



**Preparation of Sub-Sector White Papers
FAO Project TCP/SUR/3301 (1)**

Ministerie van Landbouw, Veeteelt en Visserij

Beleidsuitboek Bananensector

Juni 2011

Dit beleidswitboek is onderdeel van de serie beleidswitboeken van het ministerie van Landbouw, Veeteelt en Visserij. De reeks bestaat uit

Tuinbouw

Rijst

Bananen

Visserij & aquacultuur

Agribusiness

Agrarische gezondheid en voedselveiligheid

Landbouwontwikkeling Binnenland

Veeteelt

Table of content

1. Executive summary

2. Overview of the banana sector

2.1 Brief history and current program and activities

2.2 Macro-economic impact and important of the banana sector

3. Banana sector: structure, challenges and policies

3.1 SWOT analyses

3.1.1 Opportunities

3.1.2 Threats

3.1.3 Strengths

3.1.4 Weaknesses

3.2 Challenges of the banana sector and policies

4. Development strategies and action plan: a consolidation phase

4.1 Consolidation actions (1): Improvement of performance

4.1.1 Reducing the cost price

4.1.2 Enhancing the EU marketing position of the banana company

4.1.3 Strengthening social and environmental conditions

4.1.4 Investment program

4.1.5 Impact expected on competitiveness

4.2 Consolidation actions(2): privatization of Surland NV

4.3 Consolidation actions(3): improvement of the business environment

4.4 Extension and increase of the banana production

4.5 Diversification markets and crops

4.5.1 Banana regional markets opportunities

4.5.2 Diversification in marketing: EU market opportunities

4.5.3 Diversification in marketing: the USA market

4.5.4 Crops diversification

5. Expected results and performance indicators

1. Executive Summary

The current strategy of the banana sector formulated in June 1999 in relation and compliance with the EU banana programme SFA (Special framework of assistance), then revised and approved by the Council of Ministers in August 2002 and updated in May 2007, has the overall objectives to (1) increase foreign exchange earnings, (2) sustained rural employment and (3) income by means of increasing productivity to support to restructure the banana sector with the aim of privatisation of the government-owned banana company Surland N.V./SBBS, restructuring which have almost been achieved. Due to several external circumstances the privatization of the company has not been successful yet.

The revised strategic plan has been reviewed and updated in August 2010 (National adaptation strategy) in relation with the BAM (Banana accompanying measures) set up by EU in the context of the 2009 WTO (World Trade Organisation) Geneva agreement fixing the evolution of the MFN tariff.

ACP banana exporting countries traditionally enjoyed preferential access to the EU market. The EPA (economic partnership agreement) signed in December 2007 between EU and Cariforum has set up a WTO compatible framework allowing Suriname exporting a free and unlimited volume of banana to the EU market and consolidated the preferential access of Cariforum countries. However the EU banana regime has been challenged by other members of the WTO (World Trade Organization) who did not agree with the EU banana import regime, stating that this regime discriminates against the MFN countries. After the long disputes, an agreement was made in December 2009 (Geneva Agreement) which settles all the disputes and cuts the tariff which the EU applies to the Latin American countries (MFN) from currently Euro 176 per tonne to eventually Euro 114 per tonne over a period of seven to nine years. At bilateral levels (Free Trade Agreement between EU and central and South American countries) there will be an additional reduction to 75 euro/ton in 2020, reduction starting in 2012. As a result, the ACP preference margin will be reduced, meaning that the average European sale price for the bananas will

get lower. For Suriname the reduction of MFN tariff will deteriorate the competitiveness gap with Ecuador by 2,2 USD/box from 2010 to 2020. In order to support the ACP banana exporting countries to adapt to this new EU import regime, the EU has designed and set up the Banana Accompanying Measures (BAM).

A National Adaption Strategy (NAS), continuation of the revised strategic plan, has been elaborated by SBBS and by the Government, which outlines the strategy for Suriname during the period 2011-2015 to adapt to the consequences of the changed tariffs. This strategy has been communicated and will be used by the European Commission to set up the multi-annual strategy for Suriname through the BAM. The strategy 2011-2015, after a phase of restructuring and re-building of the banana sector from 2003 to 2010, will focus on a phase of consolidation. This phase of consolidation will focus:

- On improving the performance of the banana sector by reducing the cost price, increasing the productivity and production quality, improving the social and environmental standards and therefore improving the market position and sale price of SBBS. An investment program of 17,6 millions Euros is forecasted over the period 2011-2015
- On privatizing the state-owned banana company Surland NV/SBBS
- On crucial actions to improve the business environment regarding especially the exports logistics (port of Nickerie and banana wharf of Paramaribo) and the potential shortage of manpower. Stable and favourable custom and taxes framework is also an issue for Agriculture and banana development in Suriname.
- On considering marketing opportunities and extension/diversification options

2. Overview of the banana sector

2.1 Brief history and current program and activities of the banana sector

Revised strategic plan

In June 1999 a strategic plan was formulated for the restructuring of the banana sector in compliance with the establishment of the SFA program on 22 April 1999 for the 12 traditional ACP banana producing countries. Following one of the recommendations of the strategic plan a technical assistance team (Sofreco) initiated his assignment on October 21st 2001. But the institutional, organizational, financial and performance situation of Surland NV made it impossible to implement the strategic plan. Despite many agro-ecological, logistical and market advantages the Surinamese banana industry, i.e. state-owned company Surland N.V., performed poorly for several years. The banana sector went through several crisis and Surland NV closed on April 4th 2002.

Taking into consideration the structural difficulties of the past and the advantages of Suriname for banana production, the Government of Suriname decided, on the basis of the recommendations of the technical assistance Sofreco to implement a drastic restructuring plan and set up institutional reform in order to create an adequate framework for the viable long term development of the banana sector. A revised strategic plan for the restructuring of the banana sector, covering the period 2002-2006, was designed and adopted by the Counsel of Ministers on August 28th 2002 and endorsed by the EDF committee on 25th November 2002. An updated Revised Strategic Plan, covering the period 2007-2008, was designed and adopted in May 2007.

The overall objective of the Revised Strategic Plan (RSP) was to establish a sustainable and competitive banana industry in a liberalized world market by means of improving cost efficiency through increasing productivity and production quality. The revised and updated strategic plan provided the framework in which the financial support of the European Commission was embedded.

