DOI: 10.36347/sjebm.2014.v01i03.006
Scholars Journal of Economics, Business and Management e-ISSN 2348-5302
Taringana T; Sch J Econ Bus Manag, 2014; 1(3):116-125 p-ISSN 2348-8875

The Impact of Sanctions on Rhodesia's Coffee Industry: 1965 – 1980

TakesureTaringana
Department of Economic History, University of Zimbabwe, Harare 00263, Zimbabwe

**Corresponding Author: Takesure Taringana; Email:* ttaringana@gmail.com

Abstract: This paper argues that the sanctions that were imposed on Rhodesia as punishment for its Unilateral Declaration of Independence (UDI) in 1965, acted as a major stimulus for the development of the coffee sector in the country. Up to 1965, coffee was among neglected crops tagged "side-lines". Tobacco was the largest sector accounting for above half of total agricultural output and one third of all Rhodesian exports. As a result of sanctions, the tobacco industry was the hardest hit and owing to its central position in the country, the entire economy was affected. This forced the government to make bold policy decision to diversify the Rhodesian agricultural base. The government bankrolled diversification schemes to encourage farmers to move away from tobacco and encourage other crops wherever they could commercially thrive. This was done to cover for the export revenue lost as a result of the economic onslaught. Coffee was seen as a crop that could be economically established in the Eastern Districts. To this end the government rolled out various financial support schemes under the Ministry of Agriculture to encourage settlers to undertake coffee farming. These were backed by vigorous research programmes into the crop. Between 1965 and 1980, the coffee industry became a significant sector in the country in terms of foreign exchange contribution and employment.
Keywords: Sanctions, coffee, diversification, tobacco, side-lines, Rhodesia

INTRODUCTION

Coffee production in colonial Zimbabwe began in Chipinge District on a small scale soon after the arrival of the pioneer white settlers. R. C. Smith points out that coffee was introduced by members of the Moodie Trek from the Orange Free State in 1891 [1]. These settlers established few backyard coffee trees for subsistence. Due to favourable climatic and ecological factors that is, high rainfalls, high altitude and rich loom soils, Chipinge highlands in particular, became the centre for intensive coffee production from which farming spread to other areas in the Eastern Highlands, particularly the Vhumba Mountains and Honde Valley. By 1978, coffee production in colonial Zimbabwe had spread to include areas such as Chiredzi, Sinoia, Queque, Gatooma, Guruve, Lomagundi and Mt Darwin in what coffee planters have termed the 'northward expansion [2].'

However, the development of the sector into a commercial establishment faced several challenges. Due to coffee diseases like the leaf disease (*hemilaevastatrix*) and lack of adequate knowledge on how to grow the crop, coffee nearly died out in the 1920s [3]. There was a great lull in the production of coffee in colonial Zimbabwe from the late 1930s up to the late 1950s. Several farmers shunned producing mainly because of its long term nature. Farmers had to invest in the coffee business for almost five years before they could get meaningful returns. Yet there were other short term, profitable agricultural ventures particularly tobacco production. In this scenario, coffee production was neglected and was only produced at a negligible scale. Nonetheless, the early 1960s witnessed a sluggish interest in the production of coffee now for commercial purposes. This was demonstrated by the establishment of the Coffee Research Station at Chipinga in 1964.

This paper takes the Unilateral Declaration of Independence (UDI) period as a watershed for the development of the coffee sector into a fully-fledged commercial enterprise. From 1965, the coffee sector grew rapidly in terms of acreage under coffee and its contribution to public revenue. This growth is attributed to the various programmes that were rolled out by government and farmers to encourage coffee production. The paper explores the reason why government took to encouraging the intensive production of what were considered "side-line crops" and the nature of assistance rendered to that end.

Sanctions and efforts at diversification

The UDI by Ian Smith and his Rhodesian Front in November, 1965, and the subsequent imposition of trade sanctions by Britain in 1965and later mandatory sanctions by the United Nations in 1968, in various degrees, altered the structural composition of the Rhodesian economy in general and particularly the agricultural sector. Various scholars have taken different perspectives to examine the effects of the trade sanctions on the economy[4]. Their

DOI: 10.36347/sjebm.2014.v01i03.006

differences emerge mainly from the fact that different sectors of the economy or specifically, different sectors of the agricultural industry were affected in varying degrees.

Up to c.1965, the Rhodesian agrarian economy was mainly based on tobacco and this was the main crop affected by sanctions imposed on the country. The difficulties of marketing tobacco in an embargoed economy gave a leeway for further development of the coffee sector and other branches of agriculture. The primacy of tobacco exports to the Rhodesian economy needs no further emphasis. In 1964, tobacco accounted for above half of Rhodesia's total agricultural output and about a third of all exports [5]. In 1965, tobacco exports collected in $70 million while all other agricultural exports accounted for $103 million [5].As Handford notes, "in 1965it was possible to say that a quarter of the world's exports of the flue cured tobacco …had been marketed on the three auction floors in Salisbury before UDI [5]." The tobacco sector was, therefore, the largest single agricultural sector in colonial Zimbabwe which contributed immensely to the country's total gross domestic product (GDP).

