably reflects the impact of a succession of disasters. 2007 was a disaster free year. Both 2010 and 2011 on the other hand were periods of adverse conditions with droughts, a hurricane and a major epidemic. Farmers still have to pay workers after and during such difficulties, even if this is only to clear up. However farmers' incomes may fall to little or nothing, during such periods. A similar expenditure on labour may have to be shared over fewer kilos of bananas sold, meaning that the labour cost per kilo goes up. In these circumstances, the workers appear to be getting a bigger percentage of the retail value (and indeed they do). In real terms however workers actually get paid the same rates per hour and therefore do not benefit from the adverse conditions. When, by contrast, conditions are good and harvests are plentiful, farmers will get a larger share overall and the workers less but, again, the workers will not lose out in real terms.

The value going to the Transport/Ripening Complex has remained fairly steady but shows a slight steady decline over the period. However there have been shifts between exporter/shippers and importer/ripeners. The relative values retained in the export/shipping stage have doubled between 2007 and 2011, presumably in part reflecting the increasing cost of fuel. However there was also a surprising and dramatic fall in the value retained by exporter/shippers in 2010 and a rise in the percentage retained by the importer/ripeners.

This was probably related at least in part to changes in the exchange rates between Pounds Sterling and US Dollars (the Eastern Caribbean Dollar was pegged to the US Dollar during this period and therefore need not be considered as a separate issue.)

Prices are usually negotiated and fixed for the year in January. In January 2010 the Pound Sterling was relatively strong (US\$1 = 62p) but became weaker later in the year (US\$1 = 68p by May). The importer would normally pay in Sterling, which would mean that the exporter/shipper would suffer losses from a weakening in the value of the Pound. (It is worth noting in passing that in Winfresh (UK)'s accounts, considerable attention is given to possible losses or gains due to currency fluctuations and the Company uses hedging strategies to even these out). The exporter would be buying bananas in US Dollars (or at least in ECX which are pegged to US Dollars) but selling in Pounds (which by May would be worth fewer Dollars).

Such currency fluctuations have short term effects. However when contracts are renewed in the subsequent year adjustments would be made.

In 2011 in fact exactly the opposite pattern occurred and the Pound strengthened towards the middle of the year, meaning that the Exporter will have gained. In addition to this the exporter was probably able by 2011 to incorporate the earlier price shock in the oil market and prices negotiated with importers would presumably have taken into account new fuel prices.

One further factor is relevant in considering the 2011 figures within the Transport/Ripening Complex. The value retained by the Ripener (17.3%) is unusually low. This is in part attributable to the very good deal obtained by the supermarket in dealing with this particular ripener. Windward Islands fruit formed a very small part of a much bigger ripening deal involving fruit from a number of different exporting countries. By virtue of volume (and other factors which unfortunately cannot be discussed as these could jeopardise commercial secrecy) the value going to the ripener was successfully squeezed to the lowest possible level by the retailer.

Between 2007 and 2011 the share going to the retailer has increased slightly (largely offset by the decline in the Transport/Ripening Complex) but it also peaked in 2010, while the proportion going to the Production Stage was noticeably lower. (This was probably because the Fairtrade Minimum Price was then long overdue for re-evaluation and had not kept pace with inflation; retail prices for Fairtrade fruit had however risen between 2007 and 2010.)

While it is interesting to see these changes laid out, it is probably unwise to read too much into any trends which might appear to be occurring. All the explanations offered above can only be tentative and cannot be taken to be authoritative as other factors which are difficult to identify or which are commercially sensitive may be involved. What these tables illustrate more than anything else is the fact (referred to above) that costs at each stage in the chain continuously fluctuate and that the actors in the chain at the same time continuously struggle to negotiate for themselves the best possible deal. How successful they are in doing this will vary from one year to the next.

The occurrence of such fluctuations as can be observed above underlines the dangers of interpreting any one particular set of data (or 'snapshot') as being a reliable indicator of the distribution of value for all time and for all possible individual routes within a value chain.

4.5.2 Distribution of Value along Individual 'Routes' in 2011

In this section the data for 2011 will be summarized. The distinction between the exporting/shipping and the importing/ripening phase will not be made here. This is because out of the 5 routes considered, one is handling only very small volumes and furthermore data is missing for this route. It will therefore not be reported here. Of the remaining 4 routes, 3 are handled by a single actor from exporting port all the way to supermarket Regional Distribution Centre.

It seems more appropriate to reflect this by merging the appropriate cells in the following tables and this also has the advantage that it makes it more difficult to identify who are the

actors involved in the different routes, thus preserving the anonymity of informants (as was promised).

Table 4: Distribution of Value in 2011 for 4 "routes" from the Windwards to Individual UK supermarkets

	Workers	Farmer	Export/Shipper/	Retailer
			Importer/Ripener	
Route 1	16.86 %	12.64 %	41.4 %	29.1 %
Supermarket				
A	Production	on Stage	Transport/Ripening Complex	Retail
	29.5 %		41.4 %	29.1 %

	Workers	Farmer	Export/shipper	Retailer
			Importer/Ripener	
Route 2	16.56 %	12.44 %	43.2 %	27.8 %
Supermarket				
В	Producti	on Stage	Transport/Ripening Complex	Retailer
	29.0) %	43.2 %	27.8 %

	Workers	Farmer	Export/shipper Importer/Ripener	Retailer
Route 3 Supermarket	12.93 %	9.77 %	33.3 %	44.0 %
C	Production	on Stage	Transport/Ripening Complex	Retailer
	22.7	7 %	33.3 %	44.0 %

	Workers	Farmer	Export/shipper Importer/Ripener	Retailer
Route 4 Supermarket	15.45 %	9.95 %	48.5 %	26.1 %
D	Production	on Stage	Transport/Ripening Complex	Retailer
	25.4	1 %	48.5%	26.1 %

One set of figures stands out: those relating to Supermarket C. This supermarket had noticeably higher retail prices than most of its competitors. It still had to pay only the FTMP for the production stage however (or at least the exporter did and ultimately passed this cost on to the retailer at the end of the chain). This meant that the percentage of the value it was able to retain was much higher than those retained by the other retailers and that simultaneously the other players in the value chain appeared to lose out (retaining lower percentages of the retail value). Since however this was a Fairtrade value chain, the FTMP had to be respected as a minimum. This means that the absolute payments to farmers and workers were assured even though a higher retail price meant that the percentage of the value chain retained in the production stage was lower. A retailer which wants to increase its margins cannot do so in a Fairtrade chain by squeezing the producer or worker. It can only do so by squeezing another intermediary in the chain or by raising its retail price.

In conventional value chains the situation is clearly different. The retailer can increase his margins by squeezing everyone in the chain including the workers and farmers who are usually the weakest players.

4.5.3 Aggregated Data for 2011 Supply Chain

The data for the Transport/Ripening Complex is presented as only a single stage to reflect the fact that increasingly both stages are controlled by a single actor in this supply chain.

As stated above there is one final possible route (Route 5 Supermarket E) which currently accounts for only about 1% of volume and for which some data is unavailable. It is not included in the weighted calculations below but the small size of the volumes involved make it unlikely that the absence of Route 5 will distort the overall summary picture.

Table 5: Aggregated Data for the Supply Chain in 2011

Whole supply	Workers	Farmer	Exporter/Shipper/Importer/Ripener	Retailer
chain, aggregating data after weighting	15.67 %	11.46%	41.92 %	30.96 %
for volume	Production	on Stage	Transport/Ripening Complex	Retailer
	27.13 %		41.92 %	30.96 %

5. Analysis of Costs

5.1 Hired Labour and other Farmer Costs

In what has been called above the "Classic Summary of Value Data", hired labour has a somewhat curious position. Hired labour is of course a cost to the farmer but labour is also a cost to other actors along the chain, like the ripener and the supermarket, even though the workers hired by them are not usually treated as a distinct set of actors in their own right, as are the hired labourers at the start of the chain.