Achievements strategic plan

Suriname should be seen as a highly commendable success SFA story. A new banana company (Stichting Behoud Bananen Sector, in short SBBS) has been set up in October 2002, the replanting started in June 2003 and exports in March 2004. Productivity/yield has more than tripled since the beginning of the RSP and of the SFAs and stood in 2010 at around 40 tons per hectare in comparison with 12 tons per hectare achieved by Surland NV in 2001. The tons of bananas exported to EU increased from 21,000 tons in 2004 to 57,000 tons in 2009 and 70,050 tons in 2010. 80,000 tons are expected in 2011. Quality of bananas exported are complying with international quality standards and the PCMS score measured in Europe are in the range of 85-90 % by December 2010. Whereas all labourers lost their job when the state owned company Surland NV went broke, SBBS was able to re-engage most of them and is presently employing more than 2500 people. 40 % of the work force consists of women who are also representing a significant proportion of the staff and management position. The huge investment program of USD 30 millions foreseen over the period 2003-2009 has been achieved at 83 % and the remaining part is in progress and will be finalized in 2011. These investments have been financed by the SFA program (70 %) and by SBBS (30%). SBBS benefits now from modern infrastructures and equipment such as drainage and irrigation systems, cableway installations, in-vitro plants, packing station equipment, workers facilities and several civil works, making the company capable to compete in the banana world. Suriname has a substantially higher rate of SFA funds committed (91 %) in comparison with the other ACP countries. SBBS has also developed successfully environment-friendly production methods and social standards. SBBS is certified GlobalGAP since June 2009.

SBBS has developed also successfully a human capital, a remuneration and social scheme as well an efficient social relations system, which are strong assets for the future. Managers, middle management and workers have been trained and have participated to the successful restructuring of the company. Laborers on plantations enjoy social security/medical care rights and enjoy the highest remuneration and social scheme of all the banana producing countries (except for the European

countries). Working conditions (protective equipment, toilets facilities, and canteens) have been significantly improved in the past years.

A new commercial policy was designed in 2004 by selling the production on FOT basis in Europe (and not anymore on FOB basis as Surland NV) with a dedicated shipping service set up for Suriname. A significant step toward a better and more efficient marketing organization has been achieved in 2010 resulting from the termination of management and marketing contract with Agrisol (see paragraph below). This improvement has been achieved through the introduction of competitiveness between marketing operators and by taking over all the logistics operations in Europe (transit, handling, quality control): a new commercial contract with better pricing basis has been set up with Agrisol for the marketing of the production of Jarikaba Estate, while a new contract with another marketer, Compagnie Fruitière, was concluded in February 2010 to market the production of the Nickerie estate.

The average sale price of SBBS has been increased by 1,2 Euros/box in 2010 in comparison with the Aldi reference market price. It has to be noticed also that SBBS started developing successfully the banana exports to the regional market in August 2010 through exports to Trinidad at remunerative sale price. It is expected to export 10,000 tons to this regional market in 2011.

In parallel the Surinamese Government repaid 11 M USD bank debts and 1,5 M USD social backlogs of Surland NV. SBBS repaid also a part of the Surland NV creditors (1,1 M USD). Presently (end of May 2011) the long term debts of Surland NV and SBBS amount to 29,6 M USD with the following breakdown:

- Surland NV Creditors: 3, 6 M USD
- IDB Loan: 7,3 M USD
- Shareholder loan: 3,12 M USD
- Agrisol loan: 10,4 M USD
- Hakrinbank loan: 5,2 M USD

Another successful achievement of the restructuring plan of the banana sector can be noticed: the important role that Suriname is playing now in the ACP banana world regarding EU and WTO actions of lobbying (in comparison of the Surland NV situation in which Suriname was completely absent of the international scene). Suriname has performed an intensive and successful lobbying from 2004 to 2007 toward EC and EU members regarding the incoherence of the EU banana regime mentioned above; as a result the first come first serve system has been introduced in 2006 and in 2007 to manage the ACP quota which has alleviated significantly the EU market access cost for Suriname. In addition as pointed above EC has set up an emergency financial support of 2,5 Mio Euros .

On the other hand Suriname took the leadership in the ACP banana countries and the Ambassador of Suriname in Brussels is since 4 years the chairman of the ACP banana group. Suriname has been congratulated in 2008 during an ACP/EU banana producers meeting in Paris by the French Minister of Agriculture about the useful and efficient actions performed toward EC and EU member states by Suriname.

Main problems of the restructuring plan

The restructuring of the banana sector has been successful with the exception of the privatization process of SBBS/Surland NV, which has been jeopardized by external factors. On 22 March 2005 the first tender for privatization was launched, but at the end the 5 short listed companies, after having performed their due diligences, did not submit their bids due to the prevailing uncertainties about the future EU import regime. On July 2008 the privatization was re-launched but again the process has been jeopardized due to the consequences of the financial crisis. In January one potential investor, after having performed the due diligences, informed SBBS they could go further in the process of privatization due difficulties of financing related to the financial crisis. With the second potential investor (Univeg) the sale price and sale conditions has been discussed and fixed during the year 2009 and the sale contract drafted in August 2009. But due to the consequences of the financial crisis a change in the majority of the shareholdings occurred in September 2009 and the CEO

has been dismissed. The new CEO informed the Government of Suriname in October 2009 about the new strategy of Univeg focusing on short term cash strategy and consequently not anymore in long term investment such the privatization of SBBS/Surland NV.

The main problem faced by the Surinamese banana industry over the period 2002-2007 has been the incoherence between the EU trade policy (ACP quota management based on an historical licensing system) and the EU aid policy with an EU banana market access cost for Suriname higher than the SFA program granted to Suriname. Since the reform of the EU banana regime in 1999 Suriname had no more direct and free access to the ACP quota and was forced to find and buy licenses at a tremendous cost from excess licenses holders. As a result SBBS had to face an unbearable EU market access cost in 2004, 2005, 2006 and 2007 which amounted in total to around USD Mio 22, access costs which were close to jeopardize the successful results achieved by the restructuring plan. Due to the huge negative impact of the EU banana regime the EC agreed to re-allocate 2,5 M Euros of remaining EDF funds, as emergency financial support for the financing of inputs (fertilizers, boxes). The supplies of inputs have been performed in 2006 and 2007. In January 2008 following the setting up of the Economic Partnership Agreement between EU and Cariforum countries a duty free and unlimited volume access for the export of bananas has been granted to the ACP countries of Cariforum.

