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**PILOT REHABILITATION OF NEGLECTED COFFEE PLANTATIONS INTO
SMALL FAMILY PRODUCTION UNITS IN ANGOLA (CFC/ICO/15)**

(to be financed under the Second Account)

FINAL APPRAISAL REPORT



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Abbreviations and Definitions

INCA	-	Instituto Nacional de Café de Angola
AAA	-	Acção Agraria Alemã
AAD	-	Accao Angolana de Desenvolvimento
ACAC	-	Association of Coffee Producers and Consumers
BCI	-	Banco de Comercio e Industria
BFA	-	Banco do Fomento e Exterior Angola
BPC	-	Banco de Ponpance e Credito
CAFAMGOL	-	Coffee Exporters Association of Angola
DENOR	-	Departamento Nacional de Ordenamento Rural
FAEN	-	Fund for the Support of the National Entrepreneur
FAO	-	Food and Agriculture Organisation of the United Nations
FDCA	-	Fund for the Development of Coffee
GTZ	-	Deutsche Gesellschaft fur Technische Zusammenarbeit
ICO	-	International Coffee Organisation
IRESEM	-	Instituto de Reintegracao Socio – Profissional para Ex-Militares
LIFFE	-	London International Financial Futures Exchange
MINADER	-	Ministerio de Agricultura e Desenvolvimento Rural
MINARS	-	Ministerio de Assistencia e Reinsercao Social
PSC	-	Project Steering Committee
SDR	-	Special Drawing Rights
SECAFE	-	Secretaria do Estado de café
UNACA	-	União Nacional das Associações de Camponeses Angolano
UNDP	-	United Nations Development Programme
IOM	-	International Organisation for Migration
USAID	-	United States Agency for International Development
USD	-	United States of America Dollars
WFP	-	World Food Programme

“Collaborating Institutions”	means, singularly and collectively, S Ministry of Agriculture and Rural Development, Government of Angola
“Intermediary I”	means INCA located in the Republic of Angola, which will administer the disbursement of the Tranche I to the Target Smallholders in accordance with the Disbursement Administration Agreement.
“Intermediary II”	means a commercial bank located in the Republic of Angola, which will administer the disbursement of the Tranche II to the Coffee Traders in accordance with the Disbursement Administration Agreement.
“Loan”	a loan in the amount up to USD 2,760,000 (two million seven hundred and sixty thousand United States of America Dollars) comprising of Tranche I in the amount up to USD 2,300,000 (two million three hundred thousand United States of America Dollars) and Tranche II in the amount up to USD 460,000 (Four hundred and sixty thousand United States of America Dollars) at the avail of the Borrower for the purpose of financing as described in the Loan Agreement and Project Agreement.
“Tranche I”	a loan (Coffee Development Loan) in the amount up to USD 2,300,000 (two million and three hundred thousand United States of America Dollars) at the avail of the Borrower for the purpose of financing the Target Smallholders as described in the Project Agreement.
“Tranche II”	a loan (Coffee Trade Loan) in the amount up to USD 460,000 (Four hundred and sixty thousand United States of America Dollars) at the avail of the Borrower for the purpose of financing the Coffee Traders as described in the Project Agreement.
“Project Budget”	means that part of the Appraisal Report which provides information on the financial resources available for the Project, disaggregated by item of expenditure and source of funding;
“Project Executing Agency”	Instituto Nacional do Café (INCA);
“Project Output”	means the quantitative and qualitative results of the assistance, produced through the sound management of inputs and activities required to achieve the Project's objectives as shown in the Logical Framework Table.

“SDR”	means Special Drawing Rights, as defined by the International Monetary Fund.
“Supervisory Body”	International Coffee Organisation, London, United Kingdom.
“Target Smallholders”	means coffee growers selected by the Collaborating Institution and the Project Executing Agency (PEA) in accordance with criteria approved by the Fund and the SB and, who will participate in the Project by way of coffee production on smallholder plantations, as set out in the Appraisal Report;
“USD”	means United States of America Dollars.

LOGICAL FRAMEWORK

Narrative Summary	Verifiable Indicators	Means of verification	Assumptions
<p>Goal: To contribute to rehabilitation of the coffee sector by enhancing yields, restoring production and developing concepts that could be adapted to other coffee growing areas in and outside Angola.</p>	<p>Increased yield by rehabilitated small coffee farmers covered by the project and increased exports.</p>	<p>Project Progress; Reports by Financial Institutions; National Coffee Export Statistics.</p>	<p>The security situation in the area is stable and farmers respond to new farming methods. Coffee prices remains conducive to coffee growing in the region.</p>
<p>Project Purpose:</p> <p>(a) To increase the returns to and welfare of family farmers in Kwanza Sul region. (b) To rehabilitate coffee plantation as a mean to diversify the economy from oil. (c) To provide technical assistance for capacity building and training.</p>	<p>(a) Volume of coffee being traded with the assistance of the project. (b) Number of families settled. (c) Increase in production per hectare and farm gate prices.</p>	<p>(a) Project Reports and Export Statistics. (b) Reports from Institutions participating in the project. (c) Farmer interviews and agricultural reports on coffee production.</p>	<p>(a) Reasonable world coffee prices above the breakeven production cost (b) Willingness of the selected families to settle in new areas. (c) Willingness of farmers to grow coffee to augment incomes instead of food crops.</p>
<p>Output:</p> <p>(a) Rehabilitation of 2000 hectares of coffee plantations. (b) Resettlement of 4000 families on coffee plantations. (c) Increased yield per hectare and increased export earning of coffee. (d) Increased volume of credit and funds for investment in the coffee sector</p>	<p>(a) Area rehabilitated under the project. (b) Volume of coffee traded and actual price increase at the farm gate level. (c) The actual volume of credit and funds for investment being extended to small producers. (d) Number of families resettled.</p>	<p>(a) Project Progress reports and audits. (b) Export Statistics and Reports by the Farmers themselves. (c) Reports by Financial Institutions participating in the project. (d) Project Audit and reports by other Agencies.</p>	<p>(a) Selected plantations are not mined and are suitable for rehabilitation. (b) That required inputs can be made available in time given the security situation. (c) Effective project management.</p>
<p>Inputs : Activities</p> <p>(a) Selection of and settlement on suitable abandoned coffee farms. (b) Training of technical extension staff and farmers plus availability of equipment and support services. (c) Commercialisation of coffee. (d) Dissemination of experience gained.</p>	<p>CFC Financed</p> <p>(a) Grant US\$1,990,000 (b) Trade Loan – US\$ 460,000 (c) Government Coffee Development loan US\$ 2,300,000</p> <p>Counterpart contribution Government of Angola – US\$3,780,000</p>	<p>(a) PEA progress reports and Annual Audit Reports. (b) Participation in co-ordination and dissemination workshops. (c) Reports from Financial Institutions. (d) Reports of farmers and inspection visits to farms.</p>	<p>(a) Funding from all sources being available in a timely manner. (b) Efficient and effective project management. (c) Adequate technical and extension staff can be trained and motivated to implement the project.</p>

MAP

PILOT REHABILITATION OF NEGLECTED COFFEE PLANTATIONS INTO SMALL FAMILY PRODUCTION UNITS IN ANGOLA



The colours, boundaries, denominations, and classifications in this map do not imply, on the part of the Common Fund for Commodities or its Members, any judgement on the legal status of any territory, or any endorsement or acceptance of any boundary. The projections used for maps may distort shape, distance, and direction.

PROJECT SUMMARY

Objective and Scope: The broad objectives of the project include the increase of coffee production by bringing abandoned coffee estates into production through resettlement of displaced people and providing support services to increase productivity of small coffee producers. To increase income of the participating families through increased coffee production, productivity and trade and to facilitate the resettlement of displaced families. The specific objectives of the project are (a) increasing the production, productivity and quality of coffee. (b) Increasing the share of the fob price realised by the farmer. (c) Providing rural extension, credit facilities, and marketing information services to small-scale coffee farmers. (d) To resettle displaced families on abandoned coffee estates by sub-dividing them into small production units. (e) To develop the technical capacity of the personnel and institutions involved in the project for future sustainability.

Recipient of Grant	:	International Coffee Organisation
Supervisory Body	:	International Coffee Organisation
Project Executing Agency	:	Instituto Nacional de Café de Angola (INCA)
Collaborating Institutions	:	Ministry of Agriculture and Rural Development and banks to be identified by the project for the loan delivery.
Location of the Project	:	Republic of Angola
Duration of Project	:	Three Years
Estimated total cost	:	USD 8,530,000
Financing sought from the Fund	:	USD 4,750,000 (equivalent to approximately 3,669,966 SDR) Grant - US\$ 1,990,000 (equivalent to approximately SDR 1,537,523) Loan – USD 2,760,000 (equivalent to SDR 2,132,591) – Trade Loan USD 460,000 and Development Loan USD 2,300,000
Counterpart contributions	:	Government of Angola – USD 3,780,000

I. PROJECT BACKGROUND

A. Submission of Project by the respective National Authorities

1. In September 1997, the Governments of Angola, Nicaragua and the Democratic Republic of Congo, expressed separately a common concern about the need to reconstruct their coffee sector following devastation arising from civil war. They submitted to the ICO's Executive Director some outlined proposals to draw up strategies to formulate projects for funding by the international community.

B. Consultations with the local Coffee Institutions

2. In Angola the Ministry of Agriculture and Rural Development (MINADER) is responsible for the coffee sector. Within MINADER the Instituto Nacional do Café de Angola (INCA) is in charge to implement the coffee policy, to observe the operations in the sector and to support the activities of the different participants. Within the course of streamlining the administrative organisation in Angola, in February 1999, the Secretaria do Estado de Café (SECAFE) was dissolved and its former responsibilities have been shifted to INCA.

C. General aspects of the current situation in Angola

3. Situated on the South West coast of Africa, Angola is the fourth biggest country of Africa (1.2 million square kilometres) and can take advantage of considerable natural resources - agricultural (manioc, maize, coffee), mining (diamonds) and oil. The country's fertile land is plentiful for its population of about fifteen million inhabitants. However, Angola's full growth and development potential is not exploited yet. After three consecutive decades of war (independence from 1961 to 1974, civil war between the 1976 to 1991; and the third war period following the outcome of the first round of presidential elections held in September 1992 interrupted by 4 years of peace, which were initiated with the signing of the Lusaka Peace Accords, in November 1994). Since the April 2002 Luanda accords, peace has returned. About 4 million displaced persons have returned to their communities, including most former combatants from UNITA.

4. The agricultural sector in Angola has especially been devastated by 27 years of war, and currently represents about 8% of GDP. Investments are concentrated in the oil sector. The marketing system has been affected; roads, bridges and other rural infrastructure have largely been destroyed, and as many as 10 million land mines are scattered about the country. According to the Mine Action Program, 4,000 mine fields have been identified and the de-mining program concerns 4.7 million landmines, 26,000 km of roads, at a cost of US \$285 million. Since 2002, 27 roads and 374 villages have been opened by the UN security team. The country depends on food aid to meet its internal requirements and agricultural exports have virtually disappeared.

5. This is in sharp contrast to both the situation of thirty years ago and the potential of the sector. At one time Angola was not only self sufficient in food production, but it exported surplus maize from its smallholder sector. In addition, the coffee sector was a major earner of foreign exchange. At Independence agriculture was hard hit by the exodus of Portuguese settlers who had run large farms and also provided the marketing and credit networks for smallholder farmers. The Government tried to take on these functions and also nationalised most of the large farms which had been abandoned, attempting to run them as state farms. The

state tried to exercise controls throughout the agricultural sector, regulating prices, and using parastatals for the import and distribution of both agricultural inputs and some food products.

6. The attempts at central control and planning by the Government were not successful. By the mid 1980s the Government began to change its policies, opting for a more liberalised economy with an increased role for the private sector. In agriculture, this meant selling or turning over some of the large state farms to private operators. In addition there was some liberalisation of prices.

7. On an economic level, the successive processes for economic stabilisation brought out a recovery and a real GDP growth around 10% between 1994 and 1996. In 1997 real GDP growth declined to 7.6% and for 1998 a further reduction was expected. Between 1994 and 1998 the contribution of oil exploitation to the GDP was increased from 35% up to 45%. At this time, it represents nearly half of GDP and about 90% of Government revenues and export earnings. Angola increased its oil production from 903,000 barrels/day (bbd) in 2002 to 1,230,000 in 2005. High oil prices in 2004 and part of 2005 have translated into high export revenues. Output per capita nearly doubled from US\$764 in 2002 to US\$1,550 in 2005. However, Angola is still classified as a developing country under stress. Real GDP reached 11.7% against 3.4% in 2003. Despite its abundant natural resources, 64% of the population lives with less than a dollar a day. Subsistence agriculture provides the 156 in 1998) Improvements in transport infrastructure are desperately needed provide access to seeds and fertilizer, and to open up marketing opportunities, however, according to the World Bank, many producers may be unable to compete with imported food at the current exchange rates once road links have been fully restored. Given the risks of inefficiency and corruption, it cautioned against renewed public sector involvement in providing inputs or marketing¹.

8. Since 2000, Angola has embarked on a programme of economic stabilization leading to lower inflation (from 268% in 2000 to 55% in 2004, further expected to decline to 25% in 2005). Since May 1999, following the liberalisation of the exchange policy, the Central Bank of Angola publishes the daily Kwanza reference rate (AOK), which is the moving average of commercial bank lending rates. The difference between the black market and the official exchange rate is minimal (less than 1%).

II. OVERVIEW OF COFFEE

A. Demand and Supply Situation and Forecast

9. In terms of global commodity trade, coffee is world wide second only to oil in terms of export earnings of the developing countries, and represents about 1% of the total value of world imports and exports. Coffee is grown and exported by more than 50 developing countries but the major coffee consumers are all industrialised countries such as the USA, Japan and Europe. In recent years, coffee export earnings of developing countries amounted to some USD 10 to 11 billion annually and, thus, coffee plays a very important role in the balance of trade between developed and developing countries. Brazil, Colombia and Vietnam grow almost 60% of world production, and Latin America, 63%.

¹ IMF Article IV Staff Report - 22 February 2005

10. The two coffee species currently exploited on the world market are Coffee arabica L. (Arabica coffee) and Coffee canephora Pierre which produces coffee commercially called Robusta.

A.1 Production

11. After years of excess supply since the late 1990s due to improvements in coffee production world wide supply, this trend (“coffee curse”) was reversed during coffee years 2004/2005 year, as production is expected to decrease by about 6%, amounting to about 112 million bags and for 2005/2006, at 113 bags. This is due to an anticipated drop in Brazil’s 2005-06 production level (production year-over-year down by 14%, due mainly to the biennial production cycle of the Arabica tree). Vietnam’s production is also down by 2 million bags from 2004-05 (14% lower than the year before, but a 12.2 million bag drop from 2004-05’s yield). However, Robusta production seems headed for recovery from last year, and yields will offset total production decreases. During 2004-2005, African coffee production appreciated to 911,400 tonnes while Asia and Oceania produced 1,699,800 MT, Mexico and Latin America 1.012.800 tonnes and 3.180.00 tonnes

12. The distribution per type of coffee indicates an average share over the last three crop years of about 40% of washed Arabica, about 28% of unwashed Arabica and about 32% of Robusta. Due to the El Niño phenomenon in particular Robusta production has suffered in the recent years. Its influence has sharply reduced the size of the 1997/98 crops and continued its impact on crops in 1998/99. In early 2005, poor weather conditions in Vietnam and Indonesia took prices to their highest levels in four years.

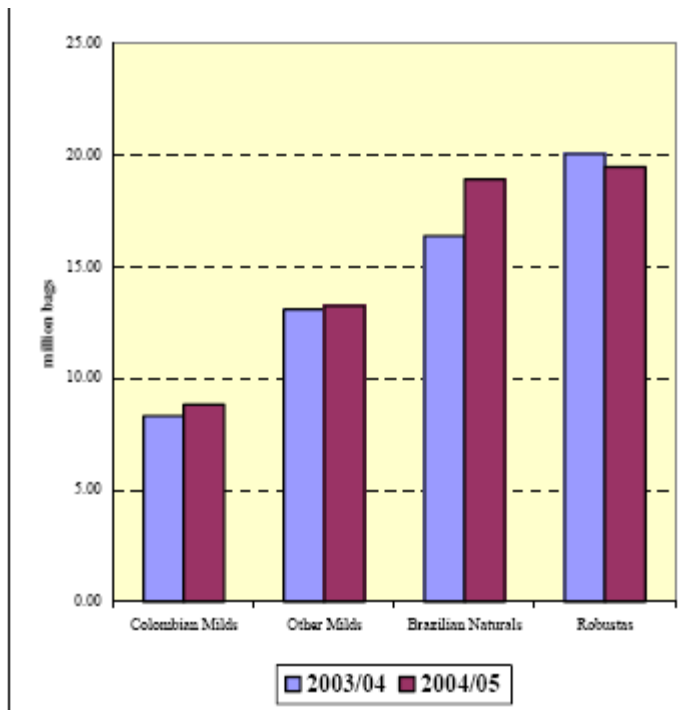
A.2 Exports

13. Export projections are based on the assumption that shipments will be in line with exportable production. This proved reasonable over the past three coffee years, with minimal carry-over stocks outside Brazil and Colombia, futures prices generally in an inverted structure and a free market in coffee.

14. The USDA estimates exports from Brazil at 23.6 million bags for 2004-05, representing a 5.9% decrease over last year. Vietnam exports are estimated down by about 8% to 13.3 million bags due to poor weather conditions. Nevertheless, overall world exports appear to be increasing, up almost 11% from 2003-04 to 2004-05. The higher projected overall production of coffee in 2004-05, combined with the lower anticipated exports compared with last year, suggests an upward impact on ending stocks, estimated to recover to 25.8 million bags. As of May 2005, total volumes of exports for the first eight months of the campaign stood at 60.52 million bags. Arabica was up by 8,47% (from 37,81 million bags to 41,02 million bags) while Robusta was down 2.82%²

² ICO Managing Director’s Letter of June 2005

Exports 2003/2004 and 2005/2006



Source: ICO (June 2005)

A.3 Coffee in Stock

15. U.S. coffee stocks at the end of January 2005 totalled 5.2 million bags, up 89,316 bags from the December 31, 2004, level.

16. Neither the London Terminal Market nor New York were paying full cash and carry. These conditions have changed somewhat recently. New York is now paying the full cost of holding coffee from September through to December and paying a high percentage of the cost of carry through to March. A low market also reduces the capital cost of holding coffee. A further increase in stock figures is therefore expected. In June 2005, the US Green Coffee Association published 2005 figures above expectations (72,290 bags of 60 kgs against 50,000 bags expected).

A.4 Consumption

17. The increase in coffee consumption during the seventies and eighties is slowing down. This can be observed in particular in various traditional importing countries. Today, world coffee consumption is at a relatively stable level. Reductions in Northern and Western Europe over recent years were counterbalanced by increases in Southern and Eastern Europe as well as in various producing countries.

18. World coffee consumption in 2003/04 is estimated at 117.3 million bags, up less than 1 percent from the preliminary 2002/03 level—89.5 million bags in importing countries and 27.8 million bags in exporting countries.

19. Coffee prices reached 101.44 US cents per pound in March 2005, a 67% increase compared to the level of 60.80 US cents. At the end of June 2005, Arabica fell by 22% in

New York (from 130.5 cents/lbs to US 102.5 cents/lbs at the end of May 2005). Robusta, which had resisted fairly well, was eventually affected. Coffee is one of the most volatile commodity futures markets, especially before and during the Brazilian winter from May to August, when players speculate on the prospect of a crop-damaging frost. Late in 2004, world coffee prices started to recover from a five-year depression caused by a global glut before plunging to an eight-month low of 95 cents, down 27 percent from 130 cents in early June 2005. Prices are expected to remain stable, with New York arabicas staying around \$1.05/lb and \$1.10/lb.

20. In April 2005, the average daily price fell to 98.2 US cents per pound, following some profit taking by investment funds. Rising coffee prices were underpinned by stronger market fundamentals: reduction in output, growing world consumption, and an anticipated fall in stocks of green coffee worldwide. World coffee production in 2005/06 (October/September) is expected to reach 6.3 million tonnes, a decrease of 6.2% over 2004/05. In the main producer countries, Brazil and Viet Nam, the 2005/06 outputs are expected to decline by 18% and 11% respectively, which could lead to a continued upward trend in world prices for the rest of the year. Coffee prices began to stabilise in 2001 and made a hesitant recovery through to the last quarter of 2004.

A.5 Niche Markets

21. Interesting opportunities are represented by the market segments of Speciality and Gourmet coffee as well as Organic coffee where partly substantial premiums are paid.

22. The American coffee industry as well as the Coffee Speciality Association of America estimate the importance of Speciality coffee at about 22% in terms of volume and about 27% in terms of value in 1997. Of these coffees, however, about 50% are artificially blended with aromas and syrups and therefore do not offer any commercial opportunity for producers of quality coffee. Based on a more restricted definition the participation of Gourmet coffee is estimated at about 8% (approximately 1.6 million bags). The segment of Speciality coffee including Organic coffee is increasing in the USA, Europe and Japan.

23. On the side of Organic coffee estimates on the actual dimension of this market segment vary considerably. The market is principally supplied by Colombia, Costa Rica, El Salvador, Guatemala, Indonesia, Mexico, Nicaragua, Papua New Guinea and Peru. It is supposed that the dimension actually does not reach the level of 400.000 bags per year. However, the opinion of representatives of this sector is that the consumption of organic coffee offers an interesting potential of growth. Increases in consumption are expected in the USA while increases at a smaller scale are predicted for Europe (Germany, Netherlands, Switzerland, Scandinavia) and Japan.

24. Presently, premiums of about 20 – 25% above the quotation at the international coffee exchange are reported.

A.6 Market Prices

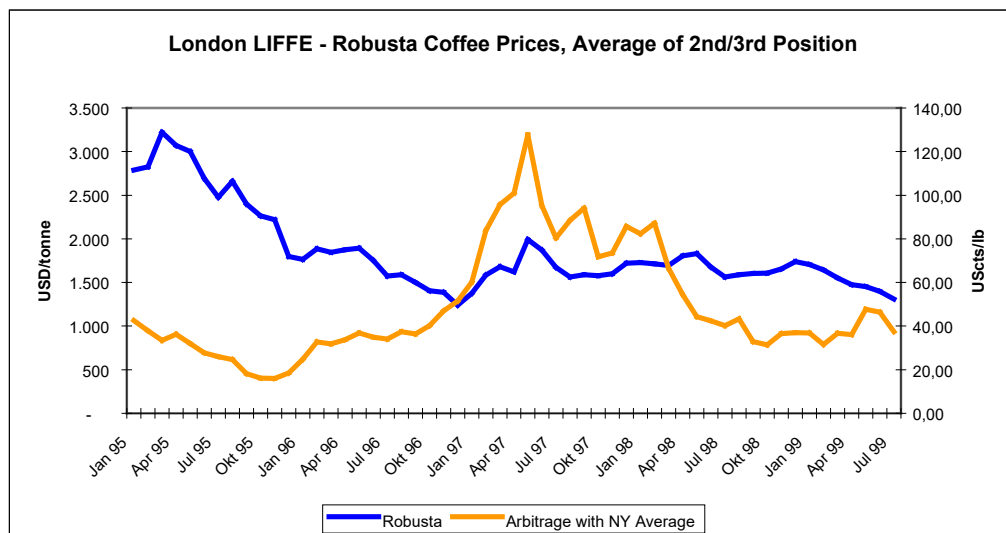
25. Coffee prices are determined through the relations between supply and demand. While demand is rather stable supply is characterised by certain fluctuations. Coffee as an agricultural commodity is subject to varying levels of yields due to climatic factors,

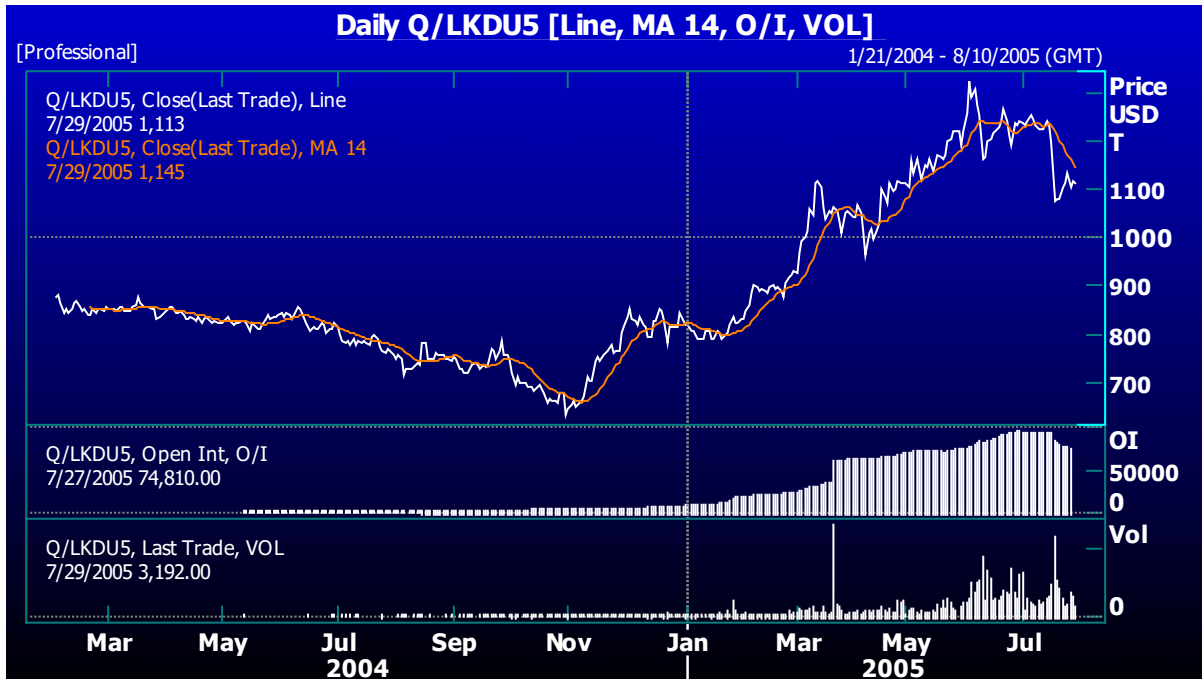
production cycles, frost, draught, pests and diseases, intensity of care etc. Prices, as a result, are generally less stable.

26. In particular, the frost in Brazil in 1994 coffee made prices rather volatile as speculators (commodity funds) entered aggressively the coffee market. They are in particular responsible for a great deal of price movements, as recently experienced this year when they entered and exited the market between March and June 2005. Indeed, mid March, coffee reached US \$143 cents lbs, before losing 30% (September NYBOT 2005) and return to its lowest levels since mid-December 2004.

27. Evaluation of all market information on its implications results in adjustment of prices according to expectations. The prices represent the expected availability of coffee in the future, in the course of which the dynamics of harvests, the influence of political decisions, the development of consumption etc. are attempted to anticipate.

28. Concerning price development in the international market a decrease could be observed after the suspension of the quota system in 1989. Due to a reduction in both production and coffee stocks, indicating a situation of tighter supply, the market, thus, relied more on the current production. This situation is reflected in the increase of prices since 1993. The trend has been spurred by the frost in Brazil in 1994. Upon the expectation of the record crop in Brazil of approximately 35 million bags coffee prices have declined since the beginning of 1998. They reached levels around UScts/lb 85.00 for Arabica and US\$ 1,349.00 per ton for Robusta by the end of August 1999. In 2005, they reach about UScts/lb 100 in New York and US\$ 1,100 per ton in the London futures market.





Coffee futures prices in New York



Source: Reuters 8/2005

Short Term Development

29. In the short term the market dimension and the overall price level are principally determined on the basis of the present situation of coffee fundamentals and its projection, say, until the end of the present coffee year. Price volatility is mainly caused by speculation. Volumes of supply and demand are almost given factors not expected to change significantly

due to unforeseen events. Based on the present figures a supply deficit of about 9.0 million bags occurred this season. At the second quarter of 2005, the recovery was confirmed with a shift in the Arabica and Robusta price differentials. After reaching its lowest levels in October 2004, Robusta prices never stopped increasing thanks to a weak dollar. Drought in Vietnam contributed to the sharp increase during Q1 2005. The estimated 2004 world consumption is at 114.4 million bags. Also, the 2004-2005 world crop estimate was reduced from 114.0 to 110.5 million bags. On April 22, 2005, the Brazilian government estimated its upcoming 2005-2006 coffee crop at 32.5 million bags. The Arabica portion was estimated at 22.5 million bags, down 25% from the previous year. On June 10, 2005, the USDA estimated Brazil's 2005-2006 coffee crop at 36.5 million bags with 26.0 million bags of Arabica. It also predicted a drop in world 2005-2006 ending coffee stocks, by 6.3 million bags to 14.9 million 60-kg. bags or 13% of annual use, the lowest in over two decades. World production is estimated at 113.1 million bags with 119.4 million bags of implied total use³.

30. Prices are generally expected to remain stable after profit taking of speculators in view of rather stable levels of consumption and despite a decline in production. Without the incidence of unforeseen factors traders expect Arabica coffee to continue trading below the level of UScts/lb 100.00 in the near future. Also in the arbitrage between New York C and LIIFFE no major changes are expected.



Long Term Development

31. Long term development is very difficult to predict as coffee fundamentals turn into variables. Any projection has to depart from a couple of assumptions drawn up on the basis of the present situation and identified trends. Disastrous natural impacts have to be omitted.

32. On the side of supply the trend is for further improvements in production where efforts in the rehabilitation of plantations with the introduction of high yielding hybrid varieties are expected to continue principally in Latin American and Asian countries. The 45 members of ICO have agreed to restrain production, but coffee overall volumes are likely to exceed the current levels of 110 million bags.

³ Dow Jones Newswires. July 21, 2005.

33. The development of stocks will depend on both the figures of production and consumption. The price structure in the futures market as well as the purchasing behaviour of roasters will have great influence on the amounts of coffee stored in producing or consuming countries. In the usual carry structure of the market where storing costs are paid for by the price levels of future positions the trade and roasting industry is more inclined to take on stocks. On the other hand the continuation of the just-in-time policy of roasters may push some responsibility for holding the surplus onto the producers.

34. Stocks of green coffee in importing countries (including free ports) totalled 21.5 million bags as at mid-2005, against 18.0 million bags at the end of the 1999/2000 crop season.

35. On the side of demand many traditional coffee growing countries are characterised by stable markets like the USA, Northern Europe, the Netherlands or Germany. Total consumption in all importing countries is estimated at 85.15 million bags in 2004 compared to 83.36 million in 2003. Consumption remains stable with a slight increase over the past few years in a few countries such as the United States. With an increasing income elasticity and rather high competition within the coffee industry the segment of mainstream coffee is likely to further suffer primarily from cost pressure. A trend to an increased use of lower quality coffee is expected. In Central and Eastern Europe, where per capita consumption is still laying behind, as well as in Asian countries a good potential for further increases is seen. However, much will depend on the economic development and the increase in consumer income. Market growth is also expected to come from producing countries. Consumption levels are likely to remain stable at levels of around 103 - 105 million bags in the longer term.