Of course, in the case of the supermarket, most labour works on a wide range of products and there are very few people working for supermarkets whose work is exclusively related to bananas. In the case of ripeners however, there are workers who work on bagging, quality control and packing of bananas and on nothing else. Arguably they could be treated as another set of actors in the banana chain, rather than simply as an expense for ripeners. Many of these workers are paid at very low rates, often at or a little above the UK minimum wage.

Workers are in a unique position in the "Classic Summary" in that they themselves usually do not have to pay many or even any expenses. The money they earn is mostly kept by them and spent by them.

The farmer on the other hand has to pay a number of costs, including hired labour itself, meaning that much of the value which appears to be retained by the farmer in fact has to be spent on expenses, in some cases leaving the farmer with less income than the labourers he or she hires.

Total labour costs (from soil preparation through to harvesting) amount to \$5.482 per 18.14 Kg box. This is divided across a range of tasks, subsumed within some of the other costs in the categories tabulated below:

Table 6: Costs of Sustainable Production per 18.14 Kg box and Payment per box

Category	Cost in USD Per 18.14 Kg box	Subtotals and Total
Set up including soil	USD	
preparation and planting	0.511	
Field work including		
weeding and disease control	9.13	
Harvesting and packing		
costs	1.8741	
Sub-total: Production, harve	sting and packing direct	
costs		11.5189
Certification and		
organisational costs,		
including support for	0.724	
NFTOs		
Total Production Costs Ex-Works		12.2427
Total Production and Export Costs (FOB)		12.243
Fair Trade Minimum Price for 2011		9.13

Source: "Cost of Sustainable Production" compiled by NFTOs

It will be readily observed that the Fair Trade Minimum Price (FTMP) does not cover the cost of production and also that according to these figures there is no difference between the Ex-Works and FOB prices. If these figures, provided by Winfa, are correct then farmers are losing roughly US\$ 3 per box. According to earlier COSPs they have been losing money for several years, although not at such a high rate.

When costs are expressed per box, the level of the costs is clearly inversely related to productivity. If more boxes of bananas are produced for a given area of land, then the costs of preparation, weeding, disease control etc. will be reduced per box. Costs are therefore variable and are lower in good years and higher in bad years. The very high levels of losses at present (viewed across the whole year) presumably reflect in part the disruption of production

following the hurricane at the end of the previous year (and the time taken to re-establish crops) and in part the on-going effects of the Black Sigatoka epidemic.

5.2 Costs to Shipping and BAFs

Unfortunately it has not been possible to obtain information regarding shipping costs, although it is possible to comment briefly on Bunker Adjustment Factors.

One of the major costs is clearly fuel. This is covered by a variable levy. Geest Line quotes BAF rates, which are expressed in US Dollars and are charged as a supplement per pallet of 48 boxes.

BAF rates were in the low twenties at the beginning of 2011 (\$23.54 in Week 1) but rose to as high as \$58.84 in Week 32, adding roughly a US Dollar to the cost of every box.

5.3 Costs to Ripeners

Ripeners typically pay for transport from Portsmouth to the ripening facility and from the facility on to supermarket regional distribution centres (RDCs). They run fleets of vehicles, pay drivers and fork-lift drivers. Diesel is a major expense. In addition they heat (and cool) and maintain the ripening centres and hire managerial staff and also labour to work on packing lines.

Costs vary according to speed of ripening and also how far ripening rooms can be filled. If volumes are small, rooms will be maintained in controlled conditions for small quantities of fruit, increasing costs per box. In the UK the ripening cycle is usually 4 or 6 days. The longer the fruit ripens in the ripening rooms (i.e. the slower it ripens), the longer it will last on supermarket shelves and in the homes of consumers. However the longer the time spent, the more it costs. Generally supermarkets prefer a 4 day ripening period to minimize costs.

Costs specifically for ripening (but excluding transport) are in the region of £1.08 per box (US\$ 1.73). Diesel costs have been rising steadily in the last two years and are also subject to a Carbon Levy in the UK.

5.4 Supermarket Costs

Supermarket costs are many and various but very few costs are exclusively related to bananas. The vast majority are costs which are shared with some 40,000 other product lines and it is difficult even for supermarket managers to say how much it costs to accept, distribute, stack and sell individual product lines, given that all the necessary tasks are performed on many products at the same time (a check-out operative may scan a large number of goods for one customer for example; how much of his or her time was spent scanning Windward Islands bananas as opposed to any other product is not easily ascertained).

Retailers' IT Departments do often have access to complex formulae and algorithms for estimating costs for different product lines but these are closely guarded by supermarkets and it is difficult to get access to the results which they can potentially generate. In practice, the

only way of estimating costs for those who do not have access to secret internal company information is to draw on overall data for profit and turnover and deduce costs from these. This gives only a very imprecise picture but gives at least a rough guide to total costs.

6. A Crude Analysis of Profits

The classic presentation of the Distribution of Value documents how much of the value is retained by each actor along the chain. This is one way of presenting data and has a certain utility. However, in some ways it creates a misleading impression.

When material of this nature is presented, it is natural that readers will be struck by what a large proportion of the total value apparently goes to retailers for example. However retailers have considerable costs and not all of this value 'sticks' to them. Much of it goes out to pay fuel, electricity, the cost of maintenance of buildings, etc. and therefore 'sticks' to other actors who are outside the chain.

The way that data is presented and the kind of data used can guide the way that phenomena are interpreted. A rather different kind of impression of the position of actors in the supply chain is gained if profits along the chain are presented rather than value.

6.1 The 'Profit' of Hired Labour

Clearly workers do not make a profit. They simply earn wages. Wages were slightly higher in St. Lucia than they were in St. Vincent or Dominica. They mostly fell within a range from 35 - 50 XCD (US\$12.96 – 18.52), depending on the type of work performed.

On St. Vincent, for example, deflowering and weed control, undertaken usually by women and men respectively, would pay 35 – 40 XCD per day but harvesting could pay 50 XCD. On St. Lucia wages for harvesting could reach as high as 60 XCD (US\$ 22.22).

These wage rates are clearly very high in comparison with Latin American and African wage rates. Furthermore, farmers complained that the quality of labour was very poor, particularly in comparison with the quality of Latin American labour (which some of them had observed during visits to the neighboring region). Most workers would only work from about 8.00 a.m. until 1.00 or 2.00 p.m., meaning that they might do as little as 5 hours work. If they were not supervised, farmers claimed, they were liable to do very little. Clearly there were also good workers but these were hard to find. In spite of the good rates of pay, young people in particular did not want to work.

Workers generally get to keep all that they earn, once taxes have been paid. Not many workers worked full time in bananas. They would usually have other sources of income and/or spouses with other employment. If they did work full time for 6 days, they could earn up to 300 XCD per week (or 310 XCD on a week which included a harvest day). However, the cost of living on the islands is high and even with 300 XCD/week it would not be easy to make ends meet.

6.2 Farmers' Profit; What Profit?

28 farmers were interviewed for this study on the three islands between Jan 6^{th} and Feb 2^{nd} 2012. This represents slightly under 1% of all farmers involved in banana production for the UK market. In addition, eleven farm visits were carried out over the same time period.

Only one farmer reported making a significant profit (of about US\$ 14,000). This woman farmer on St. Lucia was farming 3.2 hectares of high land up a valley. The height of the land and the particular topography encouraged misty precipitation which had meant that her plants had mostly survived the drought in 2010. She had also, remarkably, escaped Black Sigatoka, in spite of the fact that neighboring farms only 100 meters down the valley had been infected. She was, however having to spray every three weeks with a mist sprayer to stop the infection from spreading to her farm. She employed two regular field workers for two days a week and for harvest days and herself worked an average of 8 hours a day, six days a week.