Due to the tremendous access cost to the EU banana market the financial situation of SBBS worsened. The Government has been obliged, in addition to the first working capital of 7.3 M USD in May 2003 to re-restart the production operations, to provide additional working capital. A loan of 3 M USD has been provided in October 2004 financed by a commercial bank on the basis of a state guarantee and in April 2005 another state guarantee for 1 M USD has been granted. In January and July 2006 the Ministry of Finances granted an additional loan of 3 M USD.

As a result of the precarious financial situation of SBBS and of the failure of the privatization in 2005, SBBS had concluded in October 2006 a 2-year management

contract with their European marketing company (Agrisol, branch of Katope International) and set up a significant step toward a private management through a public-private partnership. Agrisol was responsible for the general direction and daily management of SBBS, providing its financial support (up to 9.5 M USD) while the main policies of the company are decided jointly with the board of SBBS. By the end of 2009 taking into consideration that Agrisol has withdrawn its interest from the privatization in October 2009 and also due to poor performance regarding marketing operations, the management and marketing contracts with Agrisol has been terminated on 8 February 2010. As a result a new loan of 3 M USD has been set up in November 2009 financed by a commercial bank on the basis of a state guarantee in order to replace the financing of the working capital made by Agrisol, financing which was stopped due the termination of the management contract.

In conclusion the assessment of the past performance shows that the banana industry of Suriname succeeded to set up and develop infrastructures, banana production organization, technology and friendly environment policies adapted to the agro-ecological and social conditions of Suriname. The banana sector is in the process of reaching competitiveness at sustainable levels and the company has been profitable in 2010 although significant improvements are still to be achieved in bunch, fruit protection and packing operations.

2.2 Macro-economic impact and importance of the Banana sector

SBBS is the largest employer in Suriname after the Government with 2400 people employed which, considering an average household of 5 family members, adds up to a total of roughly 12 000 living from the banana sector. Because of the regional spread of activities of the banana industry the contribution to employment in the rural area is crucial.

Others sectors of the economy benefit directly from the banana industry (5 M USD per year) with workplaces directly linked to banana activity (plastic and pallets industry, inputs suppliers, transport companies) and especially refrigerated transport

capacity for fresh fruit from Suriname to Europe. The dedicated shipping service set up for the banana industry has a spin off effect for the economy of Suriname which is benefiting of weekly shipping connections to the world and at first to Europe, North America and Caribbean region with a short transit time and at a competitive cost. The banana industry represents more than 20 % of the revenues of the port of Paramaribo and contributes significantly to the revenues of the state including fuel taxes(2 M USD/year). The banana industry has contributed to a significant improvement of the business environment especially for the development of agriculture.

The banana sector has also other indirect positive impacts in Suriname regarding the food security and life stock sector. Bananas are a key feeding component of cattle breeders and poultry farmers who are buying per year around 2000 tons of bananas not suitable for the international market. SBBS is also selling fruit to wholesalers and ripeners (around 1000 tons a year) who are supplying the local market. SBBS has also social actions trough bananas donations to school, retired people, church and other organizations in Suriname. For example 88 donations have been made in 2010 (See annex 1.1 and 1.2). The banana sector play also an important education role in Suriname: a lot of school and organizations used to visit the banana plantations. The estate of Jarikaba and Nickerie received 55 groups of visitors in 2010 (see annex 2.1 and 2.2).

The banana industry represents 2 % of the GDP and is the fourth source of foreign currency earnings of Suriname (6 %). Macro-economic impacts and indicators of the banana sector are provided in annex 3.

3. Banana sector: structure, challenges and policies

3.1 SWOT Analyses

Suriname's banana industry is composed of only one banana production company, the state owned company SBBS (Stichting Behoud Bananen Sector), which has been erected in October 2002 in replacement of the former bankrupted company Surland NV closed on 4th April 2002. SBBS is composed of two large scales banana plantations:

- Jarikaba Estate: which is 30 km from Paramaribo and consists of one property of 1,819 hectare out of which 1253 ha of useful banana plantations
- Nickerie Estate: which is located near the township of Nieuw-Nickerie 240 kilometres west of Paramaribo and consist of one property of 1234 ha out of which 1012 ha of useful banana plantations

3.1.1 Opportunities

Agro-ecological advantages

In comparison with other banana producing countries, Suriname presents several natural advantages for banana production: a flat topography, rich soil, water availability in quality and in quantity, excellent sunlight, low parasitic pressure, only yellow sigatoka, absence of hurricanes and strong wind damages.

These advantages allow high productivity and low requirements in agriculture chemical inputs which should result in a significant reduction in production costs and can balance a higher cost of manpower in comparison with other banana producing countries

Geographic position of Suriname

Suriname's strategic geographical position, close to the main banana markets of North America, Europe and also of Caricom markets places the country in a favorable position in terms of shipping transit time, compared to other banana producers.

EU banana regime

Suriname enjoys, as other ACP countries, a preferential access to the European Market through a duty and quota free access to the European banana market since 1st January 2008 as a result of the EPA's agreement between EU and Cariforum.

The additional development assistance in the form of Banana Accompanying Measures (BAM) proposed by the European Commission will support the adjustment process efforts of the banana industry of Suriname in the coming years to cope with the MFN reduction tariff. Suriname has requested to EC a financial support for investment of 17,6 millions Euros.

Caricom market opportunities

Caricom countries are importing most part of their fruit and vegetables needs. Suriname could be, with Guyana, the Caribbean food basket. Consequently there are market opportunities for banana exports and possible other crops for the banana company.

3.1.2 Threats

Agro-ecological constraints

Suriname has some natural constraints related mainly to heavy clay soil but today technologies allow water management due to these soil characteristics requesting efficient drainage and irrigation infrastructures, which have been already installed in order to cope with these constraints

EU banana regime

The foreseen tariff cuts of custom duties for the MFN countries from 176 Euros/ton to 75 Euros/tons over the period 2010-2020 , as a result of the WTO Geneva agreement and of the bilateral agreement EC/Latin American countries implies a significant reduction of the average European banana market price and consequently a significant reduction of export income for the banana industry of Suriname . The

competitiveness position of Suriname will be deteriorated over the period 2010-2020 by 2,2 USD/box. The detailed evolution of the MFN tariff is the following:

Date	Geneva Agreement	Bilateral agreement
15 December 2009	148 EUR/ton	
1 January 2011	143 EUR/ton	
1 January 2012	136 EUR/ton	
1 January 2013	132 EUR/ton	
1 January 2014	127 EUR/ton	122 EUR/ton
1 January 2015	122 EUR/Ton	112 EUR/ton
1 January 2016	117 EUR/ton	90 EUR/ton
1 January 2017	114 EUR/ton	85 EUR/ton
1 January 2018	114 EUR/ton	80 EUR/ton
1 January 2019	114 EUR/ton	75EUR/ton

Macro-economic policies

On the one hand there is a favorable regime for Agriculture sector to import inputs (fertilizers, chemicals) in Suriname. But on the other hand there is no real custom regime defined for imports of equipment and parts. Some exemptions could be granted on spot basis by the Ministry of Finances for some investments. There is also the problem of fuel taxes for Agriculture and especially for the banana sector which is an important consumer of fuel for irrigation. In addition Corporate taxes and dividend scheme are not competitive in comparison with important Agriculture countries such as Brazil or Costa Rica. A general, stable and favorable taxes and custom framework, in comparison to what has been done for the mining sector, is an important factor for the future development of Agriculture in Suriname.

Port Facilities

The current situation of the port facilities in Suriname (absence of port facilities suitable for banana vessels in Nickerie, plugging and topwharfage costs in Paramaribo, unclear land situation of the banana wharf in Paramaribo) places the banana industry in a disadvantage competitiveness position in comparison with other banana producers especially high trucking costs from Nickerie to Paramaribo. The competitive disadvantage on the export logistics costs point of view is estimated at 2 millions USD per year e.g 50 USD cents per box.

In addition with regards to the important increase of GDP in Suriname volume of import and export goods are increasing by a minimum of 10 % per year. As a result a traffic congestion of the port of Paramaribo could be foreseen in the future generating berth access difficulties to the banana vessels. A dedicated banana terminal must be considered in the medium and long term range.

Shortage of manpower

SBBS succeeded to recruit the manpower required but with difficulties and there is always the risk of shortage of manpower especially in case of extension of the banana production. Difficulties in the recruitment of middle management and management in production can be noticed also.

3.1.3 Strengths

Human capital, social conditions and relations

The human capital, the remuneration, social schemes and the social relations of SBBS are a strong asset for the future. Managers, middle management and workers have been trained and have participated to the successful restructuring of the company. Laborers on plantations enjoy social security/medical care rights and enjoy one of the best remuneration and social scheme of all the banana producing countries (except for the European countries). Working conditions (protective equipment, toilets facilities, and canteens) have been significantly improved in the past years.

The social relations and communication are organized through 2 complementary systems of social relations:

- A system of representation of personnel per farm and per specialized team (harvest, packing station and so on) focusing on the specific problems of each team
- Trade Unions installed in 2008 in Nickerie and in 2011 in Jarikaba focusing more on the collective agreement issues.

Shipping service

SBBS succeeded in setting up its owned dedicated shipping service with containers from Paramaribo to Dunkerque via a feeder service through Guadeloupe with a short transit time of 13 days at the very competitive cost in comparison with other banana producers.

Environmental and social standards

The policy of SBBS to have high environmental and social standards has been rewarded with the achievement of the GlobalGAP certification in June 2009 and in June 2010. This certification which guarantees that the banana company is complying with a formal set of procedures and practices ensuring food safety, the quality of product, the protection of environment and the working and health conditions of the workers.

Technology

The banana industry of Suriname can currently compare favorably to other banana producers on the point of view of banana production technologies. Modern technologies have been introduced successfully in the banana sector of Suriname about nutrition, pest and disease management, sigatoka management, water management, green life management, pruning, fruit protection, in vitro plant technology, planting and packing.

Marketing operations and quality

SBBS is selling the major of its production to the European market and start exporting to the regional market in August 2010. SBBS is also supplying the local Surinamese market with the banana not suitable for the international market (1000 tons/year) and the cattle breeders (2000 tons/year).

SBBS used to sell, at the difference of Surland NV, the production to clients on FOT basis in Europe (Free on truck). In a first phase the production has been marketed through a representative agent on a commission sale basis agreement. Since 2010 a further step has been achieved in the control of the marketing operations in Europe

by means of introduction of competitiveness between marketers, more remunerative commercial contracts, taking over all the logistics operations in Europe (handling, transit and quality control), which results in a significant increase of the average sale price of the production in 2010 (1,2 Euros per box).

Quality of the banana production of Suriname is complying with international standards quality. The banana production of SBBS is mainly marketed in Germany, Austria, France, Belgium and Polland.

Infrastructures and equipment

The banana company benefits from large production units (Nickerie and Jarikaba Estate) allowing modern management methods and scale effect.

The estates, through an important of investment amounting to 30 M USD , have been fully equipped with modern infrastructures over the period 2003-2010 making SBBS capable to compete on the international market : packing stations, cable way, irrigation, drainage pumping stations, replanting with in vitro plants, workers facilities and warehouses.

3.1.4 Weaknesses

Infrastructure

There is one remaining infrastructure weaknesses of the banana sector which is the roads conditions in the fields, preventing efficient supervision of field work during the rainy season. Upgrading of the packing station equipment of Jarikaba Estate (Built in 2000) is also needed.

Labor costs

Suriname has a labor cost higher than other banana producing countries (except European Countries) which is a disadvantage on the competitiveness point of view.

Productivity

Productivity has significantly improved in comparison with Surland NV (40 T/ha versus 15 T/ha) but the potential of improvement is still important: an objective of 50 tons per hectare is achievable. The percentage of rejected bananas is too high especially in Jarikaba and improvement in fruit protection, bunch management and packing operations are still needed.

Sustainability of quality

Despite the significant upgrading of the quality of the production exported, SBBS is still weak on the quality sustainability point of view and requires additional improvement to ensure the sustainability.

State ownership

One of the main institutional reforms of the Revised Strategic Plan is the privatization of the state owned company SBBS /Surland NV. The two attempts of privatization performed on March 2005 and July 2008 have failed due to external factors (respectively uncertainties of EU banana regime and financial crisis). Privatization is one of the main factors of sustainability of the banana industry in Suriname and this issue should be addressed in 2011.

Diversification in market and in crops

As SBBS is producer and exporter of a sole crop (banana) and mainly to a sole market (EU market) diversification of the risks in markets and in crops is an issue to be considered.

3.2 Challenges of the banana sector and policies

Since the beginning of the revised strategic plan, productivity and production quality have increased. Productivity went from 21,000 tonnes exported to the EU in 2004 to 65,000 tonnes in 2008, 58,000 tonnes in 2009 and 70200 tons in 2010. It is expected that this will increase to around 79,000 tonnes exports in 2011.