36. At the moment, all factors indicate a continuation of the oversupply situation in the coffee market for the next couple of years accompanied by depressed prices. Long term price development, however, is impossible to predict as much will depend on the reaction of speculating funds to any natural, political or financial factors. As an approximation for price levels long term averages may be used. For the quotation of the spot month in the futures market the following averages are available:

New York – Arabica Coffee	
• 10 year average	UScts/lb 95.85
• 5 year average	UScts/lb 63.13

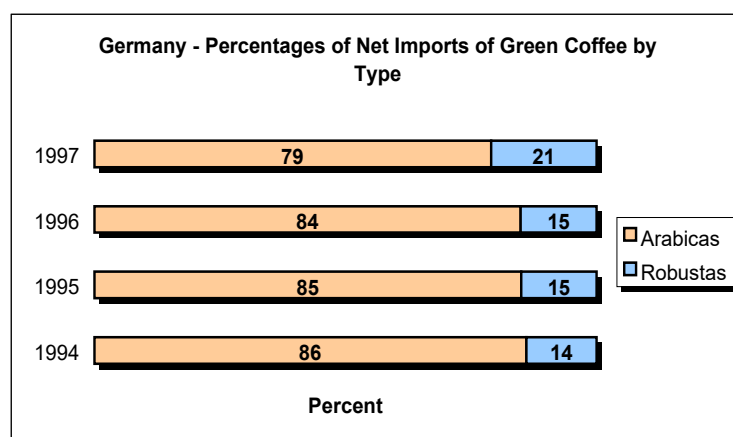
B. The Situation in the International Robusta Coffee Market

37. Asian countries are dominating the production of Robusta with a total share of about 50% followed by African producers with about 30% and American countries with about 17%.

38. Robusta production, which suffered from the El Niño effects in 1997/98 and 1998/99, is expected to increase to about million bags in the 2004/2005 crop year representing about 35% of total coffee production (Table 1, Annex 1). Vietnam is the largest Robusta producer since 1998/99 when it passed Indonesia with a production of 6.6 million bags compared to 6.3 million bags. In the current crop season, Vietnam's production has dropped by 11% following a drought. In Africa Ivory Coast is the most important producer followed by Uganda and

Cameroon while in Latin America Brazil followed by Ecuador produce significant amounts of Robusta coffee.

39. The world coffee blend, i.e. the world wide usage of different coffee types, has experienced a sharp increase in the share of Robusta in 1997. The high level of arbitrage during the year encouraged a movement towards Robusta usage in Eastern Europe as well as in Japan and in the USA where the bulk of coffee supply is sold in the less quality conscious market segments. A surprise has been the extent to which Robusta coffees have increased market share in the countries of the European Union, even in some of the markets where the national taste is based around Arabica blends. Since 1994 the percentage of Arabica coffee in blends, for instance, has been reduced in Germany by about 7% while the percentage of Robusta coffee has increased accordingly.



Source: European Coffee Report, 1998

40. In 2005 the most important Robusta importing countries have been the USA (about 2.0 million 60 kg bags), Germany, Italy, France, Spain and Japan. Market preferences in these countries vary to a large extent. African Robustas, for instance, are chiefly imported by Italy, France, Spain, Poland, Germany, and the USA.

41. The overall market situation and the arbitrage between the price level at London LIFFE and the NY C Contract determines the percentage of each type of coffee in the blend. At high prices roasters are inclined to substitute Arabica coffee with Robusta in order to cut prices while at low price levels the share of Arabica coffee is increased.

42. Generally, there is a trend for mild Robusta coffees, some of which are trading with a substantial premium in the international market. Highest premiums are achieved for well graded top quality washed Robusta coffee from India or from Uganda characterised with a particular mild flavour and a good cup.

C. The Importance of Coffee in Angola

C.1 Historical Aspects of Coffee Production in Angola

43. Prior to independence, about 500,000 ha of coffee were harvested per year. Production was dominated by Robusta coffee (95% of production). Only in the Central Highlands (Planalto Central) some Arabica coffee has been grown (5% of production).

Coffee growing areas prior to independence

Province	Harvested Coffee Area [ha]
Uíge	161,000
Kwanza Sul	120,000
Kwanza Norte	112,000
Bengo	71,000
Bié	10,000
Benguela	9,200
Cabinda	5,300
Huambo	5,000
Malanje	3,500
Zaire	3,000
Total	500,000

Source: INCA, 1989

44. Production was dominated by large plantations. Almost 60% of the coffee area was managed by plantations with more than 100 ha each. They produced about 70% of the crop.

Structure of the coffee growing industry prior to independence

Category	Total Area	Percentage
0 – 10 ha	100,000 ha	20%
10 – 100 ha	105,000 ha	21%
100 – 300 ha	120,000 ha	24%
over 300 ha	175,000 ha	35%
Total	500,000 ha	100 %

Source: INCA Statistics

45. The large plantations often had a sophisticated infrastructure of roads, water and electricity supply. They disposed of all necessary equipment and used to have their own processing facilities. They recruited man power from the Central Highlands in particular during the harvesting season and kept them in a status of dependency through suppressing contracts. Agrochemical inputs were applied regularly and yields were in the range of 450 – 520 kg/ha of green coffee. Total production reached about 230,000 t in the early 1970ies. Angola by that time was no. 4 among the coffee producing nations in terms of production.

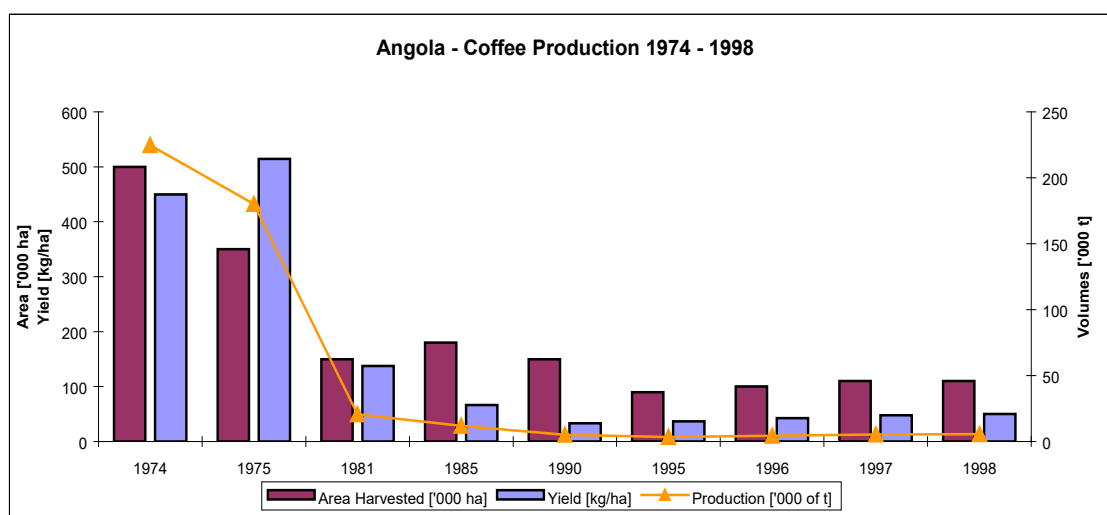
46. After independence, the situation changed drastically. The majority of the original farm owners left the country and the government nationalised most of the farms. In total 33 state enterprises were created to run a number of plantations and to commercialise its coffee production. Experience of the new farm managers, however, was very limited and, thus, a combination of mismanagement, loss of labour and poor supply of essential inputs led to the drastic decrease of yields. INCA statistics indicated the average yield of the state farms around 80 kg of green coffee per hectare.

47. With the shift to a market led economy in the beginning of the 1990's the government privatised the state farms by subdividing and giving them to the private sector. The beneficiaries of this process were small scale farmers but mainly civil servants and other privileged individuals from the official and the private sector. The deterioration of the security situation following the elections in 1992 did not allow the new farm owners to rehabilitate the coffee plantations.

C.2 Characterisation of the present Situation and Identification of determining Factors

C.2.1 Production

48. Harvested area has decreased to about 100,000 ha and production figures today reach about 5,000 – 5,500 t of green coffee per year. Yields vary to a large extent depending on the intensity of the cropping system and the resources used for coffee production. Today the vast majority of coffee in Angola is harvested by small scale farmers. It is estimated that commercial plantations contribute only by about 8 – 10% to harvested volumes.



49. Due to the employment of family labour small holders presently achieve higher yields than large scale plantations depending on external workforce which is scarce and only available at rather high cost. Many of the larger farms which were abandoned are now being rehabilitated by private investors or divided into smaller plots. Some of them are still mined although the demining process is progressing well. In vast areas, in consequence, coffee grows without being attended and cannot be harvested. Average yield in Angola, therefore, should be close to about 50kg/ha green coffee although in productive areas about 150 – 250kg/ha green coffee are being harvested.

50. The low level in coffee production today (estimated at 1,969 tonnes produced over 23,000 ha in Kwanza Sul as of June 2005) is related to a number of factors both crop related and socio-political. Most plantations are old, pests spread and crop husbandry, in general, is deficient. Agricultural inputs are either not available or can only be purchased at high prices and essential support services like rural extension, research and financial systems are practically not in function. Furthermore, several farms are still mined, farmers and their families were fleeing from civil strife in their home places and rural infrastructure has been destroyed. Due to scarcity and high demand gross margins achieved in certain food crops are sometimes more attractive than those in coffee. INCA estimates that 170 million Euros will be required to rehabilitate the entire coffee sector in Angola over several years.

C.2.2 Processing and Commercialisation

51. Coffee marketing has been liberalised and the parastatal CAFANGOL, today, competes directly with companies of the private sector. A number of licensed traders are involved in the commercialisation of coffee. Licenses are granted by the Ministry of Commerce upon recommendation of INCA. Coffee can be traded in form of café mabuba (dried cherries) or café comercial (green coffee).

52. Small scale farmers are merely not in the position to participate in added value generating processes and are restricted to sell their coffee in form of dried cherries. The intermediaries care for coffee hulling and the transport to Luanda where they sell it to exporters. The majority of processing facilities for hulling of coffee cherries in the producing areas is outdated. Breakdowns occur frequently and their processing yield is low (45% as compared to 50 – 53% achieved with new hulling equipment). Although a number of hulling stations exists in the producing areas net working capacity is reduced. Functioning hulling stations are sometimes rather distant and transport costs are high due to a lack of transport facilities and poor infrastructure.

53. Medium to large farmers often commercialises green coffee hulled at their own premises or with licensed hulling stations, which offer the service against payment. Medium to large farmers may also enter in direct commercial contact with exporters.

54. There is no continuous flow of coffee to the exporters during the harvesting season and in view of the low level of production intermediaries and exporters frequently have to blend coffee from different sources and store it for a longer period in order to accumulate sufficient volumes for forming commercial lots. Internal transport is chiefly realised by use of trucks with a loading capacity of about 10 t whereas the average export lot from Angola comprises 250 bags of 60kg (15 t). In view of a rather high degree of loss in export processing and a high share of output classified as residues about 20 t of café comercial are required to achieve an export lot.

55. Due to infrastructure problems caused by the poor conditions of many interregional roads, internal transport is hindered and tends to be expensive. After the breakdown of the harbour facilities at Lobito, Porto Amboim and Cabinda, commercialisation costs further increased due to the fact that merely all export business has to be realised through the port of Luanda. All three functional facilities for export processing of coffee are also concentrated in and around Luanda. The Lobito port is being rehabilitated and the train connection from Lobito to Cubal (197 km) is operational again.

56. INCA is responsible for observing the commercial operations in the coffee sector. It therefore establishes minimum reference prices for the purchase of coffee at farm gate level as well as minimum export prices on the basis of the quotations in the international market. These prices reflect the government's policy that each group of market participants, i.e. producers, traders/intermediaries and exporters, should equally benefit from the value of coffee and, in consequence, be entitled to receive 1/3 of the coffee's export price. The official reference prices are established both for café mabuba and café comercial as well as for Robusta and Arabica coffee. They are revised regularly by INCA and are announced to the provincial and municipal authorities as well as to exporters. No business can take place below the level of the corresponding reference prices. Although farm gate prices are above the minimum reference price as published by INCA farmers in the municipality of Amboim

obtain merely about 45 – 47% of the f.o.b. value of their coffee (tables 2 and 3, annex 1). Compared to the level of farm gate prices in other coffee producing countries (Guatemala 70%, Uganda 66%) this is rather low.

C.2.3 Exports

57. Volumes in coffee exports had been variable at a very low level. On average over the last three years about 50,000 bags of 60kg have been officially exported on an annual basis. The volumes smuggled to the Democratic Republic of Congo are unknown. Most important destinations are today Portugal, Spain, Italy, Germany and Holland. The country does not face any marketing problems. The limiting factor is with production, not with international marketing.

Angola – Export Volumes in bags of 60kg per Coffee Year

1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	2004/05
49,000	11,400	24,640	53,430	45,810	50,220	6,555

Source: INCA Statistics

58. Export business is realised by a handful of active exporters, whose number shrank from 14 in the late 1990's to only four in 2005, who work in a difficult environment. Although interest rates declined, the conditions of bank loans are still difficult for small businesspeople and exporters therefore have to employ own capital resources for prefinancing intermediaries and buying coffee. Since volumes are low and the flow of coffee is not continuous business can only be realised on a spot basis. Hedging is impossible and the price risk is always with the coffee owner. Exporters, on average, hold coffee for about 90 – 120 days from the time of purchase until the shipments can be realised. Coffee is sold to the international market by irrevocable letter of credit.

59. After a decline in importance during the mid-1990s, the role of CAFANGOL has increased with about 10% in coffee exports. The company now exports between 70 to 80% of coffee.

Volumes and Values in Coffee Exports in 2004/2005 per Exporter

Exporter	Number of Bags of 60kg	Value USD
CAFANGOL	3.855	124,920
Angona Betro	2.700	122.100
Total	6.555	247.020

Source: INCA Statistics

60. After reaching USD 182.4 million in 1974, the value of coffee exports plunged to only about USD 4.0 – 5.0 million in the early 2000s. It is now estimated at USD 247,020.

61. Coffee consumption in Angola is low and estimated to reach about 25,000 – 30,000 bags per year. 4 – 5 companies including CAFANGOL are roasting coffee in Angola and are selling the production to the national market.

C 2.4 Coffee Quality

62. The quality classification system is based on the producing areas where Ambriz and Amboim coffees are distinguished. Ambriz coffees are originating from the northern provinces of Uigi, Zaire which used to be exported through the harbour of Ambriz. Amboim

coffees originate from the provinces of Kwanza Sul, Kwanza Norte, Benguela and used to be exported in particular through Porto Amboim.

63. The grading system classifies coffee according to bean size in “Grado”, “Medio” and “Corrente” and according to defects in “Extra”, “Superior”, “1a Qualidade”, “2a Qualidade AA”, “2a Qualidade BB”, “3a Qualidade CC”, “3a Qualidade DD” and “Residuos”. The vast majority of export lots today belong to the segments of “2a Qualidade AA and BB”.

64. Angolan Robusta coffee is famous in the international market for its neutral and pleasant cup without showing the typical penetrating Robusta taste. It usually has a very good acidity. It is used in particular in Southern Europe in blends with Arabica coffee to give them a strong and balanced aroma.

65. Today, coffee from Angola is not necessarily homogeneous in terms of quality and age. Traders in the international market confirm that Angolan coffees are often characterised by an oldish taste, yellowish colour and a very low moisture content. Nevertheless, still premiums are paid in particular in Portugal and Spain for Angolan Robustas. In August 1999 traders reported the following differentials on a c.i.f. basis:

- Amboim 2^a Qualidade AA Corrente USD +225.00 per tonne
- Amboim 2^a Qualidade BB Corrente USD +175.00 per tonne
- Ambriz 2^a Qualidade AA Corrente USD + 75.00 per tonne
- Ambriz 2^a Qualidade BB Corrente USD + 25.00 per tonne

66. The most important quality in terms of volumes is 2^a Qualidade BB Corrente.

67. The market potential for Angolan Robusta coffees was confirmed to be very good. Additional quantities could easily be sold. The lack of continuity in availability of Angolan coffees as well as the variations in quality were stated as problematic. As quantities would increase, however, differentials would tend to ease.

68. Presently, no cup testing is realised and coffee is only checked by appearance, defects and bean size. This represents a market risk since off-flavours cannot be detected.

C.2.5 Support Services

69. INCA has several services to support coffee production. At the central level there are the Department of Technical Assistance, responsible for technical support to farmers especially the small-holders, the Department of Research and Experimentation, in charge of promoting research leading to more productivity as well as better coffee quality and the Department of Licensing dealing with issues related to classification, certification and licensing of exports. There is also a Central Laboratory with potential capacity for different types of analysis, namely plant and soil analysis. The Laboratory is not functional at present.

70. On a regional level INCA runs three Regional Research Stations which are decentralised services with the mandate to promote research and experimentation in collaboration with the Department of Research. These services can at times render assistance to producers especially by providing improved vegetative material. The regional services operate through three main sections namely the plant improvement section, the crop

husbandry section and the extension and vulgarisation section. Of the three stations, presently, only the station in Gabela is functional on a very low level.

71. Also in the region there are the Technical Brigades (“brigadas técnicas”) INCA’s rural extension service. These brigades perform a variety of activities ranging from assistance to producers on crop husbandry techniques to representing the Coffee Development Fund (FDCA) for credit purposes.

72. At local level there are two main services: the licensing agencies and the coffee development nucleus. The former are in charge of classification, storage and licensing of coffee for export at local level. The second are in charge of the registration of coffee producers, merchants and other stakeholders active in the coffee industry in the area.

73. In 1998 a survey on the technical staff of INCA showed that, in total, there were about 36 graduates and 83 technicians (Medium level) most of them in agronomy. However, two thirds of the graduates and about 50% of the technicians were in Luanda. Kwanza Sul Province had 5 graduates and 9 technicians (*técnico médio*).

74. INCA’s technical brigades are understaffed and poorly equipped what limits their coverage ability. For instance in Gabela there are 12 supervisors divided by areas. One supervisor was said to work with 78 farms. According to the program they should visit each area at least once a month. Lack of transport and other technical equipment are a major constraint and restrict severely the number of visits. Salaries of personnel are very low and the absence of incentives for staff in the field has a negative impact on their performance. There is also a lack of adequate and well programmed training activities for technicians in charge of providing technical assistance as well as an adequate budget to finance operations. This is also valid for research where the operations at the regional research station in Gabela are presently limited to seed preparation from selected amboim clones, seed nursery and to some extent to clonal propagation. All the above mentioned factors result in poor technical assistance and very limited research being carried out on coffee.

C.2.6 Financing

75. Financing for the agricultural sector is practically not existent in Angola. Experience with low rates of loan repayment, the insecure situation related to the internal conflict, the high rate of inflation as well as the continuous devaluation of the local currency represented a great risk for banking institutions. Today, despite the return of peace and the relative stabilization of the Kwanza (since the last quarter of 2004, in the range of 85-89 to the dollar), interest rates are still high and reported to be in the range of 20 – 30 % per year. Credit operations are beginning to take place, including in microfinance. All steps involved in coffee marketing are still very much financed from the respective participants’ own financial resources.

76. Capital is still needed to finance the activities in the coffee sector, for more investments and essential agro-chemical inputs. Routine farming operations like weeding or pruning cannot be realised and the production of many large scale plantations cannot be harvested due to a lack of funds to pay for required labour. Small scale farmers often lack adequate farming tools but at least can harvest their coffee since primarily family labour is employed.

77. Despite recent improvements and the decline in inflation, the banking system is still risk averse; especially in rural areas farmers tend to use coffee as a saving account. Usually, they only sell part of their production immediately after harvesting and keep the rest in stock to sell it whenever the need arises.

78. Coffee business, furthermore, is frequently not realised on a cash basis. Often coffee is bartered for agricultural inputs like basic farm tools as well as food items. This system is used by intermediaries for prefinancing the coffee harvest.

C.2.7 Government Strategy and Support to the Sector

79. Since the signature of the peace accord the Government has gone ahead with the implementation of programs in favour of the rural population supported by international donor organisations such as the UNDP, the International Organisation for Migration (IOM), USAID or the Worldbank. Programs were principally humanitarian aid oriented and, in addition to activities promoting resettlement in rural areas characterised by components encouraging primarily the production of key food crops. The promotion of cash crops such as coffee has been considered within the programs but has not yet been the focus of project work.

80. The Government is aware of the difficult situation of coffee farmers and the importance of the factors limiting the development of the sector. It considers the potentials of coffee production in economic and socio-economic terms and gives priority to the rehabilitation of coffee plantations and the resettlement of rural families.

81. In its sector strategy the Government has formulated the following general objectives:

- Increase of the productive potential of the sector
- Increase of foreign exchange earnings from coffee
- Increase of employment
- Socio-economic integration of demobilised soldiers, displaced families and graduated young people.

82. Focus is put on the traditional coffee producing provinces like Uige, Kwanza Norte, Kwanza Sul and Bengo, where economic and social activities are almost completely depending on coffee. The Government is favouring an integrated approach and by providing required services and defining favourable economic policies for producers is aiming to encourage the initiatives of the private sector.

83. Priority is given to the integration of demobilised soldiers, displaced families and young people in order to contribute significantly to a climate of social stability. The coffee sector is believed to represent the potential to absorb a considerable number of these people as agricultural entrepreneurs, agricultural workers as well as family producers.

84. As a perennial crop coffee is considered as beneficial for the environment. Within the scope of cultivation, cautious production practices shall be given priority. The creation of farmer organisations such as co-operatives or associations is going to be encouraged to enable the participation in added value generating processes. Additionally, the establishment of producer, trader and exporter interest groups shall be promoted to allow an active involvement of key players of the coffee industry in determination of relevant policies. The implementation

of the strategy, however, is hindered through the reactivated armed conflict since last year in parts of the country.

III. INSTITUTIONS INVOLVED AND RESPONSIBILITIES

A. Supervisory Body: International Coffee Organisation (ICO)

85. The International Coffee Organisation is the International Commodity Body (ICB) recognised by CFC for the submission of coffee projects. According to the Guidelines of the CFC the ICB is inter alia responsible for the supervision of projects it sponsors.

86. Apart from its role as ICB the International Coffee Organisation is a well equipped institution for the supervisory task. It has a vast experience in the coffee sector which facilitates an assessment of project concept and progress. Over years ICO has been successfully assisting and supervising coffee related projects financed by the CFC.

International Coffee Organisation (ICO)

22 Berners Street
London W1P 4DD
United Kingdom
Tel.: 00 44 20 7580 8591
Fax: 00 44 20 7580 6129

Person to contact: The Executive Director

B. Project Executing Agency: INCA Instituto Nacional do Café de Angola (INCA)

INCA would be the Project Executing Agency.

Instituto Nacional do Café

Avenida 4 Fevereiro, 107
c/o C.P. 527
Luanda
Tel: 00-44222 338-678
Fax: 00-44222-338-678

Person to contact: The Executive Director, Mr. Manuel Dias

87. The Instituto Nacional do Café de Angola is responsible for supervising the country's coffee sector. It ranges under the tutelage of the Ministry of Agriculture.

88. While the institution formerly was in charge primarily for technical aspects related to coffee its responsibilities have grown after the dissolution of the Secretaria do Estado de Café (SECAFE). INCA, today, is in charge of the following issues:

- Organise and supervise the activities related to coffee production, commercialisation, processing and exportation with the aim of allowing a sustainable development of the sector and the national economy.

- Provide technical assistance to coffee producers to increase production and improve the quality of coffee
- Establish the linkage and co-operation with national and international research institutions to promote the exchange of research findings and the dissemination of information within the extension service.
- Care for the quality of Angolan coffee and the accomplishment with internationally valid rules in the export business; issue certificates of origin, quality, weight and phytosanitary conditions.
- Elaborate and implement coffee development programs and promote and the formation of producer organisations.
- Collect, analyse and disseminate coffee related data and market information.
- Promote the professional education and training of participants in the coffee sector.
- Participate in national and international forums of interest for the coffee sector.
- Periodically establish and disseminate minimum reference prices in the internal commercialisation and for export business.

89. The long standing close relationship of INCA and SECAFE will assure a sound performance of its duties. Due to its competence, experience and responsibility INCA have been designated as the Project Executing Agency.

C. Ministerio de Agricultura e Desenvolvimento Rural (MINADER)

90. Ministry of Agriculture and Rural Development with its Land Use Department (Departamento Nacional de Ordenamento Rural – DENOR) will be responsible for the identification of suitable land for settlement together with the Governor of Kwanza Sul province and the traditional authorities (*sobas*) in the project area as well as for the concession of land titles to the settlers or their organisation(s).

Ministerio de Agricultura e Desenvolvimento Rural (MINADER) Departamento Nacional de Ordenamento Rural (DENOR)

Luanda
Angola
C.P. 527
Tel.: +244 2 320541
Fax: +244 2 323593

Persons to contact: MINADER – The Minister of Agriculture and Rural Development, Mr. Buta Lutucuta
DENOR - The National Director for Land Use, Mr. Henrique Alves Primo

D. Gobierno de la Provincia Kwanza Sul

91. The provincial government is responsible for the identification and selection of suited areas and abandoned coffee plantations for the settlement of displaced farm families. As the host of the project the provincial entities shall render all required support to the project during its implementation. They are in particular responsible for acceptable conditions of road infrastructure in the project area.

The Government of the Province Kwanza Sul

Sumbe
Angola

Tel.: 00 244 5 30303/30047/30448

Person to contact: Governor of Kwanza Sul, Sr. Serafim do Prado.

E. Ministerio de Assistencia e Reinserção Social (MINARS)

92. The Ministry of Social Affairs (Ministério de Assistencia e Reinserção Social – MINARS) with its executing Institute for Social Integration (Instituto de Reintegração Socio-Profissional para Ex-Militares – IRSEM) is for the programs related to the reintegration of displaced people and demobilised soldiers and shall collaborate with the project within the settlement component.⁴

93. MINARS/IRSEM will be consulted in selection of families to be settled in the project area. Key farmers will receive training at the Agricultural Training Centre run by IRSEM in Kikuxi/ Luanda. No additional staff training of these institutions will be necessary in conjunction with the implementation and post-operation of the project since they are receiving training from a bilateral programme supported by the German government.

Ministerio de Assentamento e Reinserção Social (MINARS)
Instituto de Reintegração Socio-Profissional para Ex-Militares (IRSEM)
C.P. 102
Luanda
Angola

Tel: 00 244 2 338125/343359/340370

Persons to contact: MINARS – The Minister of Social Affairs, Mr. Albino Malungo
IRSEM – Director General, Mr. António Andrade

F. Non Governmental Organisation (NGO)

94. For the implementation of the “subsistence” part of the settlement scheme, including preparation and organisation of settlers, assistance in logistics, construction of houses and social infrastructure, distribution of food, tools, seeds etc. during the initial stage an experienced non-governmental organisation will be contracted. Preliminary arrangements have been discussed. OIKOS is at present the only NGO with a permanent base in Amboim. CLUSA International is also very successful in the project area, with a repayment rate of 80% in Gabela (project area) and is aiming at a 100% in 2005. It has an alliance with USAID, which also expressed interest in the project, possibly through the CLUSA link.

⁴ IRSEM is in the process of being restructured. While it is presently responsible for the reintegration of ex-military personnel and their families only, it shall take over responsibility for the social integration of internally displaced people, returned refugees and other vulnerable groups (children/war orphans, old, sick and disabled people, war widows) in the future as well. Also the name of the institution is planned to be changed.

95. The organisation would be finally identified by the PEA in collaboration with MINARS and international donor agencies supporting such programs in Angola. In view of experience OIKOS Cooperação e Desenvolvimento could perform the required functions.

OIKOS Cooperação e Desenvolvimento

Luanda
Angola

Tel.: 00 244 2 331017
Fax: 00 244 2 331017

Person to contact: Angolan Director, Manuel Quintino

CLUSA Rua Costodio Bento de Azevedo, Nr. 4, Valodia, LuandaLuanda
Angola

Tel: 00244 923 34 84 54

Person to contact: Angolan Director Mr. Estevao Rodrigues

G. Local Bank

96. A local banking institution with proven experience in financing investment and development activities in the agricultural sector shall be responsible for the administration of project loan funds. In Angola, presently, the Banco de Poupanca e Crédito (BPC) or Banco de Comercio e Industria (BCI) are considered as appropriate.

Banco de Poupanca e Crédito (BPC)

C.P. 1343
Luanda
Angola

Tel.: 00 244 2 392177/390841/391231
Fax: 00 244 2 393790

Person to contact: Antonio Alberto M. da Conceicao, Direccao Comercial, Analista de Crédito

Banco de Fomento de Angola (BFA)

Luanda
Angola

Tel.: 00 244 222 638 900

Person to contact: Marcia Martins, Gestora de Contas

The suited bank would be identified by the PEA according to the criteria the CFC.

TERMS OF REFERENCE (TOR)

CHIEF TECHNICAL ADVISOR

Pilot Rehabilitation of Neglected Coffee Plantations into Small Family Production Units in Angola

97. The Chief Technical Advisor will, in the preliminary phase of the Project, reside in Luanda, and be responsible for the design and setting up of the Project's legal, institutional, financial and technical framework. In doing so, he will deal primarily with local authorities, as well as with potential financial and implementation partners identified in the Appraisal Report, with the primary aim of attaining key project objectives.

98. More particularly, he/she will follow up on ongoing discussions regarding potential co-financing arrangements (namely with the Government of Angola, and the World Food Programme), with a view to securing internal and external funding for the main phase of the Project. Any such proposed arrangement will have to be discussed with the INCA Director, to whom he/she will report as per the present TOR.

99. Likewise, he/she will define detailed implementation modalities, on the basis of the assessments made by the Appraisal Report and other relevant documentation. This will include seeking appropriate cooperation arrangements with implementation partners, such as national and international NGOs, financial institutions etc. He/she will maintain a close working relationship with the INCA Director and advise on progress made in this respect. It is expected that, after an initial period of six months, all legal, institutional and financial elements of the Project should be in place, so that its main phase can effectively commence.

100. During the main phase, the CTA will reside in Gabela (nearer to the project site than Sumbe) Kwanza Sul and will be responsible for the coordination and management of all activities connected to project implementation, in close cooperation with the implementation partners identified during the preliminary phase, and in keeping with relevant Project Agreement Rules and Regulations. This will include the facilitation, in cooperation with INCA, of procurement of all project equipment, recruitment of project staff and consultants, preparation, signature and management of sub-contracts with implementation partners and any other activity that may be required for the fulfilment of project objectives.