Several other farmers reported making small profits of around US\$2–3,000. By far the majority reported either barely breaking even or more usually making a loss. Most reported that some of their neighbours had lost heart and given up on their banana fields. In the majority of cases this meant that the lands had simply been abandoned, leaving sources of infection which made it impossible for the farmers who were still trying to control Black Sigatoka to succeed. Many were dispirited by the effects of the succession of disasters which had hit their islands. Each time they had replanted their crops, a new source of devastation had hit them. On St. Vincent there were said to be 250 out of the 1000 or so farmers who had been active a year ago who were simply doing nothing, waiting to see whether it would be worth their while to continue or not. Their decisions and also those of many of the farmers on both St. Vincent and St. Lucia, who were still struggling on, would be dependent on the government.

Most farmers on these two islands felt badly let down by their governments. These had the responsibility for the control of disease epidemics. Farmers said that both governments had failed to act at an early stage when the infections could have been controlled, and then had undertaken inadequate and half-hearted programmes which were insufficiently rigorous to control the disease. Farmers claimed they could only get access to the chemicals necessary to treat their plants from government-controlled depots and these depots often had no appropriate chemicals available. There were even shortages of fertilizer, meaning that the plants were more susceptible to infection. Fairtrade environmental standards also made things more difficult as water-grass and other weeds could not always be contained, using the chemicals which were permitted. Such ground cover was increasing humidity in the banana fields, further encouraging spread of the Black Sigatoka infection.

With most farmers losing rather than making money and with data from the NFTOs showing that this pattern had gone on and indeed accelerated over a period of about three years, it was difficult to understand why any farmers were continuing to produce and indeed how they were managing to survive from day to day.

The individual situations of farmers were very varied. Hardly any could be described as young and many were approaching retirement age. They were managing to survive in a number of

ways. One for example was old enough to receive a pension and was living off this. Others had increased mortgages on property in the hopes that the situation would improve. Some had taken on jobs as teachers and were both teaching and farming whenever opportunities allowed them to get to their fields. Others had more than one plot of land and had devoted another plot to the production of vegetables, particularly root crops like Dasheen or Sweet Potato. Some were experimenting with new crops like tomatoes. These were usually sold on local markets but offered unreliable sources of income and required investment in seeds and fertilizer which they could barely afford. Some had shed all labour and were simply harvesting whatever they could while barely managing their plantations, allowing weed and disease problems to build up, with little attempt to control them. Some were thinking of giving it all up and abandoning farming altogether. A few were up-beat and determined and were trying innovative approaches.

All could remember a time when banana production had provided a steady and reliable income.

When asked why they were continuing rather than diversifying into other crops, there were a few very specific reasons cited. One farmer on St. Lucia, for example, was 65 years old and was finding it difficult to continue working. He wanted to sell his farm and was struggling on until he found a buyer, knowing that no-one would want to buy a derelict farm. If however he could keep the plantation going and find a buyer, he hoped to sell for a reasonable sum which would help him to survive in retirement. For most however, the reason cited was that bananas had proved to be the only really reliable crop in terms of marketing and financial reward and provided current difficulties could be overcome it still offered the best hope for the future.

6.3 Shipping, two-way trade and the Dominican Republic

It has been noted above that shipping is handled by the Geest Line which calls in on the Dominican Republic on its way to Le Havre and Portsmouth. Its ships therefore carry not only Windward Island bananas but also bananas from the DR as well as other goods. A considerable amount of the material, including food, needed by the Windward Islanders is transported on the same ships as they return from Portsmouth.

The banana trade arguably provided the whole raison d'etre for this shipping route and continues to be an important source of regular revenue for the shipping company. However, there is a close relationship between Winfresh and the Geest Line, and it is difficult to know how the two companies divide the overall profit of the banana trade, given that the companies share many directors.

The Geest Line may offer especially low rates to Winfresh to ensure that this core business continues to survive or it may demand high rates, in order to take advantage of the potential for tax avoidance (which, unlike tax evasion, is perfectly legal).

Whatever the arrangement is between the two companies, the Geest Line's non-banana business will almost certainly be run on straightforward commercial principles. While it is reasonable to expect that this other business will contribute to the company's profitability, it

cannot be ascertained whether the banana business proportionally contributes more or less profit when compared with this non-banana business. Published accounts lodged with the UK's Companies' House are not sufficiently detailed to distinguish exact sources of revenue.

In 2010 the Geest Line's Gross Profit was £5,898,000 and its Revenue £49,545,000. The Geest Line was therefore making a headline profit of around 11.9% in 2010 on all operations.

In its published accounts however the Company reports an overall operating loss for this year. This reflects the writing off a previously incurred "onerous contract". While Geest Line is responsible for providing shipping, it does not run the ships itself but subcontracts the operation to a third party.

The published accounts make the following statement:

Onerous contract

On I January 2009, the company entered into a contract with an unrelated third party to charter four ships to service the operation between the UK, mainland Europe and the Caribbean. The contract fixed the daily charterhire rate until 31 December 2011. Management now expect this contract to be onerous due to a significant drop in the market rate for contracts of affreightment from the Dominican Republic. In accordance with International Financial Reporting Standards a provision has been made based on management's best estimate of the losses which will arise from fulfilling the charterhire contract.

In this analysis only the Gross Profit is taken into account and the effects of the "Onerous contract" are not included, as this presumably can be taken to be a one-off error. As the expected losses due to the contract were absorbed in the accounting period up to the end of January 2010, they should not have had an effect on the accounting periods relating to operations in 2010 or 2011.

While the Gross Profit was around 11.9% in 2010, it is not known how far this profit is attributable specifically to banana freight as opposed to other non-banana freight. The opinion of a shipping expert has been sought and though the expert was not willing to offer precise figures, he did express the belief that the non-banana freight was probably significantly more profitable than the banana-related business. For this reason it would be safer to assume a lower level of profit, perhaps around 8% for the banana shipping part of the operation. (Having said that, it may be that the ordinary freight business would not be viable without the reefer business and that therefore the two operations are necessarily part of a greater whole).

6.4 Ripening

Winfresh made a Gross Profit of £4,448,439 in 2010 on a Revenue of £63,226,574. This means that it was making a profit of around 7% on its overall business. It cannot be said whether its profit from Windward Islands bananas was at a higher or lower rate than the profit it made from its Dominican Republic bananas. A profit of 7% is unusually high for a ripener,

although Winfresh is not only a ripener but also an exporter and trader. This may account for the high level of profit.

It should also be noted that in the last couple of trading years Winfresh has attempted to diversify its activities beyond banana trading and ripening. It has embarked on new initiatives, bought up a number of existing processing companies and embarked on joint ventures, in some cases in association with one or other of the Windward Island governments. Attempts were made to find out about these new initiatives while in the islands, but there was insufficient time to gather systematic information. Nevertheless, it can at least be said that most informants believed that none of these initiatives had really borne fruit so far. While they may prove successful in the long run, it is not likely that they have greatly added to Winfresh's profitability in the short term (and indeed may have actually cost the parent company money during set-up phases, as premises, such as those of Hummingbird and Vincifresh, have had to be refurbished and modernised.)

Most ripeners who are not also exporters say that they aim at a 2% profit overall and they consider it a good year if they manage to attain this level of profitability. They sometimes make no profit at all and occasionally make losses overall. It can certainly be said without doubt that in 2006 and 2007 two UK ripeners came close to bankruptcy, although both survived and are now enjoying low levels of profit.

6.5 Supermarkets

Large supermarket chains in the UK have generally been successful in maintaining good levels of profitability over the long term. Those which have not succeeded have been bought up or taken over so that now the big 4 account for around 75% of the country's grocery market.

The largest of the 4 is Tesco. Its 2010 accounts show that the company's "UK Core Business" which includes non-food items, made a Trading Profit of £ 2.4 bn on Sales of £42.3 bn.