In the wake of the sanction provoked by the UDI, the tobacco sector lost above half of its market share in Europe. The value of Rhodesian tobacco exports to West German fell from US$18 160 000 in 1965 to US$689 000 in 1969, while exports to Britain collapsed in value from US$52 198 000 to zero between 1965 and 1969[6].The same trend could be said of the Dutch, Belgian and Luxemburg markets [6]. The plight of the tobacco sector in the context of sanctions, exhibited an integral part of the deficiencies of the dependent trade arrangement and its detrimental implications to the entire process of economic development for countries in such relationships. The specialization in tobacco as a major cash crop meant that the Rhodesian agricultural economy approximately came to be a monoculture with serious consequences if the crop was to face any misfortunes as was the case with sanctions. As a result of sanctions, between 1965 and 1979, the sector decreased its contribution of total agricultural sales from 56% to less than 25% [7]. With the central position occupied by the sector in the entire Rhodesian economy, it was feared that the effects of sanctions would soon be reverberated into the whole economy through structural economic relations. This called for a vibrant policy decision by the government to ensure the stability and growth of the economy and to ensure that the average white Rhodesian had the income to sponsor high standards of living [8].

As a reaction to the above situation, the government actively encouraged farmers to diversify away from tobacco. Tobacco production quotas were introduced to discourage farmers to further venture in tobacco production. It is a historical fact that sectorial recession and bottlenecks such as those suffered by the tobacco sector are more frequent than those affecting the entire economy. Even during an all-out economic embargo or recession, not all sectors are similarly affected. In this case, an agricultural economy that relies much on a single commodity is more susceptible to the problems related to recessions and embargoes than a diversified multi-commodity one. As a result, the tobacco area reaped was 26% lower in 1967 than in 1964 and thereafter total crop area increased steadily as the diversification programmes gathered momentum [9].

The government took a major initiative by accelerating the tempo of coordinated agricultural diversification drive. It immediately began to buttress the economy by establishing various instruments of control and particularly reduce its dependency on tobacco through the diversification schemes from 1967[10]. Sanction, therefore, created a situation where local agrarian capital had to find entirely new opportunities for profitable investment. This meant emphasizing on other crops wherever they thrived. This shift in policy that was designed to create opportunities for the accumulation of agrarian capital gave an impressive impetus for the development of the coffee sector in the country as the government worked tirelessly to cover for the export revenue lost through the embargoed tobacco.

To encourage diversification, the government established the Agricultural Diversification Scheme (ADS)in 1967 to help and encourage farmers to reduce or stop growing tobacco and to shift into other crops to provide a greater widening to the mix of export commodities which were easier to market in the sanction context than tobacco [11].This gave a substantial incentive and an equally significant structural change in the growth of export crops such as coffee and cotton. The ADS provided low interest loans to farmers who agreed to strictly limit or go out of tobacco production completely [9].

With diversification improving, most companies and estates in the Eastern Highlands, which in the first place did not focus on coffee, were encouraged to widen their scope of operation by establishing coffee divisions alongside their areas of specialization. Among these companies were: the Southdown Holdings, the Capital Tea and Coffee Company, the Wattle Company (Coffee Division) and the Eastern Highlands Tea Estates (Coffee Division) [12]. The government also made sure that every farm had a diversity of crops planted to it to counter the problems of specializing on a single crop which was subject to the uncertainties of the international markets. This followed the recommendations by the chairman of the Agricultural Marketing Authority (AMA), W. Margolis, who explored in detail the agricultural situation of the country:

> Specialization in the field of agriculture in Rhodesia has not yet reached a point where monoculture can be practised on the individual farm. I do not advocate a return to the old concept of farmers having one or two side-lines in addition to the main crop, but I say that farmers should continue to make use of the expertise they have gained over the past few years and strive to achieve that 'blend' or 'mix' of crops best suited to their particular conditions which will enable them to make full use of management ability and capital resources. As I said earlier, the bankers are in a particularly advantageous position to point this out to the farmer, as well as to assist them in this regard [13].

It was this realisation and its translation into government policy to ensure Rhodesian self-sufficiency, that helped propel the further development of the coffee sector.

"Salisbury's benevolent hand"

Coffee is a long-term investment with a long lag averaging 4 – 5 years between investment and returns. It requires heavy capital injection to prime the sector. It was estimated that the cost of establishing the crop was approximately between $400 and $800 per ha depending on the nature of head-works involved, desirability of irrigation facilities, and general land topography [14].. The overheads were very high while levels of expertise and management are very demanding. There was, therefore, need for a long-term financial organisation that would propel the coffee sector and such other agricultural industries if the efforts at diversification were to be fruitful. The following table shows the main items required to start a coffee project and the average total capital needed to roll it out.