101. More particularly, he/she will:

- have a joint signing authority with the Project accountant and the PEA Director (INCA Director) on the project accounts.
- prepare an Annual Work Plan and Budget for the grant-funded activities, to be submitted to INCA, the International Coffee Organization (ICO) and CFC for approval;
- manage the timely implementation of such Annual Work programme and Budget;
- prepare Project Progress Reports, on a quarterly basis, including financial reporting;
- monitor and supervise loan disbursements to INCA and to final beneficiaries;

- assist in the set-up and functioning of the micro-credit scheme aimed at channelling loan resources, including in defining criteria for selection of loan recipients and modalities for credit disbursement and recovery;
- check and certify withdrawal applications made to CFC with a copy to ICO;
- monitor the status of repayments made by the beneficiaries as well as repayments made by the Government of Angola to CFC and provide timely information to INCA, ICO and CFC on these matters;
- actively participate in the organization and carrying out of an annual evaluation of the project, in cooperation with CFC and ICO;
- any other project-related task as may reasonably be requested by INCA or CFC.

IV. PROJECT DESCRIPTION

A. The Project Area

102. Target area for the pilot project on rehabilitation of coffee production will be the municipality of Amboim (see map in annex 1, graph 1). The capital of the municipality is Gabela. The area is located about 300 km south-east of Luanda and can be reached by road within about 8-12 hours. The road is in very poor condition.

103. Amboim was selected as the project area as the production is primarily based on small scale farmers. The region is safe, with the end of armed conflict and farming activities are “normal” in the area around the city of Gabela. All important support services for the coffee industry used to be available and substantial part of them can be reactivated within the pilot project pattern.

104. According to information of the provincial government about 6,000 small scale coffee growers are active in the area, of which 3,000 shall be covered by the project. Additionally, the project will attend 1,000 dislocated families. Assuming an average family size of 5 members, the project will directly benefit about 20,000 people. The war has displaced almost four (4) of the 15 million population. During 2003, over 3.8 million war-affected persons resettled or returned to their areas of origin

105. Additionally, the project will intervene in Luanda to co-ordinate activities of involved institutions and execute the measures related to the institutional support for INCA.

B. Project Rationale and Objectives

106. This pilot project aims to contribute to coffee sector rehabilitation by enhancing yields, restoring production and developing concepts that might be adapted to other coffee growing areas inside Angola as well as other coffee producing countries facing a comparable challenge.

107. The **main objective** of the pilot project is:

To increase the returns to and welfare of family farmers and displaced people in the municipality of Amboim (Kwanza Sul) and adjacent areas through reactivation of coffee production and increase in the use of man power.

108. The main objective of the pilot project shall be attained by achieving the following:

Specific objectives:

- (a) To increase the production, productivity and quality of coffee.
- (b) To increase the prices paid to farmers in relation to the f.o.b. value of coffee.
- (c) To support and reinforce the settlement of displaced families and engage them in production of coffee and food, and provide access to basic social services and improve their own housing.
- (d) To make available services of technical assistance, rural extension, credit facilities and market information.
- (e) To assure adequate project management, efficacious application of resources as well as the project's continuous accompaniment, monitoring and evaluation.
- (f) To further develop the technical capacity of the personnel/institutions involved in the project and to provide adequate equipment.

109. The expected **results** of the project are:

- (i) To prove the viability of settlement of displaced families in coffee producing areas. The impact of the pilot project of settlement of 1.000 families on reduction of the immense problem which represent displaced people in Angola (including de-mobilised ex-combatants, refugees and other affected groups) cannot be very high taking into account the total number, presently estimated at close to 2 million persons on national level. But the project might indicate possible ways to engage a significant number of unemployed people (of rural/agricultural origin) into coffee and food producers.
- (ii) To increase the yield of rehabilitated small scale coffee farms to 600 kg/ha of green coffee (after 5 years), to increase the yield of renovated farms to 800 kg/ha of green coffee (after 6 years) and to increase the yield in plantations of resettled farmer families to 300 kg/ha of green coffee (after 3 years) on a sustainable basis.
- (iii) To increase coffee production in general and particularly in the municipality of Amboim.
- (iv) To increase farmers' incomes through higher coffee production and an improvement of their participation in the commercialisation of coffee.
- (v) To improve the quality and the availability of essential support services for coffee farmers in the municipality of Amboim and to strengthen the capacities of involved institutions.
- (vi) To enhance and promote inter-institutional and international co-operation for increasing efficiency of project activities and facilitate exchange of relevant experiences.
- (vii) To provide decision takers at provincial and governmental level with a proven concept to develop strategies for coffee rehabilitation and to further develop related policies.

110. The situation in Angola is no longer unstable, removing physical risk in the project. The intervention is relevant and important. Small-scale farmers and dislocated farmer families deserve assistance in developing their self-help potentials to effectively employ their

resources in productive processes. Development processes in the affected areas will be effectively supported.

111. As a pilot project the **approach** used should be rather flexible and allow for certain refinement of activities in the course of implementation whenever situation so demand.

C. Relevant Previous Work in the Field of the Current Project

112. In 1998 under the tutelage of INCA the “1st Days of the Coffee Culture in Angola (1^{as} Jornadas da Cafeicultura Angolana)” were realised in Luanda addressing in particular the limiting factors for the production and commercialisation of coffee in Angola. The papers that were presented emphasised the necessity to intervene at all levels of the coffee sector and offering particular support for small-scale farmers. At production level an increase in the planting density, renovation of unproductive fields, improved coffee husbandry as well as improvements in the availability of basic agricultural inputs were highlighted. Furthermore, the availability of qualified essential support services like technical assistance and rural finance adapted to the particular situation were brought out. It was stressed that human resources should be further developed. The subjects presented and discussed in this event are in line with the concept of this project. This exercise was repeated regularly.

113. FAO and UNCTAD have sponsored missions in 1996 and 1998 to identify options for coffee rehabilitation and development in Angola. The reports emphasise four principal areas that should be addressed within a coffee sector rehabilitation program:

- *Policy formulation* to define the potential role of coffee in the economy together with the role of governmental institutions and companies like SECAFE and CAFANGOL in a liberalised and privatised environment. Furthermore, the development of coffee estates belonging to absentee landlords should be reviewed.
- *Institutional support* to reorganise research and development programs in the area of variety trials, agronomy, breeding, disease and pest management. The three coffee research stations located in Gabela, Uige and Ganda should be rehabilitated and basic research tools, equipment and operational funds be provided. Technical and financial support should be provided for the privatisation of CAFANGOL and PROCAFE as well as for restructuring SECAFE in order to effectively perform the services of regulating the sector, assisting research and development programs, licensing participants in coffee business and monitoring prices and coffee quality. Additionally, extension staff should be trained and adequate extension material be provided.
- *Private sector development* to support the constitution of private producers, traders and exporters associations. Furthermore, the need to provide market related information on prices, volumes, grades and production figures to all coffee stakeholders is emphasised. A private input delivery system should be established. To integrate demobilised soldiers and displaced farmer families into coffee production essential farm tools and coffee seedlings should be distributed. Rural savings and credit banks should be established.
- *Infrastructure* to upgrade the road system in coffee areas to ease the flow of coffee as well as to rehabilitate communication facilities, water supply as well as the export port structures at Porto Amboim and Cabinda.

114. The recommendations of these missions are still relevant. By focussing on the municipality of Amboim the project will contribute to the implementation of the most imperative measures of immediate importance on a pilot basis.

115. At production level EMBRAPA in Brazil has realised significant work in the Robusta coffee research to improve production patterns, coffee yields, coffee quality as well as pest resistance of cultivars. Methods represent a combination of both professional scientific research and market led economic evaluation. Impressive results were obtained in the establishment of improved production systems integrating new varieties in the state of Espirito Santo. The institution is furthermore offering highly qualified technical assistance to growers on a commercial basis.

116. The knowledge, experience and methodology in research and extension work shall be made available to the project through co-operation with relevant institutions on an international level. The training of key staff of local institutions abroad shall contribute to upgrade the qualifications of local human resources.

117. A significant number of small holders are organised in farmer associations or co-operatives. These organisations perform a vital function in the purchase and distribution of agricultural inputs and farm tools. They also represent a good potential for the mutual commercialisation and processing of small holder coffee. Family growers can thus improve their participation in added value generating processes.

118. Examples of professional small holder coffee farmer organisations exist in various producing countries such as Guatemala, Dominican Republic or Ethiopia. In these places the farmer associations or co-operatives purchase the coffee of their members, process it at their own premises and sell it directly to exporters. With their accumulated harvest they are in the position to allow for a rather continuous flow of good volumes of quality coffee and can negotiate prices with clients. Farmers benefit from value added processes provided by their organisations through higher farm gate prices. In Guatemala and Dominican Republic, furthermore, co-operatives are licensed exporters themselves and sell graded green coffee to the international market. The organisations also provide essential support services to their members in arranging for bank credits or co-ordinating technical assistance with governmental or private institutions.

119. In Angola, however, only in some places small holder organisations dispose of a firm structure and qualified management to be in a position to offer the above mentioned services to their members. Nevertheless, the formation and strengthening of farmer organisations is encouraged by the government and will be addressed within the project.

120. With the co-operative in Assangu one example of a functioning farmer organisation exists in the municipality of Amboim. 30 Associations with an average membership of about 30 farmers each are grouped together under the co-operative and use their organisation both to accumulate their production and to mutually sell coffee to the intermediaries. They are thus in a better position to negotiate prices. Unfortunately, the next hulling station is rather distant and transport costs are high reducing producers' income. In the new crop season, therefore, the co-operative plans to collect a certain amount of dried coffee from their members to accumulate sufficient value for purchasing a tractor in order to cut transport cost.

121. To promote marketing activities the government of the province of Kwanza Sul has launched a program for rendering assistance to the coffee harvesting campaign in 2004/2005. In 1999/2000, 284 medium to large plantations in Kwanza Sul were entitled to apply for funding from the Fund for the Support of the National Entrepreneur (FAEN) to finance coffee harvesting activities. In total, the harvest of an area of about 20,700 ha producing about 4,140t was foreseen. The total budget for the operation was calculated with USD 1,95 million. Credits were dollarised to protect the funds from inflation and were provided for a period of 6 months at an interest rate of 30%. According to beneficiaries of the program funds have been liberalised too late due to lengthy bureaucratic procedures.

122. Principally, the approach is considered as adequate to promote coffee marketing and, therefore, experiences of the operation shall be analysed to assess their relevance for improving the approach of the pilot project.

123. The provincial government of Kwanza Sul is no longer requiring that export processing and exporting of all coffee produced in the region be realised through the province or in accordance with the control mechanisms of the above mentioned program. This regulation was criticised among producers in certain parts of the province who would have to incur excessive transport costs due to lacking direct road access to the grading facilities in Porto Amboim. Coffee from Calulo, for instance, would have to be transported via Luanda to Porto Amboim for export processing and then transported back to Luanda for shipment.

124. The Fund for the Development of Coffee (FDCA) was established to support the coffee related operations. It provides credits at privileged rates and subsidies to support activities related to coffee production, processing, storing, internal and external commercialisation, research and vocational training. FDCA is represented in the coffee producing areas through INCA. Clients of the fund are small holder coffee growers, producer associations and companies active at the level of commercialisation and export of coffee as well as the research and training centres. Priority is given to small holders with limited potential to obtain bank finance.

125. In its actions FDCA has imported and distributed agricultural equipment (hoes, machetes etc.) to farmers at subsidised prices, it provided hulling equipment to co-operatives and private operators, it provided pick-ups and tractors to the provinces to facilitate farm operations and the transport of coffee and it supported the technical brigades and the regional experimental stations. Distribution of inputs was realised through PROCAFE.

126. FDCA is almost completely financed by the government while only generating insignificant income from the proper management of the fund. Its financial resources are limited and the funds are held in Kwanzas. Problematic, furthermore, seems to be the irregular liberalisation of funds through the Ministry of Finance. The repayment rate of funds is questionable since FDCA used a flexible approach during the war and also considered the concession of subsidies as a feasible instrument for providing incentives to rural communities.

127. The subject of FDCA's activities is considered important within the project concept. However, in view of the questionable recovery rate an experienced financing institution like a commercial bank should be involved in the project's credit operations.

128. After peace agreement signed in 1994 government planned to resettle demobilised soldiers, internally displaced families and returning refugees in regions of their origin.

Resettlement programmes started very slowly and never had an overwhelming effect in terms of number of people assisted. Since the 2002 Peace Agreements, resettlement is now almost completed, with many displaced families resettled, also in other areas.

129. In the province of Kwanza Sul resettlement so far is limited to activities of a few institutions: Acção Angolana de Desenvolvimento (AAD) with participation of the World Food Program (WFP) and the provincial government is implementing a resettlement program in Pomba Nova near Sumbe. MINARS with technical assistance of the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) is at the initial stage of an agricultural resettlement program in the interior of Kwanza Sul province. Acção Agraria Alemã (AAA) with its Angolan partner has supported various municipalities of Kwanza Sul using food for work as an instrument during initial stages. Also OIKOS within its Food Security Program in Amboim supported some families in their intention to resettle in Kwanza Sul province.

130. Experience of these programs has shown that under the existing production conditions in Kwanza Sul 2.0 ha of coffee can be maintained and harvested by an average family without contracting additional labour. Furthermore, under present conditions 1.5 ha are considered necessary for subsistence food production for a family. It is recommended to provide for approximately 1.5 ha of additional land for each family for future expansion. This with the argument that through improved technologies and possibly depressed coffee prices in future (see chapter on Overview of the Commodity) small scale producers might be in position and in need of getting more are under coffee production to maintain satisfactory income levels.

D. Project Components

D.1 Component 1: Production (Rehabilitation) of Coffee

131. The objective of the component is identical to the specific project objective (a): To increase the production, productivity and quality of coffee.

132. The output to be achieved by this component is to increase the production of coffee from the area covered by the project to about 2,000 t within three years (from 5,200 ha). Additionally, 1,800 ha will be renovated and can start production in year 4.

133. The following indicators are established to verify the achievement of the expected result:

- Availability of report on the socio-economic situation of the project beneficiaries.
- Establishment of at least 25 nurseries.
- Availability of 8.8 million seedlings.
- Continuous records on the development of soil conditions in at least 5% of farms covered by the project.
- The central laboratory of INCA is working effectively.
- Increase in the planting density in 4,200 ha to about 2,200 plants/ha.
- In these 4,200 ha production of at least 150 kg/ha in year 1, 200 kg/ha in year 2 and 350 kg/ha in year 3.
- Renovation of 1,800 ha reaching planting density of 1,650 plants/ha.
- Rehabilitation of 1,000 ha of abandoned plantations. (Production figures to be achieved are included in component no. 3).
- Availability and use of at least 750 t of Urea per year and 280 t of Zinc sulfate in year 1.

Activities:

1. Realisation of a baseline survey in the project area

134. A sound data base on the project's target group is required for the proper planning of project activities and monitoring and evaluating its impact. Presently, neither INCA nor the provincial government dispose of sufficiently accurate production related, socio-economic and economic data of the project region. Therefore, the realisation of a baseline survey is suggested that should provide information on the structure of production, holding sizes and coffee area, age of coffee trees, yield, cultivation practices, income from coffee and other crops, income from off farm activities, situation of basic social infrastructure and services, etc.

135. The baseline survey should be realised at the beginning of the project and is suggested to have a duration of about 2 months. It should be realised by a multidisciplinary team lead by a socio-economic expert. In total, 4 months of technical assistance should be foreseen to realise this activity.

2. Production of planting material

136. The rehabilitation of coffee plantations implies that new plants are gradually established in substitution of old plantations. Additionally, seedlings will be required for the renovation of unproductive fields. It is suggested that 2 ha per farmer shall be covered within the pilot project. In total, therefore 6,000 ha of coffee will be attended. It is furthermore suggested that 70% of this area will be subject to rehabilitation/intensification (see activity no. 5 below) while 30% will be renovated (see activity no. 6). Additionally, 2,000 ha will be rehabilitated within the resettlement scheme (see activity no. 7 below). For rehabilitation, therefore, 5.0 million plants will be required and for renovation about 3.0 million plants. In total about 8.8 million plants including a contingency of 10% for replanting will be needed.

137. INCA should assist the farmers with the production and distribution of new plants either on-station or on-farm. Whenever possible it is desirable that this activity be developed in the fields of the farmer's associations. Alternatively, nurseries can also be developed in the closer individual commercial farms in terms to be agreed upon with the owners. The production of coffee seedlings will be realised within the first two years of the project. It is supposed that on average 350.000 trees will be produced per nursery and that 25 nurseries be established in the project area. INCA should collect seeds before or at the beginning of the project in order to allow for fresh material and its availability on-time. Seedlings will be ready for transplanting into the field after 6 months. Transplantation shall coincide with the beginning of the principal raining season in March.

3. Regular analysis of basic soil characteristics

138. This is an important routine service which needs to be carried out in order to guide recommendations concerning plant nutrition as foreseen within the production packages above. At short term the acquisition of 2 soil analysis kits to be used by the technical brigade in the field will solve the problem and give an indication on soil fertility, while the central laboratory of INCA is not operational. The reactivation of the central laboratory should be realised within the first year of the project.

139. The project should finance the upgradation of laboratory including by providing equipments while INCA will subsequently cover the operative costs. It is recommended that this should be realised by INCA. A lumpsum amount of US\$ 50,000.00 has been assumed for rehabilitation purposes.

4. Improvement of coffee crop husbandry

140. The productivity of the coffee plantations can significantly be improved with better crop management such as weeding, adequate pruning practices, pest control, post-harvest management.

Weeding: At least three weedings are recommended per year in order to adequately maintain coffee plantations. There is also a need to adjust shading and pruning immediately after harvest and before flowering.

Phytosanitary control: Integrated pest management practices (IPM) are to be encouraged. For instance to control the stem borer a systemic pesticide, combined with sound crop management practices is advised, such as cultural hygienic measures including pedantic cleaning from all coffee beans after harvesting. It is the role of extension staff to advise producers of the best pest management practices.

Pruning: During pruning it is recommended that 4 branches be left in order to allow for the establishment of 6,000 to 7,000 branches per hectare. It is recommended that after a 3rd harvest in the same branch, be eliminated. The more fragile and taller central branches should be eliminated and the stronger and shorter external branches should be left.

Harvest and Drying: Harvest should start when most fruits reach maturity. Grains should be taken from the fields to the drying terraces at the same day and immediately spread over the ground. Coffee fruits should be moved constantly (at least 6 times a day) at the beginning and less frequently as grain humidity decreases. Drying should be considered complete at 11 – 12% humidity. Whenever green fruits are collected they should be separated and separately dried.

141. These practices will also contribute to the improvement of quality aspects. The bean size is expected to increase and damages due to the berry borer to be reduced. Additionally, new and more effective post harvest techniques such as drying on nets etc. will enhance quality aspects.

142. Improved practices in crop husbandry shall be disseminated through INCA's extension service. The activity will be ongoing during the entire lifetime of the project.

5. Rehabilitation/Intensification of small holder coffee farms in production

143. Due to a lack of availability, the majority of small holders in the project area grow coffee on a low input basis. Most coffee farms have old plantations (25 – 30 years old). Furthermore, there is considerable incidence of pests such as the stem borer (*Bixadus sierricola*) and fruit borer (*Hypothenemus hampei*). Another major problem reported in coffee

plantations in Gabela is “sudden death”. Crop husbandry is, in general, deficient with some farmers doing only one weeding per year, close to harvest time.

144. Soil samples collected around Calulo and Gabela showed acceptable values of pH and macro nutrients. Marked deficiencies were identified in soil organic matter and the level of the micro nutrients zinc and sulfur. To achieve superior yields on a sustainable basis soil management and fertilisation should take due account of these deficiencies and strive for replenishing the low levels.

145. Currently active coffee plantations of small holder farms may be characterised as follows:

- Good vegetative aspect.
- Planting density superior of 1,000 trees per hectare.
- Average yield of 150 kg/ha of green coffee (and more).
- Age of coffee trees between 25 and 35 years.
- Low degree of infestation.

146. It is suggested that 4,200 ha of small holder coffee plantations are in conditions to be rehabilitated and crop management be intensified. The package for rehabilitation which should be adapted to the prevailing site specific conditions would basically look as follows:

- Increasing the plant density to 2,200 trees per hectare. This is achieved by reducing the planting distance from currently 3m x 3m to 3m x 1,5m by interplanting new trees.
- Protecting coffee from climbers and other weeds through regular weed control 3 times per year.
- Keeping 3 to 4 branches per coffee plant.
- Protecting coffee against pests and diseases, in particular against coffee stem borer and coffee berry borer.
- Immediate pruning after the harvest.
- If no soil analysis can be made, fertilisation of 20 gr/plant of Zinc-Sulfate, 75 gr/plant of Urea after the first rains and straw and mulch material. Urea has to be alternated every year with 150 gr/plant of ammoniumsulfate.
- Shadow regulation (about 30%)

6. *Renovation of unproductive coffee plantations*

147. Unproductive plantations or parts of such plantations should be replanted. These areas are usually characterised by:

- Weak vegetative aspect (etiolated plants with only 1 stem and some leafs at the top; plants covered with climbers).
- Planting density less than 800 plants per hectare.
- Average production below 100 kg/ha of green coffee.
- Age of coffee trees more than 35 years.
- High degree of infested plants.
- Located in fields with steep slopes and difficult exploration potential.

148. It is suggested that 1,800 ha of small holder coffee plantations are in conditions to be renovated. The package for renovation which should be adapted to the prevailing site specific conditions would basically look as follows:

- Clearing of unproductive fields.
- Planting of coffee with a distance of 3m x 2m yielding a density of 1,650 trees per hectare.
- Keeping 4 – 5 branches per tree.
- Protecting coffee against pests and diseases, in particular against coffee stem borer and coffee berry borer.
- Immediate pruning after the harvest.
- If no soil analysis can be made, fertilisation of 20 gr/plant of Zinc-Sulfate, 75 gr/plant of Urea after the first rains and straw and mulch material. Urea has to be alternated every year with 150 gr/plant of ammoniumsulfate.
- Shadow regulation (about 30%).

149. Planting will be realised in the second half of the first year when coffee seedlings have been produced. Planting should take place at the beginning of the rainy season, which usually starts in March.

7. Rehabilitation of abandoned coffee plantations within the resettlement scheme

150. The plantations to be rehabilitated should have the following characteristics:

- Reasonable vegetative vigour.
- Average yield of 100 kg/ha of green coffee and more.
- Planting density of more than 800 coffee trees per hectare.
- Age of coffee trees between 25 and 35 years.
- Low degree of infested plants.

151. It is suggested that 2,000 ha of abandoned coffee plantations will be rehabilitated within the resettlement scheme. The package for rehabilitation which should be adapted to the prevailing site specific conditions would basically look as follows:

- Establishing a plant density of 1,100 trees per hectare through replanting.
- Keeping 4 – 5 branches per coffee tree.
- Protecting of coffee against pests and diseases, in particular against coffee stem borer and coffee berry borer.
- Immediate pruning after the harvest.
- If no soil analysis can be made, fertilisation of 20 gr/plant of Zinc-Sulfate, 75 gr/plant of Urea after the first rains and 5 litre/plant of straw and mulch material. Urea has to be alternated every year with 150 gr/plant of ammoniumsulfate.
- Shadow regulation (about 30%).

152. Activities no. 5, 6 and 7 shall be implemented with intensive support of the technical brigades. In particular spraying of insecticides and other chemical phytosanitary control shall remain (as it is the present practice) with specific INCA staff.

153. See relevant tabulations on the costs and benefits of coffee rehabilitation and renovation in annex 2.

D.2 Component 2: Commercialisation of Coffee

154. The costs related to component no. 1 are shown in Annex 5a.

155. The objective of the component is identical to the specific project objective (b): To increase the prices paid to farmers in relation to the f.o.b. value of coffee.

156. The output to be achieved is an improved participation of farmers in the commercialisation of coffee and the generation of added value. It is thus expected to increase the prices realised by the farmers in relation to the f.o.b. value of presently about 45 – 47% to at least 55% and to commercialise at least 30% of the coffee produced within the project through farmer organisations.

157. The following indicators are established to verify the achievement of the expected result:

- Availability of a study on coffee marketing including quantitative and economic information on the flow of coffee from the project area.
- Availability of appropriate and actual market information at farmer level.
- 1 coffee hulling factory is working in the project area (supposed to be within the co-operative of Assangu)
- Availability of 20 moisture meters in the project area and key staff trained in its use.
- 1 coffee quality laboratory at INCA is working and samples of export lots are cup-tested.
- A revolving fund for the commercialisation of coffee has been set up and is working. The volumes used in year 1 are about US\$ 160,000, in year 2 about US\$ 220,000 and in year 3 US\$ 350,000.
- In year 2 at least 30% of coffee produced by farmers covered by the project will be commercialised as green coffee. This percentage will reach in year 3 at least 60%.

Activities:

1. Coffee marketing study

158. As a complement to the baseline survey a marketing study is appropriate to collect information on the flow of coffee from farmers to exporters, on volumes traded and values that can be related to the different steps involved in coffee processing and marketing. Also the dynamics in coffee marketing and the decision making structure of farmers should be duly analysed together with their need for market related information. Additionally should information be collected on the installed gross and net capacity of coffee processing facilities in the producing area and the status of machinery. The study shall furthermore analyse the potential of Angolan Robusta coffee in the international market in particular in the segment of Organic coffee.

159. The study will provide valuable input for other activities, in particular under component no. 2 and component no. 4. Ideally, the marketing expert should duly collaborate with the credit expert for mutually setting up the credit pattern for the commercialisation of coffee. The study should be realised by an international coffee marketing specialist and should

have a duration of about 2 months. It is suggested that the study should be split in two missions.

2. Regular provision of market related information

160. All participants in coffee business need adequate information on the market situation and likely trends. Transparency will thus be increased and the basis for decision taking be improved. Price movements will be better understood and risk related to respective operations thus be reduced. It is suggested that the use of scarce resources will be optimised.

161. INCA will be responsible for this activity (see component no. 5). The institution will collect and analyse information on the internal and international coffee market, prepare relevant reports and information packages for the different groups of participants in the coffee sector and disseminate the information on a regular basis. Radio programs, announcements, leaflets and reports are considered as suited media for the distribution of information.

162. The identification of required market information at the different levels should be addressed. This will feed into the establishment of suited information packages and determine the frequency of the dissemination. The activity will be ongoing throughout the total lifetime of the project.

3. Improved coffee hulling facilities

163. The number, location, age, installed capacity, processed volumes as well as corresponding processing yields of hulling facilities in the municipality of Amboim will be analysed within the marketing study. Investment needs for the rehabilitation or replacement of hulling equipment will be identified.

164. The processing facility to be established should be composed of the following main components: reception, destoner and cleaning device, impact huller with husk separation, bagging off device. Additionally, the station should have a factory building with a little storage as well as sufficient drying space. Total investment cost should not exceed USD 68,000 for the machinery and USD 160,000 for civil works.

165. INCA will be responsible for this activity. In co-operation with FDCA and FAEN the institution will assess the feasibility of indicated investments in order to establish a priority schedule.

166. Within the pilot project, it is suggested that the co-operative in Assangu will receive their own coffee hulling facility. Staff will be trained in its proper use and maintenance. This investment will be realised from the project's fiduciary fund as preferential conditions are deemed adequate to support this new activity to the co-operative. (see annex 3).

167. The investment will be finalised after 18 months of the start of the project. Staff training will be held during establishment of the hulling machinery and again in the beginning of the subsequent harvesting season.

168. Based on the findings of the marketing study further investment requirements might be identified at other farmer organisations. Corresponding feasibility studies will be realised in

co-operation with FDCA and FAEN and funding negotiated with these institutions. This activity shall be finalised within the first project year.

4. *Introduction of quality improving measures*

169. The high quality of Angolan coffee has to be assured by all means. In the long term this will favour sustainability and in the short term support the country's competitiveness in a depressed market situation which is expected for the upcoming future. In particular when produced volumes will increase, as is projected already within the pilot project and expected in subsequent phases, quality issues will have to be adequately addressed. Therefore the project will focus on measures to control and improve coffee quality.

170. Improved coffee husbandry and the implementation of the production packages under component no. 1 are expected to contribute to quality improvement by reducing the impact of pests and diseases and achieving larger bean sizes. Additionally, in the producing areas specific training of key extension staff will be realised. They will be trained in aspects related to proper coffee harvesting, drying, storing and measures of quality control such as the use of moisture meters. Subsequently, they will train key staff of the farmer organisations as well as the local rural communicators (*dinamizadores rurais*).

171. Larger farmer organisations as well as coffee hulling stations will be equipped with moisture meters and will be trained in its proper use. Staff of hulling stations will be trained in optimised use and adjustment of the equipment.

172. At export level INCA will introduce cup testing of export lots prior to shipment. Therefore, the existing quality laboratory of the institution will be rehabilitated and 2 staff will be trained abroad for one month each in coffee liquoring.

173. INCA will be responsible for this activity. Technical assistance will be recruited for 1 man-month to realise required training of key staff on the spot during the harvesting season. It will supervise first training activities of key extension staff with farmer organisations.

174. Training of liquorers and the rehabilitation of the laboratory will be realised in the first project year.

5. *Support to internal coffee marketing*

175. To overcome one of the major obstacles in the commercialisation of coffee under the present circumstances and to enable farmers that they can hire labour to harvest coffee that is produced the project will make adequate finance from its fiduciary fund (see component no. 4) available to coffee producers. Farmer organisations attended by the project will collect the applications for funding from their individual members and receive the corresponding funds from the bank. Disbursements from the fund will be made to the farmer organisations who will pass on the money to their members to finance the costs related to coffee harvesting. Repayments from the beneficiaries to the organisation will be realised with coffee. The organisation will establish direct relationships with exporters and sell commercial lots to them. The exporters, who will sell the coffee to the international market and will receive payment in hard currency, will reimburse the funds to the project's fiduciary account at the bank. In the first year the organisations will primarily commercialise dried cherry coffee. In

the second year 30% of coffee will be commercialised in form of green coffee which will be expanded in the third year to at least 60%.

176. Funds for coffee commercialisation will be made available to the organisations for up to 6 months. It has to be assured that the funding will reach farmers on time.

177. It is suggested that farmers who participate in the project will receive financing for harvesting 2 ha of coffee each. In years 1 – 3 only the plantations to be rehabilitated and to be covered by the settlement scheme will produce coffee and will thus be included within this activity. Total credit volume of this revolving fund operation should be US\$160,000 in year 1, US\$ 220,000 in year 2 and US\$ 350,000 in year 3 (annex 4).

178. The activity will be under the responsibility of INCA. It will be established in co-operation with the bank. The technical brigades of INCA dispose of certain experience in credit finance through their involvement in the operations of FDCA. This should be used for this activity and they should support the marketing program by controlling the proper use of funds. 2 man-months of external technical assistance will be recruited to assist in the establishment of the operation. As an input for this activity, the marketing study shall analyse the experiences of the marketing program of the province of Kwanza Sul.

179. The costs related to component no. 2 are shown in annex 5b.

D.3 Component 3: Settlement Scheme for Displaced Farmer Families

180. Angola faces a structural socio-economic crisis that has direct and widespread impact on livelihoods by depleting basic household assets and diminishing people's ability to cope. Between 1970 and 2001, the urban population rose from 15% to over 50% of the total. A survey carried out by the National Institute for Statistics in 2001 indicates that 63% of households in urban and peri-urban areas live below the poverty line, of whom 25% live below the extreme poverty line. Displacement has been the major factor generating food insecurity. Women and children, who constitute 70% of IDPs, have been the worst affected. Approximately one third of all households are headed by women. In 2003/2004, INCA and the World Food Programme (WFP) launched a project that provides employment for demobilized soldiers and their families. WFP has provided the necessary tools and food, while INCA has made available the seeds and the plastic bags in which they will grow for the next year, before being planted. The project is considered positive.