These figures suggest that the company made roughly 5.7% on all transactions overall. However in its annual report, the company claims a trading margin of 6.2%. This would be based on profit as a percentage of prices paid for goods rather than as a percentage of sales, giving a slightly higher and actually more accurate figure.

Tesco's annual report stated however (as have the reports of other big UK food retailers) that profits were better for its non-food business than for its food business. A more realistic figure for the food business would probably be nearer 5%.

(In January 2012 however, Tesco issued a profit warning for its UK operations. After decades of maintaining good profitability it has for the first time shown signs of a decline in its fortunes).

6.6. Summary of Profits along the Chain

It is clear that the estimates of profit above are extremely crude, somewhat speculative and far from being highly reliable. They are also based on published accounts which relate to the period before the time frame considered in the analysis above (as the financial accounts for more recent years are not yet published). However they do give a rough picture of the overall relative profitability of the trade for different actors in the chain and the calculations are probably strong enough to add to the overall understanding of the trade.

In the table below, workers' earnings are treated as if they were profits. Farmers' profits are presented as zero. The 'normal' level of profit from ripening (including distribution within the UK) is subtracted from Winfresh's overall profits and the difference is attributed to "export", in spite of the uncertainties surrounding Winfresh's internal charges. All percentages are rounded up or down as the quality of the calculations do not justify quoting more accurate figures. If these crude assumptions are accepted, the following picture emerges:

Table 7: Profits along the Chain

Workers' 'Profits'	All earnings kept (100%)	
Farmers' Profits	0%	
Exporters' Profits	5%	
Shippers' Profits	Up to 12% but probably around 8%	
Ripeners' Profits	2%	
Retailers' Profits	5%	

Shippers' profits may be considerably less on its banana business than on its business overall. The figure of 8% is little more than a guess but has been guided by expert opinion. The one-off impact of absorbing losses from an onerous contract is disregarded.

If these figures can be accepted as a rough guide, analysis of profits presents a very different picture than that which emerges from the distribution of value figures.

The people who grow or add value to the product, the farmers and ripeners, are making very little (0-2%). The traders (exporters and retailers) are doing pretty well at around 5% profitability and the shippers (with a monopoly on transport) appear to be doing very nicely (with profits of up to 12%).

For the workers who keep almost everything they earn, the issues are rather different. The key issue for them is not so much the value they are able to keep as a percentage of the final retail price as the actual amount of cash they earn and the relationship of this to the cost of living in the Windward Islands. This is an issue which is outside the scope of this study.

7. The "Anomalous 22%" and Supermarket F

In Section 3.2 reference was made to an anomalous 22% of production for which prices lower than the FTMP were paid. In Section 3.6 reference was also made to "Supermarket F". It was suggested that these two issues needed to be treated separately from the remainder of the material.

One issue which was raised repeatedly by farmers during interviews was the failure of Winfresh to purchase all bananas certified as Fairtrade at Fairtrade prices. It was clear that many farmers (particularly in St. Vincent) did not trust Winfresh, that they felt they were being mistreated by the Company and that they could not understand how, when they had complied with all the Fairtrade standards they could be paid at the FTMP for one box of bananas while a second box, apparently identical in all respects and produced on the same Fairtrade Certified farm, would receive only a conventional price.

At first sight, this resentment of Winfresh appeared to be unjust and to be based on a misunderstanding of the Fairtrade system. It is arguably one of the weaknesses of the Fairtrade system that farmers who participate in the scheme are required to meet relatively onerous standards which add to their production costs, without there being any guarantee that they can sell their produce as Fairtrade produce. A Fairtrade certified farmer has the right to sell their produce as Fairtrade and if s/he succeeds then the Fairtrade Minimum Price must be paid. However, if there is insufficient demand for Fairtrade produce at the time s/he needs to sell, then s/he will not be able to sell the produce as Fairtrade and will only receive conventional prices (if indeed s/he can sell the produce at all). If the demand for Fairtrade is insufficient, then the farmer is left having to pay all the additional costs of complying with the standards without the benefit of either being paid the (usually) higher FTMP nor the Fairtrade "Social Premium".

Seen in this light, it would appear to be justified for Winfresh to pay conventional prices if it knew that it would not be able to sell the fruit in the UK as Fairtrade fruit. It could even be argued that Winfresh was being generous towards the farmers in buying even at conventional prices if it did not believe that it had a market for the produce.

While this initial interpretation appeared to be fairly reasonable, it nevertheless generated a nagging doubt. The problem was that no retailers in the UK admitted to buying and selling conventional bananas from the Windward Islands. This inevitably led to the question: "If Winfresh is buying bananas from Fairtrade farmers at conventional prices and if, as seems to be the case, it is selling exclusively in the UK and if apparently no UK retailers are selling conventional Windward Islands bananas, then what is happening to these extra so-called conventional bananas?"

Had the amounts been small, then there might have been two possible explanations. It might be that Winfresh had a policy of buying some extra bananas at conventional prices because of problems with wastage. The extra bananas might be a kind of insurance against losses en route. A second explanation might be that it knew that there was some possibility of making

last minute ad-hoc sales, for example if another ripener found that it had insufficient Fairtrade bananas to fulfill a contractual obligation to a particular supermarket to provide a specified quantity of Fairtrade fruit. (Indeed a case like this had already been discovered in the UK, prior to the research visit to the islands.) In either of these two cases it might be seen as reasonable for Winfresh to pay conventional prices but to then sell small amounts at Fairtrade prices.

However, when the figures were examined after the period of research in the islands, it was found that the amounts were not small but appeared rather to amount to at least 22% of all purchases made by Winfresh in the islands.

Before proceeding further, it is necessary to look precisely at the reliability of the data obtained. In fact, the data available from the three islands was not of the same quality.

The NFTO in **St. Lucia** (by far the largest producer) supplied extremely precise figures for weekly sales for the whole of 2011. These figures were not produced retrospectively for the benefit of this research project. The NFTO had no prior warning that they would be asked for them and when they were asked, they simply copied the weekly sales figures onto a memory stick directly from their own database. There would seem to be no chance therefore that these figures had been in any way tampered with.

The figures specified among other things the number of boxes sold each week for each product category and the prices per box. The product categories indicated the name of the supermarket being supplied and the particular product line (such as a bag containing a specified number of fingers of a specified size). Four individual UK supermarkets were named. In addition to the product categories destined for named supermarkets (all of which were bagged by the farmer and for all of which the FTMP was paid), there were a number of other categories. None of these were destined for named supermarkets. Two of these categories (referred to as "Conventional Standard" and "Fairtrade Loose") were purchased by Winfresh at Fairtrade prices.

In addition, there were a number of other categories (almost all for loose bananas) for which prices were paid which were less than the FTMP (of US\$9.13). For some categories these prices were very low, the lowest amounting to US\$5.49.

The following table shows a summary of the number of boxes sold in 2011 overall, tabulated according to whether or not the FTMP had been paid and according to whether or not an individual supermarket had been named.

Table 8: Payment and Non-Payment of FTMP in St. Lucia

ТҮРЕ	NUMBER OF BOXES	% OF TOTAL SHIPMENT
Named supermarket/FTMP paid	320,793	69.74%
FTMP paid but supermarket not named	38,056	8.27%

Paid at below FTMP (supermarket not named)	99,82	21.70%
Paid at prices far below FTMP (from US\$ 5.49 to US\$ 7.34	64,659	14.06%

Three elements are noteworthy in the above table. Firstly, for 38,056 boxes (8.27% of the total annual shipment) the FTMP was paid but the bananas were not packed for a named supermarket. This fruit could clearly legitimately be sold to any supermarket as Fairtrade.

Secondly, 99,818 boxes (roughly 22%) were paid at rates which appeared to be below the FTMP. One would not normally expect such fruit to be sold in the UK as Fairtrade.