Table 1: Estimated Capital Costs involved in Estate Coffee Production on 250 acres

ITERM	COSTS (£)
1. a) Machinery and implements	
3 Tractors at £850	2,475
2 Modified Rotavators at £280	560
1 2-farrow disc plough	124
2 Trailers at £295	590
1 Rotary cutter with windrow attachment	210
1 post hole digger	104
2 sprayers at £325	650
	= 4 713
b. Processing Equipment	
1 4-disc pulper with rotary screen	350
1 2 1/2 h.p. diesel engine	100
1 centrifugal pump	80
	= **530**
c. Processing Buildings	
Pulpery buildings (platform, fermenting, tanks, channels etc)	2 970
Drying tables	500
Store	1 000
	= **4 470**
2. Rent	9 375
3. African labour	60 per labourer per annum
4. European labour	1 440 per annum
5. Sprays	1 per acre
6. Transport	800

Source: "An Economic Appraisal of Coffee Production in Southern Rhodesia under Estate Conditions", Economic and Markets Branch Report, April 1964

Generally, it can be pointed that the capital needed to embark on commercial coffee production was high and beyond the capacity of most farmers. To leave farmers to their own devices, in this case, would be ruinous.

In the backdrop of such high capital requirements for coffee production and other long-term agricultural ventures, the government established various supporting schemes to expedite the programme of expanding the agricultural export base. In Rhodesia, where agriculture played a key role in the economy, the provision of adequate credit facilities was essential to ensure the sustainability of the industry. Notable among these was the Farm Irrigation Fund (FIF) established in 1966 and the Agricultural Assistance Board (AAB) in 1967, to assist and rehabilitate farmers in financial difficulties. They also sought to assist the development of crops that needed continuous or supplementary irrigation through the provision of loans for the establishment of irrigation infrastructure and the purchase of irrigation equipment and general head works in farm developments [10]. Even when the Eastern Districts received high rainfall, the rainy season was confined to between November and April, making supplementary irrigation necessary in most coffee farms in Chipinga, Vumba,Honde Valley and, to some extent, Melsetter. The FIF was such a vital facility, particularly to large scale coffee plantations for the establishment of dams and canals, and for the purchase of pipes and sprinklers. Commenting on the importance of the FIF to the coffee sector in 1971, one New Castle farmer had this to say:

> The outlook of many large-scale coffee estates is very encouraging, as far as irrigation development is concerned. One of the major obstacles limiting the expansion of coffee farms is lack of supplementary irrigation. Nevertheless, the government is providing loans through the Farm Irrigation Fund and this move is making headways to ensure that the expansion of the sector is not arrested by lack of irrigation. Here, at New Castle, we have managed to complete the first phase of canal development on the farm. Most farmers at the Farmer's Hall in Chipinga last week expressed satisfaction at the operation of the scheme[15].

The government also provided a further push to the provision of farm credit mechanisms through the establishment of the Agricultural Finance Corporation (AFC) in 1971, as a long term central facility to finance the agricultural sector.

The history of agricultural credit in colonial Zimbabwe dates back to the setting up of the Land Bank in 1912 for the purpose of granting loans to white settler farmers. The AFC was established by the AFC Act of 1971 which transferred the Land Bank from the portfolio of the Minister of Finance to the Minister of Agriculture [16]. The task of centralizing and controlling government sponsored sources of credit on easy terms for farmers was achieved in the same year, as the corporation assumed control of various funds provided by the state, that is, FIF, AAB and the ADS [16].Of crucial importance to the expansion of the coffee sector was the incorporation of the Coffee Scheme within the operational scope of the corporation. The principal objective of thescheme was to provide medium to long-term loans for coffee farmers for purposes of the purchase and expansion of farms and procurement of equipment related to that [16]. This was later extended to include loans targeted at different needs in the entire coffee value processing, storage, packaging and marketing.

It should be pointed out, however, that access to credit from the AFC's Coffee Scheme was not a smooth venture to all coffee farmers. To qualify for coffee loans, a farmer had to contribute a reasonable amount of capital to the project and "must be able to provide adequate security acceptable to the corporation [16]." In some cases, the demands by the AFC were beyond the capacity of farmers, thus hindering them from benefiting from the scheme. This was captured by S. W. du Plesis, a coffee farmer at Clearwater Tea Estates in Chipinga, who emphasized that, "the development of the area has been retarded by one dominant factor – lack of capital [17]." He added that the only source of long-term financing available was the AFC's Coffee Scheme but in practice the facility proved most unsatisfactory as "the Agricultural Finance Corporation is not interested in granting loans for tea production and terms for coffee are extremely difficult. A farmer needs $40 000 before he could qualify for a coffee loan. He is then tied down by commitments that made coffee production an unattractive proposition [17]."

du Plesis also lamented the poor performance of the FIF arguing that tea and coffee were being produced under both irrigation and dry land conditions. The difference between irrigated and dry land yield was about 80%. Over a period of years, irrigation was essential. Yet in some way the development of irrigation was not satisfactory as farmers

> have been told by the Ministry of Water Development that there are no major dam cites in the district, but several smaller successful dams are already being built by private enterprise. We also have eight cusecs of uncommitted water running into Mozambique because no individual farmer or group of farmers in the vicinity can, at this stage, raise the capital to pump this water to a point where it can gravitate to more than 500 ha of tea and coffee lands for supplementary irrigation[17].

It was for this reason that individual farmer savings played a significant role in rolling out the coffee projects. Boswell Hugh Brown pointed out that much of the capital he used to start his coffee project at CVFARM in Vumba was accumulated from his job as a Rural Development officer in the civil service [18].While somefarmers expressed dissatisfaction with the performance of the AFC, the majority ofwere contended with the general level of government assistance and commitment to the coffee sector [18].