181. The objective of the component is identical to the specific project objective (c): Settlement of displaced families with production of coffee and food, access to basic social services and own housing.

182. The output to be achieved is to assist in the settlement of 1,000 displaced families in Amboim area who will have housing, access to schools and health posts and produce at least their own basic food requirements in addition to 300 mt of commercial coffee per year.

183. The following indicators are established to verify the achievement of the expected result:

- 1.000 families are settled in the municipality of Amboim, Kwanza Sul province.
- 1.000 houses are self-constructed mainly with local materials.

- Each family has at its disposal 2ha of coffee plantation, 1.5ha of land for food production (and 1.5ha land as a reserve for future expansion). The land is free of mines.
- The production of commercial coffee in the first year is 300kg per family (150kg/ha) and reaches 400kg (200kg/ha) in the second and 600kg (300kg/ha) in the third year.
- The production of basic food (maize, beans, cassava, vegetables and others) is sufficient for family auto-consumption 7 month after the start of settlement.
- There will be a small surplus of food production in the second and third year to allow for acquisition of some other items of basic needs.
- 4 schools constructed and equipped are in function (Ministry of Education employs the necessary teachers).
- 2 health posts constructed and equipped are in function (Ministry of Health employs the necessary personnel).
- Access roads have been rehabilitated and are maintained by government and municipality.

Activities:

1. Identification and selection of land

184. Identification and selection of agricultural land of good quality in areas with existing but abandoned coffee plantations will be done by DENOR together with the Governor of Kwanza Sul province and the traditional authorities (*sobas*) of the area. According to the Governor, 49,000 ha are reserved for settlements in Kwanza Sul. The selected land should have no mining, problems and should be “safe”.⁵ Government would take responsibility of de-mining in case of necessity. Topographical and geodesical activities to establish the boundaries of the settlement as well as internal divisions would be performed by DENOR simultaneously to the preparation of settlers (see 3. and 4. below) to avoid delays in project implementation. Since this activity is government contribution it could be performed even before the formal project start. It should be finished within the first quarter of year one of implementation of the settlement component. In 2003, CNIDAH reported that an area totalling 3,525,197 square meters had been cleared of 14,726 antipersonnel mines, 1,045 antivehicle mines and 71,596 UXO. In 2003, local and international NGOs provided mine risk education to 806,319 individuals through 8,077 events. A Landmine Impact Survey started in December 2002 was ongoing as of September 2004. Looking ahead to 2005, we have agreed with Angola and the major asylum countries of Zambia, DRC and Namibia to try and complete the return of some 53,000 refugees remaining in camps and settlements who wish to repatriate. Estimates of Angolan refugees who have settled in other countries in the region vary widely, ranging from 83,000 to around 200,000. It is planned that once the camp-based refugees are voluntarily repatriated, there will be a window of opportunity in 2006 for settled Angolan refugees to return home with UNHCR assistance should they wish to do so.

2. Selection of settlers

185. Selection of displaced people is done preferentially in Gabela. According to provincial statistics there were (August 1999) 25,785 displaced people located in and around the city of Gabela. Second priority would be the selection of settlers in and around the provincial capital

⁵ See also chapter M. Risk Assessment.

of Sumbe, where 21,925 displaced people were reported to be located in August 1999. In 2005, there are very few people considered as displaced in the project area, as most of them resettled since the end of the war. However, these people are still very poor and at stress, therefore project assumptions remain valid.

186. Selection criteria would include: (a) agricultural background of potential settlers and experience especially in the coffee sector, (b) strong interest in settling in the project area and (c) age (preference would be given to younger families since older people might show a tendency to return to their own land of origin after peace agreement and consider the settlement only as temporary). A full socio-economic survey will be required prior to implementing this component (entirely financed by the Government of Angola).

187. For the selection of settlers and the subsequent implementation of the settlement scheme an experienced NGO already acting in Angola, assisted by MINARS, would be contracted. Selection of settlers should be performed during the first quarter of year one of implementation of the settlement component.

3. *Organisation and preparation of settlers, training of key farmers*

188. The NGO chosen for the implementation of the “subsistence” part of the settlement scheme (coffee rehabilitation and production will be under the responsibility of INCA – see component 1) would organise the selected settlers in such a way that they are in a position to form association(s) or co-operative(s). The settlers association(s) will be the land concession holder(s) for 3,500 to 5,000ha of the pilot settlement scheme since the concession of individual land titles is more difficult to obtain and more time consuming according to DENOR. The organisation and preparation of settlers should terminate six months after initiation of the settlement programme.

189. Contracting an NGO for implementation of the pilot settlement scheme is recommended as INCA, the leading national institution, is specialised in coffee production and does not have the necessary experience in the particular field of settlement.

190. The NGO chosen should have worked in similar projects and would perform or assist in execution of the following activities, among others:

- Assist in selection of settlers which have agricultural and specifically coffee production background.
- Organise and prepare settlers and give legal advise in constitution of associations or co-operatives which qualify for reception of land use titles and execution of communal tasks of settlement. Establishment of co-operation with the Confederation of Farmers Associations UNACA (*União Nacional das Associações de Camponeses Angolanos*) might be useful.
- Acquisition, transport and distribution of food, seeds, tools and materials for food for work activities.
- Organisation of food for work activities: construction of houses and social infrastructure (schools, health posts, drinking water facilities).
- Establishment of production plans; technical assistance in food production.
- Assist in selection of key farmers to be trained; organisation of other training activities.
- Administration and financial control of the “subsistence” part of settlement.

- Select and train local rural communicators (*dinamizadores rurais*).
- Co-operate closely with INCA as the leading institution of the project.
- Monitoring and evaluation of project activities; regular reporting.

191. For the realisation of these tasks the NGO will employ the following specialised personnel:

- One supervisor for approx. 12 man/months (MM).
- One administrator/logistics for approx. 12 MM.
- One specialist in community development for approx. 12 MM.
- One agricultural extensionist for approx. 12 MM.
- Assistants.

192. The specialists will be acting in the project full time only initially, then with diminishing intensity during a two year period.

193. Training of key settlers/farmers would be carried out at the Agricultural Training Centre in Kikuxi/Luanda run by MINARS/IRSEM and in future in co-operation with MINADER. The training courses offered at present have duration of six months.

194. The services of the NGO as well as the costs of training are considered inputs for executing these activities.

4. *Concession of land title(s) (título de concessão de terras provisório)*

195. According to Angolan laws the state has the property title of all land. Government can concede land to a person or a legal entity when applied for. This right to use land is initially given for a period of five years (provisional land use concession) and is extended when good use of it is made.

196. The concession is given by the Governor of the province together with the provincial representative of MINADER for areas below 1,000 ha. For areas above 1,000 ha the National Director for land use (Director Nacional de Ordenamento Rural) of MINADER/DENOR is entitled to concede the land use concession. In any case the approval of the Governor of Kwanza Sul province and the traditional authorities (*sobas*) of the area has to be obtained.

197. The submission of the concession in written form is a necessary precondition for any investment on the land using funds advanced by CFC. Taking the political priority of settlement for granted by the government, the land title(s) should be submitted within six months after project initiation. The settlers' association(s) would be constituted by then and can act as concession holder(s). At this time (July 2005), most farmers in the project area have land titles over land they have been working on the land since the end of the war.

5. *Construction of housing*

198. Construction of houses for settler families will be done on a self-help basis with food for work, using a maximum quantity of local materials. The settlers themselves will determine the location of the villages. The settled families will construct their own sanitary facilities (latrines). The Government with the assistance of NGOs will advise on construction, engineering and social aspects. Construction of housing should be done in the first months of

implementation of the settlement component. Preference would have the dry season of the year (see also 9. below). The Government of Angola will support the rehabilitation through for example, tin roofs.

199. Basic household equipment (kitchen kit) will be provided by the project. Also, the project has to provide clothes, blankets and other start-up material, since generally displaced families cannot satisfy the most basic needs and do not have anything which allows for a decent living

6. Construction of social infrastructure and rehabilitation of access roads

200. School buildings as well as health posts will be constructed through food for work, using predominantly local materials. Also school desks will be mounted by the settlers themselves. Timber and carpenter tool kits are provided for by the project. Operational costs (salaries of teachers, health personnel, school materials, medicine, etc.) will be borne by the institutions responsible for these services, the Ministry of Education and the Ministry of Health respectively.

201. Rehabilitation of access roads is considered to be contribution of the local and regional authorities (municipality of Amboim, governor of Kwanza Sul).

202. In many parts of Kwanza Sul existing water sources such as natural wells or small rivers can be made available for drinking purposes at low costs. Since the definite site for settlement has not yet been determined, there might arise the necessity to construct drinking water facilities like dug wells. In that case, construction might be performed on a food for work basis.

203. Social infrastructure should be installed during the first year of implementation of the settlement scheme.

7. Initiation of agricultural production

204. To start agricultural production for food self-sufficiency the settlers need tools and seeds to prepare and cultivate land. Both is provided for by the project. The minimum set of tools includes hoes and machetes, which are used traditionally on family farms. The seeds provided include maize, beans, cassava and vegetables. To start animal production, the acquisition of one goat per family has been calculated.

205. Preparation of land for cultivation is done during the dry season to permit sowing with the first rains normally expected in October. This should be taken into account when timing the start of the settlement component (see also 9. below).

206. The rehabilitation of coffee production will be executed as indicated in project description of component 1. It is assumed, that settlers will mostly find abandoned coffee plantations which can be rehabilitated without immediate necessity of replanting. The tools needed are already included in the kit for production of food. The costs of all inputs are presented in Annex 1.

8. *Food for work*

207. From the start of the project until the first harvest of subsistence food crops, the settler families will receive basic food rations, consisting of maize, beans and vegetable oil. A hygiene component in form of soap is included. All community construction work (schools, health posts) as well as individual constructions (housing) will be done on a food for work basis. The same holds true for all work related to the initial production of coffee and food crops.

208. It is estimated that the settler families need to receive food from outside about seven month from project start until the first harvest of own produced food. The quantities and costs of food as an input of the settlement scheme are estimated and presented in Annex 1.

209. It has to be noted, that the great majority of displaced people in Angola presently depends on feeding programmes of government and humanitarian organisations. Many receive food in camps around the coastal cities and the “safe” towns in the interior of the country. Some participate in food for work programmes. Adult members of the 1.000 families selected for the pilot settlement programme will temporarily take part on the project’s food for work programme.

210. It is up to project management to establish co-operation with one of the humanitarian organisations working in the country with feeding or food for work programmes to facilitate the acquisition (import), transport, composition and distribution of food rations to the settlers.

9. *Period of implementation*

211. Preparation of agricultural land as well as construction of houses has to be executed in the dry season, that means it has to be finished before the month of October which usually marks the beginning of the rainy season. Since food and coffee production are based on the meteorological cycle, the disposition of land to the settlers by the government (handing-over of land titles) has to be realised at latest until end of June of a particular year. The same applies to selection and organisation of settlers and constitution of settlers’ associations or co-operatives. If one of these preconditions occur later, a whole year will be lost.

212. The costs related to component no. 3 are shown in annex 5c.

D.4 Component 4: Support Services

213. The objective of the component is identical to the specific project objective (d): To make available services of technical assistance, rural extension, credit facilities and market information.

214. As an output of this component it is expected that the number of farmer organisations in the project area is increased by 36 and that existing and new ones are well organised and properly working. They shall have at hand all required support services in an appropriate form.

215. The following indicators are established to verify the achievement of the expected result:

- 36 new farmer organisations have been formed in the municipality of Amboim and are working within an appropriate structure.
- All existing farmer organisations have been contacted. Of these at least 50% are co-operating with the project and are working within an appropriate structure.
- Availability of 4 tractors which are used by farmer organisations to facilitate transport and other rural works.
- A collection of coffee varieties is established and maintained at the experimental station in Gabela.
- The experimental station performs at least 5 trials with improved/selected varieties, 5 trials on improved coffee husbandry techniques and assists in the establishment and maintenance of at least 10 demonstration plots in the municipality of Amboim per year.
- Equipment and material as specified is available at the experimental station, is properly used and maintained in good working conditions.
- A study on the rural extension system in coffee is available.
- The technical brigade is working properly and attends through its structure at least 25% of the target group.
- A program of continuous staff training is established and 12 seminars are realised per year.
- Equipment and material as specified is at the disposal of the technical brigade, is used properly and maintained in good working conditions.
- A fiduciary fund is set up with a commercial bank and works properly for financing coffee production, processing and commercialisation.
 - For rehabilitation of 4,200 ha US\$ 2.35 million are available and used.
 - For renovation of 1,800 ha US\$ 1.06 million are available and used.
 - For rehabilitation of 2,000 ha within the settlement scheme US\$ 140,000 are available and used.
 - For the establishment of a processing station US\$ 230.000 are available and used.
 - For commercialisation US\$ 160,000 are available and used in year 1, US\$ 220,000 in year 2 and US\$ 350,000 in year 3.

Activities:

1. Formation and strengthening of farmer organisations

216. The implementation of mechanisms leading to the formation of farmer's associations and co-operatives are of great importance for the achievement of project objectives. The project should also seek to reinforce management capacity and performance of already existing farmer's associations, including advocacy for registration and land titling. The organisations will be assisted in drawing up adequate statutes and will be supported to become juridical persons with all corresponding rights and duties. Farmer's organisations are in much better position to commercialise production as well as to represent farmers in dealing with credit agencies. Through these organisations farmers will also be able to valorise production through better post harvest processing.

217. Existent farmer organisations will have to be identified, their structure to be assessed and their present and potential performance to be analysed. Information has to be collected on their members, the corresponding coffee area as well as the volumes that are produced. In addition, information will be collected on individual farmers identifying potentials and

constraints for their association to farmer organisations. The information will be collected within the baseline survey.

218. It is expected that about 30% of individual coffee growers will be organised during the life-time of the project. Based on the estimates of the provincial government this corresponds to about 1,800 farmers. Assuming that a farmers' association groups on average about 50 members it is expected that 36 new farmer's associations will be formed.

219. The organisations will be trained to improve their management capacities. Special emphasis will be given to sound operative planning and monitoring of activities as well as on financial issues. The organisations will be actively involved in the identification of investment priorities as well as in the distribution, administration and recovery of credit funds provided to their members in cash or in kind. To facilitate transport of coffee and other items within the farmer organisations the purchase of 6 tractors with its followers should be foreseen within the project 2 of which would be for the settlement scheme.

220. On an optional basis farmer organisations should be supported to build up capital and to establish an own saving and credit fund for facilitating required investments of members as well as of the organisation itself in the long run. The credit expert should assist in analysing this option.

221. They will also be trained to improve their coffee marketing skills in order to assess coffee quality, analyse market information and pass it on to their members as well as to responsibly commercialise their members' production.

222. Responsibility for this activity could be with União Nacional das Associações de Camponeses Angolano (UNACA). In the settlement scheme an NGO will be involved too to organise farmers associations (see component 3). The NGO should put an expert in the co-operative movement at the disposal of the project. He would be based in Gabela and assist and train the organisations in managerial aspects. He should organise the relevant training of staff and technical assistance to the organisations in particular subject areas. This activity would be ongoing through the entire lifetime of the project. The co-operative expert should have an own vehicle to facilitate his contact with the organisations as well as relevant institutions.

2. Support to research and experimentation

223. Coffee related research should be applied in the field and should concentrate on addressing present needs to support coffee production rehabilitation and the improvement of its productivity. Thus, among other aspects, the project will promote:

The establishment of a collection of coffee varieties: This is a very important activity aimed at the conservation of important vegetative material to be used in breeding programs. This would assure the maintenance of valuable genetic resources, which would otherwise risk disappearance. The collection should be established at INCA's experimental station in Gabela.

Seed production: For propagation purposes and due to the fact that in the next few years it will be difficult to obtain sufficient amount of plants from clone fields there would be a need to prepare planting material from seeds harvested in plants with the following attributes: to belong to the variety *Gossweileri* (the best "amboim

robustas”), to have large grains (100 grains with 11% humidity should weigh more than 18 grams), to have high productivity and short harvesting periods. (see component no. 1)

Coffee variety trials: The project should promote the implementation of coffee variety and adaptation trials. Improved varieties with high production potential should be introduced and tested under the prevailing conditions in Amboim.

Soil fertility management: Plant nutrition status is very important for good yields and coffee quality. Recommendations for fertilisation, therefore, should always be based on thorough soil sample analysis. Apart from the nutrient status soil analysis will also inform on its quality and conditions. In the project area, in particular, the level of organic matter needs to be increased.

Training of research staff: In the short to medium term, research personnel should be trained in basic agronomic experimentation and yield evaluation, reporting on disease and pest incidence, soil fertility management, plant propagation techniques among others relevant subjects.

224. Responsibility for this activity is with INCA. The experimental station in Gabela will be supported by the project with basic tools required for the execution of the above mentioned research activities and for the expansion of the coffee nursery. In particular, it will receive:

- 1 vehicle
- 2 mobile laboratories for basic soil analysis
- 1 soil sample auger
- 1 computer
- 1 printer
- 1 generator
- 1 Photocopier
- 1 fax machine
- 1 electrical stabiliser

225. At the station, 1 technician with a superior degree, 2 with a medium level degree and about 35 qualified and unqualified staff are supposed to work within the project. The activity will be ongoing through the entire project lifetime.

3. *Strengthening of coffee related services for technical assistance*

226. The introduction and adaptation of new production and processing technologies is of utmost importance. This should be realised through the implementation of those technologies which improve coffee production and quality and that are easy to adopt under local conditions. Farmers should be involved in the prioritisation of problems and the identification of feasible solutions. Demonstration plots should be established in farmers’ fields. The technical brigade of INCA should provide for the linkage between farmers and research and establish the contact to other essential support services.

227. The technical brigade in Amboim consists of a total staff of 6 persons, the head of the brigade, the head of the technical sector of the brigade and 4 technicians. Each of the technicians works with 4 rural animators or leader farmers (*dinamizadores rurais*), who in

turn should attend 100 – 150 coffee farmers each. In total, the brigade should cover about 1,200 – 1,800 coffee farmers.

228. A study should be realised by an experienced expert for rural extension to review the presently applied extension system and to analyse its effectiveness. The technical brigade in Amboim should be put in conditions to effectively perform their function. Additional staff and *dinamizadores rurais* may be required. Staff, furthermore, needs to be adequately trained both technically as well as on effective extension and vulgarisation techniques. Training would be done both theoretically and on-the-job. Some of the training should be training of trainers so that training can be reproduced at lower levels through the *dinamizadores rurais*.

229. The extension service in Amboim should be supported with adequate means of transport to ease the contact with farmers. In particular it should receive:

- 2 vehicles (4 WD Pick-up)
- 1 small truck
- 6 motorcycles
- 12 bicycles
- 2 computers
- 1 Photocopier
- 1 printer
- 1 fax machine
- 2 telephones
- 1 electrical stabiliser
- 1 generator
- 1 typewriter
- 1 photo camera
- 1 radio communication main station with 6 individual hand sets
- 3 television with video equipment with 1 parabolic antenna
- Stationary
- Basic office furniture

230. The activity will be ongoing during the entire lifetime of the project.

231. Establishment and use of a fiduciary fund for investments and commercialisation of coffee.

232. Project components no. 1 and no. 2 require investments to be made respectively funds for operative business to be available to farmers and farmers' organisations. At present, banks are not interested to provide long term finance. Only short term credits are conceded at prohibitive interest rates. The government has created autonomous development funds for the coffee sector and for small to medium sized enterprises but their financial resources are limited and interest rates of 30% per year on USD basis are still to be considered as excessive for long term investments.

233. The project will therefore establish a fiduciary fund in USD with a local bank. The bank experience and strength in the management and recovery of funds shall ensure sustainability of the credit pattern. Presently, either Banco de Poupança e Crédito (BPC) or BFA (Banco Fomento de Angola) are in the position to co-operate with the project in the management of the fiduciary fund. BPC has a branch office in Porto Amboim in the province

of Kwanza Sul. Banks indicated a **service fee of about 5-8%** for the administration of the project funds.

234. The fiduciary fund will be used both for enabling the establishment of rehabilitated and renovated plantations including part of production costs as well as for providing finance for the commercialisation of coffee according to the following suggestions:

(a) Credit for establishments and production

The credit amounts for establishment and production will be required according to the rehabilitation and renovation program as designed under component 1. The corresponding total amounts will be USD 2.01 million in year 1, USD 450,000 in year 2 and USD 450,000 in year 3. (annex 2)

The conditions should be as follows:

- Coffee rehabilitation: Maximum amount per farmer USD 560 (for 2 ha) for the rehabilitation of 4,200 ha plus equipment, 3 years of grace period, 10% interest rate, repayment within 8 years. Total required credit amount USD 1.93 million.
- Renovation of coffee plantations: Maximum amount per farmer USD 600 (for 2 ha) for the renovation of 1,800 ha plus equipment, 3 years of grace period, 10% interest rate, repayment within 8 years. Total required credit amount USD 865.000 million.
- Coffee rehabilitation (settlement scheme): Maximum amount per USD 120 (for 2 ha) for the rehabilitation of 2,000 ha. Repayment would be realised within the same year; 10% of interest rate. Total required credit amount about USD 120,000.

(b) Credit for commercialisation

The amount of credit required for commercialisation will increase according to the development of production and the number of producers reached through suited farmer organisations. According to the production schedule under component no.1 farmers would produce 100 – 150 kg/ha of coffee (green coffee equivalent) in year 1, about 200 kg/ha of coffee in year 2 and 300 – 350 kg/ha of coffee in year 3. The maximum amount per farmer is limited to financing 2 ha. As mentioned under component no. 2, total credit amount required for commercialisation would be about USD 460,000. (annex 4)

Conditions of the credit for commercialisation should be as follows:

- Grace period of 3 months, interest rate of 10% and repayment within 6 months.

(c) Credit for establishment of coffee processing station

As mentioned under component no. 2, investment in 1 coffee processing station would require an amount of about USD 230,000. (annex 3)

Credit conditions for this investment are suggested to be as follows:

- Coffee processing: Maximum amount for one processing station USD 230,000 for machinery and civil work, 10% interest rate, repayment within 8 years.

235. In the absence of registered land titles beneficiaries will form groups of 5 – 10 farmers each under the umbrella of the farmer organisation to mutually guarantee the credit taken by its members. This guarantee form should be acceptable both for long term investment as well

as short term credit for the commercialisation of coffee. Credit for the investment in processing facilities should be guaranteed by the assets of the farmer organisation, for instance a tractor or warehouse facilities. To complete the required guarantees coffee in stock should also be accepted. Once the machinery is installed this should become the guarantee to be provided.

236. INCA and BPC/BCI will be responsible for this activity. They will be supported by international technical assistance for about 1 month for setting up the credit pattern including the establishment of required formats for the contractual relationships between the parties involved. He shall furthermore work out the agreements between the respective project funding institution and the bank. The credit system will be established in the beginning of the project and will be operative after 6 months.

237. The costs related to component no.4 are shown in Annex 5d

D.5 Component 5: Institutional Support

238. The objective of the component is identical to the specific project objective (f): To further develop the technical capacity of the personnel/institutions involved in the project and to provide adequate equipment.

239. The output to be achieved is to put INCA in the position to properly provide its services in favour of coffee farmers and to continuously monitor the performance and efficiency of its operations.

240. The following indicators are established to verify the achievement of the expected result:

- Availability of up-to-date market related information in appropriate form and on a regular basis at farmer level.
- The management information system is established, works properly and allows regular monitoring of INCAs performance.
- INCA staff is trained as specified.
- 2 missions for the exchange with relevant international institutions are realised per year.
- Equipment and material as specified is available for INCA in Luanda, is properly used and maintained in good working conditions.

Activities:

1. Establishment of a market information system

241. Coffee is a global business and all participants require adequate information on the market for sound decision taking. Information related to the internal and international market needs to be collected and analysed and derived trends be communicated to producers, processors and traders. A dialogue needs to be established between participants and policy makers to best serve the industry in view of anticipated developments in the national and the international market. The risk in operations can thus be reduced.

242. Furthermore, the market information system will assist INCA in reviewing the minimum price policy and adjusting reference prices accordingly. The information will also

assist institutions like banks and the autonomous governmental funds to optimise their financing policies and the allocation of scarce resources.

243. INCA's Section for Commercialisation should provide this service to the coffee sector. Two staff of the institution are suggested to work within the market information system. The system should be established within the first project year and incorporate data on prices, volumes and quality from the baseline survey. International technical assistance should set up the information system and provide for basic training of involved staff.

2. Establishment of a management information system

244. In view of the diversity of components and activities as well as to assure the efficient use of resources project management will require a powerful management tool. Therefore the establishment of a management information system is suggested. This system should encompass the following components:

- Work plans and schedules, keeping in view the available resources (local supplies, materials and labour) and staff capabilities.
- Develop appropriate activities for extension service, agricultural services (including input supply, credit and marketing) and estimate the required inputs and outputs.
- Determine the precise responsibilities of the various units involved in project implementation.
- Detailed records of physical and financial performance.
- Performance indicators, preferably for each organisational unit, based on feasibility, costs and capabilities.
- Monitor the project environment so that suitable adjustments can be made in ongoing or planned activities if necessary.
- Provide periodic reports (progress reports, technical reports etc.) to the responsible agencies and institutions.

245. The system shall be computerised and be hosted by INCA's Section for Studies and Projects, where two staff will work within the system. One staff of the department should be trained in project related management information systems.

3. Training of INCA staff

246. Staff training was mentioned under various activities and is summarised as follows:

- 2 staff of the coffee quality laboratory will be trained for one month each abroad in coffee liquoring. Training will be realised during the first project year.
- INCA extension staff at different levels will be trained to strengthen their technical assistance capacities.
- 1 staff of the section for studies and projects will be trained in project related management information systems. Training should be done in the beginning of the project.

247. Additional training might be required. 3 man-months of training have therefore been budgeted to be specified during project implementation.

4. Exchange with relevant international institutions

248. Within the project, the exchange with relevant international institutions such as EMCAPA, ACRN, ASARECA, Institute for Agricultural Research in Coffee and CIRAD is foreseen. For this purpose, the project should provide for 6 international flights and per diems for about 90 days.

5. Provision of incentives for INCA personnel

249. Under the conditions in Angola project related staff of INCA should receive an incentive to work on the project. Per diem field allowances should be provided to staff usually based in Luanda when travelling to the project area. Additionally, the institution should hold out a prospect to raise salaries from its increased charges due to higher coffee exports. Thus the Government of Angola will pay salaries while the project will pay DSA only.

6. Procurement and distribution of equipment and material

250. For INCA central office in Luanda the following equipment and material should be procured under the project:

- 3 vehicles
- 4 computers (3 desk tops and 1 notebook)
- 3 printers
- 1 photocopier
- 1 fax machine
- 1 electrical stabiliser
- Stationary
- Basic office equipment

251. All other relevant equipment, material and supplies have already been identified within components no. 1 – 4. Distribution of material will be under the responsibility of INCA and will be monitored by the project.

252. The costs related to component no. 5 are shown in Annex 5e

The ICO considers that:

- To achieve results expected from Component 6, it is necessary to keep the long term technical assistance as initially suggested.
- INCA will coordinate the project only in its initial phases, and the long term technical assistant will act as a back-up.
- In order to cope with the suggested downsizing of Component 6, a reduction in international trips could be considered.

D.6 Component 6: International Technical Assistance

253. The objective or purpose of the component is: To make required technical assistance available and to enhance and promote inter-institutional and international co-operation for increasing efficiency of project activities and facilitate exchange of relevant experiences.

254. The following indicators are established to verify the achievement of the expected result:

- Terms of reference are available for the different expert missions.
- The missions are realised and relevant reports are available.

Activities:

1. Selection of long term technical assistance

255. Long term technical assistance should be selected to assist INCA in project management, sound organisation of activities, monitoring and evaluation as well as accounting procedures during the entire lifetime of the project. An experienced Chief Technical Advisor (CTA) should be selected to provide the expertise for 30 man-months (10 man-months per year). Additionally, 1 man-month should be foreseen prior to project start for participation in the project planning workshop. Additionally, 1 man-month should be foreseen prior to project start for participation in the project planning workshop.

256. The technical assistant to be provided (CTA) shall perform the function of the project co-director. Ideally, it would be a coffee expert with proven experience in the field of rural development and project management. He will receive backstopping from the Project Management Unit.

257. The CTA shall have a vehicle at his disposal for official duties. The contract for the CTA will be approved by the Common Fund.

258. The budget has been entirely revised to take this change into account.

2. Selection of short term technical assistance

259. The need for short term technical assistance in specific subject areas has already been identified to a certain extent within components no. 1 – 5 and can be summarised as follows:

- 1 man-month of coffee quality expertise for the training of key staff involved in coffee quality control in the field. Training shall be done in the first project year during the harvesting season.
- 2 man-months of coffee processing and marketing expertise to analyse the present system and opportunities into more detail. He shall contribute to provide basic data on coffee processing facilities and to quantify coffee flows related to the project area. He should evaluate the experiences of the recent marketing program of the province of Kwanza Sul and co-operate with the credit expert. The assistance shall be realised in the first project year during the harvesting season.
- 1 man-month of rural extension expertise to review and analyse the present approach in technical assistance and providing training to involved technicians. The expertise will be realised in the first project year.
- 2 man-month of rural credit expertise to set-up the credit pattern including the establishment of required formats for the contractual relationships between the parties involved. This expertise will be required in the beginning of the project.
- 4 man-months of socio-economic and rural development expertise for the baseline survey. The survey should be realised in the beginning of the project.
- 1 man-month of expertise in market information systems to establish the system and provide basic training of involved staff. The expertise will be realised in the second project year.

260. In total 11 man-months of short-term technical assistance have been identified. To provide the project with an utmost degree of flexibility, it is suggested that in total 17 man-months of technical assistance should be foreseen and that the project might confirm or not the above proposal and, if required, specify further areas of intervention.

261. Technical expertise might be provided through the consulting agency or company selected for rendering long term technical assistance. For specific expertise the project might establish direct contact with suited institutions and recruit appropriate experts directly. Generally, where local consultants can offer services of the same quality as required by the project these should be given preference.

262. In total, 14 international flights should be foreseen within this activity.

D.7 Component 7: Project Management

263. The costs related to component no. 6 are shown in Annex 5f.

264. The objective of the component is identical to the specific project objective (e): To assure adequate project management, efficacious application of resources as well as the project's continuous accompaniment, monitoring and evaluation.

265. The following indicators are established to verify the achievement of the expected result:

- The project planning workshop is realised.
- Annual work plans and budgets are available on time.
- Six-monthly and annual reports together with financial statements are available on time.
- Availability of annual auditor reports.