Thirdly, 64,659 boxes (14.06%) were purchased at very low prices. It can be added that for 98% of these only US\$ 5.49 was paid.

The data obtained from **Dominica** was not as precise as that obtained from St. Lucia. The NFTO was asked to copy data onto a memory stick but when this was inspected later in the UK it was found to be data for 2010 rather than 2011 (which was what had been requested). An additional summary table was obtained from the NFTO through an intermediary which provided more precise data but again for 2010.

Only one supermarket was named in this data, the Dominican NFTO having in 2003/4 agreed a deal to provide Tesco exclusively. As it happens, this data also showed that 22% of boxes purchased were paid for at conventional prices. According to the data, it appeared that the conventional produce was destined for Tesco. However, it is not clear whether this was the case (Tesco did not report buying conventional fruit) or whether Tesco's name was recorded simply because it was assumed by the NFTO, as a result of the agreement, that everything must be going to it. It cannot be said with certainty that this pattern of purchasing 22% at conventional prices persisted into 2011 as the data was not made available.

Data from **St. Vincent** was also copied onto a memory stick and inspected later. This was data for 2011 but was less detailed than the St. Lucia data. It showed amounts (expressed in lbs) sold each week but did not specify individual product lines nor mention supermarkets. Again, the assumption for St. Vincent would have been that fruit would go to Asda. A government extension officer and a Winfarm representative whose offices were at the port stated that since Hurricane Tomas farmers had been paid only for "Loose Generic" at a price which were below the FTMP (with the highest price paid being 18.00 XCD and the lowest price 13.70 XCD, a little over US\$ 5 per box). None, they said, had been designated to any supermarket. (Winfarm provides technical advice to farmers in St. Vincent only; in the other islands the NFTO provides such support).

From the above data it would appear that substantial amounts of fruit are being purchased by Winfresh at conventional prices on all three islands. It is unfortunately unclear where this fruit

might be going. For this reason this 22% (or presumably more when the St. Vincent figures are factored in) is treated as anomalous.

Farmers in the Windward Islands refer by name to 5 UK supermarkets. They refer to bagging fruit for these supermarkets and the names of these supermarkets are recorded in the data obtained from NFTOs. There is however a 6th UK supermarket, referred to here as Supermarket F which does not receive a mention by anyone. The buyer from this supermarket reports that it has been buying at a rate of 6000 boxes per week during 2011. No farmer interviewed reported bagging for this supermarket and it would seem possible therefore that fruit is being bagged in the UK and ripened, presumably by Winfresh and then delivered to the supermarket. It has not been possible to confirm this. 6000 boxes per week would amount to 312,000 per year. However it is reasonable to assume that not more than half this amount was purchased during 2011 as a result of disruptions caused by Hurricane Tomas (in line with production reports from all islands). This would suggest that Supermarket F probably bought not more than 156,000 boxes in 2011.

It is difficult to see where this fruit could have been sourced, given that most of the Windward Islands fruit which was purchased by Winfresh at Fairtrade prices was already bagged for the other 5 supermarkets according to the data provided by the NFTOs. From the table above, it can be seen that a Fairtrade price was paid for 38,056 boxes without these boxes being assigned to a particular supermarket. Clearly these boxes could legitimately have ended up being sold as Fairtrade bananas to Supermarket F (or to anyone else). This however still leaves unaccounted for up to 117,049 boxes supplied to Supermarket F presumably as Fairtrade fruit.

According to a source from Dominica, there was a brief period in August 2011 when production levels increased to 8,000 boxes per week as farms recovered from the effects of Hurricane Tomas. At this time, Tesco was ordering only 3,500 boxes, leaving 4,500 extra boxes per week unsold. Winfresh suggested that Sainsbury might take the excess but that farmers would have to meet Sainsbury specific standards. This could not be achieved without a period of transition and would also have broken the NFTO's prior agreement with Tesco. According to the source the extra 4,500 boxes went to waste and farmers left bananas to rot if they could not sell them on the local market. Possibly some of this excess found its way to Supermarket F but this does not tally with the information provided by this source.

It should perhaps also be mentioned that another supermarket reported that it had purchased very considerably more Windward Islands Fairtrade fruit than was bagged for it in St. Lucia. The buyer in question was on the whole not particularly helpful and gave only "ballpark figures", which were probably unreliable. However the extent of the disparity between what was being packed for the supermarket in the Windwards and what allegedly was arriving at the supermarket (three times the amount which would have been expected from NFTO figures) was worrying.

It would be gratifying to be able to reassure Windward Island farmers that they were being correctly treated in every respect. Unfortunately difficulties in achieving a reconciliation between the figures recorded for fruit purchased as Fairtrade in the Islands and fruit sold as Fairtrade in the UK make it difficult to provide such reassurance. The fact that meanwhile a

substantial amount of fruit is being purchased at conventional prices in the islands but that buyers do not report buying conventional produce in the UK, only compounds the difficulty. No doubt there is a good explanation (Winfresh might be selling the fruit as conventional produce on the wholesale market for example) but unfortunately it has not been possible to arrive at it.

It was suggested by several informants early in the research period that the only way of contacting Winfresh would be to approach the Chief Executive, who they said acted as a gatekeeper, controlling access to the Company. Attempts were made therefore to telephone him but he had left the UK at the time of these attempts. An e-mail was sent to him, suggesting a meeting be held either in the UK or in the Windward Islands but he did not reply. A meeting with Winfresh representatives was scheduled to take place in Odsan, St. Lucia on January 16th, according to a plan drawn up by the local NFTO. This meeting could not be held for reasons which were not specified. This is highly regrettable as no doubt a meeting would have allowed the data from different sources to have been reconciled and explained. As clarity has not been possible for some of the data, the "anomalous 22%" and Supermarket F have had to be omitted from the financial analysis above.

Clearly, if some fruit purchased as conventional produce for around US\$ 5.5 was inadvertently finding its way into the Fairtrade supply chain to the UK, this would have a very marked impact on Winfresh's profit margin. It would also distort the analysis of the Distribution of Value, which is the subject of this study.

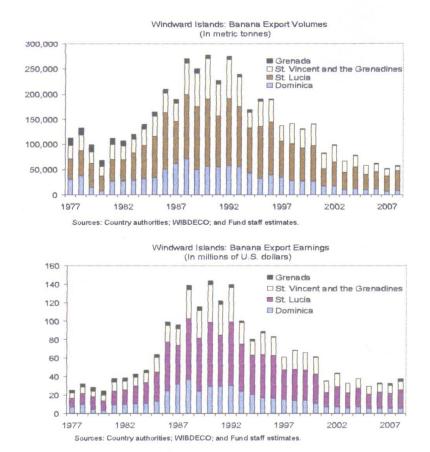
II. Social and Economic Impacts and the International Policy Environment

1. Social and Economic Impacts of the International Banana Trade

It was already noted in Section 1.1 "A Brief History of Windward Island Bananas" that historically the international trade in bananas was a major contributor to the economies of the three islands.

Volumes and earnings from bananas rose steadily throughout the 1980s, peaking around 1990 before steadily declining to levels which were ultimately lower than those which had been seen in the 1970s (see Figure below).

Figure 1: Windward Island Banana Export Volumes and Earnings, 1997 to 2007



Source: IMF Working Paper: Caribbean Bananas: The Macroeconomic Impact of Trade Preference Erosion, 2010 *Montfort Mlachila, Paul Cashin, and Cleary Haines*

In the mid 1980s, banana production accounted for 24% of the GDP of St. Lucia. In Dominica in 1980, it accounted for 30% but had fallen to 20.1% by 1992. In St. Vincent it accounted for 16% in 1990. (Thomas Klak et al, 2011).

While these figures refer to the direct contribution of bananas to GDP, much of the remainder of the economy (such as education, infrastructure, retailing, etc.) was stimulated by the expenditure of banana earnings within the internal economies of the islands. The indirect contribution to GDP was therefore considerably higher.