Suriname has achieved most of the objectives of the SFA programme. The total funds for Suriname of Euro 21,726,000 have been invested for 83,1% so far. It is expected that by the end of 2011 (executing the last SFA 2008) 94% of the funds will be committed (invested). The assessment of the past performance shows that the banana sector is in the process of reaching competitiveness at sustainable levels and the company has been profitable in 2010.

Lessons from past experience with the state-owned company Surland N.V. (poor management, institutional, financial and organizational problems) indicate that it is essential to privatize the banana company. With the new EU banana trade regime, another problem has come across to compete with the MFN countries. In order to adapt to the effects of the changes in the EU's import regime, the European Commission has designed the Banana Accompanying Measures.

The above SWOT analysis shows that the banana industry of Suriname benefits from several advantages and can be competitive. A labor cost higher than in the other banana producer countries is balanced by the favorable natural conditions and the favorable geographic position of Surinam and the duty free and unlimited access to the European market. Technologies today allow managing the natural constraints especially the water management and the soil characteristics.

The challenge for Suriname is to reduce the weaknesses of the banana company (quality and productivity), to improve the business environment regarding the logistics of export, while enhancing its market position in Europe. In the mean time the privatization process should be re-launched successfully.

The adjustments required for Suriname are to reduce the cost price by 2,24 USD/box from 2010 to 2020 and improve its relative average market sale price in comparison with other origins of bananas.

Suriname has drawn up a strategy to adjust to the changed market conditions which will be formulated in the National Adaption Strategy (NAS). In the following paragraphs this strategy is described.

4 Development strategies and actions plan: a consolidation phase

The Government of Suriname sees the banana industry as one of the main pillar of the macro- economic and social stability of the country. The banana sector is crucial for the macro-economic and social stability of Suriname.

The overall objectives of the Government of Suriname are (1) increased foreign exchange earnings and (2) sustained rural employment and (3) income by means of increasing productivity, and of reduction of cost price and by means of improvement of social and environment standards and food safety in banana production.

The National Adaptation Strategy is a continuation of the Revised Strategic Plan set up in 2002 with additional adjustment actions in order to cope with the reduction of the preferential margin of ACP countries over the period 2010-2020 and to address the threat/opportunities as well the weaknesses of the banana company.

The National Adaptation Strategy is based on the four main following categories of adjustments and efforts which are the following:

- Improvement of the performance
- Privatization of Surland NV/SBBS
- Improve the business environment
- Actions of extension and diversification

4.1 Consolidation actions (1): improvement of the performance

4.1.1 Reducing the cost price

Reducing the cost price is related to a set of actions and depends at first of the increasing of the productivity (major part of FOB expenses are fixed and related to cultivated surfaces).

- Increasing the productivity

The objective is to improve the current productivity of 40 tons/ha to 50 tons which will require the organizational, management and investments actions.

- Organizational and management actions

Improving the bunch, fruit protection and packing management which could be achieved through:

- Upgrading of the production organization through the setting up of a system group responsibility per area of 50-60 hectares conducting to an improvement of the manpower efficiency and performance.
- Increasing of the motivation of employees through the setting up of the a variable component of the remuneration of employees linked to the group responsibility. This potential increase of remuneration will be financed by the improvement of productivity and increase of banana boxes exported.

- Investment program

Four mains categories of investment are considered to improve the productivity and reduce the cost price:

- Improving the capacity of supervision of field operations through the rehabilitation/building of secondary roads (difficulty of access to the farms

during rainy seasons), which will also improve the working conditions. The investment is estimated at 3,402 M Euros.

- Upgrading the transport of the fruit (cable way & hanging tractors). The investments are estimated at 0,48 M Euros
- Upgrading the the drainage (excavators & drainage pumps). The investment are estimated at 1,79 M Euros
- Upgrading the transportation from packing stations (tractors, trailers). The investments are estimated at 0,565 M Euros.

It has to be noticed that the improvement of productivity will require several years to be performed as it depends at first on human factor and on the implementation of investments. It is estimated that the increase of productivity from 40 to 50 tons/ha will reduce the cost price by 1,8 USD/box.

Other actions related to the improvement of business environment (see paragraph below) has also to be considered.

- Reducing the logistic export costs

Suriname, in comparison with other banana producers is facing a competitiveness disadvantage regarding the logistic costs for exports due to the plugging cost charged by the Port of Paramaribo (67 USD/day in comparison with 30-40 USD/day by other port). The plugging cost could be reduced either by getting a tariff reduction from the port of Paramaribo or by investing in a reefer station in the premises of SBBS if an agreement is not achievable with the Port. The investment in a reefer station is estimated at 1,12 M Euros and the reduction of the plugging cost price at 0,1 USD/box.

4.1.2 Enhancing the EU marketing position of the banana company

The current average market sale price of SBBS stood currently at minus 3,5 Euros in comparison with Aldi price reference (corresponding to Globalgap second brand sold by the retailer ALDI). One of the main objectives of the National Adaptation Strategy is to improve the market position and sale price of SBBS by (1) enhancing the current market organization by means of competitiveness between European clients and direct supplying to retailers (2) continuous improvement of production quality (3) introducing additional environmental and social labels/standards than Globalgap such as ISO 14001, ISO 22,000, SAS 8000, OAHAS 18,000, Cedex, Tesco future choice..etc. (4) Improving the image of the Surinamese banana (link to the sustainability of the quality and communication toward clients).

Improvement of quality and in labeling will require investments for an amount of 2,8 M Euros in fruit processing, decantation basins, in post harvest chemical recycling, packing stations equipment and surroundings and also investments for an amount of 2,285 M Euros for the rehabilitation of main roads (upgrading fruit handling and trucking).

It is expected to increase progressively the average market sale price by 50 Euros cents per box over the period 2011-2015.

4.1.3 Strengthening social and environmental conditions

The policy regarding international standards related to food safety, environmental protection and social conditions will be developed and strengthened in relation with the market requirements (see enhancing the market position above).

Investment in toilets, canteens, sanitary buildings, office buildings, parcels bridges, mechanization of harvest and field camps in order to improve the social and working conditions are considered for a total investment estimated at 4,219 M Euros. It is also

considered to invest in ferti-irrigation, in water management and trucking of inputs in order to improve the environment conditions and reduce the fuel consumption over the period 2010-2013 for a total amount of investment of 0,945 M Euros.