266. Activities and responsibilities are largely specified within chapter no. V. "Management of the Project". They shall therefore subsequently only be summarised as follows:

1. Initial project planning workshop
2. Co-ordination and organisation of project implementation
3. Organisation and supervision of short term expert missions
4. Organisation and co-ordination of staff training
5. Continuous monitoring and evaluation
6. Project accounting
7. Reporting

267. The costs related to component no. 7 are shown in Annex 5g.

E. Beneficiaries and Benefits

E.1 Beneficiaries

(a) Target Group

268. There are two target groups who will benefit from the project:

1. Small family coffee producers with holdings up to 10ha in the Amboim and surrounding municipalities. The estimated number of farmers of that section who will directly benefit from the project during the three year period is 3.000.
2. One thousand displaced families who will receive up to 5ha of land each for settlement (2ha for coffee production, 1.5ha for subsistence food production and 1.5ha as reserve for future expansion).

Socio-economic situation:

269. Small family coffee producers are presently not more than subsistence farmers. They produce food for auto-consumption. The production of cash crops, including coffee, is very low. Their socio-economic situation is far from being satisfactory. Their incomes do not allow for more than the satisfaction of very basic needs regarding alimentation, health, education, housing and clothing.

270. Displaced families, future members of the second project target group, are presently depending on external support from humanitarian organisations to survive. Their socio-economic situation is precarious since they rarely have any source of income.

271. While small family coffee producers and settlers represent the principal target groups, medium and large coffee producers will also benefit from selected project activities, e.g. the market information system to be established or the applied coffee research results. They will only benefit from the extension service when they are paying for it. They do not have access to the credit facilities planned to be established under the project.

(b) INCA

272. Of course, the local implementing institution INCA with its technicians working in extension, technical assistance and coffee research will also benefit from the institutional strengthening process and from training and consulting activities supported by the project.

(c) Government

273. The GOA will benefit through information derived from the pilot project pattern that might serve for refining and further developing national coffee policy.

(d) ICO and other coffee growing countries

274. Coffee growers in other member countries of the ICO may benefit from the project experience in rehabilitating coffee production in places hit by civil strife and social unrest.

E.2 Benefits

275. The project benefits can be summarised as follows:

- Small family coffee producers rehabilitating their plantations will have an increased income in the order of US\$ 170.00/year at the end of year three. Long term an increase of about US\$ 400.00/year is targeted. It has to be mentioned that price expectations have been considered rather conservative.

- Settlers (formerly displaced families depending on humanitarian support) will reach self-sufficiency in food production. Additionally they will have a cash income through the sale of coffee of estimated US\$ 40.00 in year 2 and US\$ 140.00 from year 3 onwards when producing about 300 kg/ha.
- Employment generation of the settlement scheme is estimated at 2.000 permanent jobs (calculated at two fully employed persons per family). Some of the labour force of this group will also be disposable for large coffee producers.
- The physical output of commercial coffee is estimated at 830 t in year one, 1,240 t in year two and 2,070 t in year three.
- Foreign exchange earnings are high since almost total production of coffee is exported. Calculated at present export prices the foreign exchange earnings will sum up to US\$ 1.16 million in year one, US\$ 1.73 million in year two and US\$ 2.89 million in year three.
- The project will significantly contribute to poverty alleviation.
- Especially INCA will profit from training, institutional strengthening and consulting activities of the project.
- The financial rate of return is estimated at 15%. (annex 6)

276. Assuming that the project will reach about 3,000 small holders with an area of less than 10 ha who are growing coffee in the municipality of Amboim and that 2 ha of coffee per farm shall be rehabilitated within the project the total coffee area of existent farms to be covered should reach 6,000 ha. Additionally, 1,000 displaced farmer families shall be resettled and each family shall dispose of 2 ha of coffee. Total coffee area covered by the project, therefore, should be 8,000 ha.

277. According to component no. 1 three different packages shall be applied to enhance coffee production:

- (a) Rehabilitation/intensification of about 4,200 ha
- (b) Renovation of about 1,800 ha
- (c) Rehabilitation of abandoned plantations of about 2,000 ha

278. Production from the area covered by the project should reach about 2,070 t after three years. Present production of existing small holders is estimated to be around 50 – 125 kg/ha green coffee on average, not exceeding a total production level of about 1,000 t from the area covered by the project. According to the production schedule of the project output should more than double compared to present figures.

F. Environmental Aspects

280. Coffee in Angola is traditionally produced under shade trees. This is under environmental aspects a very favourable method. Plantations rehabilitated with project support will maintain this technology which protects soil resources from erosion. Because of the unfavourable political and economic conditions during the last decade almost no modern agricultural inputs like fertiliser and pesticides have been utilised in coffee production. The project aims for cautious use of inputs which potentially could have negative impacts on environment. It is planned to use only lime to correct the low pH-values of the soil and minimum levels of carefully selected pesticides in emergency situations.

281. Furthermore, coffee processing in Angola is traditionally done by using “dry” technologies. These have no negative effects on environment as do “wet” processing methods. The organic by-products of the processing might even be used as organic fertiliser.

282. In constructing or rehabilitating infrastructures (housing, schools, access roads, drinking water facilities) care will be taken to minimise negative environmental effects.

G. Intellectual Property Rights

283. The concepts and technologies developed under the project will be placed in the public domain and all information shall be diffused in the best interest of coffee growing countries. The CFC maintains the copyrights of any publications emanating from this project.

H. Project Costs and Financing

284. Total project cost is estimated at US\$ 8,530,000 million, of which 2,300,000 million, should be provided as loan, USD 460,000 on short term credit and USD 1,990,000 as a grant from CFC and USD 3,780,000 contribution from the Government of Angola.

285. The credit should be provided on soft terms (intermediate concessional loan). For the calculations, a net interest rate of 10% has been assumed for farmers. Based on projected bank charges of 5 to 8% for credit administration loan funds should be provided to the project at an interest rate of 5%. The internal financial rate of return of the project, however, would allow charging an interest rate of up to 15% to just break even.

286. The Government of Angola will borrow the loan thus there will be no need for a guarantee.

287. The project is now being financed by the Common Fund for Commodities and the Government of Angola has assumed the co-financing from European Commission.

I. Workplan

288. See Annex 7a.

J. Supervising Process

289. See chapter V. on Project Management

K. Risk Assessment

290. The main risk involved in the project is the lack of road infrastructure to allow efficient circulation of coffee. With regard to project management, care should be taken that a CTA is selected and made familiar with CFC rules and regulations as soon as possible. The INCA Director, a highly motivated and knowledgeable individual will not be able to manage the project due to his current responsibilities. He will however provide guidance to the CTA who will report to him, as PEA Representative. Finally, it is important that NGOs successful in microfinance (OIKOS and CLUSA) in the project area, be associated to the project.

291. The political situation is considered stable and elections are scheduled in 2006.
292. Despite the return to peace, the budget for internal flights remains the same, due to the very poor condition of the roads. Travel to the project area may not always be possible by road transport.
293. The risk related to rehabilitation potential of abandoned plantations within the settlement program should be considered and care should be taken in the selection that plots comply with the characteristics established under activity no. 7 of component no. 1.
294. A major risk in settlement implementation might be related to the availability of suitable land. Land use titles of much of the good coffee producing land in Kwanza Sul province have already been extended to a number of persons. None of the 49,000 ha allegedly reserved for settlement purposes has been shown to the mission during its stay in Angola. So, the quality of land which government intends to make available is unknown at present. Some of the potential areas for settlement might be partially mined. It is assumed that government will make available de-mined land or take responsibility for de-mining.
295. Land use titles were available to most settlers seen during the mission of July 2005, and did not seem to be difficult to obtain. This is considered prerequisite for investment of CFC funds.
296. The willingness of dislocated families to settle in safe areas should not be an obstacle since many people are eager to get out of the unsatisfactory situation in camps or of sometimes crowded conditions in urban houses of their relatives.
297. Salaries for project staff do not fit into the local civil servant scale and if they are not paid by a donor there is a high risk that the project will encounter implementation problems according to INCA. It is therefore suggested to shift, to the extent possible, corresponding line items i.e, non salary, to INCA,
298. For the rehabilitation/intensification program the availability of agricultural inputs like urea and zincsulfate may represent a risk and the project should consider to import these inputs e.g. through PROCAFE or through the involvement of the private sector. Price may also increase in view of the armed conflict.
299. The incidence of pest and diseases always represents a risk in agricultural programs. Precaution is taken in the establishment of the production packages and the measures foreseen should be duly implemented. Other natural hazard like draught cannot be excluded.
300. Generally, the development of international coffee prices cannot be predicted. They show a rather high degree of volatility and may fall below a threshold that permits profitable production. This may thus represent a risk for farmers' cashflow and delay the repayment of credits.
301. There is a risk related to the stability of farmer organisations and due training and education would therefore be required for the entire lifetime of the project.
302. The motivation of INCA staff in the field is low. Lack of transport facilities and low salaries are reported to be main reasons. Additionally, knowledge as required by certain activities of the project might not always be developed. Therefore, in addition to per diem

payments, also staff training and institutional support would be essential components of the project to assure long term sustainability.

303. INCA, presently, is only partly in the position to assure adequate project management. The recruitment of short term experts to assist in project management and to provide key input in specific subject areas will enable the institution to accumulate further relevant knowledge and experience in project work in order to allow the continuation of initiated activities and the expansion of the concept to other producing areas.

304. Sensitivity analysis (annex 8) was realised for two key variables: coffee prices and input prices. Long term coffee prices were assumed to fall 30% below the 10 years average price to a level of about US\$/t 1,100.00. At the same time it was assumed that no premium would be paid any longer for Amboim coffee. Based on these assumptions the financial rates of return dropped to the following levels:

- Rehabilitation 15%
- Renovation 9%
- Settlement scheme 17%

305. In the second scenario it was assumed that input prices would rise by 50% compared to present levels. In consequence, financial rates of return dropped as follows:

- Rehabilitation 15%
- Renovation 10%
- Settlement scheme 57%

306. Apart from the security situation, therefore, project risk is rather low provided essential support service including technical assistance are made available for farmers in adequate form.

V. MANAGEMENT OF THE PROJECT

A. Supervisory Body (SB): International Coffee Organisation (ICO)

307. The International Coffee Organisation as the International Commodity Body recognised by the CFC for the submission of coffee projects will be the Supervisory Body. It provides a forum for meetings between representatives of coffee producing and consuming countries and acts as a centre for collection, exchange and dissemination of economic and technical information on coffee. It will ensure that relevant information on the project will be made available to interested member countries.

308. To perform its supervisory role, the ICO will receive reports from the Project Executing Agency (PEA) on project activities and progress on a regular basis. The annual work program and budget will be attached to the progress reports.

B. Project Executing Agency (PEA): INCA

309. The Instituto Nacional do Café de Angola will be in charge of the technical and financial implementation of the project, including preparation of reports.

310. **National Project Co-ordinator** – The Ministry of Agriculture and Rural Development will appoint a National Project Co-ordinator who will be responsible for co-ordinating all Government Agencies and Donor Agencies supporting the project. The Chief Technical Advisor will assist the National Project Co-ordinator in performing his duties.

311. The pilot project will interfere at provincial and national level in Angola. It is intended to provide concepts and strategies that should afterwards be adapted to other regions in the country as well as other coffee producing countries facing a similar situation. The bodies within producing countries responsible for the development of coffee are therefore considered to play a key role in the execution of such projects and should assume the responsibility for implementation.

312. INCA will implement the project in collaboration with NGOs. INCA has the mandate to promote the coffee sector in Angola and has an adequate structure to effectively reach and support the target group. The institute is furthermore responsible for representing the country on an international basis and keeping the contact with the ICO.

313. INCA has experience in project work through its active role as the co-ordinating and managing institution in the national coffee development programs assisted by FDCA and PROCAFE. INCA realised a project in co-operation with CIRAD and furthermore participates regularly in the research programs and meetings of the African Coffee Research Network.

314. In the long run project sustainability will be effectively promoted through the institutional support to INCA encouraging its capacities to provide essential support services.

C. Project Management Unit

315. The Project Management Unit (PMU) will be headed by the Chief Technical Advisor who will be assisted by the Director of INCA. The Management Unit will report through the Project Steering Committee.

316. The PMU will assume the responsibility for the technical and financial management of the project. The PMU will plan and co-ordinate project work directly with the different technical departments and sections of INCA involved in project execution. It will intervene at field level through the Technical Brigade in Gabela under the responsibility of the Department for Technical Assistance. The project related accounting system will be established at INCA's Section for Accounting within the Department for Administration and Budgetary Management.

317. The PMU will report to the Project Steering Committee and INGA.

E. Project Steering Committee

318. Due to the diversity of activities and the number of institutions involved in project implementation a Project Steering Committee (PSC) should be formed in Angola. Members of the PSC shall be representatives of the involved line ministries and institutions as well as the Government of the Province of Kwanza Sul. In particular the following representatives should participate in the PSC:

- MINADER

- Ministry of Finance
- INCA
- United Nations Development Program
- NGO collaborating in the resettlement component
- Bank collaborating in the credit component
- Government of the Province of Kwanza Sul,
- INCA and Common Fund for Commodities.

319. PSC's main function will be to oversee the project activities, approving annual work plans and budgets, monitoring the flow and use of project funds, facilitating the contact to other governmental institutions, facilitating intergovernmental exchange and arranging for the tax exemption of project funds.

320. The PSC should meet on a quarterly basis.

F. Disbursements, Procurements, Recruitment, Accounts and Audit

321. Disbursements against the purchase of equipment, vehicles, materials costing the equivalent of USD 500 or more and technical assistance services would be fully documented. Local staff salaries and allowances, operating expenses, training including workshop costs and supplies would be disbursed against certified statements of the expenditures. Documentation for withdrawals under statements of expenditures would be maintained in a central location by the PEA and collaborating institutions for review during the supervision missions and for authentication by auditors.

322. The PEA and collaborating institutions will not be able to prefinance expenditures eligible for funding. For operative expenses and purchases related to support services, institutional support and project management, a project account will be opened at a bank which is satisfactory to the CFC and in convertible currency. The CFC would make a deposit of an estimated 6 months worth of expenditures net of equipment and vehicles. This account would be replenished in accordance with the CFC procedures and practices. The PEA would provide the necessary funds to the collaborating institutions through the project account in accordance with the agreed work programme and budget.

323. For the loan component, a separate project account will be opened in convertible currency at the collaborating bank. This bank shall comply with the criteria established by the CFC. CFC would make a deposit of an estimated 6 months worth of expenditures covered from the loan funds. The account would be replenished in accordance with CFC procedures and practices. In collaboration with the PEA the bank shall disburse the loan funds according to the respective credit schemes.

324. Procurements will be in accordance with the CFC's regulations and rules for the procurements of goods and services from the Second Account. Equipment, vehicles and materials would be bulked as much as possible to attract International Competitive Bidding. Contracts costing the equivalent of US\$ 100,000.00 or more would be subject to International Competitive Bidding. Contracts costing less than US\$ 100,000.00 but more than US\$ 50,000.00 would be procured through Local Competitive Bidding satisfactory to CFC. Contracts of US\$ 50,000.00 or less or for specialised equipment, prudent procedures with at least three quotations would apply.

325. Recruitment. The selection of the consulting agency or company foreseen to render long-term and short-term technical assistance as well as the recruitment of independent consultants for the midterm evaluation shall be subject to International Competitive Bidding along with respective regulations of the CFC. Payments to the consulting agency or company shall be made on a quarterly basis directly by CFC based on invoices and performance records approved by the PEA and endorsed by ICO.

326. Accounts and Audit. All collaborating agencies in the project would keep independent financial records and accounts. The accounting department of the PEA will furthermore keep consolidated project accounts. Consolidated statements shall be prepared on a six-monthly basis and shall be submitted to CFC along with the request to replenish the project account. The PEA will also establish annual consolidated accounts.

327. All project accounts shall be audited annually by independent (local) auditors acceptable to CFC. The audited accounts along with the auditors' report shall be submitted within three months after the end of the related project fiscal year.

G. Organisation, Management and Implementation

328. INCA as PEA will assume overall responsibility for conducting the project including overall co-ordination of implementation, planning, budgeting, accounting, procurement as well as monitoring of progress.

Role of the CTA

329. Project implementation will be according to agreed annual work programs and budgets. These will be consistent with the project budget. PEA, in collaboration with the participating agencies, each year will prepare a draft work program and budget including the respective task assignments. The annual draft work program will be submitted to Project Steering Committee (PSC) and ICO for clearance. ICO will forward it to CFC for comments and approval. Draft annual work programs shall reach CFC not later than two months ahead of the start of the respective project fiscal year. Comments of CFC will be incorporated in the annual work program and budget. The annual work programs will have to be approved by PSC.

330. The first annual program will be established as a result of a project planning workshop which should be held three months ahead of project start. The Project Manager of will participate in the workshop supported by an experienced international consultant and moderator.

331. A workshop shall be held at the end of the pilot project to enable discussion of project results and experience during implementation with representatives of other countries who might be interested due to comparable situations in their home country.

H. Reporting

332. Responsible agencies will prepare quarterly reports to the PEA on the individual project activities. PEA will establish appropriate formats in line with the CFC Project Manual and provide them to the responsible agencies in the beginning of the project. The PEA shall prepare six-monthly reports on project progress based on the quarterly reports. The six-

monthly reports shall be submitted to PSC and ICO. ICO will forward the reports with its comments to CFC.

333. PEA will furthermore prepare comprehensive annual reports informing about the development of project activities and achievements and indicating important milestones for project monitoring purposes. These reports shall be prepared in accordance with the CFC Guidelines for Progress Reports.

334. Separate reports will be prepared for the short term expert missions. These shall be kept by PEA and be summarised within the six-monthly reports. Copies of the reports will be made available upon request.

335. Three months prior to completion PEA will prepare a final report based on the experiences of the project. This report will be evaluating the appropriateness of components and activities as implemented and modified or fine-tuned under the project pattern. The report shall be analysed by the ex-post evaluation and serve as the basis for concepts for other countries interested in rehabilitating coffee production after situations of civil strife.

336. Reports of the midterm and ex-post evaluation will be sent to ICO and CFC not later than two months after finalising the corresponding missions. ICO will provide its comments to CFC.

I. Project Monitoring, Cost Control and Evaluation

337. Monitoring of project progress will a continuous task. Quarterly reports by INCA Field Staff will have to comment on established indicators. This together with field visits and own assessments will put PEA in the position to comment upon project progress within its six-monthly and annual reports.

338. Important milestones have been established within the workplan. These shall be reviewed during the initial planning workshop.

339. ICO as the Supervisory Body should visit the project annually, if feasible accompanied by CFC, and analyse its performance and progress on the spot.

340. The midterm evaluation shall be realised by independent consultants. They will review the project concept, achievements as well as the efficiency of used funds.

341. ICO and CFC will evaluate the project impact ex-post.

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ANNEX I

TABLE 1: PRODUCTION ESTIMATES BY CROP YEARS

('000 60 kg. Bags)

CROP YEARS :	Total Production			Arabica			Robusta		
	1999/00	1998/99	1997/98	1999/00	1998/99	1997/98	1999/00	1998/99	1997/98
North & Central America									
Costa Rica (Oct)	2,760	2,490	2,420	2,760	2,490	2,420			
Cuba (Jul)	220	220	330	220	220	330			
Dominican Republic (Jul)	500	450	700	500	450	700			
El Salvador (Oct)	2,540	1,990	2,220	2,540	1,990	2,220			
Guatemala (Oct)	4,830	4,580	4,230	4,800	4,550	4,200	30	30	30
Haiti (Jul)	350	350	350	350	350	350			
Honduras (Oct)	2,870	2,300	2,700	2,870	2,300	2,700			
Jamaica (Oct)	40	40	40	40	40	40			
Mexico (Oct)	5,500	4,600	4,900	5,400	4,500	4,800	100	100	100
Nicaragua (Oct)	1,300	1,050	1,060	1,300	1,050	1,060			
Panama (Oct)	210	200	230	210	200	230			
Trinidad & Tobago (Oct)	20	20	20				20	20	20
USA (Puerto Rico/Hawaii) (Oct)	280	240	280	280	240	280			
Total	21,420	18,530	19,480	21,270	18,380	19,330	150	150	150
South America (except Brazil)									
Bolivia (Apr)	150	170	150	150	170	150			
Colombia (Oct)	11,800	10,500	12,110	11,800	10,500	12,110			
Ecuador (Apr)	1,800	1,310	1,360	880	480	530	920	830	830
Guyana (Oct)	10	10	10	10	10	10			
Paraguay (Apr)	50	60	50	50	60	50			
Peru (Apr)	2,130	2,000	1,820	2,130	2,000	1,820			
Venezuela (Oct)	1,400	1,650	970	1,400	1,650	970			
Total	17,340	15,700	16,470	16,420	14,870	15,640	920	830	830
Brazil (Jul)	27,180	38,000	23,000	22,080	33,500	18,500	5,100	4,500	4,500
Africa									
Angola (Apr)	50	90	90				50	90	90
Benin (Oct)	0	10	10				0	10	10
Burundi (Apr)	300	290	340	300	290	330	0	0	10
Cameroun (Oct)	1,120	1,020	870	120	120	120	1,000	900	750
Central African Rep. (Oct)	110	110	120				110	110	120
Congo (Jul)	10	30	10				10	30	10
Côte d'Ivoire (Oct)	5,000	2,700	3,600				5,000	2,700	3,600
Democratic Rep. of Congo (Oct)	560	560	750	60	60	150	500	500	600
Equatorial Guinea (Oct)	0	0	0				0	0	0
Ethiopia (Oct)	3,580	3,580	3,500	3,580	3,580	3,500	0	0	0
Gabon (Oct)	10	10	10				10	10	10
Ghana (Oct)	50	50	40				50	50	40
Guinea (Oct)	120	150	170				120	150	170
Kenya (Oct)	1,250	1,150	900	1,250	1,150	900			
Liberia (Oct)	10	10	10				10	10	10
Madagascar (Apr)	960	950	660	20	20	20	940	930	640
Malawi (Apr)	70	70	80	70	70	80			
Nigeria (Oct)	50	100	100				50	100	100
Rwanda (Apr)	250	230	220	250	230	220			
Sierra Leone (Oct)	30	30	40				30	30	40
Tanzania (Jul)	800	730	600	550	520	400	250	210	200
Togo (Oct)	200	200	200				200	200	200
Uganda (Oct)	3,810	3,600	3,000	300	350	250	3,510	3,250	2,750
Zambia (Jul)	60	60	30	60	60	30			
Zimbabwe (Apr)	180	170	130	180	170	130			
Total	18,580	15,900	15,480	6,740	6,620	6,130	11,840	9,280	9,350
Asia & Oceania									
India (Oct)	4,750	3,830	3,800	2,000	1,610	1,650	2,750	2,220	2,150
Indonesia (Apr)	6,000	6,300	6,730	480	400	400	5,520	5,900	6,330
Laos (Oct)	260	230	270				260	230	270
Malaysia (Oct)	160	160	160				160	160	160
New Caledonia (Oct)	10	10	10	10	10	10	0	0	0
Papua New Guinea (Apr)	1,400	1,330	1,060	1,340	1,270	1,000	60	60	60
Phillipines (Jul)	870	570	790	20	40	40	850	530	750
Sri Lanka (Oct)	40	40	40				40	40	40
Thailand (Oct)	1,370	830	1,320	0	0	10	1,370	830	1,310
Vietnam (Oct)	7,800	6,610	6,610	300	10	10	7,500	6,600	6,600
Yemen (Oct)	90	90	80	90	90	80			
Total	22,750	20,000	20,870	4,240	3,430	3,200	18,510	16,570	17,670
Total	107,270	108,130	95,300	70,750	76,800	62,800	36,520	31,330	32,500
Summary (By Type)									
American Milds	37,480	33,010	34,760	37,480	33,010	34,760	-	-	-
African & Asian Milds	7,310	6,380	5,750	7,310	6,380	5,750	-	-	-
Unwashed Arabicas	25,960	37,410	22,290	25,960	37,410	22,290	-	-	-
Robustas	36,520	31,330	32,500	-	-	-	36,520	31,330	32,500
Total	107,270	108,130	95,300	70,750	76,800	62,800	36,520	31,330	32,500

ANNEX 2

Projection of long term reference price for coffee sales under the project

Conservatively the long term reference price for coffee sales was assumed on the basis of the 10 year average of the LIFFE Robusta quotations, i.e. US\$/t 1,571.00.

This average price was arbitrarily reduced by 20% and the differential for Amboim coffee halved.

Item	US\$/t
Long term world market price for Robusta coffee ¹	1.256,80
Long term c.i.f. differential for Amboim coffee 2 ^a Quality BB ²	87,50
Long term f.o.b. differential for Amboim coffee 2 ^a Quality BB ³	27,50
Projected f.o.b. value of Amboim coffee 2 ^a Quality BB ⁴	1.224,30
Present f.o.b. value of Amboim coffee 2 ^a Quality BB ⁵	1.404,94
Overall reduction in value compared to present price levels	180,64
Percentage reduction in value	11,75%
Long term value of hulled coffee ex-warehouse of the hulling station ⁶	687,23
Long term value of dried cherries at farm gate level ⁷	576,90

Notes:

¹ US\$/t 1,571.00 - 20%

² US\$/t 175.00 - 50%

³ c.i.f. differential - US\$/t 60.00 (cost, insurance, freight to Europe)

⁴ US\$/t 1,571.00 - US\$/t 60.00 - US\$/t 27.50

⁵ See Table "Angola - Indicative Costs and Margins in the Commercialisation of Coffee"

⁶ US\$/t 778.70 - 11.75%

⁷ US\$/t 653.70 - 11.75%

ANNEX 2

REHABILITATION of 1 ha small holder coffee plantations (increase of planting density from 3m x 3m to 3m x 1.5m) - ESTABLISHMENT COSTS

Item	Unit	Quantity	Unit Value ['000 Kzr]	Value ['000 Kzr]	Value [USD]
ACTIVITY					
Clearing of area	man-day	14	4.500,00	63.000,00	20,00
Shade regulation	man-day	6	4.500,00	27.000,00	8,57
Digging of plant holes	man-day	16	4.500,00	72.000,00	22,86
Filling of plant holes	man-day	4	4.500,00	18.000,00	5,71
Phytosanitary control	man-day	6	4.500,00	27.000,00	8,57
Fertilisation	man-day	2	4.500,00	9.000,00	2,86
Planting	man-day	7	4.500,00	31.500,00	10,00
INPUTS					
Seedlings	plants	1200	315,00	378.000,00	120,00
Urea	kg	165	704,00	116.160,00	36,88
Zinc Sulfate	kg	44	3.150,00	138.600,00	44,00
Formicide	kg	2	5.250,00	10.500,00	3,33
Insecticide	L	1,5	15.533,00	23.299,50	7,40
SUB -TOTAL				914.059,50	290,18
Contingency	10%			91.405,95	29,02
TOTAL				1.005.465,45	319,20

ANNEX 2

COST OF PRODUCTION, YEAR 1 to 12

Item	Unit	Unit Value ['000 Kzr]	Unit Value [USD]	Year 1		Year 2		Year 3		Year 4		Year 5	
				Production 150 kg/ha		Production 200 kg/ha		Production 350 kg/ha		Production 500 kg/ha		Production 600 kg/ha	
				No of Units	[USD]	No. of Units	[USD]	No. of Units	[USD]	No. of Units	[USD]	No. of Units	[USD]
ACTIVIY													
Shade regulation	man-days	4,500.00	1.43	3	4.29	3	4.29	3	4.29	3	4.29	3	4.29
Weeding	man-days	4,500.00	1.43	9	12.86	9	12.86	9	12.86	9	12.86	9	12.86
Phytosanitary control	man-days	4,500.00	1.43	3	4.29	3	4.29	3	4.29	3	4.29	3	4.29
Replanting	man-days	4,500.00	1.43	1	1.43	0	0.00	0	0.00	0	0.00	0	0.00
Selection of best shoots	man-days	4,500.00	1.43	4	5.71	4	5.71	6	8.57	6	8.57	6	8.57
Pruning	man-days	4,500.00	1.43	3	4.29	3	4.29	3	4.29	3	4.29	5	7.14
Harvesting coffee cherries	bags of 75kg	3,000.00	0.95	9.4	8.95	12.5	11.90	22	20.95	31	29.52	37	35.24
Drying	man-days	4,500.00	1.43	3	4.29	4	5.71	7	10.00	10	14.29	12	17.14
Storing	man-days	4,500.00	1.43	0.3	0.43	0.5	0.71	0.7	1.00	0.8	1.14	0.75	1.07
Transport	man-days	4,500.00	1.43	4	5.71	5	7.14	8	11.43	12	17.14	15	21.43
Hulling	kg	150.00	0.05	150	7.14	200	9.52	350	16.67	500	23.81	600	28.57
INPUTS													
Urea	kg	704.00	0.22	0	0.00	165	36.88	165	36.88	165	36.88	165	36.88
Seedlings	plants	315.00	0.10	0	0.00	60	6.00	0	0.00	0	0.00	0	0.00
Insecticides	l	15,533.00	4.93	0	0.00	1	4.93	1	4.93	1	4.93	1	4.93
Formicides	kg	5,250.00	1.67	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Sacks	bags	3,500.00	1.11	3	3.33	4	4.44	6	6.67	9	10.00	10	11.11
SUB TOTAL					62.71		118.68		142.81		172.00		193.51
Contingency	10%				6.27		11.87		14.28		17.20		19.35
TOTAL					68.99		130.55		157.09		189.20		212.87

ANNEX 2

CASH FLOW												
(all figures in USD)												
Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
(a) INFLOWS												
Revenue ¹	103,50	138,00	241,00	345,00	414,00	414,00	414,00	414,00	414,00	414,00	414,00	414,00
TOTAL INFLOWS	103,50	138,00	241,00	345,00	414,00	414,00	414,00	414,00	414,00	414,00	414,00	414,00
(b) OUTFLOWS												
Equipment ²	-58,00			-58,00			-58,00			-58,00		
Establishment	-320,00											
Costs of Production	-69,00	-130,00	-157,00	-189,00	-213,00	-213,00	-213,00	-213,00	-213,00	-213,00	-213,00	-213,00
TOTAL OUTFLOWS	-447,00	-130,00	-157,00	-247,00	-213,00	-213,00	-271,00	-213,00	-213,00	-271,00	-213,00	-213,00
CASH FLOW BEFORE FINANCING (a) - (b)	-343,50	8,00	84,00	98,00	201,00	201,00	143,00	201,00	201,00	143,00	201,00	201,00
Internal Financial Rate of Return	31%											
FINANCING												
(A) INVESTMENT												
INFLOW												
Credit ³	293,00											
Accumulation of Interest ³	29,30	32,23	35,45									
NET BALANCE OF INFLOW	322,30	354,53	389,98	341,24	292,49	243,74	194,99	146,24	97,50	48,75	0,00	
OUTFLOW												
Interest ⁴				-39,00	-34,12	-29,25	-24,37	-19,50	-14,62	-9,75	-4,87	
Repayment of Accumulated Interest ⁵				-12,12	-12,12	-12,12	-12,12	-12,12	-12,12	-12,12	-12,12	
Repayment of Principle ⁵				-36,63	-36,63	-36,63	-36,63	-36,63	-36,63	-36,63	-36,63	
REPAYMENTS INVESTMENT	0,00	0,00	0,00	-87,75	-82,87	-78,00	-73,12	-68,25	-63,37	-58,50	-53,62	
(B) PRODUCTION & COMMERCIALISATION												
INFLOW												
Credit ⁶		75,00	75,00	90,00	90,00	90,00	90,00	90,00	90,00	90,00	90,00	90,00
OUTFLOW												
Interest ⁴	0,00	-7,50	-7,50	-9,00	-9,00	-9,00	-9,00	-9,00	-9,00	-9,00	-9,00	-9,00
Repayment of Principle	0,00	-75,00	-75,00	-90,00	-90,00	-90,00	-90,00	-90,00	-90,00	-90,00	-90,00	-90,00
REPAYMENTS PROD. & COMMERCIAL.	0,00	-7,50	-7,50	-9,00	-9,00	-9,00	-9,00	-9,00	-9,00	-9,00	-9,00	-9,00
NET FINANCING	293,00	-7,50	-7,50	-96,75	-91,87	-87,00	-82,12	-77,25	-72,37	-67,50	-62,62	-9,00
NET CASHFLOW AFTER FINANCING	-50,50	0,50	76,50	1,26	109,13	114,01	60,88	123,76	128,63	75,51	138,38	192,00
NET INCREMENTAL CASH FLOW	-50,50	-50,00	26,50	27,76	136,89	250,90	311,78	435,54	564,17	639,68	778,06	970,07

Notes:

¹ Sales price is UScts/kg 68.72 (value of hulled coffee ex warehouse of hulling station reduced by 11.75%; see "projection of long term reference price for coffee sales under the project")

² Equipment will have to be replaced every three years.