After the introduction of the European Banana Regime in 1993 however, the contributions of bananas to the GDPs of the three countries began to fall. Within a few years, by 1997, the percentage of GDP attributable to banana production fell to 7% in St. Lucia, to 7.4% in Dominica and to only 6% in St. Vincent. (Thomas Klak et al, 2011).

According to Eastern Caribbean Central Bank figures, by 2000 bananas were contributing only from 3 to 4% of GDP in all three islands (Dominica 3.64%, St Lucia 3.93%, St. Vincent 2.59%) and these contributions continued to decline to less than 2% by 2010 (Dominica 1.4%, St. Lucia 1.53%, St. Vincent 0.44%) (ECCB Stats 2010).

Not surprisingly there was a dramatic decline in the number of banana farmers active from the early 1990s to the present day with 25,055 in 1992, 24,000 in 1993, 16,642 in 1998, 5,475 in 2003, 5000 in 2005 and 3,817 in 2008. (Figures from a number of sources: Anderson et al, 2003, John 2006, Klak et al, 2011, Mlachila, 2010)

While the contribution of bananas to GDP continued to decline in the 2000s and into the present day, the contributions to GDP of the broader categories of "Agriculture, Livestock and Forestry" on the one hand and of "Crops" on the other (both of which incorporate bananas) have remained much more stable, with the exception of those seen in St. Lucia.

In Dominica, the general agricultural category and the crops category started at 13.13% of GDP and 11.73% in 2000 and remained very nearly the same at 12.83% and 11.28% respectively in 2010 (and were projected to rise to their former 2000 levels by the end of 2011) (ECCB Stats 2010).

In St. Vincent the two categories started at 7.5% and 6.18% respectively in 2000 and had fallen to 5.81% and 4.52% by 2010, significant declines but not as serious as that seen in bananas (in fact the decline in these figures could probably mostly be accounted for specifically by the decline in the contribution to GDP from bananas over the same period.)

In the case of St. Lucia, the contribution of both categories more than halved from 6.13% and 5.5% in 2000 to 2.74% and 2.32% in 2010.

Many farmers who were interviewed for this research looked back fondly to earlier times when banana production had produced a steady and reliable income for them. They frequently referred to bananas as having provided 'the backbone of the economy' and many studies of the islands' economies confirm this interpretation (e.g. Singh et al, Williams and Darius).

With the dramatic decline in banana production since its peak in 1990 however, it is reasonable to ask whether or not the sector continues to have much importance today.

Certainly remittances, grants and tourism appear to have overtaken bananas as sources of foreign currency. According to a World Bank Study (World Bank 2006), grants and remittances provided major contributions to all the island economies, accounting for as much as 11.5% of GDP in Dominica, 5.7% in St. Vincent and a more modest 3% in St. Lucia in 2005. Grants and remittances accounted for nearly equal proportions of these revenues in all three islands.

Tourism has overtaken bananas on all three islands as a source of revenue (IMF 2011, Govt. of St Lucia 2010b). However much of the money from tourism ends up in the hands of foreign investors and does little to boost local incomes (beyond generating some poorly paid service jobs). What is more, since the economic shocks which started in 2008, tourism revenues have generally declined. In the case of Dominica, for example, Carnival Cruise Liner which accounted for 30% of the island's cruise tourism business, announced in 2010 that it would no longer be calling on the island from 2011 (Dominica Online News, 2010).

Manufacturing is not well developed on any of the islands, except arguably for St. Lucia where there is some food processing, beverage production, paper production, clothing and electronic assembly. In the case of St. Lucia this contributed an average of 5.6% to GDP in the last decade. However by the end of the decade manufacturing was under pressure due to higher oil and other input costs (Govt. of St. Lucia 2008b).

Manufacturing was also under pressure in Dominica, falling by 27% following decreases in beverage production and the closure of a dental cream production line by Dominica Coconut Production in September 2007) (IMF, 2011).

While it is certainly true to say that bananas no longer make the massive contribution which they made up until the 1990s, nevertheless all three islands face considerable financial difficulties and none can really afford to lose any sources of foreign revenue or indeed any contributions to GDP.

Both farmers and policy makers interviewed for this research stressed the unique contribution which bananas make to the economy, when compared to other sectors, including other agricultural sectors.

Given the difficulties faced by bananas and particularly the challenges posed by Black Sigatoka, many farmers either were considering or had considered diversification into other agricultural commodities. By far the most common reason for staying with bananas rather than diversifying however was that bananas provided the only reliable market and also the only way of raising credit. Farmers could easily obtain credit, if they could show receipts for recent sales of bananas. Only banana sales were seen by banks as providing a guarantee of creditworthiness. Credit meant that fertilizer and other inputs could be purchased and that economic activities could continue. Even if a farmer wanted to diversify, he or she (nearly half of the farmers interviewed were women) needed credit to buy seeds and credit could not be obtained with the expectation of future sales of other crops than bananas. The testimonies

of farmers in this respect were also reiterated by Ministry of Agriculture officials, government extension officers and representatives of advisory bodies like the Banana Production Management Unit in St. Lucia and Winfarm in St. Vincent.

Crops other than bananas had little or no surrounding infrastructure. There were, in particular, no reliable markets. There were some opportunities to export crops like Dasheen to neighboring islands but the trade was controlled by what were referred to as "traffickers", lone operators who could not necessarily be relied upon to pay. At least Winfresh could be relied on to pay, even it if did not necessarily always pay a Fairtrade price. There was a potential to supply hotels and restaurants in St. Lucia which serviced the tourist industry, but much food, including fresh produce could be imported from the US, Canada or the EU at prices which local producers could not match, since prices for inputs and labour on the islands were high.

Most of the farmers interviewed who still produced bananas believed that if they could stay with bananas and weather the current storms they would be better off in the long run, even if this meant short-term privation. The problem was that the privations were going on rather too long and it was beginning to be uncertain whether many of them could continue, particularly if the governments still failed to deal with the Black Sigatoka epidemic.

During the research period, both the new governments of St. Lucia and St. Vincent (both countries having had elections a couple of months before) announced renewed programmes, involving significant investments (of around 3 million XCD on each island during 2012) for treating the epidemic. However, such announcements had been made before and there was some cynicism about whether the promises would be adhered to this time around.

While Dominica had so far escaped Black Sigatoka and while the impact of Hurricane Tomas had been less severe than it had on the other two islands, the mood appeared to be hardly more optimistic. Farmers were still abandoning banana farming, believing that there was no future in what was becoming an increasingly fierce competitive international market.

Both farmers and government officials pointed out during interviews that banana earnings had a unique impact on the islands. Banana money went into local rural communities, provided considerable employment and stimulated other local businesses. There was a widespread fear that if the banana economy collapsed, poverty would spread and social disorder follow. There was particular concern that very few young people wanted to farm or to work on farms and that many of them preferred to "sit on the side of the road" (a euphemism which, one informant explained, meant hustle for a living and possibly deal in the growing drug trade.) As if to underline fears regarding social stability, immediately before the research period in the first six days of January there were six murders, believed to be drug related, in the capital of St. Lucia, Castries. Considering that the whole island's population amounts to a mere 171,226 souls (in 2010) and that the capital would be considered to be just a small town by European standards, such a high murder rate is startling.

2. The Impacts of Trade Policy on the Island Economies

It was already noted in Section 1.3 "The Impact of Changing Trade Rules" that the adoption of the European Single Market threatened the historical preferential access of the Windward Islands to the UK's retail banana market. It was noted that once the Single Market was in place, this would imply that expensive Caribbean bananas would have to compete directly with the much cheaper Latin American bananas produced with the benefit of lower wages and less challenging landscapes and climates.