In order to improve the social and remuneration standard of SBBS a progressive upgrading of the remuneration for some categories of personnel over the period 2010-2013 (Remuneration increase of 15 %) shall be also taken into consideration in the NAS. These actions will improve the social and remuneration standards of SBBS but also increase the cost price by 50 USD cents over the period 2010-2013. It is considered that the improvement of performance of SBBS will allow financing these improvements.

4.1.4 Investment program

Thanks to the huge investment program performed from 2003-2010 the needs in investments for basic infrastructures and equipments of the banana company are limited for the next 10 years and the needs of investments have to focus in the future in investments to improve the performance of marketing, productivity and cost price and social and environmental conditions . The investments considered over the period 2010-2013 amount to 17,616 Millions Euros and are the following by degree of priorities:

- Very high priorities: 9,492 M Euros
 - Marketing & quality: rehabilitation of main roads (2,295 Mio Euros), renovation packing stations (2 Mio Euros)
 - Cost price & productivity: rehabilitation of secondary roads (3,402 M Euros), cable way (0,480 M Euros)
 - Social actions: workers facilities (0,97 M Euros)
 - Environment actions: ferti-irrigation & water management (0,345 M Euros)

- High priority : 5,604 M Euros
 - Cost price & productivity: infrastructure drainage (1,79 M Euros), transportation from packing stations (0,565 M Euros)
 - Social actions: parcels bridges & mechanization harvest (3,249 M Euros)

- Medium priority: 1,4 M Euros
 - Marketing: packing station environment (0,8 M Euro)
 - Environment actions: inputs trucking(0,6 M Euros)

- Low priority: 1,12 M Euros
 - Cost price: reefer station (1,12 M Euro).

A detailed investment program by Estate is presented in annex

4.1.5 Impact expected on the competitiveness

The balance of the different actions considered in the NAS will improve the revenues/cost price by 2,2 USD/box and make the Surinamese banana industry capable to cope with the reduction of the MFN tariff. The impact of the different categories of actions is detailed below:

Item	Expected results	Amount Financing (Euro) EU (BAM)	Impact on revenues or cost price
Marketing	Enhancing the market position and sale price of SBBS by means of: <ol style="list-style-type: none"> (1) enhancing the current market organization (2) continuous improvement of production quality (3) introducing additional environmental and social labels/standards and improving the Surinamese banana image: <ul style="list-style-type: none"> - Improvements of working conditions (workers facilities, parcels bridges, harvest mechanization) - Improvement of environment conditions (ferti-irrigation, 	4,219,097	+ 0,6/box of export revenues

	water management, inputs trucking)	945,000	
	(4) Upgrading the packing station equipment and surroundings	2,800,000	
	(5) Upgrading fruit handling & trucking (rehabilitation main roads)	2,295,000	
Reduction of cost price	Increase the productivity from 40 to 50 tons per ha by means of:		-
	(1) Upgrade bunch, fruit protection & packing management	3,402,000	-1,8 SD/box
	(2) Upgrading the secondary roads conditions	1,120,000	-0,1 USD/box
	(3) Reduce the logistics exports costs either by getting a cost tariff reduction from the Port or by setting up a reefer station in the premises of SBBS	480,000	-0,05 USD/box
	(4) (4)Upgrading the transport of the fruit	1,790,000	- 0,1 USD/box
	(5) Upgrading the drainage	565,000	-0,05 USD/box
	(6) Upgrading the transportation from the packing station		
Institutional reform	Successful privatization		
Social actions	-Progressive improvement of the remuneration conditions		+0,50 USD/box
Total		17,616,000	2,2 USD/box

The consolidation actions regarding performance could generate, on the basis of 5 millions boxes exported per year, a significant improvement of revenues/reduction of costs for the banana company which could amount to 11 millions USD per year in 2016 in comparison with 2010.

4.2 Consolidation actions (2): privatization of Surland NV/SBBS

The overall objective of privatization is to set up an institutional framework and shareholding allowing achieving the sustainability of the Surinamese banana sector.

A strategy of privatization has been elaborated in 2003 and 2004 and updated in 2008.

As mentioned above 2 rounds of privatization has been performed but external factors (EU banana regime in 2005, financial crisis in 2009) jeopardized them.

Nevertheless lessons from the past have been learned and relevant experience has been accumulated especially on 3 points of view:

- There are 27 strategic investors e.g banana operators identified in Europe but only 9 have the capacity to take over SBBS/Surland NV considering the size of operations (2000 ha, 80,000 tons & 2500 people employed, 50 millions turnover). A minimum turnover of 200 millions Euros is required to take over Surland NV.
- The 9 potential strategic investors have a detailed knowledge about the banana sector of Suriname, either because they participated to one of the 2 rounds of privatisation and/or because some of them marketed the production of Suriname (Fyffes, GF Group, Univeg, Compagnie Fruitière). On the other hand, and reciprocally, Suriname has also detailed and relevant information about each potential strategic investor.
- A relevant estimation of the value of Surland NV/SBBS can be derived from the 2 rounds of privatization: the sale price of Surland NV/SBBS is estimated at 30 millions USD.

Another benefit from the experience of the 2 rounds of privatization is that a complete and accurate strategy of privatization, and all the related documentation (memorandum of information, sale contract, data room documents), is available making possible to re-launch the privatization in a very short period of time.

To re-launch the privatization process it is just needed to review the strategy and take decision about the main options of the strategy which are the following:

- Method of privatization: sale of shares or sale of assets. Due to the status and backlogs of Surland NV the only option is to use a “sale of assets” method
- Method of sales: direct negotiation versus open international tender. Open tender is usually preferable for transparency reasons
- Scope of privatization: the scope includes the Estate of Jarikaba and Nickerie and also includes the ex-rice operations land in Jarikaba. The banana wharf of Paramaribo could be also included if the unclear land situation is fixed.
- Shareholding scheme considering that there are possible classes of shareholders: strategic investors, financial investors, management and the state.

A state ownership is inappropriate with regards to decision making required by the strong competition in the banana world, the rapid change in technology and on the markets and with regards to the important financing needs to run a banana company.

As part of any form of change in state ownership a part of the shares can be dedicated to the management. The current management has experience and expertise in several segment of the banana chain. Nevertheless with regards to the sustainability, especially on the financing point of view, management has

weaknesses and consequently could be considered only for a minority part of the shares.