RESEARCH AND EXTENSION

Both government and private support for coffee research was intensified notably after 1965. This was in line with the need to boost non-tobacco sectors in an effort to cover up for the loss of tobacco exports as a result of sanctions. It was estimated that between 1967 and 1970, research spending for non-tobacco commodities more than doubled in real terms, rising from 0, 5% to 1, 5% of GDP, and this level of spending was sustained during the 1970s with strong private support [19]. The CGA, in particular, contributed 3% of the government' research budget on coffee, using revenue from levies on members' marketing [20].It also established a network of research institutions in different parts of the world to promote research on different coffee diseases. The CGA became a member of the Consultation Group of International Agricultural

Research (CGIAR) [21]. The sector benefited from customised coffee management systems designed to improve the quality of the coffee crop produced in the country. This included among other things, plant nutrition, and weed-control, mulching and spraying [21].

The CONEX department in conjunction with the CRS, was also crucial in spear-heading research related to land management and conservation systems in coffee growing areas as improper cultivation of the coffee crop could contribute to environmental degradation. The department "provided full service of professional advice to coffee farmers on matters of soil and water conservation and land use in general" at a charge of between $35 and $52, depending on the size of the farm [14].It focused on methods of tillage that would reduce dangers of soil erosion and poisoning and ensure the sustainability of the industry. Commenting on the threats of land degradation in coffee producing areas, one CONEX official stated: "the agricultural and land use problems speak eloquently for the need of increased attention if the coffee sector is not to become limiting to overall development [22]."To prevent and control these intermittent agricultural problems, the department conducted soils and ecological surveys, assessed the capabilities of lands and their irrigation potential [22].

In order to establish ecologically sound coffee production systems, coffee farmers were supposed to have their farms planned by CONEX officials. This included pegging the necessary access roads and determining the master planting lines. Officials also carried out chemical analysis of soil samples to determine soil nutrition and recommend necessary supplements where possible. In line with recommendations of the World Health Organisation, the department stipulated the different pesticides to be used by farmers to avoid hazards to the ecosystem. This, however, attracted discontent among farmers. They were disgruntled by the "outlawing of useful pesticides by the World Health Authority, making us buy more expensive, often less effective alternatives [18]."

The greatest break-through in conservation research was the development of irrigation technology that enabled the expansion of coffee production to drier areas in the country. Of particular interest was the ability of the CONEX department in collaboration with the CRS and the CGA to device the "Lambart trickle irrigation system" – named after BianLambart, a prominent coffee grower in Chipinga [12].Trickle irrigation, sometimes referred to as drip irrigation, is a low-pressure system that places water slowly and directly in the root zone of the desired plant, increasing the efficiency of the water applied. This system reduced the quantity of water used by 30 to 70 per cent compared to more traditional means of irrigation, such as overhead sprinklers [12].The trickle system became very appropriate for the "*cova"* planting method developed in Brazil and adapted for local conditions by most farmers in the Eastern Districts of colonial Zimbabwe [12].Technically, the trickle irrigation had a number of advantages. Compared to overhead irrigation, the Lambart system reduced the danger posed on coffee leaves by poor quality water, especially water with high bicarbonate and salt content. It also allowed for the preservation of insecticides and fungicides on the leaves. Drip irrigationwas successfully established and under tree system drippers which emitted four litres of water per hour were developed and produced locally by Prodorite Pvt Ltd. [12]These were verified during on-the-farm experimentationsin different farms in Chipinga, notablyat Mike Wilson's Lion's Den, New Castle, Smalldale and other farms in Melsetter with good results[12].

The advancement of this irrigation system also led to some new developments in the soil and water management system which had a positive impact on the conservative cultivation of coffee and also benefited local designers and manufactures. In the 1970s, The Tinto Industries for example, manufactured *coffee contines* which were slant type rippers that allowed water penetration to the rooting zone with minimum destruction of the top soil [23]. These developments show the progress registered in the coffee industry in its drive to maturity. The coffee industry was reflective of the progress made generally in agricultural diversification through research. Systems of management in the coffee sector differed considerably with management systems in other coffee producing countries and were developed within the industry in the country to meet the specific needs of the sector.

As a result of research, both for conservation purposes and for the general development of the industry, farmer ingenuity became manifest and a great deal of innovation was made on the things that proved useful in the industry. Some of these included a fixed point pumping system devised by Sany Scott of Chipinga and a method of renovating old pulper discs developed by Robin Fennel [12].Growers, therefore, made valuable contributions towards improvements in local pulping equipment in cooperation with the manufactures. As such, coffee production in Rhodesia in the 1970s successfully kept pace with new advances in technology, the main objective always being to produce a high yield of the best quality coffee in the most efficient manner.

The CGA and the CRS also made an in-depth research into coffee pests and diseases, disease control mechanisms and weed control and developed such systems to combat any disease or pest in the likelihood of an outbreak to guarantee the sector of sustainability and avoid the danger of the 1920s[24]. The most feared was *Himalae Vastatrix* which laid waste the coffee plantations between 1914 and 1926. As a result, more research efforts were directed towards that area and then other diseases such as, *fusarium* and the *armallaria* root disease. Expressing the primacy of disease control in 1968, one Simleit of Highview (Hivu) farm in Vumba pointed that:

> although no serious disease has occurred in recent years in Rhodesian coffee plantations, it is most important to watch out for *HimalaeVastatrix*, *fusarium* and *armallaria*, and also to develop sustainable methods of eradicating the mine grasshoppers and caterpillars which we are as of now controlling by light carboryl spraying [24].