The Windward Islands and other ACP producers were temporarily protected by the provisions of Regulation 404/93 which established a controversial licensing system for EU banana imports. Under this system 12 'traditional' ACP exporters (including 7 Caribbean states, among them the 3 Windward Islands considered here) were allocated country quotas at one tariff level. Higher tariffs and a quota limit of 2 million tonnes were imposed on so-called 'third country bananas' (99 per cent of which came from Latin America), meaning producing countries which were neither banana producing EU members (Spain, Portugal, France and Greece) nor one of the 12 preferred ACP countries.

The new regulation was immediately challenged at the GATT by Costa Rica, Colombia and three other Latin American banana exporters, as contravening fundamental GATT principles (of non-discrimination). The GATT was unable to enforce its decisions. In 1996 however Ecuador filed a new complaint against the Regulation to the newly formed WTO and the US joined Ecuador, entering the dispute for the first time.

In 1997 the WTO ruled in favour of the complainants and ordered the EU to change its banana import policy to comply with WTO rules. The EU presented a new policy which was barely different to Regulation 404/93 however and the WTO authorized the complainants to levy sanctions against the EU. The US did impose sanctions in 1999 but Ecuador did not.

In 2001, the EU made agreements with its challengers and obtained a waiver from the WTO members, allowing it to discriminate in favour of ACP countries' bananas but only in the context of a long-term plan to phase out such discrimination.

Under this plan, from January 2002 a complex system of quotas and tariffs was introduced. There were three quotas. Quota A (of 2,200,000 tonnes) was subject to a 75 Euro tariff. Quota B (453,000 tonnes) was also subject to a 75 Euro tariff. Quota C (750,000) had a zero tariff. Imports outside these quotas were subject to a tariff of 680 Euro per tonne, except for ACP imports which were subject to a 300 Euro per tonne tariff.

Quotas A and B were open to bananas supplied by any country but when ACP countries supplied under these tariffs they did not need to pay the tariff. The C quota was reserved exclusively for ACP countries.

The quotas were allocated through import licenses which were distributed on the basis of past trade. These licenses could however also be traded between importers. The Windward Islands (or rather WIBDECO, their trading operation) were able to sell licenses to other importers when its licenses exceeded the ability of Windward Island farmers to export. This

arrangement ceased however from 2006 when the EU abandoned quotas and import licenses and introduced a tariff-only regime.

From January 2006 a new tariff of 230 Euro per tonne was to be imposed but ACP producers would be allowed a duty-free waiver which was originally scheduled to end on the 31st December 2007. According to the 2001 agreement, the EU expressed its willingness to discuss the level of tariffs through arbitration at the WTO between February and the end of September 2005. After much argument the EU set its new tariff level at 176 Euros per tonne, with a global ACP tariff free quota of 775,000 tonnes.

Although many hoped that this would mark the end of the long-running trade dispute, it was still not entirely over. The EU rushed through a number of interim Economic Partnership Agreements, free trade agreements between ACP countries and the EU effectively allowing ACP suppliers to continue to benefit from duty free access beyond the end of 2007 deadline.

The loss of WIBDECO's ability to sell import licenses will clearly have had an adverse effect on the Company's income. However it is unlikely to have had any impact on the distribution of value. It has been suggested by various commentators that the Windward Islands were somehow using the income from sales of import licenses to subsidise Windward Island production. However by 2006 almost all exports were already Fairtrade (see figures for Fairtrade exports shown in the graph on p 48 of Liu P., 2009, which are almost identical to the total export figures shown here in Table 9 above) and the payments for these will almost certainly have been no more than the Fairtrade Minimum Price. The only part of the chain to benefit would therefore have been WIBDECO itself but the financial gains would feed into its overall income and would not contribute to the share of the retail value retained by the Company during its trading of actual Windward Island fruit.

In February and April 2008 the US and Ecuador made separate complaints at the WTO. In July a temporary agreement was made between 11 countries, including the US and the EU for the EU to lower its tariff from 176 to 114 Euros per tonne over a period of 7 or 8 years. The EU Commission tried to appeal against challenges made to the ACP quota but in November 2008 the WTO dispute panel rejected the EU's appeal. In January 2009, Ecuador and Costa Rica threatened to launch a new complaint but agreement was finally reached on December 15, 2009. The tariff would be lowered from 176 to 148 Euros in 2010. This would be followed by a series a further reductions between 2013 and 2017 until it reached 114 Euros per tonne. This was more or less what had been agreed earlier in July 2008. In exchange for the programme of tariff reductions, the complainants would agree to take no further complaints to the WTO.

While the changes to the EU import regime have been complicated and somewhat tortuous, the effects appear fairly straightforward overall. It had been forseen in advance that the effect of the European Single Market would be to make most Caribbean production uncompetitive in relation to low cost Latin American producers (the one possible exception being production in the Dominican Republic which was able to benefit from cheap migrant, non-unionised Haitian labour). It was predicted that small island producers would be driven out of business and that industries would collapse.

For all its defects, the EU's import regimes in all their various manifestations added up to a rearguard action, in which the protection for Caribbean and other ACP producers was gradually dismantled, allowing them at least some time to make adjustments.

The Jamaican export trade to the UK did not survive the pressures, particularly as Jamaica suffered a series of hurricanes in close succession, exacerbating the difficulty of continuing to operate in such a disadvantageous financial context.

The Windward Islands found themselves in ever greater difficulty as UK/EU system of trade preferences was gradually dismantled. The effects of the liberalisation of the EU market on levels of production, contributions to GDP and employment have been documented in the preceding section. In spite of the damaging impacts, the islands' industries were able 'by the skin of their teeth' to adapt by embracing Fairtrade and by developing a new dependency not on the former colonial power as a political and economic entity but rather on the supermarkets operating within it, a dependency which has offered short-term salvation but which is also not without dangers for the future.

III. Conclusions and Recommendations

1. What Can Governments Do?

The governments of the Windward Islands face considerable challenges. It has long been clear that their banana industries cannot compete head to head with producers in the dollar banana zones. The liberalisation of the EU market has been little short of disastrous for the islands' banana economies.

The decision to specialise by supplying the UK's Fairtrade market has allowed the industries to survive in the short term. However, as has been noted above, even Fairtrade has not provided them with a secure refuge. The expansion of the UK's Fairtrade market to the point where it can no longer be seen as a "niche market" has brought with it new threats. Windward Islands bananas, as already noted, are now in direct competition with much cheaper Fairtrade bananas from a number of countries, most notably Colombia, the Dominican Republic and Ecuador.

The recent spate of natural disasters, culminating in the Black Sigatoka epidemic, has made the future look increasingly bleak for many banana farmers and some question whether there is any future for the three countries' banana industries at all.

It was clear from discussions with Ministry of Agriculture officials that even governments are beginning to question whether it is worth trying to struggle on in the face of such difficulties. At a meeting in January 2012 with officials from the Ministry of Agriculture in St. Vincent the author was actually asked whether or not he thought it was worth continuing. It is not a very easy question to answer, given that considerable on-going financial investment in Black Sigatoka control is unavoidable if there is to be any future for bananas in the Windwards at all.

In the case of Dominica, happily up until now the crop has not been infected, in spite of the fact that islands to both the North and the South already face epidemics. With only some thirty miles between neighbouring islands however, it would seem unwise to assume that Dominica will continue to enjoy such good fortune in the long-term. In both St. Vincent and St. Lucia at the outset of the epidemic, there were only isolated pockets of infection and had the appropriate authorities acted quickly it would probably have been possible to limit its spread. Arguably Dominica should learn from the mistakes of its near neighbours and invest now in the appropriate fungicides and in putting in place rapid reaction teams so that if infections occur in the future these can be immediately contained.

In the case of St. Lucia efforts to control the disease were far from perfect and many farmers complained that the government had not done enough and had been too slow to act. However, in spite of such criticisms, there were signs that the disease was being brought under control and certainly production and export was continuing.