Financial investors can be characterised as investors without any experience in the banana world. This category of investors are not bringing any experience required to compete in the banana world and could be considered only for a minority part of the share

Strategic investors can be characterised as companies involved in the banana business. As the EU banana market is the natural market for Suriname due to the competitiveness advantage granted to ACP countries (MFN tariff for Latin American banana producers) and in terms of shipping (shipping cost and transit time) the relevant strategic investors are the one having a significant presence in the European market.

The decisions about the shareholding scheme are derived from the confrontation of the profile of each potential shareholder to a sustainability test. On this point of view experience and expertise in the various segment of the industry (production, marketing, shipping ..) is central to the definition of the best profile as well financing capacities. Given the specificities of banana production and international trade, strong competition and continuous and rapid changes in technology and on the markets, the presence of a strategic investor (or group of strategic investors) for 100 % or a major percentage of the shares in the capital of the privatized banana company is an important factor to achieve the sustainability of the banana sector in Suriname and is the priority shareholding scheme and most preferable option to be considered.

4.3 Consolidation actions (3): improvement of the business environment

At first the banana sector in Suriname has to cope with competitive disadvantage due to the business environment mainly related to export logistics in comparison

with other banana producing countries. The negative impact of these disadvantages is estimated at 2 millions USD per year e.g around 50 USD cents per box.

There are two main logistic issues to be improved:

- Rehabilitation of the port of Nickerie must be in compliance with the requirements of banana vessels to have access to the port of Nickerie. Two key issues are not yet addressed: a minimum draft of 6 meters and enlargement of the river to allow vessels of 140 meters turning)
- Banana wharf and fruit terminal for the banana sector. Due to the high costs and the foreseen traffic congestion in the coming years of the port of Paramaribo a dedicated place (fruit terminal) is required for the banana sector (as in any banana exporting countries). In this perspective the current banana wharf in Paramaribo is a first option to be considered to address this issue. For this purpose the current unclear land title situation of the banana wharf must be addressed by issuing a leasehold for the banana company.

Other improvements of the business environment for the banana sector (but also for other agriculture sectors) must be considered such as:

- Stable and long term favorable regime of custom duties regarding import of inputs and investment in agriculture
- Regime of fuel taxes for Agriculture sector
- Facilitation of the import of manpower (at first from Haiti and Guyana) in order to cope with possible shortage of manpower especially in the case of extension of the area cultivated for banana production
- Improvement of the competitiveness of corporate taxes and dividend especially in comparison with important agriculture countries such as Brazil and Costa Rica

4.4 Extension and increase of banana production

For the year 2011 SBBS got a significantly higher demand from marketers (160,000 tons of bananas) than the forecasted production (79,000 tons). It means that the image of the Surinamese fruit is positive in the EU market and that extension of area cultivated and increase of production can be considered.

Three conditions must be considered regarding the feasibility of extension:

- The possible shortage of manpower (see above)
- The financing requirements (1000 ha of banana require 27 millions USD investments)
- The land availability. It is for this reason that the Surland NV ex-rice operation land must be included in the scope of privatization

For these reasons extension must be contemplated in the framework of a privatized banana company.

4.5 Diversification: market and crops

On the one hand the core business of SBBS is banana production and the core market is Europe (90 % of the exports) which means that the first priority of the banana sector is to consolidate the current business to set up the basis of sustainability.

But on the other hand SBBS is a producer and exporter of a sole crop (banana) to a main and sole main market Europe which raises the problems diversification of risks. Consequently on medium and long term point of view diversification in other markets than Europe or to develop production of other crops or both must be contemplated.

4.5.1 Banana regional markets opportunities

In general Suriname (with Guyana) could be the food basket of CARICOM countries and these could represent a market diversification opportunity for the banana production. These opportunities are nevertheless limited in volume due to on the one hand to the small size of the different regional markets and due also to market competition from St Lucia, St Vincent and Dominica. Consequently an objective limited to 10,000 tons per year could be contemplated at medium term (10 to 15 % of the Surinamese banana production) by exporting higher quality fruit (and/or specific packaging) than the competitors.

SBBS start to develop these markets in August 2010 and presently is exporting 5 containers a week (around 5000 tons a year), mainly in the Trinidad and Tobago market.

4.5.2 Diversification in marketing :EU market opportunities

On the one hand the most remunerative market for the banana industry of Suriname remains the European market due to the competitive advantage due to the custom duties for MFN countries (Suriname is not competitive for the North American Market due to the difference in shipping costs).

On the other hand the average European banana market price will be reduced progressively as a result of the cuts of custom duties for MFN countries over the period 2010-2020..

Nevertheless there are still for Suriname markets opportunities in Europe as there are indeed different sale price which varies in the range of 3 euros per box depending of the quality, the European country, the marketing organization and the image of the fruit. As a result there is still a potential of increase of the sale price despite of the reduction of the MFN tariff. Consequently the main marketing issue for the banana industry of Suriname is to progressively enhance its EU market position by means of

achieving a high and sustainable quality, improvement of its image, strengthening the competition between marketers and by introducing if additional environmental and social labels.

4.5.3 Diversification in marketing: the USA market

Suriname is close to the USA banana market (7 days transit shipping time) which is a remunerative market since 2 years (average sale price of 15 USD). Nevertheless Suriname, at the difference of the EU banana market, has a competitiveness disadvantage with regards to the USA market due to a higher shipping cost than Latin American banana producers (longer transit shipping time) and of course is not benefiting from any custom duties preferential access. For these reasons the USA banana market is not an option for Suriname.

4.5.4 Crops diversification

Crops diversification could a medium or long term objective for the banana sector of Suriname (at short term the priority is to consolidate the current business) in order to diversify the risks. Usually banana companies are also producing and marketing other crops.

Six conditions/criteria must be considered regarding the feasibility of diversification in other crops:

- Based on a market driven approach e.g volume, price, quality requirements of the EU market or of the CARICOM market
- Availability of the technology for the different crops
- Possible shortage of manpower (see above)
- Financing requirements
- Minimum scale of operations (above 250 ha)
- Land availability.

The best option to develop diversification is to privatize the banana company with a strategic investor of the banana world in the shareholding as strategic investors are already diversified in market and in production and consequently:

- Could bring the technology for other crops
- Could bring the financing
- Have knowledge of the markets

5 Expected results and performance indicators

Extension and diversification have not been considered in the projections.