³ It is supposed that all agricultural activities related to the establishment of the rehabilitation scheme will be realised by family labour.

⁴ Interest is calculated with 10%.

⁵ Repayment of accumulated interest and initial credit for establishment over 8 years.

⁶ It is supposed that all farming activities will be realised by family labour. Only for harvesting and post harvest operations external labour would be recruited. Credit, therefore, should be extended up to a maximum amount of US\$ 75.00/ha in year 2, US\$ 75.00/ha in year 3 and US\$ 90.00/ha from year 4 onwards.

ANNEX 2

**RENOVATION of 1 ha of unproductive Coffee Plantations
(planting density 1,650 trees per hectare)
ESTABLISHMENT COSTS (Year 1 to 3)**

Year 1

Item	Unit	Quantity	Unit Value ['000 Kzr]	Value ['000 Kzr]	Value [USD]
ACTIVITY					
Clearing of area	man-day	14	4.500,00	63.000,00	20,00
Marking of planting holes	man-day	3	4.500,00	13.500,00	4,29
Digging of planting holes	man-day	24	4.500,00	84.000,00	26,67
Filling of planting holes	man-day	6	4.500,00	27.000,00	8,57
Phytosanitary control	man-day	6	4.500,00	27.000,00	8,57
Fertilisation	man-day	3	4.500,00	13.500,00	4,29
Planting	man-day	10	4.500,00	45.000,00	14,29
INPUTS					
Seedlings	plants	1650	315,00	519.750,00	165,00
Urea	kg	125	704,00	88.000,00	27,94
Zinc sulfate	kg	33	3.150,00	102.960,00	32,69
Formicide	kg	2	5.250,00	10.500,00	3,33
Insecticides	L	1,5	15.533,00	23.300,00	7,40
SUB-TOTAL				1.017.510,00	323,02
Contingency	%	10		101.751,00	32,30
TOTAL				1.119.261,00	355,32

Year 2

Item	Unit	Quantity	Unit Value ['000 Kzr]	Value ['000 Kzr]	Value [USD]
ACTIVITY					
Shade regulation	man-day	6	4.500,00	27.000,00	8,57
Weeding	man-day	27	4.500,00	121.500,00	38,57
Replanting	man-day	1	4.500,00	4.500,00	1,43
INPUTS					
Seedlings	plants	100	315,00	31.500,00	10,00
Urea	kg	125	704,00	88.000,00	27,94
SUBTOTAL				272.500,00	86,51
Contingency	%	10		27.250,00	8,65
TOTAL				299.750,00	95,16

Year 3

Item	Unit	Quantity	Unit Value ['000 Kzr]	Value ['000 Kzr]	Value [USD]
ACTIVITY					
Shade regulation	man-day	3	4.500,00	13.500,00	4,29
Weeding	man-day	27	4.500,00	121.500,00	38,57
Phytosanitary control	man-day	3	4.500,00	13.500,00	4,29
INPUTS					
Control of Broca (Insecticide)	L	0,75	15.533,00	11.650,00	3,70
Formicide	kg	1	5.250,00	5.250,00	1,67
Urea	kg	125	704,00	88.000,00	27,94
SUB-TOTAL				253.400,00	80,44
Contingency	10%			25.340,00	8,04
TOTAL				278.740,00	88,49

ANNEX 2

COSTS OF PRODUCTION FOR YEARS 3 TO 12

Item	Unit	Unit Value ['000 Kzr]	Unit Value [USD]	Year 4		Year 5		Year 6		Year 7 - 13	
				Production 200 kg/ha		Production 400 kg/ha		Production 600 kg/ha		Production 800 kg/ha	
				No. of Units	USD	No. of Units	USD	No. of Units	USD	No. of Units	USD
ACTIVITY											
Shade regulation	man-days	4,500.00	1.43	3	4.29	3	4.29	3	4.29	3	4.29
Weeding	man-days	4,500.00	1.43	27	38.57	27	38.57	27	38.57	27	38.57
Phytosanitary control	man-days	4,500.00	1.43	3	4.29	3	4.29	3	4.29	3	4.29
Selection of best shoots	man-days	4,500.00	1.43	0	0.00	0	0.00	6	8.57	5	7.14
Pruning	man-days	4,500.00	1.43	0	0.00	0	0.00	5	7.14	5	7.14
Harvesting	bags of 75kg	3,000.00	0.95	12.5	11.90	25	23.81	37.5	35.71	50	47.62
Drying	man-days	4,500.00	1.43	3	4.29	5	7.14	8	11.43	10	14.29
Storing	man-days	4,500.00	1.43	0.5	0.71	0.75	1.07	0.75	1.07	0.85	1.21
Transport	man-days	4,500.00	1.43	5	7.14	10	14.29	15	21.43	20	28.57
Hulling	kg	150.00	0.05	200	9.52	400	19.05	600	28.57	800	38.10
INPUTS											
Urea	kg	704.00	0.22	125	27.94	125	27.94	125	27.94	125	27.94
Insecticide	l	15,533.00	4.93	1.5	7.40	1.5	7.40	0.75	3.70	0.75	3.70
Sacks	bags	3,500.00	1.11	4	4.44	7	7.78	10	11.11	14	15.56
SUB TOTAL					120.49		155.61		203.82		238.40
Contingency	10%				12.05		15.56		20.38		23.84
TOTAL					132.54		171.17		224.20		262.25

Note: There is no production during year 1 and 2 since coffee trees are growing.

ANNEX 2

CASH FLOW (all figures in USD)

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
(a) INFLOWS												
Revenue ¹				138.00	276.00	414.00	552.00	552.00	552.00	552.00	552.00	552.00
TOTAL INFLOWS	0.00	0.00	0.00	138.00	276.00	414.00	552.00	552.00	552.00	552.00	552.00	552.00
(b) OUTFLOWS												
Equipment ²	-58.00			-58.00			-58.00				-58.00	
Establishment	-355.00											
Costs of Production		-95.00	-88.00	-133.00	-171.00	-224.00	-262.00	-262.00	-262.00	-262.00	-262.00	-262.00
TOTAL OUTFLOWS	-413.00	-95.00	-88.00	-191.00	-171.00	-224.00	-320.00	-262.00	-262.00	-320.00	-262.00	-262.00
CASH FLOW BEFORE FINANCING (a) - (b)	-413.00	-95.00	-88.00	-53.00	105.00	190.00	232.00	290.00	290.00	232.00	290.00	290.00

Internal Financial Rate of Return 17%

FINANCING	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
INFLOW												
Credit ³	260.00	50.00	40.00									
Accumulation of Interest	26.00	28.17	36.99									
NET BALANCE OF INFLOW	286.00	369.17	450.16	405.57	361.30	317.42	273.55	229.67	185.80	141.92	98.05	
OUTFLOW												
Interest ⁵				-45.02	-40.56	-36.13	-31.70	-27.37	-22.97	-18.58	-14.19	-9.81
Repayment of Accumulated Interest ⁶				-11.39	-11.39	-11.39	-11.39	-11.39	-11.39	-11.39	-11.39	-11.39
Repayment of Principle ⁶				-32.50	-32.48	-32.48	-32.48	-32.48	-32.48	-32.48	-32.48	-32.48
REPAYMENTS INVESTMENT	0.00	0.00	0.00	-88.91	-84.43	-80.00	-75.58	-71.25	-66.84	-62.45	-58.07	-9.81
(B) PRODUCTION & COMMERCIALISATION												
INFLOW												
Credit ⁴				75.00	80.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00
OUTFLOW												
Interest ⁵				-7.50	-8.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
Repayment of Principle ⁶				-75.00	-80.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00	-90.00
REPAYMENTS PROD. & COMMERCIAL.	0.00	0.00	0.00	-7.50	-8.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00	-9.00
NET FINANCING	260.00	50.00	40.00	-96.41	-92.43	-89.00	-84.58	-80.25	-75.82	-71.49	-67.07	-18.77
NET CASH FLOW AFTER FINANCING	-153.00	-45.00	-48.00	-149.41	12.57	101.00	147.43	209.76	214.18	160.51	222.94	271.23
NET INCREMENTAL CASH FLOW	-153.00	-198.00	-246.00	-395.41	-382.83	-281.84	-134.41	75.34	289.52	450.03	672.96	944.20

Notes:

¹ Sales price is UScts/kg 68.72 (value of hulled coffee ex warehouse of hulling station reduced by 11.75%; see "projection of long term reference .price for coffee sales under the project")

² Equipment will have to be replaced every three years.

³ It is supposed that all farming activities realised to the renovation of coffee plantations will be realised by family labour.

⁴ It is supposed that all farming activities will be realised by family labour. Only for harvesting and post harvest operations external labour would be recruited.

Credit, therefore, should be extended up to a maximum amount of US\$ 75.00/ha in year 4, US\$ 80.00 in year 5, and US\$ 90.00 from year 6 onwards.

ANNEX 2

COSTS for REHABILITATION of 1 ha of abandoned Coffee Plantations (no increase in planting density) SETTLEMENT SCHEME

Item	Unit	Unit Value ['000 Kzr]	Unit Value [USD]	Year 1		Year 2		Year 3 and onwards	
				Production 100 kg/ha		Production 200 kg/ha		Production 300 kg/ha	
				No. of Units	Value [USD]	No. of Units	Value [USD]	No. of Units	Value [USD]
ACTIVITY									
Clearing of area	man-days	4,500.00	1.43	27	38.57	25	35.71	25	35.71
Shade regulation	man-days	4,500.00	1.43	6	8.57	3	4.29	3	4.29
Pruning	man-days	4,500.00	1.43	3	4.29	3	4.29	3	4.29
Selection of best shoots	man-days	4,500.00	1.43	4	5.71	4	5.71	4	5.71
Harvesting	bags of 75kg	3,000.00	0.95	9	8.95	13	11.90	17	15.81
Drying	man-days	4,500.00	1.43	3	4.29	3	4.29	3	4.29
Storing	man-days	4,500.00	1.43	0	0.43	1	0.71	1	0.71
Transport	man-days	4,500.00	1.43	3	3.57	5	7.14	8	10.71
Hulling	kg	150.00	0.05	100	4.76	200	9.52	300	14.29
INPUTS									
Seedlings	plants	315.00	0.10	150	15.00	25	2.50	25	2.50
Urea	kg	704.00	0.22	83	18.55	83	18.55	83	18.55
Zinc sulfate	kg	3,150.00	1.00	22	22.00	0	0.00	0	0.00
Sacks	bags	3,500.00	1.11	3	3.33	4	4.44	5	5.56
SUB-TOTAL					138.03		109.07		122.41
Contingency	10%				13.80		10.91		12.24
TOTAL					151.83		119.97		134.66

ANNEX 2

CASH FLOW (all figures in USD)										
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Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
(a) INFLOWS										
Revenue ¹	69,00	138,00	207,00	207,00	207,00	207,00	207,00	207,00	207,00	207,00
TOTAL INFLOWS	69,00	138,00	207,00	207,00	207,00	207,00	207,00	207,00	207,00	207,00
(b) OUTFLOWS										
Equipment ²	0,00			-58,00			-58,00			-58,00
Costs of Production	-151,50	-119,75	-134,75	-134,75	-134,75	-134,75	-134,75	-134,75	-134,75	-134,75
TOTAL OUTFLOWS	-151,50	-119,75	-134,75	-192,75	-134,75	-134,75	-192,75	-134,75	-134,75	-192,75
CASH FLOW BEFORE FINANCING (a) - (b)	-82,50	18,25	72,25	14,25	72,25	72,25	14,25	72,25	72,25	14,25
INCREMENTAL CASH FLOW BEFORE FINANC.	-82,50	-64,25	8,00	22,25	94,50	166,75	181,00	253,25	325,50	339,75

Internal Financial Rate of Return	49%
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FINANCING	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Credit ³	70,00	70,00	70,00	70,00	70,00	70,00	70,00	70,00	70,00	70,00
OUTFLOW										
Interest ⁴	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00
Repayment of Principle	-70,00	-70,00	-70,00	-70,00	-70,00	-70,00	-70,00	-70,00	-70,00	-70,00
NET FINANCING	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00	-7,00
NET CASH FLOW AFTER FINANCING	-89,50	11,25	65,25	7,25	65,25	65,25	7,25	65,25	65,25	7,25
NET INCREMENTAL CASH FLOW	-89,50	-78,25	-13,00	-5,75	59,50	124,75	132,00	197,25	262,50	269,75

Note:

¹ Sales price is UScts/kg 68.72 (value of hulled coffee ex warehouse of hulling station reduced by 11.75%; see "projection of long term reference price for coffee sales under the project").

² Equipment will be donated initially. After 3 years of operation farmers will have to replace equipment at own cost.

³ It is supposed that all farming activities will be realised by family labour. Only for harvesting and post harvest operations external labour would be recruited. Credit, therefore, should be extended up to a maximum amount of US\$ 70.00/ha per year.

⁴ Interest is calculated with 10%.

ANNEX 2

VOLUME OF CREDIT FOR PRODUCTION (all figures in USD)

Item	Cost per ha	Volume per Farmer ⁰	Volume Year 1	Volume Year 2 ⁷	Volume Year 3 ⁷
REHABILITATION (4,200 ha)					
Equipment	58,00	58,00	121.800,00		
Establishment ¹	235,00	470,00	987.000,00		
Production ²	55,00	110,00		231.000,00	231.000,00
SUB-TOTAL			1.108.800,00	231.000,00	231.000,00
RENOVATION (1,800 ha)					
Equipment	58,00	58,00	52.200,00		
Establishment ³	270,00	540,00	486.000,00		
Production ⁴	50,00	100,00		90.000,00	90.000,00
SUB-TOTAL			538.200,00	90.000,00	90.000,00
REHABILITATION within SETTLEMENT SCHEME (2,000 ha)					
Equipment ⁵	0,00	0,00			
Production ⁶	70,00	140,00	140.000,00		
SUB-TOTAL			140.000,00	0,00	0,00
TOTAL VOLUME PER YEAR			1.787.000,00	321.000,00	321.000,00
INCREMENTAL CREDIT VOLUME			1.787.000,00	2.108.000,00	2.429.000,00

Notes:

⁰ Each farmer will receive finance for 2 ha of coffee.

¹ Credit for establishment would be extended up to a maximum amount US\$ 235.00/ha covering required inputs.

² Credit would be extended up to a maximum amount of US\$ 55.00/ha from year 2 onwards. The amount should cover the costs of required inputs.

³ Credit for establishment of renovated plots would be extended up to maximum amount of US\$ 270.00/ha in year 1 covering costs of required inputs.

⁴ Credit would be extended up to a maximum amount of US\$ 50.00/ha from year 2 onwards covering required inputs.

⁵ Equipment will be donated only in year 1. Afterwards farmers will have to cover the costs for replacements.

⁶ Credit would be extended up to a maximum amount of US\$ 70.00/ha per year covering the costs of inputs and some additional work force if required.

⁷ For the settlement scheme only the incremental amount necessary compared to year 1 has been considered as the total credit shall always be recovered within the same year.

ANNEX 3

COFFEE PROCESSING (HULLING) ESTABLISHMENT and RECURRENT COSTS

(A) Establishment Costs

1. Machinery

Type	Quantity	US\$/unit	Year 1		Year 2		Year 3	
			Total quantity	Total costs US\$	Total quantity	Total costs US\$	Total quantity	Total costs US\$
Hulling machinery ¹	1	65.000	1	70.000		0		0
Generator	1	3.000	1	3.000		0		0
Sub-total				73.000		0		0

¹ Hulling capacity 2.4 t/h of cherry coffee

2. Civil Works

Type	Quantity	US\$/unit	Year 1		Year 2		Year 3	
			Total quantity	Total costs US\$	Total quantity	Total costs US\$	Total quantity	Total costs US\$
Factory building ²	200 m ²	400,00	200	80.000		0		0
Drying space	2,500 m ²	20,00	2.500	50.000		0		0
Sub-total				130.000		0		0

² Including storing facilities

TOTAL ESTABLISHMENT COSTS	203.000
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(B) Recurrent Costs

Type	Quantity/year	US\$/unit	Year 1		Year 2		Year 3	
			Total quantity	Total costs US\$	Total quantity	Total costs US\$	Total quantity	Total costs US\$
Permanent staff ³	2 x 12 man-months	50	36	1.800	72	3.600	72	3.600
Fuel			Lumpsum	3.000		3.000		3.000
Maintenance/repair			Lumpsum	3.000		3.000		3.000
Other costs			Lumpsum	2.000		2.000		2.000
Sub-total				9.800		11.600		11.600

³ It is supposed that staff will be trained during 6 months of year 1 while machinery will be tendered and installed.

Processing will only start in year 2.

ANNEX 3

CASH FLOW												
(all figures in USD)												
Item	Without Project ²					With Project ³						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7 - 8
(a) INFLOWS												
Revenue ¹	156.600,00	208.800,00	365.400,00	522.000,00	626.400,00	183.600,00	244.800,00	428.400,00	612.000,00	734.400,00	734.400,00	734.400,00
TOTAL INFLOWS	156.600,00	208.800,00	365.400,00	522.000,00	626.400,00	183.600,00	244.800,00	428.400,00	612.000,00	734.400,00	734.400,00	734.400,00
(b) OUTFLOWS												
Machinery and Equipment						-73.000,00						
Civil Works						-130.000,00						
Recurrent Costs						-9.800,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00
TOTAL OUTFLOWS	0,00	0,00	0,00	0,00	0,00	-212.800,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00
CASH FLOW BEFORE FINANCING (a) - (b)	156.600,00	208.800,00	365.400,00	522.000,00	626.400,00	-29.200,00	233.200,00	416.800,00	600.400,00	722.800,00	722.800,00	722.800,00
DIFFERENCE IN CASH FLOWS						-185.800,00	24.400,00	51.400,00	78.400,00	96.400,00	96.400,00	96.400,00
Internal Financial Rate of Return	26%											
FINANCING												
						Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7 - 8
INFLOW												
Credit ⁴						203.000,00						
Accumulation of Interest						20.300,00						
NET BALANCE OF INFLOW						223.300,00						
OUTFLOW												
Interest ⁵							-22.330,00	-17.762,50	-15.225,00	-12.687,50	-10.150,00	-7.612,50
Repayment of Accumulated Interest							-2.537,50	-2.537,50	-2.537,50	-2.537,50	-2.537,50	-2.537,50
Repayment of Principle ⁶							-25.375,00	-25.375,00	-25.375,00	-25.375,00	-25.375,00	-25.375,00
NET BALANCE OF OUTFLOW							-50.242,50	-45.675,00	-43.137,50	-40.600,00	-38.062,50	-35.525,00
NET FINANCING						203.000,00	-47.705,00	-43.137,50	-40.600,00	-38.062,50	-35.525,00	-32.987,50
NET CASHFLOW AFTER FINANCING						17.200,00	-23.305,00	8.262,50	37.800,00	58.337,50	60.875,00	63.412,50
NET INCREMENTAL CASH FLOW						17.200,00	-6.105,00	2.157,50	39.957,50	98.295,00	159.170,00	222.582,50

Notes:

¹ Sales price is UScts/kg 68.72 (value of hulled coffee ex warehouse of hulling station reduced by 11.75%; see "projection of long term reference price for coffee sales under the project").

Estimated processing volume:

Year 1: 900 farmers harvest 150 kg/ha green coffee, i.e. 300 kg/ha dried cherries. Total amount: 270 t dried cherries

Year 2: 900 farmers harvest 200 kg/ha green coffee, i.e. 400 kg/ha dried cherries. Total amount: 360 t dried cherries

Year 3: 900 farmers harvest 350 kg/ha green coffee, i.e. 700 kg/ha dried cherries. Total amount: 630 t dried cherries

Year 4: 900 farmers harvest 500 kg/ha green coffee, i.e. 1,000 kg/ha dried cherries. Total amount: 900 t dried cherries

Year 5 and onwards: 900 farmers harvest 600 kg/ha green coffee, i.e. 1,200 kg/ha dried cherries. Total amount: 1,080 t dried cherries

² Without project farmers are supposed to sell dried cherries (café mabuba) and processing yield is 48%.

³ With project farmers are supposed to sell hulled coffee (café comercial) and processing yield is 53%.

⁴ Grace period of 1 year.

⁵ Interest rate 10%.

⁶ Repayment of initial credit for establishment and accumulated interest over 8 years.

ANNEX 4

VOLUME OF COMMERCIALISATION CREDIT
(all figures in USD)

	Year 1	Year 2	Year 3
Type	Total costs US\$	Total costs US\$	Total costs US\$
Rehabilitation ¹	112.850,00	148.930,00	255.575,00
Settlement ¹	44.450,00	68.060,00	93.000,00
TOTAL VOLUME PER YEAR	157.300,00	216.990,00	348.575,00
NET VOLUME OF CREDIT PER YEAR ²	157.300,00	59.690,00	131.585,00

Notes:

¹ Only rehabilitation and settlement have been considered as yields from renovated fields are only expected in year 4.

For both schemes the following activities are covered by the credit for commercialisation: harvesting, drying, storing, transport and hulling.

² Only the additional value of credit is considered since repayment is assumed to be realised within the same year.

ANNEX 5a

Summary of Costs by Category including 5% Contingency - USD					
	Total Cost	CFC Loan	CFC Grant	Angola Government	% Expend. Financed by CFC
Category of Expenditure					
I Vehicles, Machinery and Equipment	1,402,711	246,750	441,079	714,882	49%
II Civil Works	626,185	136,500	0	489,685	22%
III Materials and Supplies	2,358,243	1,855,766	5,250	497,228	79%
IV Personnel	1,211,847	0	626,850	584,997	51%
V Technical Assistance	272,528	0	252,840	19,688	93%
VI Duty Travel	139,650	0	104,580	35,070	76%
VII Dissemination and Training	351,645	0	95,813	255,833	27%
VIII Operational Costs	2,049,284	521,000	344,177	1,184,107	42%
IX Supervision and Monitoring	119,385	0	119,385	0	100%
Grand Total	8,531,477	2,760,016	1,989,973	3,781,488	56%

ANNEX 5b

SUMMARY OF PROJECT COSTS (Cost per Component in USD)

Category of Expenditure	PY1	PY2	PY3	Base Cost	Contingency	Total Cost
Component No.1	1,754,720	381,561	402,767	2,539,048	126,952	2,666,000
Component No.2	440,950	226,350	177,590	844,890	42,245	887,135
Component No.3	1,058,700	114,000	1,000	1,173,700	58,685	1,232,385
Component No.4	1,204,389	358,732	406,108	1,969,228	98,461	2,067,689
Component No.5	252,800	133,200	107,300	493,300	24,665	517,965
Component No.6	22,300	21,500	21,500	65,300	3,265	68,565
Component No.7	466,050	296,200	277,500	1,039,750	51,988	1,091,738
Sub Total	5,199,908	1,531,543	1,393,765	8,125,216	406,261	8,531,477
Contingency (5%)	259,995	76,577	69,688	406,261		
Grand Total	5,459,904	1,608,120	1,463,453	8,531,477		

ANNEX 5c

SUMMARY OF PROJECT COSTS (Split of project costs into Grant and Loan, in USD)

	Component No. 1		Component No. 2		Component No. 3		Component No. 4		Component No. 5		Component No. 6		Component No. 7	
	Loan	Grant	Loan	Grant	Loan	Grant	Loan	Grant	Loan	Grant	Loan	Grant	Loan	Grant
I Vehicles, Machinery and Equipment	0	207,023	78,750	23,100	0	194,250	168,000	399,053	0	133,035	0	0	0	199,500
II Civil Works	0	0	136,500	0	0	215,250	0	274,435	0	0	0	0	0	0
III Materials and Supplies	1,834,766	6,825	21,000	0	0	382,778	0	60,375	0	23,625	0	0	0	28,875
IV Personnel	0	103,467	0	9,450	0	100,800	0	201,180	0	211,680	0	0	0	585,270
V Technical Assistance	0	75,180	0	56,385	0	0	0	56,385	0	18,795	0	56,385	0	9,398
VI Duty Travel	0	5,880	0	14,700	0	0	0	72,450	0	20,580	0	12,180	0	13,860
VII Dissemination and Training	0	157,500	0	13,650	0	15,750	0	101,745	0	63,000	0	0	0	0
VIII Operational Costs	0	275,359	521,000	12,600	0	323,558	0	734,067	0	47,250	0	0	0	135,450
IX Supervision and Monitoring	0	0	0	0	0	0	0	0	0	0	0	0	0	119,385
Grand Total	1,834,766	831,235	757,250	129,885	0	1,232,385	168,000	1,899,689	0	517,965	0	68,565	0	1,091,738

Total Loan	2,760,016	32%
Total Grant	5,771,462	68%

ANNEX 5d

SUMMARY OF PROJECT COSTS (Specification of Loan and Grant items for Components 1 and 2, in USD)

	Specification of Component 1		Specification of Component 2	
	Loan	Grant	Loan	Grant
I Vehicles, Machinery and Equipment		Portable Laboratory 4,400	Hulling machinery 70,000	Sample roasting kit 15,000
		Rehabilitation/Intensification (4.200 há) 79,800	Generator 5,000	Liquoring kit 7,000
		Renovation (1.800 há) 22,950		
		Production of Coffee Seedlings 225		
II Civil works			Factory building (incl. Storing facilities) 80,000	
			Drying space 50,000	
III Materials & Supplies	Rehabilitation/Intensification (4.200 há) 828,749	Other costs 5,000	Moisture meters 20,000	
	Renovation 1800 HA 248,729			
	Rehabilitation within settlement scheme 189,210			
	Production of coffee seedlings 568,078			

IV Personnel				
V Technical Assistance and Consultancy		TA Baseline Survey 71,600		Quality Trainer 17,900 Marketing expert 35,800
VI Duty Travel		International 4,000		International flight 10,000
VII Dissemination and Training	Farmer Training			Liquorer Training 13,000
VIII Operational Costs		Construction of nursery (1750 m) 6,569	Revolving Fund Coffee Commercialisation 496,190	
	Total	1,834,766	194,544	721,190
	Contingency (5%)	91,738	9,727	36,060
	GRAND TOTAL	1,926,504	204,271	757,250

ANNEX 5e

SUMMARY OF PROJECT COSTS (Budget Details, in USD)

I PRODUCT ION	Category and Component Inputs	Items of Expenditure	Unit	Unit Price	Y1	Y2	Y3	Y1	Y2	Y3	Base Cost	Cont	Contingenc y Amount	Total Cost	CFC
				US \$	QQ	QQ	QQ	US \$	US \$	US \$	US \$	%	US \$	US \$	US \$
	I Vehicles, Machinery and Equipment	Portable Laboratory	Number	2,200	2	0		4,400	0	0	4,400	5	220	4,620	4,620
		<i>Rehabilitation/Intensification (4.200 há)</i>													
		Hoes (large)	4/farmer	9	8,400	0		75,600	0	0	75,600	5	3,780	79,380	39,690
		Axes	1/farmer	5	2,100	0		10,500	0	0	10,500	5	525	11,025	11,025
		Machetes	3/farmer	5	6,300	0		31,500	0	0	31,500	5	1,575	33,075	33,075
		Files	1/farmer	2	2,100	0		4,200	0	0	4,200	5	210	4,410	0
		<i>Renovation (1.800 há)</i>													
		Hoes (large)	4/farmer	9	3,600	0		32,400	0	0	32,400	5	1,620	34,020	17,010
		Axes	1/farmer	5	900	0		4,500	0	0	4,500	5	225	4,725	0
		Machetes	3/farmer	5	2,700	0		13,500	0	0	13,500	5	675	14,175	7,088
		Files	1/farmer	2	900	0		1,800	0	0	1,800	5	90	1,890	0
		<i>Production of Coffee Seedlings</i>													
		Hoes (large)	Number	9	75	0		675	0		675	5	34	709	0
		Hoes (small)	Number	5	75	0		375	0		375	5	19	394	0
		Axes	Number	5	25	0		125	0		125	5	6	131	131
		Machetes	Number	5	75	0	0	375	0	0	375	5	19	394	0
		Files	Number	2	50			100			100	5	5	105	105
		Wheelbarrow	Number	35	25			875			875	5	44	919	0
		Watering can	Number	5	50			240			240	5	12	252	0
		Sprayer	Number	40	25			1,000			1,000	5	50	1,050	0
		Production tools for medium farmers													