The situation in St. Vincent was undoubtedly the most critical and as already noted export had almost ground to a halt by the beginning of 2012. Furthermore if the disease was to be brought under control, the effort required would be considerable. In spite of the difficulties the

St. Vincent government decided to invest further in the control efforts and by March 2012 the work had been stepped up with the formation of a third spray team.

The widespread abandonment of infected banana plantations has presented the government with a politically difficult situation. Many of the famers who were continuing with bananas believed that the government should require those farmers who had abandoned their crops to destroy any remaining infected plants. Without such a tough policy, infection would rapidly spread back to areas where eradication had been successfully achieved. However such a policy posed real difficulties.

Firstly, many farmers felt that a legal requirement would be an infringement of their civil liberties. Secondly, in many cases, the farmers who had abandoned their land were ageing and could not clear the land without employing labour. However they often had no income following their abandonment of their plantations and were often having difficulty surviving from day to day. Seen in this light, the only viable solution would appear to be for the government to pay for clearances, adding to the expense of the overall operation.

While in such circumstances it might appear to be preferable to abandon the industry, getting out of bananas would present other serious difficulties. While St. Lucia would find it difficult to survive without the banana trade, at least it has a fairly diversified economy. St. Vincent and Dominica on the other hand would struggle to find alternatives. Other sources of revenue, notably tourism, remittances and grants are all under pressure in the context of the current world economic crisis and the high cost of inputs and the remoteness of the islands are unfavourable to involvement in manufacturing.

It is difficult to escape the conclusion that the islands have little choice other than to protect their banana industries. On the positive side the demand for Windward Island bananas in the UK continues to be robust. As long as this market remains, the islands would probably be well advised to do whatever they can to ensure the continued survival of the industry.

At the same time however it would probably also be advisable to help farmers to find alternatives for the future by doing what they can to develop markets in other agricultural products. There are three areas where governments could take the initiative.

Firstly, they could help to develop more reliable regional markets by moving away from dependence on "hucksters", the informal traders who farmers report are frequently unreliable and who sometimes cannot be relied on to pay for produce. Given that Winfresh is owned by the governments, it could perhaps play a more active role in making local regional markets more dependable for farmers.

Secondly and linked to the above is the issue of access to credit. If markets were more reliable, local banks might be persuaded to extend credit to farmers on the basis of crops other than bananas.

A third area which could be developed would be the encouragement of better links between tourist facilities and local agriculture. Many hotels continue to purchase imported food which could be replaced by local products.

2. What can farmers and their organisations do?

Windward Island farmers themselves point out that they tend to be very individualistic and are not always good at cooperating. This can present very immediate and tangible difficulties.

It has already been noted that epidemics are hard to contain when farmers cannot influence their neighbours to remove infected material. Farmers can also face difficulties with access to inputs and support when they act individually. They often complain that they cannot get hold of inputs and equipment because it is unavailable. Even when inputs are available farmers are often a long way away (in terms of travel time, if not in terms of geographical distance) from supply depots, adding to the expense of obtaining essential supplies. It can also be difficult for them as individuals to get access to technical advice.

While farmers may be far from the main town where supplies and technical support are available, in most cases they are clustered together with other farmers in plains or valleys. The development of more active local associations or cooperatives could be helpful. Such associations could develop their own small supply depots, so that each individual farmer would not longer need to travel to the capital every time an input was needed and so that savings could be made in terms of transport costs and time (some farmers do not have their own vehicle, meaning that they have to pay someone else, usually at high rates, to drive them into town). Local associations might also be able to help to ensure that infected fields were cleared by applying social pressure and collective support.

Stronger local organisations might also help in the development of better management, taking advantage of technical innovations. Most relevant here is the fact that the island of Martinique lies between Dominica and St. Lucia. With the help of CIRAD (the International Centre for Research on Agriculture and Development), considerable improvements have been made in plantation management in the French island (and also in Guadeloupe to the North of Dominica). One element of CIRAD's approach has been a radical reduction in the use of agrochemicals. These are particularly expensive in the Windward Islands (as a result of high transport costs) and the costs of inputs are continuing to rise. Better links with the French Antilles, via local associations, might help Windward Islands farmers to adopt new approaches which reduce costs and therefore allow farming to be both more profitable and also more attractive to up-coming generations of potential farmers.

It has recently been announced that, after years of lobbying, Winfa has finally been granted a place on Winfresh's Board. Whoever is appointed to join the Board will need to have the patience to focus on the details of the company's day-to-day operations and to verify that Fairtrade prices are always being paid to farmers when produce is being sold as Fairtrade in UK supermarkets, in spite of the possible "anomaly" relating to Supermarket F, referred to in Section 7.

3. What Action can be Taken to Influence the Distribution of Value?

The production of this paper was encouraged by Working Group 02 of the World Banana Forum (WBF) as part of a wider investigation into value chains in the banana industry.

Working Group 02 on "The Distribution of Value along the Chain" was set up by participants in the WBF because they had concerns about how value was distributed along the supply chain. There was particular concern in the group about the low level of wages earned by most workers in plantation agriculture and also a concern about low incomes among small farmers. One of the benefits of analysing the Distribution of Value is that it potentially clarifies the impacts of raising wages for all workers employed in banana production, or the impacts of raising incomes for small farmers at the beginning of the chain.

If, for example, workers are receiving as wages only a small percentage of the final retail value, then it would be possible in theory to envisage raising wage levels across the whole industry, without jeopardising the financial viability of any particular producing country. This could be done without any great impact on consumer prices, provided that all the actors downstream in the chain were prepared to accept their current levels of earnings, rather than insist on retaining their current percentage margins.

While it is possible to envisage such an intervention in the case of "conventional" production, Fairtrade production presents an exceptional case. In the case of Fairtrade an intervention has already been made through the imposition of Fairtrade Minimum Prices. These prices, at least in theory, are intended to ensure that workers can be paid adequately and that small farmers can earn adequate incomes.

The FTMP and the social premium are normally funded by consumers who voluntarily choose to buy more expensive Fairtrade products. (This is not entirely the case in the UK banana market since Sainsbury and Waitrose consumers are forced to buy Fairtrade whether they wish to or not; however they do not necessarily have to pay Fairtrade prices as loose bananas are being sold at conventional prices, at a loss to the two retailers).

It appears that in the case of the Windward Islands, as has been noted, Fairtrade has provided a lifeline for the industry which has allowed it to survive in the face of fierce competition from "dollar bananas". However this lifeline does not appear to be sufficiently robust to ensure that farmers' incomes are adequate.

As regards the issue of banana retail prices, there appears to be little chance of prices for Windward Islands fruit increasing in the current market, when it is already one of the most expensive alternatives.

As should by now be clear, responsibility for the failure of the Fairtrade Minimum Price to actually guarantee an adequate income for the Windward Island farmers cannot realistically be laid at the door of the Fairtrade movement nor at that of the Committee which is responsible for setting FTMPs. In the case of the Windward Islands it has been a succession of natural disasters which has reduced average farmer profits to unsustainably low levels.

When it comes to other actors in the chain, there are really no indications that excessive profits are being made at any other point in the chain. Supermarket profits appear to be adequate but by no means spectacular and ripener's profits are very slim. In this particular chain Winfresh and the Geest Line taken together appear to be in the best position with their near monopoly control of several links.

Winfresh is however owned by the island governments and the Geest Line is 50% owned by Winfresh. While the Fairtrade system appears to be broadly effective in intervening in the distribution of value so that hired labour is not unduly exploited (and indeed appears to be fairly well protected) and so that farmers would be adequately rewarded were it not for the intervention of natural disasters, there is one further way in which the distribution of value could be influenced.

The island governments receive any dividends deriving from Winfresh's and the Geest Line's profitabilities and some of these could in principle and in fact are in practice being used to ensure the long term viability of the islands' banana economies and therefore the future survival of the banana farmers themselves. Whether enough is being done remains to be seen.

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