The expected results are to have a sustainable banana company by means of:

- Reduction of the cost price by 2,1 USD/box over the period 2011-2015
- Improvement of the marketing position of SBBS and the market sale price by Euro 50 cents which will compensate partially the reduction of the average EU market sale price resulting from the reduction of the MFN tariff
- Strengthening the friendly environment and social policies of the banana company with the introduction of additional label than GlobalGap and improving the working conditions and remuneration of employees
- Successful privatization of the state owned company SBBS/Surland NV

The key performance indicators of the action plan considered are the following: volume of boxes exported, yield per hectare, FOB cost price, FOB export revenues and sale price in comparison with Aldi price reference.

The expected results and related performance indicators are formalized in the NAS logical framework presented in annex 2 in which are presented the current performance indicators (2010) and the forecasted performance indicators in 2015.

Banana production and exports have increased: the tons exported to the EU banana market have increased from 21,000 tons in 2004 to 58,000 tons in 2009, 70,200 tons in 2010 and 79,000 tons exported are expected in 2011 (4,3 M boxes). In 2015 it is

forecasted to export 100,000 tons (5,4 M boxes) as a result of the increase of the productivity. The productivity stood at around 2,162 boxes/ha in 2010 and it is expected to reach a productivity of 2,702 boxes/ha in 2015. Consequently, the FOB cost price will be reduced from USD 9,6 USD per box in 2010 to 8 USD/box in 2015. The contribution of banana exports to the foreign currency of the country will be around USD 35 M in 2010 (4th source of foreign earnings for the country) and it is forecasted to increase the contribution to 53 M USD in 2015.

SBBS is currently employing 2400 people (40% women) and is indirectly supporting about 12,000 people (taking into account an average household of 5 family members per employer). In 2015 the number of people employed will be around 2,600 people. During the period 2010-2015 it is also expected to improve the average market sale price from 3,5 Euro/box minus Aldi in 2010 to 3 Euros/box minus Aldi price reference.

ANNEX

NAS logical framework 2011-2015

1 EUR=1,2 USD

	Intervention Logic	Objectively verifiable indicators	Source of verification	Assumptions
Overall Objectives	1) Increased foreign exchange earnings 2) Sustained rural employment and income		Macro-economic data provided by the Government	No dramatic change in international, regional and local and social environment
Project purpose	A sustainable and competitive banana industry in a liberalized world market	<p>Volume (box) FOB-cost price (USD/Box)</p> <p>Year 2010: 3,810,000 boxes Year 2010: 9,6 USD/Box</p> <p>Year 2011: 4,270,000 Boxes Year 2011: 9,2 USD/Box</p> <p>Year 2012: 4,600,000 boxes Year 2012: 8,8 USD/box</p> <p>Year 2013 : 4,900,000 boxes Year 2013: 8,6 USD/box</p> <p>Year 2014 : 5,200,000 boxes Year 2014: 8,3 USD/box</p> <p>Year 2015 : 5,400,000 boxes Year 2015: 8 USD/box</p> <p>Yield/hectare (box) Export value (FOB)</p> <p>Year 2010: 2059 Boxes Year 2010: 34 millions USD</p> <p>Year 2011: 2,189 Boxes Year 2011: 42 millions USD</p> <p>Year 2012: 2,350 boxes Year 2012: 45 millions USD</p> <p>Year 2013: 2,512 boxes Year 2013: 48 millions USD</p> <p>Year 2014: 2,600 boxes Year 2014: 51 millions USD</p> <p>Year 2015: 2,702boxes Year 2015: 53 millions USD</p> <p>Sale price/Aldi reference price People employed</p> <p>Year 2010: 3,5 euro/box Year 2010: 2400</p> <p>Year 2011: 3,4 euro/box Year 2011: 2450</p> <p>Year 2012: 3,3 euros/box Year 2012: 2500</p> <p>Year 2013: 3,2 euros/box Year 2013: 2500</p> <p>Year 2014: 3,1 euros/box Year 2014: 2550</p>	<p>Eurostat, comex Banana company/programme records Banana company profit and loss account</p> <p>Banana company profit and loss account Sub-sector analyses, production and data/statistics, central bank</p>	

		Year 2015: 3 euro/box	Year 2015: 2600		
Results	1.1. Reduction of cost price	FOB Cost price reduced by 1,6 USD/box		Banana company profit and loss account	
	1.2 Enhancing the EU market position of Suriname	Average market sale price increased by 0,6 USD/box in comparison with Aldi reference price		Banana company profit and loss account	
	1.3. Institutionnal reforms completed	Banana company privatized			
	1.4. Strengthening social and environmental conditions	net salary mass increased by 3 millions USD Additional environmental labels introduced		Banana company profit and loss account	
Activities	1.1 Reduction of cost price				
	1.1.1.Increase productivity				
	Improve bunch, fruit protection and packing management	-Set up a group and area responsibility of workers -Upgrading the link between remuneration and group performance			
	Improve capacity of field operations supervision (better access to the farm in rainy seasons)	36 kilometres of secondary roads rehabilitated/built		3,402,000	-
	Upgrading the infrastructures & machineries for fruit handling, drainage & for transportation	-Replacing excavators and installation of additional drainage pumps -Replacement of hanging tractors and cable way -Buying dumping trailers, ATV & packing station tractors		1,790,000 480,600 565,000	- - -
	1.1.2 Reduce the logistic exports costs				
	Reduce the plugging costs	Agreement with the Port for a tariff reduction or investing in a reefer station in the premise of SBBS		1,120,000	-
1.3 Enhancing EU market					

<p>position of Suriname Increase the average sale price in comparison with Aldi price reference</p>	<p>Competition between marketers and clients Introduction of additional environmental and social labels Strengthening the image of Suriname</p>		
	<p>Investment in fruit processing, decantation basins, post harvest chemical recycling, packing station equipment and surroundings 17 kilometres of main roads rehabilitated/built</p>	<p>2,800,000 2,295,000</p>	
<p>1.4. Institutionnal reforms completed</p>	<p>Banana company privatized</p>		
<p>1.5 Upgrading social and environmental standards</p>			
<p>Improvement of working conditions & remuneration</p>	<p>Investment in in toilets, canteens, sanitary buildings, office buildings, parcels bridges, mechanization of harvest and field camps</p>	<p>4,219,000</p>	
<p>Improvement of environmental conditions</p>	<p>Investment in ferti-irrigation, water management & inputs truckings</p>	<p>945,000</p>	
	<p>TOTAL COSTS</p>	<p>17,616,600</p>	