From 1965 on-wards, extension remained a crucial role that the CGA played among coffee farmers. As indicated in the previous chapter, the association issued a monthly newsletter, which kept the farmer updated on developments in the commercial, technological and marketing fields. Field discussions were held regularly in all the main producing areas where current problems and technical developments were discussed. One of the greatest contributions of the CGA in its extension role was the publication of the Coffee Handbook in 1975 [12]. The handbook was a detailed synthesis of all aspects of coffee culture, based on Rhodesian local conditions. It integrated all technical aspects such as seed preparation, transplanting, and mulching, shedding, weeding, pest and disease control, irrigation, harvesting, processing and marketing, among other vital aspects in the coffee value chain. This was quite an impressive achievement that even went beyond the ability of traditional coffee producers in Africa like Kenya. As Fennel acknowledged, "technologically, we are ahead of most countries in the world and our handbook has received international acclaim [17]."

"Coffee becomes of age"

The government's diversification scheme, backed by strong credit support mechanisms, and comprehensive research from 1965, resulted in the large expansion of the coffee industry and its evolution to a mature vital sector in the agricultural industry, "a transition from a long age of pioneering and experimentations, characterized by fear and doubt onto a fully-fledged enterprise characterized by hope and confidence [17]." Between 1965 and 1975, the country's coffee output increased 30 fold from 98 tons in 1965 to 3 011 tons in 1975and between 1971 and 1975, the annual crop had almost trebled [24]. Fortunately, this expansion took place at a time when coffee became a highly profitable crop compared to crops such as tobacco in the Eastern Districts. As noted by G. Nicholas:

> Coffee growing in Southern Rhodesia is becoming more lucrative than boom-time tobacco production. In some Rhodesian farms notably those in the Eastern Highlands, the profits made per acre are now higher than those realized by flue cured tobacco in the hey-day of the crop. Only 8 seasons ago, the area planted to coffee in the country covered less than 160 ha in the intervening years, the area increased fairly rapidly until today. It is not far short of the immediate target of 2 400 ha. The value of the annual crop, at the moment is conservatively estimated at $R 300 000 and is expected to rise to $R 2 million within the next few years [24].

The main reason for the high profitability of the sector was that its expansion fortuitously coincided with a general decline in world coffee production and the high quality Arabica became more scarce and treasured. Rhodesia's specialization in the production of the super quality crop enabled her to sell her crops at high premiums on the world markets. As Nicholas points out,

> … in the past decades there has been a world over-production of coffee of all types except good quality Arabica – the variety grown in Rhodesia – with the result that the local product attracted a good demand at reasonable prices in the period. Now a world shortage of coffee of all types has developed and prospects for Rhodesian coffee fare ever better. Reports from over-seas suggest that it may take another decade before sufficient coffee is produced and marketed to meet all international needs [9].

The profitability and the general trends in the development of the coffee sector are further expressed by Muir who points that there was a sharp rise in international coffee prices in 1976.Whilst coffee output rose by 35%,the gross value of the industry trebled. By 1979, while the area planted to coffee accounted for only a single percentage of the total crop area, the crop assumed a strategic position as an export crop accounting for over 3% of the agricultural industry's gross value [9]. Total coffee export value increased from $ 84 000 in 1966 to $ 11 million dollars in 1979[17].

The rapid development of the coffee industry and the importance it gradually assumed in the Rhodesian economy attracted the attention of political figures in the government. In 1974, Prime Minister Ian Smith led a fact verifying mission to Chipinga to assess the nature of the importance ascribed to coffee in the Eastern Highland in order to prepare for the possibility of producing coffee on a national scale [17]. The team acknowledged that coffee and tea production in the area were the key factors in the development of the region. Impressed by the developments in coffee in the Eastern Districts, Ian Smith remarked:

> An exciting agricultural awakening is taking place in one of Rhodesia's mountainous Eastern Districts. It is the Chipinga area where land that returned a few thousand dollars ten years ago is now producing millions of dollars-worth of farm products. The incredible physical and economic transformation that has taken place since then as a result of intensive coffee and tea production has evoked enormous interest not only among Rhodesian farmers but also from further afield [sic],… I recently spent a day touring the farms established in the area. The developments we saw and the high profitability of farms under good management were impressive. It is indeed a tonic for any Rhodesian to come to this part of the country and see what is taking place [12].

The following table indicates the expansion of the coffee sector from 1965 – 1975, as demonstrated by the increase of area under cultivation and yields produced.

Table 1.Coffee production trends from 1965 to 1975.

Year	Area under coffee (ha.)	Production Yields (tons)
1965/1966	200	98
1966/1967	305	127
1967/1968	394	160
1968/1969	850	400
1969/1970	1070	995
1970/1971	2055	1009
1971/1972	2900	1000
1972/1973	3567	1600
1973/1974	4013	1581
1974/1975	3952	3011

Source: Zimbabwe Agriculture and Economic Review, Modern Printers, Harare, 1982, p. 113

The coffee sector had become a significant player in Rhodesian agricultural industry by 1975, at least judging from the land under cultivation and yield.