		Generator	Number	5,000	3			15,000			15,000	5	750	15,750	7,875
	III Materials & Supplies	<i>Rehabilitation/Intensification (4.200 há)</i>													
		Urea	165kg/há	0	693,000	693,000	693,000	152,460	152,460	152,460	457,380	5	22,869	480,249	480,249
		Zinc Sulfate	1 l/há	1	184,800			184,800	0	0	184,800	5	9,240	194,040	194,040
		Insecticides	2 kg/há	5	6,300	4,200	4,200	31,059	20,706	20,706	72,471	5	3,624	76,095	76,095
		Formicides	1 bag/há	2	8,400			14,028	0	0	14,028	5	701	14,729	14,729
		Sacks	1 bag/há	1	12,600	16,800	25,200	13,986	18,648	27,972	60,606	5	3,030	63,636	63,636
		<i>Renovation 1800 HA</i>						0	0	0	0	5	0	0	0
		Urea	125 kg/ha	0	225,000	225,000	225,000	49,500	49,500	49,500	148,500	5	7,425	155,925	155,925
		Zinc Sulfate	33 kg/ha	1	59,400			59,400	0	0	59,400	5	2,970	62,370	62,370
		Insecticides	0.75 to 1,5 l/ha	5	2,700		1,350	13,311	0	6,656	19,967	5	998	20,965	20,965
		Formicides	1 to 2 kg/ha	2	3,600		1,800	6,012	0	3,006	9,018	5	451	9,469	9,469
		<i>Rehabilitation within settlement scheme</i>								0					
		Urea	83 kg/ha	0	166,000	166,000	166,000	36,520	36,520	36,520	109,560	5	5,478	115,038	115,038
		Zinc Sulfate	22 kg/ha	1	44,000			44,000	0	0	44,000	5	2,200	46,200	46,200
		Sacks	1 bag/há	1	6,000	8,000	10,000	6,660	8,880	11,100	26,640	5	1,332	27,972	27,972
		<i>Production of coffee seedlings</i>													
		Seeds	kg	15	3,500	100	100	52,500	1,500	1,500	55,500	5	2,775	58,275	58,275
		Ammoniumsulfate	kg	0	875	25	25	175	5	5	185	5	9	194	194
		Copperoxide	kg	1	875	25	25	569	16	16	601	5	30	631	631
		Planting bags	1000 bags	60	7,579	250	250	454,740	15,000	15,000	484,740	5	24,237	508,977	508,977
		<i>Expansion/modernisation *(...ha)</i>								0					
			83 kg/ha	0	0	0	0	0	0	0	0	5	0	0	0
			22 kg/ha	0	0			0	0	0	0	5	0	0	0
			1 bag/há	0	0	0	0	0	0	0	0	5	0	0	0
		<i>Other costs</i>						0	0	0	0	5	0	0	0
		Material baseline survey	Lumpsum	5,000	1			5,000	0	0	5,000	5	250	5,250	5,250
		Material soil analysis	Lumpsum	1,500	1			1,500	0	0	1,500	5	75	1,575	0
	IV Personnel														

		Enumerators	Per diem/man month	40	120			4,800	0	0	4,800	5	240	5,040	
		Statistician	fee/man month	8,000	1			8,000	0	0	8,000	5	400	8,400	
		Nursery staff	fee/man month	60	625	312	312	37,500	18,720	18,720	74,940	5	3,747	78,687	
		Laboratory staff	fee/man month	100	36	36	36	3,600	3,600	3,600	10,800	5	540	11,340	
	V Technical Assistance and Consultancy	TA Baseline Survey	Fee/man-month	12,500	4			50,000	0	0	50,000	5	2,500	52,500	52,500
			per diem/man-month	5,400	4			21,600	0	0	21,600	5	1,080	22,680	22,680
	VI Duty Travel	Flights	International	2,000	2	0		4,000	0	0	4,000	5	200	4,200	4,200
		Flights	National	400	4	0		1,600	0	0	1,600	5	80	1,680	
	VII Dissemination and Training	Farmer Training	Training Units	500	100	100	100	50,000	50,000	50,000	150,000	5	7,500	157,500	0
	VIII Operational Costs	<i>Production of Coffee Seedlings</i>													
		Construction of nursery (1750 m)	man-days	1	17,500			25,025	0	0	25,025	5	1,251	26,276	6,569
		Expansion of multiplication facilities at experimental station in Gabella	lumpsum	15,000	1	0		15,000	0	0	15,000	5	750	15,750	0
		Preparation of substrate	man-days	1	3,500	100	100	5,005	143	143	5,291	5	265	5,556	
		Filling of planting bags	man-days	1	14,000	400	400	20,020	572	572	21,164	5	1,058	22,222	
		Seeding	man-days	1	3,500	100	100	5,005	143	143	5,291	5	265	5,556	
		Weeding	man-days	1	8,750	250	250	12,513	358	358	13,228	5	661	13,889	
		Irrigation (manual)	man-days	1	105,000	3,000	3,000	150,150	4,290	4,290	158,730	5	7,937	166,667	
		Selection of seedlings	man-days	1	7,000	200	200	10,010	286	286	10,582	5	529	11,111	
		Spraying	man-days	1	5,250	150	150	7,508	215	215	7,937	5	397	8,333	
2	COMMER	I Vehicles, Machinery and Equipment	Hulling machinery	number	70,000	1		70,000	0	0	70,000	5	3,500	73,500	73,500
	CIALISATI		Generator	number	5,000	1		5,000	0	0	5,000	5	250	5,250	5,250
	ON		Sample roasting kit	number	15,000	1		15,000	0	0	15,000	5	750	15,750	15,750

			Liquoring kit	number	7,000	1			7,000	0	0	7,000	5	350	7,350	7,350	
	II Civil works		Factory building (incl. Storing facilities)	200m2	400	200			80,000	0	0	80,000	5	4,000	84,000	84,000	
			Drying space	2.500 m2	20	2,500			50,000	0	0	50,000	5	2,500	52,500	52,500	
	III Materials & Supplies		Moisture meters	number	1,000	20			20,000	0	0	20,000	5	1,000	21,000	21,000	
	IV Personnel		Permanent staff hulling station	man-month	50	36	72	72	1,800	3,600	3,600	9,000	5	450	9,450		
	V Technical Assistance and Consultancy		Quality Trainer	fee/man-month	12,500	1	0		12,500	0	0	12,500	5	625	13,125	13,125	
				per diem/man- month	5,400	1			5,400			5,400	5	270	5,670	5,670	
			Marketing expert	Fee/man-month	12,500	2	1		18,750	6,250		25,000	5	1,250	26,250	26,250	
				per diem/man- month	5,400	2	1		8,100	2,700		10,800	5	540	11,340	11,340	
	VI Duty Travel		Marketing expert	International flight	2,000	1	1		2,000	2,000		4,000	5	200	4,200	4,200	
			Quality trainer	International flight	2,000	1	0		2,000	0		2,000	5	100	2,100	2,100	
			Liquorers for external training	International flight	2,000	2	0		4,000	0		4,000	5	200	4,200	4,200	
			Flights	National	400	6	2	2	2,400	800	800	4,000	5	200	4,200		
	VII Training and Dissemination		Liquorer Training	per diem/man month	4,500	2			9,000			9,000	5	450	9,450	9,450	
				training-fee	2,000	2			4,000			4,000	5	200	4,200	4,200	
	VIII Operational Costs		Fuel	Lumpsum						3,000	3,000	6,000	5	300	6,300	0	
			Maintenance/repair	Lumpsum						3,000	3,000	6,000	5	300	6,300	0	
			Revolving Fund Coffee Commercialisation	Lumpsum	349				124,000	205,000	167,190	496,190	5	24,810	521,000	521,000	
3 RESETTL EMENT	I Vehicles, Machinery and Equipment		<i>Basic agricultural tools</i>														
			Hoes (large)	2/family	9	2,000			18,000			18,000	5	900	18,900		
			Hoes (small)	3/family	5	3,000			15,000			15,000	5	750	15,750		
			Machetes	4/family	5	4,000			20,000			20,000	5	1,000	21,000		

		Files	1/family	2	1,000			2,000			2,000	5	100	2,100	
		<i>Basic household articles, equipment and tools</i>													
		Kitchen kit	1/family	20	1,000			20,000			20,000	5	1,000	21,000	
		Used clothes, shoes, blankets	1/family	100	1,000			100,000			100,000	5	5,000	105,000	
		School desks		10	500			5,000			5,000	5	250	5,250	
		Basic health post equipment		500	2			1,000			1,000	5	50	1,050	
		carpenter kits		500	4			2,000			2,000	5	100	2,100	
		Constructor kits		500	4			2,000			2,000	5	100	2,100	
	II Civil Works	Houses*	1/family	150	1,000			150,000			150,000	5	7,500	157,500	
		Schools*		10,000	4			40,000			40,000	5	2,000	42,000	
		Health posts**		7,500	2			15,000			15,000	5	750	15,750	
		* Construction to be done using local materials on self-help basis using food for work. Only costs of locally not available materials and basic tools will be considered (nails, wire, fittings, locks, etc..)													
		** Only building materials. Construction to be done on a self-help basis with food for work.													
	III Materials & Supplies	<i>Food and hygiene articles</i>	50 kg/family/month	330/mt	350 mt										
		Maize	50 kg/family/month	330/mt	350 mt			115,500			115,500	5	5,775	121,275	
		Beans	10 kg/family/month	735/mt	70 mt			51,450			51,450	5	2,573	54,023	
		Vegetable Oil	5/family/month	620/m2	35 mt			21,700			21,700	5	1,085	22,785	
		Soap	1 kg/family/month	700/mt	7 mt			4,900			4,900	5	245	5,145	
		<i>Seeds</i>													
		Maize (0.5 há)	12 kg/family	500/mt	8 mt			4,000			4,000	5	200	4,200	
		Cassava (0.4 há)	24 kg/family	1,000/mt	12 mt			12,000			12,000	5	600	12,600	
		Vegetables (0.1 há)	1 kg/family	20/kg	1 mt			20,000			20,000	5	1,000	21,000	
		Cassava (0.4 há)	4,500 stakes	0,02/stake	4,500,000			90,000			90,000	5	4,500	94,500	
		<i>Animals</i>													

		Goats	1/family	40	1,000			40,000			40,000	5	2,000	42,000	
		Bucks	0,05/family	100	50			5,000			5,000	5	250	5,250	
	IV Personnel	Services of NGO (Personnel)		avg 1.200/MM	60/MM			72,000	24,000		96,000	5	4,800	100,800	
		Local personnel of the NGO will include Supervisor, Administrator/Logistics, Specialist in community development, Extensionist and Assistants; they will be acting in the project initially full time, then diminishing intensity during a two-year contract.													
	VIII Training and Dissemination	Key farmers		1,500	6 months/6 persons			9,000	2,000	1,000	12,000	5	600	12,600	
		Other training						3,000			3,000	5	150	3,150	
	VII Operational Costs	Transport and handling of food within Angola	0,455 mt/family	330/mt*	455			150,150	20,000		170,150	5	8,508	178,658	
		Transport of other material within Angola	0,2 mt/family	100/mt	200			20,000			20,000	5	1,000	21,000	
		Logistics							58,000		58,000	5	2,900	60,900	
		Identification of land for Settlement	Lumpsum						10,000		10,000	5	500	10,500	
		Parcellation and cartography of land						20,000			20,000	5	1,000	21,000	
		Concession of land titles						30,000			30,000	5	1,500	31,500	
		* Logistics include rent of office and store (rent, fuel and maintenance) of vehicles (\$WD, motorcyces), communication costs (telephone, telefax, email), office material, operational costs of office equipment (computers, printers, photocopying machines)													
4 INVESTIGATION	I Vehicles, machinery and equipment	Vehicle* (2 for extension, 1 for experimental station, 1 for expert)	40000	4				160,000			160,000	5	8,000	168,000	168,000
		Tractor	40000	6				240,000			240,000	5	12,000	252,000	252,000
		Small truck	60000	1				60,000			60,000	5	3,000	63,000	31,500
		Motorcycles	4000	6				24,000			24,000	5	1,200	25,200	12,600
		Bicycles	200	12				2,400			2,400	5	120	2,520	1,260
		Generator	5000	2				10,000			10,000	5	500	10,500	0
		Typewriter	1000	1				1,000			1,000	5	50	1,050	0
		Foto Camera	1000	1				1,000			1,000	5	50	1,050	0
		Computer	2000	3				6,000			6,000	5	300	6,300	0
		Printer	1000	2				2,000			2,000	5	100	2,100	0
		Photocopier	1000	2				2,000			2,000	5	100	2,100	0
		Fax Machine	700	2				1,400			1,400	5	70	1,470	0

		Electrical stabiliser	1000	2				2,000			2,000	5	100	2,100	0
		Telephone	500	2				1,000			1,000	5	50	1,050	0
		Radio Communication main station	5800	1				5,800			5,800	5	290	6,090	0
		Individual Radio Communication handset	800	6				4,800			4,800	5	240	5,040	0
		Television with video equipment	2000	3				6,000			6,000	5	300	6,300	0
		Parabolic antenna	500	1				500			500	5	25	525	0
		Soil sample auger	150	1				150			150	5	8	158	0
		Basic office furniture	Lumpsum					10,000			10,000	5	500	10,500	0
	II Civil works	Office rehabilitation	Lumpsum		163,777	47,590	50,000	163,777	47,590	50,000	261,367	5	13,068	274,435	
	III Material & supplies	Stationary	Lumpsum					2,500	2,500	2,500	7,500	5	375	7,875	
		Information material in the project	Lumpsum					5,000	7,500	7,500	20,000	5	1,000	21,000	
		Training material	Lumpsum					10,000	10,000	10,000	30,000	5	1,500	31,500	
	IV Personnel	NGO cooperative expert	fee/man-month	1,500	12	12	12	18,000	18,000	18,000	54,000	5	2,700	56,700	56,700
		INCA staff experimental station (qualified)	fee/man-month	250	97	97	97	24,267	24,267	24,267	72,800	5	3,640	76,440	0
		INCA technical brigade	fee/man-month	300	72	72	72	21,600	21,600	21,600	64,800	5	3,240	68,040	0
	V Technical Assistance and Consultancy	Extension expert	fee/man-month	12,500	2			18,750	0		18,750	5	938	19,688	9,844
			per diem/man- month	5,400	2			8,100	0		8,100	5	405	8,505	8,505
		Rural credit expert	fee/man-month	12,500	1	1		12,500	6,250		18,750	5	938	19,688	9,844
			per diem/man- month	5,400	1	1		5,400	2,700		8,100	5	405	8,505	8,505
	VI Duty Travel	Extension expert	International flight	2,000	1			2,000	0	0	2,000	5	100	2,100	1,050

		Rural credit expert	International flight	2,000	1	1		2,000	2,000	0	4,000	5	200	4,200	2,100
		INCA missions for project presentation	International flight	2,000	2	2	2	4,000	4,000	4,000	12,000	5	600	12,600	6,300
		Visits from interested countries	International flight	2,000		2	2	0	4,000	4,000	8,000	5	400	8,400	8,400
		Moderator	International flight	2,000			1	0	0	2,000	2,000	5	100	2,100	2,100
		Participants workshop at project end	International flight	1,500			8	0	0	12,000	12,000	5	600	12,600	12,600
		Intern. Participants workshop at project end	per diem/man-month	5,000			5	0	0	25,000	25,000	5	1,250	26,250	26,250
		Flights	National	400	6	4		2,400	1,600	0	4,000	5	200	4,200	
	VII Training and Dissemination	Field extension staff training	Seminars	150	12	12	12	1,800	1,800	1,800	5,400	5	270	5,670	0
		INCA missions for project	Per diem man month	4,500	1	1	1	4,500	4,500	4,500	13,500	5	675	14,175	7,088
		Exchange with INCA provincial offices	Per diem man month	1,000	3	3	3	3,000	3,000	3,000	9,000	5	450	9,450	4,725
		Visits from interested countries	Per diem man month	4,500		1	1	0	4,500	4,500	9,000	5	450	9,450	4,725
		Workshops for exchange with provincial offices of INCA**	lumpsum	5,000	1	1	1	5,000	5,000	5,000	15,000	5	750	15,750	7,875
		Dissemination through CRN/IACO including workshop with interested parties	lumpsum	10,000	1	2	1	10,000	20,000	10,000	40,000	5	2,000	42,000	21,000
		Moderator for workshop at project end	fee man month	5,000	0	0	1	0	0	2,500	2,500	5	125	2,625	2,625
			Per diem man month	5,000			1	0	0	2,500	2,500	5	125	2,625	2,625
	VIII Operational Costs	Operational Costs vehicles		7,000	4	4	4	28,000	28,000	28,000	84,000	5	4,200	88,200	
		Operational Costs tractors		5,000	6	6	6	30,000	30,000	30,000	90,000	5	4,500	94,500	
		Operational Costs small trucks		8,000	6	6	6	48,000	48,000	48,000	144,000	5	7,200	151,200	

			Operational Costs motorcycles	1,000	6	6	6	6,000	6,000	6,000	18,000	5	900	18,900		
			Operational Costs bicycles	30	12	12	12	360	360	360	1,080	5	54	1,134		
			INCA regional office operational costs	Lumpsum	10,000	1	1	1	10,000	10,000	10,000	30,000	5	1,500	31,500	
			Demonstration plots operational costs	Lumpsum	5,000	1	1	1	5,000	5,000	5,000	15,000	5	750	15,750	
			Experimental station operational costs	Lumpsum	5,000	1	1	1	5,000	5,000	5,000	15,000	5	750	15,750	
			Communication	Lumpsum	1,500	1	1	1	1,500	1,500	1,500	4,500	5	225	4,725	
			Administrative fiduciary fund	5% of credit volume				205,885	34,066	57,581	297,531	5	14,877	312,408	312,408	
			Fiduciary fund includes credit volume for coffee rehabilitation/intensification {establishment and production costs} for establishment of one processing station and commercialisation of coffee each year													
5. INSTITUTIONAL SUPPORT	I Vehicles, Machinery and Equipment		Vehicle		30,000	3			90,000	0	0	90,000	5	4,500	94,500	
			Computer		2,000	4			8,000	0	0	8,000	5	400	8,400	
			Printer		1,000	3			3,000	0	0	3,000	5	150	3,150	
			Fotocopier		1,000	1			1,000	0	0	1,000	5	50	1,050	
			Fax Machine		700	1			700	0	0	700	5	35	735	
			Electrical stabilizer		3,000	1			3,000	0	0	3,000	5	150	3,150	
			Telephone		500	2			1,000	0	0	1,000	5	50	1,050	
			Radio communication station Luanda Gabella		5,000	2			10,000	0	0	10,000	5	500	10,500	
			Basic Office furniture	Lumpsum	10,000	1			10,000	0	0	10,000	5	500	10,500	
	III Material and Supplies		Stationary	Lumpsum	2,500	1	1	1	2,500	2,500	2,500	7,500	5	375	7,875	
			Training Material	Lumpsum	5,000	1	1	1	5,000	5,000	5,000	15,000	5	750	15,750	
									0	0						
	IV Personnel		INCA staff for Market Information System	fee/man month	500	24	24	24	12,000	12,000	12,000	36,000	5	1,800	37,800	0
			INCA staff for Management info System	fee/man month	500	24	24	24	12,000	12,000	12,000	36,000	5	1,800	37,800	0

			Per Diems for INCA field staff	per diem/man month	200	108	108	108	21,600	21,600	21,600	64,800	5	3,240	68,040	0
			Per Diems for INCA Headquarter staff	per diem/man month	1,800	12	12	12	21,600	21,600	21,600	64,800	5	3,240	68,040	0
	V Technical Assistance and Consultancy		Market Information Systems Expert	fee/man month	12,500		1		0	12,500	0	12,500	5	625	13,125	13,125
				per diem/man month	5,400		1		0	5,400	0	5,400	5	270	5,670	5,670
	VI Duty Travel		Market Information Systems Expert	International flight	2,000		1		0	2,000	0	2,000	5	100	2,100	2,100
			Exchange with international institutions	International flight	2,000	2	2	2	4,000	4,000	4,000	12,000	5	600	12,600	12,600
			Flights	National	400	6	4	4	2,400	1,600	1,600	5,600	5	280	5,880	
	VII Training and Dissemination		Management Information System Staff	per diem/man month	1,000	6			6,000	0	0	6,000	5	300	6,300	6,300
				Training fee	2,000	6			12,000	0	0	12,000	5	600	12,600	12,600
			Market information system staff	per diem/man month	1,000		2		0	2,000	0	2,000	5	100	2,100	2,100
				Training fee	2,000		2		0	4,000	0	4,000	5	200	4,200	4,200
			Exchange with international institutions	per diem/man month	4,500	2	2	2	9,000	9,000	9,000	27,000	5	1,350	28,350	
			To be specified	per diem/man month	1,000	1	1	1	1,000	1,000	1,000	3,000	5	150	3,150	
			Training fee	per diem/man month	2,000	1	1	1	2,000	2,000	2,000	6,000	5	300	6,300	6,300
	VIII Operational costs		Vehicles		5,000	3	3	3	15,000	15,000	15,000	45,000	5	2,250	47,250	
6. INTERNATIONAL TA	V Technical assistance and consultancy															
	Lont term expert *codirector	canceled	Short term experts * additonal	Fee man month	12,500	1	1	1	12,500	12,500	12,500	37,500	5	1,875	39,375	39,375
			Per diem short term	Per diem	5,400	1	1	1	5,400	5,400	5,400	16,200	5	810	17,010	17,010

		expert														
		Backstopping	Fee man month	0	1	1	1	0	0	0	0	5	0	0	0	
		Per diem Backstopping	Per diem	0	1	1	1	0	0	0	0	5	0	0	0	
	VI Duty travel															
		Short term experts	International flight	2,000	1	1	1	2,000	2,000	2,000	6,000	5	300	6,300	6,300	
		Backstopping	International flight	0	1	1	1	0	0	0	0	5	0	0	0	
		Flights	National	400	6	4	4	2,400	1,600	1,600	5,600	5	280	5,880		
7. PROJECT MANAGEMENT	I Vehicles, machinery	Vehicle		47,500	4			190,000	0	0	190,000	5	9,500	199,500		
	III Material and Supplies	Stationary	Lumpsum	2,500	1	1	1	2,500	2,500	2,500	7,500	5	375	7,875		
		Other supplies	Lumpsum	5,000	1	1	1	5,000	5,000	5,000	15,000	5	750	15,750		
		Materials for project workshop	Lumpsum	5,000	1			5,000	0	0	5,000	5	250	5,250		
	IV Personnel	CTA	fee/man month	9,583	12	12	12	115,000	115,000	115,000	345,000	5	17,250	362,250	362,250	
		INCA project coordinator	fee/man month	1,000	12	12	12	12,000	12,000	12,000	36,000	5	1,800	37,800	37,800	
		INCA project facilitator in Kwanza Sul	fee/man month	700	12	12	12	8,400	8,400	8,400	25,200	5	1,260	26,460	26,460	
		Accountant	fee/man month	2,000	12	12	12	24,000	24,000	24,000	72,000	5	3,600	75,600	75,600	
		Secretary	fee/man month	600	12	12	12	7,200	7,200	7,200	21,600	5	1,080	22,680	22,680	
		Support staff	fee/man month	400	24	24	24	9,600	9,600	9,600	28,800	5	1,440	30,240	30,240	
		Driver	fee/man month	400	24	24	24	9,600	9,600	9,600	28,800	5	1,440	30,240	15,120	
	V Technical Assistance & Consultancy	Moderator for project planning workshop	fee/man month	12,500	1	0	0	6,250	0	0	6,250	5	313	6,563	6,563	
			per diem/man month	5,400	1	0	0	2,700	0	0	2,700	5	135	2,835	2,835	

	VI Duty Travel	Auditor	National	400	3	3	3	1,200	1,200	1,200	3,600	5	180	3,780	3,780	
		Supervision	International flight	2,000	1	1	1	2,000	2,000	2,000	6,000	5	300	6,300	6,300	
		Flights	National	400	3	3	3	1,200	1,200	1,200	3,600	5	180	3,780		
	VIII Operational Costs	Report Editing	Lumpsum	2,000	1	1	1	2,000	2,000	2,000	6,000	5	300	6,300	6,300	
		Translations	Lumpsum	5,000	1	1	1	5,000	5,000	5,000	15,000	5	750	15,750	15,750	
		Report Binding and Distribution	Lumpsum	1,000	1	1	1	1,000	1,000	1,000	3,000	5	150	3,150	3,150	
		Operational costs - CTA	Lumpsum	5,000	1	1	1	5,000	5,000	5,000	15,000	5	750	15,750		
		Operational costs vehicle	Vehicle	5,000	3	3	3	15,000	15,000	15,000	45,000	5	2,250	47,250		
		Office space	Lumpsum	7,500	1	1	1	7,500	7,500	7,500	22,500	5	1,125	23,625		
		Communication	Lumpsum	7,500	1	1	1	7,500	7,500	7,500	22,500	5	1,125	23,625		
	IX Supervision and Monitoring															
		Auditor	Fee man month	6,000	1	1	1	6,000	6,000	6,000	18,000	5	900	18,900	18,900	
		Mid term evaluation	Fee man month	11,650		2		0	23,300	0	23,300	5	1,165	24,465	24,465	
			Per diem man month	5,400		2		0	10,800	0	10,800	5	540	11,340	11,340	
		Expost eval. CFC		10,000			1	0	0	10,000	10,000	5	500	10,500	10,500	
			Per diem man month	5,400			1	0	0	5,400	5,400	5	270	5,670	5,670	
		Supervision through ICO		10,000	1	1	1	10,000	10,000	10,000	30,000	5	1,500	31,500	31,500	
			Per diem man month	5,400	1	1	1	5,400	5,400	5,400	16,200	5	810	17,010	17,010	
										TOTAL	8,125,216		406,261	8,531,477	4,749,989	
										L						

ANNEX 5f

FINANCING TABLE by COMPONENTS
(figures in USD)

				CFC	LOAN	GRANT	ANGOLA		
SUMMARY	Component 1	Category 1	Vehicles, machinery, equipment	120,619	0	120,619	86,405		
		Category 2	Civil Works						
	PRODUCTION	Category 3	Materials and supplies	1,840,016	1,834,766	5,250	1,575		
		Category 4	Personnel	0	0	0	103,467		
		Category 5	Technical assist	75,180		75,180			
		Category 6	Duty Travel	4,200		4,200	1,680		
		Category 7	Training and dissemination	0		0	157,500		
		Category 8	Operational costs	6,569		6,569	268,790		
			Subtotal Component 1	2,046,583	1,834,766	211,818	619,417	2,666,000	
	Component 2	Category 1	Vehicles, machinery, equipment	101,850	78,750	23,100			
		Category 2	Civil Works	136,500	136,500				
	COMMERCIALISATION	Category 3	Materials and supplies	21,000	21,000		0		
		Category 4	Personnel	0			9,450		
		Category 5	Technical assist	56,385		56,385			
		Category 6	Duty Travel	10,500		10,500	4,200		
		Category 7	Training and dissemination	13,650		13,650			
		Category 8	Operational costs	521,000	521,000	0	12,600		
			Subtotal Component 2	860,885	757,250	103,635	26,250	887,135	
	Component 3	Category 1	Vehicles	0			194,250		
		Category 2	Civil Works				215,250		
	RELOCATION OF DISPLACED	Category 3	Materials and supplies				382,778		
		Category 4	Personnel				100,800		
		Category 5	Technical assist						
		Category 6	Duty Travel						
		Category 7	Training and dissemination				15,750		
		Category 8	Operational costs				323,558		

				Subtotal Component 3	0	0	0	1,232,385	1,232,385	
Component 4 INVESTIGATION	Category 1	Vehicles, machinery, equipment	465,360	168,000	297,360	101,693				
	Category 2	Civil Works	0			274,435				
	Category 3	Materials and supplies	0		0	60,375				
	Category 4	Personnel	56,700		56,700	144,480				
	Category 5	Technical assist	36,698		36,698	19,688				
	Category 6	Duty Travel	58,800		58,800	13,650				
	Category 7	Training and dissemination	50,663		50,663	51,083				
	Category 8	Operational costs	312,408		312,408	421,659				
			Subtotal Component 4	980,628	168,000	812,628	1,087,062			2,067,689
Component 5 INSTITUTIONAL SUPPORT	Category 1	Vehicles				133,035				
	Category 2	Civil Works								
	Category 3	Materials and supplies				23,625				
	Category 4	Personnel	0		0	211,680				
	Category 5	Technical assist	18,795		18,795					
	Category 6	Duty Travel	14,700		14,700	5,880				
	Category 7	Training and dissemination	31,500		31,500	31,500				
	Category 8	Operational costs	0			47,250				
			Subtotal Component 5	64,995	0	64,995	452,970			517,965
	Component 6 INTERNATIONAL TECH. ASSISTANCE	Category 1	Vehicles							
Category 2		Civil Works								
Category 3		Materials and supplies								
Category 4		Personnel								
Category 5		Technical assist	56,385		56,385					
Category 6		Duty Travel	6,300		6,300	5,880				
Category 7		Training and dissemination								
Category 8		Operational costs								
			Subtotal Component 6	62,685	0	62,685	5,880			68,565

Component 7	Category 1	Vehicles				199,500	
	Category 2	Civil Works					
	PROJECT MANAGEMENT	Category 3	Materials and supplies			28,875	
	Category 4	Personnel	570,150		570,150	15,120	
	Category 5	Technical assist	9,398		9,398		
	Category 6	Duty Travel	10,080		10,080	3,780	
	Category 7	Training and dissemination					
	Category 8	Operational costs	25,200		25,200	110,250	
	Category 9	Supervision	119,385		119,385	0	
			Subtotal Component 7	734,213	0	734,213	357,525
			CFC	LOAN	GRANT	ANGOLA	
			4,749,989	2,760,016	1,989,973	3,781,488	8,531,477

ANNEX 5g

CATEGORY and COMPONENT ITEMS OF EXPENDITURE UNIT

	Category and Component Inputs	Items of Expenditure	Unit	Base Cost	Cont	Contingency Amount	Total Cost	CFC
				US \$	%	US \$	US \$	US \$
1. PRODUCTION	I Vehicles, Machinery and Equipment	Portable Laboratory	Number	4,400	5	220	4,620	4,620
		<i>Rehabilitation/Intensification (4.200 há)</i>						
		Hoes (large)	4/farmer	75,600	5	3,780	79,380	39,690
		Axes	1/farmer	10,500	5	525	11,025	11,025
		Machetes	3/farmer	31,500	5	1,575	33,075	33,075
		Files	1/farmer	4,200	5	210	4,410	0
		<i>Renovation (1.800 há)</i>						
		Hoes (large)	4/farmer	32,400	5	1,620	34,020	17,010
		Axes	1/farmer	4,500	5	225	4,725	0
		Machetes	3/farmer	13,500	5	675	14,175	7,088
		Files	1/farmer	1,800	5	90	1,890	0
		<i>Production of Coffee Seedlings</i>						
		Hoes (large)	Number	675	5	34	709	0
		Hoes (small)	Number	375	5	19	394	0
		Axes	Number	125	5	6	131	131
		Machetes	Number	375	5	19	394	0
		Files	Number	100	5	5	105	105
		Wheelbarrow	Number	875	5	44	919	0
		Watering can	Number	240	5	12	252	0
		Sprayer	Number	1,000	5	50	1,050	0
		Production tools for medium farmers						
		Generator	Number	15,000	5	750	15,750	7,875