The "northward expansion" c. 1974 – 1980

Coffee production in colonial Zimbabwe exhibited an agricultural expansion that brought new wealth to the colony and efforts were made to establish the venture on a national scale. This was probably spurred by Smith's 1974 visit to the coffee producing areas. However, the major limiting factors that inhibited the expansion of coffee were climatic and ecological. The coffee crop is generally suitable in areas of high rainfall and altitudes like the Eastern Districts. Nevertheless, as a result of vigorous practical research efforts and the ingenuity of the coffee farmers exhibited by the invention of the trickle irrigation system, among other developments, coffee production gradually expanded successfully to drier areas that were traditionally regarded as unsuitable for its production. The ability to adapt irrigation technology for local conditions in the coffee sector has been the largest single factor driving the expansion of the sector to other regions other than the Eastern Districts. This adaptation fused well with the general desire by the government to take coffee growing to a national level owing to its profitability from the early1970s to 1980.

The CGA capitalized on the government's general diversification programmes to encourage farmers to put up plots under coffee. The advice of the CGA had since 1967 been to stir farmers around the country to experiment with coffee and to adopt it as a strategic crop with which to broaden their scope of operations. This policy was evidently adapted by a number of growers to good advantage. The expansion of coffee outside the Eastern Districts began in the Chiredzilow veld, where a small number of enterprising farmers discovered that coffee was a viable crop. The first farmer to start coffee on a commercial basis was Bernard Guimbeau who began planting coffee in his Rosalie Farm in 1974.Guimbeau established coffee nurseries with the help of the CRS and by 1978 he had planted 40 ha of coffee designed to produce 100 tons of the crop alongside 1200 tons of cane [12]. On the issue of diversification, Guimbeau articulated that"the question is no longer tea or coffee but both please, with sugar, - and something to eat and perhaps a good pipeful of tobacco too [12]." Eric Harrison, another farmer who ventured into coffee growing at his MaioiaFarm in the area, noted that he researched on the area and found that where sugar grows, coffee will grow well under continuous irrigation [12].

Coffee production spread to Queque, Gatooma, Chegutu, Sinoia, Karoi, Doma, Rafingora, Guruve, Mt. Darwin and several other districts. Production in these areas commenced a good years after the Eastern Districts became established and was a result of the diversification drive of the early 1970s. There was a great interest in the crop from 1976 which saw many new growers coming into production, some on a small scale and experimental basis. Another example of coffee grown in the Northern Districts was that at Sherwood area, 25km from Queque where 142 ha of land were put under coffee. As Pieter Burger, a farmer and a member of the executive committee of the

DOI: 10.36347/sjebm.2014.v01i03.006

CGA, stated: "we started with a pilot scheme in 1978, everything looked encouraging so we established nurseries and planted in 1980 [9]."By 1980, the northern region was producing 20% of the total crop produced in the country while 80% came from the Eastern Districts and the total area under crop production increased to 5000 ha [25]. In the northern region, coffee was being grown almost entirely in a mixed crop situation.

The northern areas were mainly planted to the *robusta* coffee species. *Robusta*coffee was considered easier to grow and was disease resistant and more suited to lower altitudes and its processing also simple as the crop was sun dried and required no fermentation processes. Even when Rhodesia had specialised in the production of high quality Arabica coffee beans which were generally easier to market on the international coffee markets, the global decline of coffee production in the mid-1970s gave a leeway for lower quality coffees to be disposable at an attractive profit. In this case, Rhodesia's venture into *robusta* shows that the country was dedicated to exhausting its coffee potential in order to extract maximum profits that the world markets offered [12].

To cater for the expansion of coffee production in the north, the CRS and the CGA stepped their efforts on research to take care of technological huddles likely to be faced by farmers in the new areas. These organisations had a programme directed at ensuring both the short and long term viability of the industry and the emphasis was therefore on broad based applied research. This was because conditions generally differed in terms of climate, temperature, and soil fertility, which needed completely new research from that adopted for production in the Eastern Districts. As a result, during the 1970s, the technical advisory services were expanded and there were two coffee specialists employed by the CONEX department, one for the northern region and another for the traditional Eastern Districts. This led to the establishment of a Coffee Research Sub-station at Mhangura in 1976 to cater, more representatively, for the northern region. The CRS also emphasized on the development of new intensive systems of management and coffee production methods to meet the specifications needed by both the eastern and northern region. The trickle irrigation system was highly economic in the northern region where regular irrigation was required as it saved water and electricity as well as maintaining greater control over the distribution of the irrigation. As one farmer indicated, "the high cost of permanently set irrigation has led to the use of drag-line system of drip irrigation not used in other countries[12]."

Further, the most appropriate method of soil tillage developed for the north was done by the slant-tine ripper and the coffee contine, implements developed through local farmer ingenuity with the help of the CONEX department. These methods were also economic as stated earlier that it saved water by directing it to penetrate to the rooting zone without destroying the top soil. Also, following contining was a proliferation of feeder roots where the tine passed, allowing fertilizers and insecticides to be applied to the zones [26].

Coffee suffered a serious *fusarium* bark disease out-break that threatened it with extinction in 1975[26]. As such, the major research theme of the CRC from 1977 was how to grow and manage coffee in the presence of increasing *fusarium* disease in both the Eastern Districts and the northern regions[26]. The research station developed sparing techniques that made it possible to control the disease which had proved to be more virulent in Rhodesia than in any other coffee producing countries[27]. The CGA, on the other hand, reorganised its research focus and put emphasis on research on *fusarium* and created sub-committee for research on the disease. As the association indicated in 1977:

> Your executive is currently formulating plans to establish a working sub-committee with specific responsibilities for investigating the major problems of *fusarium*disease and coffee leaf disease now affecting the industry and to report their recommendation and findings and the improving that they deem necessary for the two coffee regions [18].

By 1979, the *fusarium* threat was successfully compacted through a designed routine of spraying and coffee production continued on the increase. The following table indicates the increase of the area planted to coffee and yield produced mainly as a result of the north-wards expansion [28].

Table 2: Coffee production 1975 to 1980

Year	**Area planted to coffee (ha)**	**Total yield (tonnes)**
1975/1976	4075	3837
1976/1977	4211	5075
1977/1978	4480	3625
1978/1979	4985	5148
1979/1980	4988	4160

Source: Zimbabwe Agriculture and Economic Review, Modern Printers, Harare, 1982, p. 114

In general, from 1965 to 1980, it was the efforts at diversification supported by locally applied international research efforts, which were essential for the continual expansion of commercial production of coffee. The yield increases, intensified production and out-put per hectare maintained good returns for the farmers and were aided by the steady increase of coffee prices on the international markets. These development enticed farmers to establish coffee plantations in the 'northern' areas not traditionally suitable for the cultivation of coffee.

The coffee industry proved to be very progressive and systems of management evolved to meet the specific needs of both different areas and the preference shown by individual growers. Much of the successes registered in the Rhodesian coffee sector between 1965 and 1980 can be attributed to the range of support services provided through the Ministry of Agriculture, largely as a counter to the UDI provoked sanctions. The successes stem directly from a determined policy of research and extension in coffee. Important to this was the ability to network with international research institutions like the CGIAR to promote coffee production in the country[11].By 1979, coffee contributed about 3% of the total agricultural production from a mere 0, 02% in 1965 and contributing over $10, 6 million in cash compared to a paltry $ 2 million in 1968[29].The development of the coffee industry therefore, represented a salient feature of an agricultural expansion that brought in wealth to the colony.

The Second Chimurenga that intensified in the mid-1970s had negative effects to the coffee sector; however, the effects were marginal. The war was largely about land and the European farming community was the primary target of guerrilla operations. White farmers constituted the core of Rhodesian patriotism and farming operations in vulnerable areas were therefore on the frontline. Plantations in the Eastern Districts were among the most exposed to the onslaught due to their proximity to Mozambique where the guerrillas were based. Freedom fighters' strategy was to attack politically sensitive targets and by striking at white commercial farms they trounced the Rhodesian economy at its most vulnerable point [30].Escalating attacks on the estates and plantations in the Eastern Highlands resulted in about 10% of the 1090 white owned farms being abandoned by 1977[30].

However, many of the abandoned farms in Melsetter, Chipinga and Cashel districts were those based on fruits and vegetables which were less profitable than coffee and tea [30].High coffee prices in the 1970s were a strong incentive for farmers to continue in the business. Plantation operations, nevertheless, were sustained at an extra cost of the security requirements of the plantations. Moreover, the long-term nature of the sector made it very difficult to disrupt in a short space of time. Coffee can have a productive life span of up to 30 years and the major concern of the farmer during most of the time was harvesting. This is unlike vegetables and fruit ventures which required year in year out planting and related tasks where plantation processes were easily disrupted from the very onset. The most noticeable constraint imposed on the coffee sector as a result of the war was mainly to do with labour supply. The war indeed disrupted the labour supply network to the coffee plantations in various ways and coffee planters had to institute measures to guarantee the availability of labour [30].

The war, to some degree worked to strengthen farmer-government relations. The government was determined to reduce emigration and to achieve this it stepped up its support for farmers of different orientations. Farmers in financial difficulties were encouraged through various schemes to continue farming operations so that they could remain viable throughout the war. As quoted by McKenzie;

> Every assistance must be given to persuade farmers to remain on the land. These were from all areas of farming and he was convinced that they would stay if it was profitable and the objectives as set out aimed to achieve that end [sic] [30].

Of note, was the involvement of the Rural Land Board (RLB) in settling coffee farmers in the Eastern Highlands particularly from 1967.The RLB's primary concern was to promote and finance settlement in unsettled land or encourage tenancy where the owners had more land than they could profitably use [31].The scheme provided one third of the capital needed to commence coffee production while the other two thirds were advanced by the AFC[30].These settlement schemes were mainly implemented in the Chipinga and Melsetter areas and as a result of the initiative, 263 acres were planted to coffee by the end of 1967[7].

Coffee farmers also received financial assistances to establish security systems around their plantations. Coffee plantations fell within the Designated Area Grant Scheme (DAGS) regions. This scheme was intended to fund the establishment of security mechanisms to counter ZANL Ainsurgency [30]. Farmers used the funds for fencing, alarm systems and other defence and security structures. Therefore, the war in a way resulted in the government providing more assistance to encourage farmers to continue in their business and to cushion them from the difficulties caused by the war.

CONCLUSION

From 1965 to 1980, Rhodesia had a declared policy of diversifying agriculture. The European farming community was at first reluctant to try new crops. But in the work of the embargo imposed on the country, the country sought to be more self-sufficient internally in agricultural products and also diversified export crops. One of the greatest gains was coffee production. In as much as the imposition of sanctions on the Rhodesian economy resulted initially in reduced rate of economic growth, in the long run, they incited increased capacity utilisation of Rhodesian agricultural potential leading particularly to the expansion of the coffee sector and as a result, the economy grew at an average rate of 7.5% until 1975[5].The war posed security threats to plantation operations in the coffee estates. Nonetheless, the government strengthened its backing to farmers in order to encourage them to continue on the land through various settlement and financial schemes. In this regard, the evolvement of the coffee sector into a mature industry can be located within the UDI period.

REFERENCES

1. Smith R; Avondale to Zimbabwe, Collins , Salisbury, 1978; 8
2. The expression “northward expansion” is hereby used to denote the spread of coffee production to areas other than the Eastern Districts of the country.
3. Weinmann H; Agricultural Research and Development in Southern Rhodesia 1924-1950, University of Rhodesia, Salisbury, 1975; 13.
4. Woods JRT; A Matter of Weeks Rather than Months: The Impasse between Harold and Ian Smith: Sanctions, Aborted Settlements and War, 1965- 1969, Trafford, 2012.
5. Handford J; Portrait of an Economy: Rhodesia under Sanctions, Mercury Press, Salisbury, 1976; 98.The currency expressed here is Rhodesian dollar except when stated and the exchange rate against the British pound was generally $2 = £1 when Rhodesia dollarized in 1970. 1976; 98.
6. Kurebwa J; The Politics of Economic Sanctions on Rhodesia-Zimbabwe, 1965-1979, University of Zimbabwe Publications, Harare, 2012;190-91.
7. Shopo TD; The State and Food Policy in Colonial Zimbabwe1965 – 1980. T. Mkandawire and N. Bourenane (eds), The State and Agriculture in Africa, Codesira Book Series, London, 1987; 197.
8. Herbst J; State and Politics in Zimbabwe, University of Zimbabwe Publications, Harare, 1990;.21
9. Muir K; Crop Production in Zimbabwe’s Commercial Agricultural Sector: 1940-1979. Department of Land Management, University of Zimbabwe, 1981; 4
10. Rukuni M; The Evolution of Agricultural Policy: 1890 – 1990. M. Rukuni and C. Eicher (eds), Zimbabwe’s Agricultral Revolution, UZ Publications, Harare, 1994; 27.
11. Shopo TD; The State and Food Policy in Colonial Zimbabwe1965 – 1980. 1987;197.
12. The Financial Gazette, May 24, 1985
13. NAZ Gen-P/Mar, W. Margolis, Diversification in the Rhodesian Economy, 1969; 358
14. Metcalfe CB; A Guide to Farming in Rhodesia, Rhodesian Farming publication, Salisbury, 1971; 127
15. Coffee Irrigation. *The Rhodesian Farmer*, 1972; 23(7):6-7
16. Agricultural Finance Cooperation, Annual Report for year ended December 1972; 6
17. Nicholas G; Chipinge’s Great Awakening: Wealth and Abundance Where There Was None,” in Farmers’ Weekly, March 5, 1975; 41.
18. Interview with Boswell Hugh Brown, Coffee Farmer, 29 January, 2013, Mutare(cvfarm@zol.co.zw)
19. Masters WA; Government and Agriculture in Zimbabwe, Praeger, London, 1994; 55
20. Coffee Growers Association News Letter, 30 March 1973;.2
21. Commercial Agriculture in Zimbabwe: Annual, 1985/6;135
22. Department of Research and Specialist Services, Monthly Report, June 1976
23. Coffee Farmer Ingenuity. The Rhodesian Farmer, vol. 6, no.35, May 1978; 32
24. Nicholas G; “Rhodesian Coffee Beats Boom Era Tobacco” Farmer’s Weekly, May 26, 1971; 5.
25. Interview with Charles Taffs, former coffee farmer, 31 July 2013, Marlborough, Harare (ctaffs@cfuzim.org). Much on the profitability of the coffee sector during the mid-1970s to 1980 is discussed in the section on marketing.
26. NAZ: RG3/Hor 6 – Horticulture and Coffee Research Institute 11, 1977 -78; 5
27. NAZ: S/RH, Coffee Growers Association News Letter, April 1977;.2
28. Commercial Agriculture in Zimbabwe: Annual, 1985/6
29. Cilliers J.K; Counter Insurgence in Rhodesia ,Croom Helm, London, 1985; 30.
30. Coffee settlers go to it: RLB’s Chipinga Coffee project,” in The Rhodesia Farmer, 1 September, 1967; 22
31. McKenzie; Commercial Farmers in the Governmental Systems of Colonial Zimbabwe, 1963-1980, 253