	III Materials & Supplies		<i>Rehabilitation/Intensification (4.200 há)</i>						
			Urea	165kg/há	457,380	5	22,869	480,249	480,249
			Zinc Sulfate	1 l/há	184,800	5	9,240	194,040	194,040
			Insecticides	2 kg/há	72,471	5	3,624	76,095	76,095
			Formicides	1 bag/há	14,028	5	701	14,729	14,729
			Sacks	1 bag/há	60,606	5	3,030	63,636	63,636
			<i>Renovation 1800 HA</i>		0	5	0	0	0
			Urea	125 kg/ha	148,500	5	7,425	155,925	155,925
			Zinc Sulfate	33 kg/ha	59,400	5	2,970	62,370	62,370
			Insecticides	0.75 to 1,5 l/ha	19,967	5	998	20,965	20,965
			Formicides	1 to 2 kg/ha	9,018	5	451	9,469	9,469
			<i>Rehabilitation within settlement scheme</i>						
			Urea	83 kg/ha	109,560	5	5,478	115,038	115,038
			Zinc Sulfate	22 kg/ha	44,000	5	2,200	46,200	46,200
			Sacks	1 bag/há	26,640	5	1,332	27,972	27,972
			<i>Production of coffee seedlings</i>						
			Seeds	kg	55,500	5	2,775	58,275	58,275
			Ammoniumsulfate	kg	185	5	9	194	194
			Copperoxide	kg	601	5	30	631	631
			Planting bags	1000 bags	484,740	5	24,237	508,977	508,977
			<i>Expansion/modernisation *(...ha)</i>						
				83 kg/ha	0	5	0	0	0
				22 kg/ha	0	5	0	0	0
				1 bag/há	0	5	0	0	0
			<i>Other costs</i>		0	5	0	0	0
			Material baseline survey	Lumpsum	5,000	5	250	5,250	5,250
			Material soil analysis	Lumpsum	1,500	5	75	1,575	0
	IV Personnel								
			Enumerators	Per diem/man month	4,800	5	240	5,040	
			Statistician	fee/man month	8,000	5	400	8,400	
			Nursery staff	fee/man month	74,940	5	3,747	78,687	

		Laboratory staff	fee/man month	10,800	5	540	11,340	
	V Technical Assistance and Consultancy	TA Baseline Survey	Fee/man-month	50,000	5	2,500	52,500	52,500
			per diem/man-month	21,600	5	1,080	22,680	22,680
	VI Duty Travel	Flights	International	4,000	5	200	4,200	4,200
		Flights	National	1,600	5	80	1,680	
	VII Dissemination and Training	Farmer Training	Training Units	150,000	5	7,500	157,500	0
	VIII Operational Costs	<i>Production of Coffee Seedlings</i>						
		Construction of nursery (1750 m)	man-days	25,025	5	1,251	26,276	6,569
		Expansion of multiplication facilities at experimental station in Gabella	lumpsum	15,000	5	750	15,750	0
		Preparation of substrate	man-days	5,291	5	265	5,556	
		Filling of planting bags	man-days	21,164	5	1,058	22,222	
		Seeding	man-days	5,291	5	265	5,556	
		Weeding	man-days	13,228	5	661	13,889	
		Irrigation (manual)	man-days	158,730	5	7,937	166,667	
		Selection of seedlings	man-days	10,582	5	529	11,111	
		Spraying	man-days	7,937	5	397	8,333	
2	I Vehicles, Machinery and Equipment	Hulling machinery	number	70,000	5	3,500	73,500	73,500
COMME		Generator	number	5,000	5	250	5,250	5,250
RCIALIS		Sample roasting kit	number	15,000	5	750	15,750	15,750
ATION		Liquoring kit	number	7,000	5	350	7,350	7,350
	II Civil works	Factory building (incl. Storing facilities)	200m2	80,000	5	4,000	84,000	84,000
		Drying space	2.500 m2	50,000	5	2,500	52,500	52,500
	III Materials & Supplies	Moisture meters	number	20,000	5	1,000	21,000	21,000
	IV Personnel	Permanent staff hulling station	man-month	9,000	5	450	9,450	
	V Technical Assistance and Consultancy	Quality Trainer	fee/man-month	12,500	5	625	13,125	13,125

				per diem/man-month	5,400	5	270	5,670	5,670
			Marketing expert	Fee/man-month	25,000	5	1,250	26,250	26,250
				per diem/man-month	10,800	5	540	11,340	11,340
	VI Duty Travel		Marketing expert	International flight	4,000	5	200	4,200	4,200
			Quality trainer	International flight	2,000	5	100	2,100	2,100
			Liquorers for external training	International flight	4,000	5	200	4,200	4,200
			Flights	National	4,000	5	200	4,200	
	VII Training and Dissemination		Liquorer Training	per diem/man month	9,000	5	450	9,450	9,450
				training-fee	4,000	5	200	4,200	4,200
	VIII Operational Costs		Fuel	Lumpsum	6,000	5	300	6,300	0
			Maintenance/repair	Lumpsum	6,000	5	300	6,300	0
			Revolving Fund Coffee Commercialisation	Lumpsum	496,190	5	24,810	521,000	521,000
3. RESETTLEMENT	I Vehicles, Machinery and Equipment		<i>Basic agricultural tools</i>						
			Hoes (large)	2/family	18,000	5	900	18,900	
			Hoes (small)	3/family	15,000	5	750	15,750	
			Machetes	4/family	20,000	5	1,000	21,000	
			Files	1/family	2,000	5	100	2,100	
			<i>Basic household articles, equipment and tools</i>						
			Kitchen kit	1/family	20,000	5	1,000	21,000	
			Used clothes, shoes, blankets	1/family	100,000	5	5,000	105,000	
			School desks		5,000	5	250	5,250	
			Basic health post equipment		1,000	5	50	1,050	
			carpenter kits		2,000	5	100	2,100	
			Constructor kits		2,000	5	100	2,100	
	II Civil Works		Houses*	1/family	150,000	5	7,500	157,500	

		Schools*		40,000	5	2,000	42,000
		Health posts**		15,000	5	750	15,750
		* Construction to be done using local materials on self-help basis using food for work. Only costs of locally not available materials and basic tools will be considered (nails, wire, fittings, locks, etc..)					
		** Only building materials. Construction to be done on a self-help basis with food for work.					
	III Materials & Supplies	<i>Food and hygiene articles</i>	50 kg/family/month				
		Maize	50 kg/family/month	115,500	5	5,775	121,275
		Beans	10 kg/family/month	51,450	5	2,573	54,023
		Vegetable Oil	5/family/month	21,700	5	1,085	22,785
		Soap	1 kg/family/month	4,900	5	245	5,145
		<i>Seeds</i>					
		Maize (0.5 há)	12 kg/family	4,000	5	200	4,200
		Cassava (0.4 há)	24 kg/family	12,000	5	600	12,600
		Vegetables (0.1 há)	1 kg/family	20,000	5	1,000	21,000
		Cassava (0.4 há)	4,500 stakes	90,000	5	4,500	94,500
		<i>Animals</i>					
		Goats	1/family	40,000	5	2,000	42,000
		Bucks	0,05/family	5,000	5	250	5,250
	IV Personnel	Services of NGO (Personnel)		96,000	5	4,800	100,800
		Local personnel of the NGO will include Supervisor, Administrator/Logistics, Specialist in community development, Extensionist and Assistants; they will be acting in the project initially full time, then diminishing intensity during a two-year contract.					
	VIII Training and Dissemination	Key farmers		12,000	5	600	12,600
		Other training		3,000	5	150	3,150
	VII Operational Costs	Transport and handling of food within Angola	0,455 mt/family	170,150	5	8,508	178,658
		Transport of other material within Angola	0,2 mt/family	20,000	5	1,000	21,000
		Logistics		58,000	5	2,900	60,900
		Identification of land for Settlement	Lumpsum	10,000	5	500	10,500
		Parcellation and cartography of land		20,000	5	1,000	21,000

		Concession of land titles		30,000	5	1,500	31,500	
		* Logistics include rent of office and store (rent, fuel and maintenance) of vehicles (\$WD, motorcycles), communication costs (telephone, telefax, email), office material, operational costs of office equipment (computers, printers, photocopying machines)						
4	I Vehicles, machinery and equipment	Vehicle* (2 for extension, 1 for experimental station, 1 for expert)	40000	160,000	5	8,000	168,000	168,000
INVESTIGATION		Tractor	40000	240,000	5	12,000	252,000	252,000
		Small truck	60000	60,000	5	3,000	63,000	31,500
		Motorcycles	4000	24,000	5	1,200	25,200	12,600
		Bicycles	200	2,400	5	120	2,520	1,260
		Generator	5000	10,000	5	500	10,500	0
		Typewriter	1000	1,000	5	50	1,050	0
		Foto Camera	1000	1,000	5	50	1,050	0
		Computer	2000	6,000	5	300	6,300	0
		Printer	1000	2,000	5	100	2,100	0
		Photocopier	1000	2,000	5	100	2,100	0
		Fax Machine	700	1,400	5	70	1,470	0
		Electrical stabiliser	1000	2,000	5	100	2,100	0
		Telephone	500	1,000	5	50	1,050	0
		Radio Communication main station	5800	5,800	5	290	6,090	0
		Individual Radio Communication handset	800	4,800	5	240	5,040	0
		Television with video equipment	2000	6,000	5	300	6,300	0
		Parabolic antenna	500	500	5	25	525	0
		Soil sample auger	150	150	5	8	158	0
		Basic office furniture	Lumpsum	10,000	5	500	10,500	0
	II Civil works	Office rehabilitation	Lumpsum	261,367	5	13,068	274,435	
	III Material & supplies	Stationary	Lumpsum	7,500	5	375	7,875	
		Information material in the project	Lumpsum	20,000	5	1,000	21,000	

			Training material	Lumpsum	30,000	5	1,500	31,500	
	IV Personnel		NGO cooperative expert	fee/man-month	54,000	5	2,700	56,700	56,700
			INCA staff experimental station (qualified)	fee/man-month	72,800	5	3,640	76,440	0
			INCA technical brigade	fee/man-month	64,800	5	3,240	68,040	0
	V Technical Assistance and Consultancy		Extension expert	fee/man-month	18,750	5	938	19,688	9,844
				per diem/man-month	8,100	5	405	8,505	8,505
			Rural credit expert	fee/man-month	18,750	5	938	19,688	9,844
				per diem/man-month	8,100	5	405	8,505	8,505
	VI Duty Travel		Extension expert	International flight	2,000	5	100	2,100	1,050
			Rural credit expert	International flight	4,000	5	200	4,200	2,100
			INCA missions for project presentation	International flight	12,000	5	600	12,600	6,300
			Visits from interested countries	International flight	8,000	5	400	8,400	8,400
			Moderator	International flight	2,000	5	100	2,100	2,100
			Participants workshop at project end	International flight	12,000	5	600	12,600	12,600
			Intern. Participants workshop at project end	per diem/man-month	25,000	5	1,250	26,250	26,250
			Flights	National	4,000	5	200	4,200	
	VII Training and Dissemination		Field extension staff training	Seminars	5,400	5	270	5,670	0
			INCA missions for project	Per diem man month	13,500	5	675	14,175	7,088
			Exchange with INCA provincial offices	Per diem man month	9,000	5	450	9,450	4,725
			Visits from interested countries	Per diem man month	9,000	5	450	9,450	4,725
			Workshops for exchange with provincial offices of INCA**	lumpsum	15,000	5	750	15,750	7,875

		Dissemination through CRN/IACO including workshop with interested parties	lumpsum	40,000	5	2,000	42,000	21,000
		Moderator for workshop at project end	fee man month	2,500	5	125	2,625	2,625
			Per diem man month	2,500	5	125	2,625	2,625
	VIII Operational Costs	Operational Costs vehicles		84,000	5	4,200	88,200	
		Operational Costs tractors		90,000	5	4,500	94,500	
		Operational Costs small trucks		144,000	5	7,200	151,200	
		Operational Costs motorcycles		18,000	5	900	18,900	
		Operational Costs bicycles		1,080	5	54	1,134	
		INCA regional office operational costs	Lumpsum	30,000	5	1,500	31,500	
		Demonstration plots operational costs	Lumpsum	15,000	5	750	15,750	
		Experimental station operational costs	Lumpsum	15,000	5	750	15,750	
		Communication	Lumpsum	4,500	5	225	4,725	
		Administrative fiduciary fund	5% of credit volume	297,531	5	14,877	312,408	312,408
		Fiduciary fund includes credit volume for coffee rehabilitation/intensification {establishment and production costs} for establishment of one processing station and commercialisation of coffee each year						
5. INSTITUTIONAL SUPPORT	I Vehicles, Machinery and Equipment	Vehicle		90,000	5	4,500	94,500	
		Computer		8,000	5	400	8,400	
		Printer		3,000	5	150	3,150	
		Fotocopier		1,000	5	50	1,050	
		Fax Machine		700	5	35	735	
		Electrical stabilizer		3,000	5	150	3,150	
		Telephone		1,000	5	50	1,050	
		Radio communication station Luanda Gabella		10,000	5	500	10,500	

			Basic Office furniture	Lumpsum	10,000	5	500	10,500	
	III Material and Supplies		Stationary	Lumpsum	7,500	5	375	7,875	
			Training Material	Lumpsum	15,000	5	750	15,750	
	IV Personnel		INCA staff for Market Information System	fee/man month	36,000	5	1,800	37,800	0
			INCA staff for Management info System	fee/man month	36,000	5	1,800	37,800	0
			Per Diems for INCA field staff	per diem/man month	64,800	5	3,240	68,040	0
			Per Diems for INCA Headquarter staff	per diem/man month	64,800	5	3,240	68,040	0
	V Technical Assistance and Consultancy		Market Information Systems Expert	fee/man month	12,500	5	625	13,125	13,125
				per diem/man month	5,400	5	270	5,670	5,670
	VI Duty Travel		Market Information Systems Expert	International flight	2,000	5	100	2,100	2,100
			Exchange with international institutions	International flight	12,000	5	600	12,600	12,600
			Flights	National	5,600	5	280	5,880	
	VII Training and Dissemination		Management Information System Staff	per diem/man month	6,000	5	300	6,300	6,300
				Training fee	12,000	5	600	12,600	12,600
			Market information system staff	per diem/man month	2,000	5	100	2,100	2,100
				Training fee	4,000	5	200	4,200	4,200
			Exchange with international institutions	per diem/man month	27,000	5	1,350	28,350	
			To be specified	per diem/man month	3,000	5	150	3,150	
			Training fee	per diem/man month	6,000	5	300	6,300	6,300
	VIII Operational costs		Vehicles		45,000	5	2,250	47,250	
6.	V Technical assistance and consultancy								

INTERNATIONAL TA									
	Lont term expert *codirector	cancelled	Short term experts * addiditonal	Fee man month	37,500	5	1,875	39,375	39,375
			Per diem short term expert	Per diem	16,200	5	810	17,010	17,010
			Backstopping	Fee man month	0	5	0	0	0
			Per diem Backstopping	Per diem	0	5	0	0	0
	VI Duty travel								
			Short term experts	International flight	6,000	5	300	6,300	6,300
			Backstopping	International flight	0	5	0	0	0
			Flights	National	5,600	5	280	5,880	
7. PROJECT MANAGEMENT	I Vehicles, machinery		Vehicle		190,000	5	9,500	199,500	
	III Material and Supplies		Stationary	Lumpsum	7,500	5	375	7,875	
			Other supplies	Lumpsum	15,000	5	750	15,750	
			Materials for project workshop	Lumpsum	5,000	5	250	5,250	
	IV Personnel		CTA	fee/man month	345,000	5	17,250	362,250	362,250
			INCA project coordinator	fee/man month	36,000	5	1,800	37,800	37,800
			INCA project facilitator in Kwanza Sul	fee/man month	25,200	5	1,260	26,460	26,460
			Accountant	fee/man month	72,000	5	3,600	75,600	75,600
			Secretary	fee/man month	21,600	5	1,080	22,680	22,680
			Support staff	fee/man month	28,800	5	1,440	30,240	30,240
			Driver	fee/man month	28,800	5	1,440	30,240	15,120
	V Technical Assistance & Consultancy		Moderator for project	fee/man month	6,250	5	313	6,563	6,563

		planning workshop						
			per diem/man month	2,700	5	135	2,835	2,835
	VI Duty Travel	Auditor	National	3,600	5	180	3,780	3,780
		Supervision	International flight	6,000	5	300	6,300	6,300
		Flights	National	3,600	5	180	3,780	
	VIII Operational Costs	Report Editing	Lumpsum	6,000	5	300	6,300	6,300
		Translations	Lumpsum	15,000	5	750	15,750	15,750
		Report Binding and Distribution	Lumpsum	3,000	5	150	3,150	3,150
		Operational costs - CTA	Lumpsum	15,000	5	750	15,750	
		Operational costs vehicle	Vehicle	45,000	5	2,250	47,250	
		Office space	Lumpsum	22,500	5	1,125	23,625	
		Communication	Lumpsum	22,500	5	1,125	23,625	
	IX Supervision and Monitoring							
		Auditor	Fee man month	18,000	5	900	18,900	18,900
		Mid term evaluation	Fee man month	23,300	5	1,165	24,465	24,465
			Per diem man month	10,800	5	540	11,340	11,340
		Expost eval. CFC		10,000	5	500	10,500	10,500
			Per diem man month	5,400	5	270	5,670	5,670
		Supervision through ICO		30,000	5	1,500	31,500	31,500
			Per diem man month	16,200	5	810	17,010	17,010
				8,125,216		406,261	8,531,477	4,749,989

Annex 6

PROJECT CASH FLOW (all figures in USD)										
Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
(a) INFLOWS										
Revenue Rehabilitation	434.700,00	579.600,00	1.014.300,00	1.449.000,00	1.738.800,00	1.738.800,00	1.738.800,00	1.738.800,00	1.738.800,00	1.738.800,00
Revenue Renovation	0,00	0,00	0,00	248.400,00	496.800,00	745.200,00	993.600,00	993.600,00	993.600,00	993.600,00
Revenue Settlement Scheme	138.000,00	276.000,00	414.000,00	414.000,00	414.000,00	414.000,00	414.000,00	414.000,00	414.000,00	414.000,00
Revenue Coffee Processing	183.600,00	244.800,00	428.400,00	612.000,00	734.400,00	734.400,00	734.400,00	734.400,00	734.400,00	734.400,00
TOTAL INFLOWS	756.300,00	1.100.400,00	1.856.700,00	2.723.400,00	3.384.000,00	3.632.400,00	3.880.800,00	3.880.800,00	3.880.800,00	3.880.800,00
(b) OUTFLOWS										
<i>Rehabilitation</i>										
Equipment	-121.800,00			-121.800,00			-121.800,00			-121.800,00
Establishment	-1.218.746,00									
Production and Commercialisation	-445.990,00	-498.457,00	-599.790,00	-722.390,00	-812.757,00	-812.757,00	-812.757,00	-812.757,00	-812.757,00	-812.757,00
<i>Renovation</i>										
Equipment	-52.200,00			-52.200,00			-52.200,00			-52.200,00
Establishment	-581.434,00	-155.714,00	-144.800,00							
Production and Commercialisation				-216.885,00	-280.100,00	-366.871,00	-429.128,00	-429.128,00	-429.128,00	-429.128,00
<i>Settlement Scheme</i>										
Equipment*				-58.000,00			-58.000,00			-58.000,00
Production and Commercialisation	-246.052,00	-213.131,00	-239.830,00	-239.830,00	-239.830,00	-239.830,00	-239.830,00	-239.830,00	-239.830,00	-239.830,00
<i>Processing</i>										
Equipment	-68.000,00			-68.000,00			-68.000,00			-68.000,00
Civil Works	-160.000,00									
Operational Costs	-9.800,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00	-11.600,00
<i>Other Costs</i>										
I Vehicles, Machinery and Equipment	-734.750,00	0,00	0,00							
II Civil Works	-205.000,00	0,00	0,00							
III Materials and Supplies	-436.500,00	-35.000,00	-35.000,00							
IV Personnel	-319.200,00	-271.200,00	-247.200,00							
V Technical Assistance and Consultancy	-367.300,00	-212.650,00	-176.850,00							
VI Duty Travel	-57.600,00	-42.000,00	-51.400,00							
VII Dissemination and Training	-129.300,00	-108.800,00	-127.750,00							
VIII Operational Costs	-1.130.125,00	-365.361,25	-430.415,25							
IX Supervision and Monitoring	-25.400,00	-61.200,00	-43.300,00							
TOTAL OUTFLOWS **	-6.309.197,00	-1.975.113,25	-2.107.935,25	-1.490.705,00	-1.344.287,00	-1.431.058,00	-1.793.315,00	-1.493.315,00	-1.493.315,00	-1.793.315,00
(c) CONTINGENCY (5%)										
	-315.459,85	-98.755,66	-105.396,76	-74.535,25	-67.214,35	-71.552,90	-89.665,75	-74.665,75	-74.665,75	-89.665,75
CASH FLOW (a) + (b) + (c)	-5.868.356,85	-973.468,91	-356.632,01	1.158.159,75	1.972.498,65	2.129.789,10	1.997.819,25	2.312.819,25	2.312.819,25	1.997.819,25
Internal Financial Rate of Return	14%									

* Initially donated equipment for resettled farmer families included under component no. 3.

** Figures for year 1, year 2 and 3 are not identical with project cost since family labour has been considered as cost in this financial assessment.

Annex 7a

Work Plan

Component No. 1: Production (Rehabilitation) of Coffee

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
1	1	Procurement of seed	INCA	3.5 t of seed
		Establishment of coffee nurseries	INCA, technical brigade, experimental station, farmer organisations	25 nurseries established
		Taking of soil samples	INCA, experimental station	Basic information on soil conditions
		Procurement of soil sample kits for INCA	INCA	Equipment available and operational
		Realisation of baseline survey	INCA, consultant	Report with baseline information
		Identification of farms for rehabilitation and renovation	INCA, technical brigade	Areas for rehabilitation and renovation specified
	2	Procurement of agricultural inputs and tools	INCA	Contracts for purchase of agricultural inputs and tools
		Distribution of agricultural tools and inputs	INCA, technical brigade	Availability of inputs and tools at farm level
		Agricultural extension	INCA, technical brigade	Improved production
		Preparation of fields for planting	Farmers	Fields prepared
		Production of seedlings	INCA, experimental station, farmer organisations	Seedlings
	3	Distribution of seedlings	INCA, technical brigade, farmer organisations	Seedlings available at farms
		Planting of coffee	Farmers	Increased plant density
		Agricultural extension	INCA, technical brigade	Improved production
		Production of seedlings	INCA, experimental station, farmer organisations	Seedlings
	4	Agricultural extension	INCA, technical brigade	Improved production
		Coffee and food production	Farmers	Coffee, food
		Production of seedlings	INCA, experimental station, farmer organisations	Seedlings

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
2	1	Agricultural extension	INCA, technical brigade	Improved production
		Coffee and food production	Farmers	Coffee, food
		Production of seedlings	INCA, experimental station, farmer organisations	Seedlings
	2	Agricultural extension	INCA, technical brigade	Improved production
		Coffee and food production	Farmers	Coffee, food
		Production of seedlings	INCA, experimental station, farmer organisations	Seedlings
		Mid term review of production component	Independent consultant	Evaluation report/ recommendations
	3	Agricultural extension	INCA, technical brigade	Improved production
		Coffee and food production	Farmers	Coffee, food
		Production of seedlings	INCA, experimental station, farmer organisations	Seedlings
	4	Agricultural extension	INCA, technical brigade	Improved production
		Coffee and food production	Farmers	Coffee, food
		Production of seedlings	INCA, experimental station, farmer organisations	Seedlings
3	1	Agricultural extension	INCA, technical brigade	Improved production
		Coffee and food production	Farmers	Coffee, food
	2	Agricultural extension	INCA, technical brigade	Improved production
		Coffee and food production	Farmers	Coffee, food
	3	Agricultural extension	INCA, technical brigade	Improved production
		Coffee and food production	Farmers	Coffee, food
	4	Agricultural extension	INCA, technical brigade	Improved production
		Coffee and food production	Farmers	Coffee, food
		Ex post evaluation of production component	CFC/ICO	Evaluation report with project impact and lessons learned

Annex 7a

Component No. 2: Commercialisation of Coffee

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
1	1	Marketing study	INCA, consultant	Report, recommendations
		Feasibility analysis of investments	INCA, FAEN, FDCA	Report
		Design of coffee hulling station	INCA, Coop Assangu	Technical layout of hulling station
		Tendering for hulling equipment and civil works	INCA	Tender documents
		Procurement of moisture meters	INCA	Moisture meters
		Procurement of equipment quality laboratory	INCA	Contracts for equipment
	2	Distribution of moisture meters	INCA	Moisture meters available with users
		Training in the use of moisture meters	INCA, technical brigade	Appropriate handling
		Establishment of equipment for quality laboratory	INCA	Laboratory equipped
		Training of liquorers	INCA	Liquorers trained
		Evaluation of offers for hulling station (civil works and equipment) and contracting of companies	INCA	Contracts
		Set up of credit scheme for commercialisation	Bank, INCA, consultant	Contracts for credit system
	3	Production of hulling machinery	Supplier	Machinery
		Civil works	Construction Company	Drying space, factory building
		Mission of quality trainer	INCA	Staff involved in quality issues trained
		Cup testing of export lots	INCA	Quality certificate
		Disbursement of credit for commercialisation	Bank, INCA, technical brigade, farmer organisation	
		Processing and commercialisation of coffee	Farmers, farmer organisations	Coffee

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	4	Civil works	Construction company	Drying space, factory building
		Production of hulling machinery	Supplier	Machinery
		Processing and commercialisation of coffee	Farmers, farmer organisations	Coffee
		Cup testing of export lots	INCA	Quality certificates
2	1	Delivery of hulling equipment	Supplier	Documents
		Processing and commercialisation of coffee	Farmers, farmer organisations	Coffee
		Cup testing of export lots	INCA	Quality certificate
	2	Installation of hulling equipment	Supplier	Machinery installed and working
		Staff training in use of hulling equipment	Supplier	Staff trained
		Recoupment of commercialisation credit	Bank, INCA, technical brigade, farmer organisations	Repayment records
		Cup testing of export lots	INCA	Quality certificates
		Mid term review of commercialisation component	Independent consultant	Evaluation report/ recommendations
	3	Disbursement of commercialisation credit	Bank, INCA, technical brigade, farmer organisation	
		Processing and commercialisation of coffee	Farmers, farmer organisations	Coffee
		Use of new hulling equipment	Farmer organisation	Hulled coffee
		Cup testing of export lots	INCA	Quality certificates
	4	Processing and commercialisation of coffee	Farmers, farmer organisations	Coffee
		Use of new hulling equipment	Farmer organisation	Hulled coffee
		Cup testing of export lots	INCA	Quality certificate
3	1	Processing and commercialisation of coffee	Farmers, farmer organisations	Coffee
		Use of new hulling equipment	Farmer organisation	Hulled coffee
		Cup testing of export lots	INCA	Quality certificates

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	2	Recoupment of commercialisation credit	Bank, INCA, technical brigade, farmer organisations	Repayment records
		Cup testing of export lots	INCA	Quality certificates
	3	Disbursement of commercialisation credit	Bank, INCA, technical brigade, farmer organisations	
		Processing and commercialisation of coffee	Farmers, farmer organisations	Coffee
		Use of new hulling equipment	Farmer organisation	Hulled coffee
		Cup testing of export lots	INCA	Quality certificates
	4	Processing and commercialisation of coffee	Farmers, farmer organisation	Coffee
		Use of new hulling equipment	Farmer organisation	Hulled coffee
		Cup testing of export lots	INCA	Quality certificates
		Ex post evaluation of production component	CFC, ICO	Evaluation report with project impact and lessons learned

Component 3: Settlement Scheme

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
0	0	Identification and selection of land	MINADER/DENOR, Governor K.S., <i>sobas</i>	5.000ha of agricultural land
		Land survey to establish boundaries and internal divisions	MINADER/DENOR/INCA	Map of location of 5.000ha with boundaries and internal divisions
		Initiation of process for granting land concessions to settlers	MINADER/DENOR/INCA	Applications for concessions
		Rehabilitation access roads on area foreseen for settlement	Governor of K.S., Municipality of Amboim	Project area can reasonably be reached, basic infrastructure available

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
1	1	Selection and contracting NGO	INCA	Contract INCA/NGO
		Selection of settlers	MINARS,	1.000 agricultural producers
		Acquisition of food or arrangement with co-operating NGO for food distribution	INCA	Food rations
		Handing-over/concession of land title(s)	MINADER/DENOR, approval of governor K.S. and <i>sobas</i>	Título(s) de concessão de terras provisório(s)
	2	Organisation and preparation of settlers	NGO, INCA, MINARS	Farmers association(s)/co-operative(s)
		Training of key farmers	MINARS/IRSEM, MINADER	Key farmers trained
		Construction of housing with food for work ⁶	Settlers,	1.000 Houses
		Acquisition of tools and seeds	INCA	Tools, seeds
		Initiation of agricultural production ⁷ and rehabilitation of coffee plantation	Settlers	Land cultivated, coffee plantation rehabilitated
	3	Agricultural extension	INCA, Settlers,	Improved production
		Construction of social infrastructure with food for work		4 schools, 2 health posts, drinking water
	4	Agricultural extension	INCA,	Improved production
		Coffee and food production	Settlers	Coffee, food
2	1	Agricultural extension	INCA,	Improved production
		Coffee and food production	Settlers	Coffee, food
	2	Agricultural extension	INCA,	Improved production
		Coffee and food production	Settlers	Coffee, food
		Maintenance of access roads	Municipality of Am-boim, governor K.S.	Passable access roads
		Mid term review of settlement component	Independent consultant	Evaluation report/recommendations

⁶ This activity should be performed in the dry season.

⁷ Preparation of land is done during dry season to permit sowing with the first rains in October.

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	3	Agricultural extension Coffee and food production Maintenance of social infrastructure	INCA, Settlers Settlers, Ministry of Education, Ministry of Health	Improved production Coffee, food Schools, health posts functioning
	4	Agricultural extension Coffee and food production	INCA, Settlers	Improved production Coffee, food
3	1	Agricultural extension Coffee and food production	INCA, Settlers	Improved production Coffee, food
	2	Agricultural extension Coffee and food production Maintenance of access roads	INCA, Settlers Municipality of Am-boim, governor K.S.	Improved production Coffee, food Passable access roads
	3	Agricultural extension Coffee and food production Maintenance of social infrastructure	INCA, Settlers Settlers, Ministry of Education, Ministry of Health	Improved production Coffee, food Schools, health posts functioning
	4	Agricultural extension Coffee and food production Ex post evaluation of settlement component	INCA, Settlers CFC/ ICO	Improved production Coffee, food Evaluation report with project impact and lessons learned

Annex 7a

Component No. 4: Support Services

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
1	1	Identification and assessment of farmer organisations	INCA, UNACA	Record on farmer organisations in Amboim
		Procurement of equipment	INCA	Tender documents
		Research activities	INCA, experimental station	Trials
		Establishment of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		Mission of credit expert	INCA, consultant	Report, recommendations, contract drafts
		Set up of fiduciary fund	Bank, INCA, consultant, CFC	Contracts
	2	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Evaluation of tenders and purchase of equipment	INCA	Contracts
		Research activities	INCA, experimental station	Trials
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	3	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Distribution of equipment	INCA	Equipment available at farmer organisation, settlement scheme, technical brigade and experimental station
		Research activities	INCA, experimental station	Trials
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		Extension study	INCA, consultant	Report, recommendations
		Disbursement of credits for production	Bank, INCA, technical brigade, farmer organisations	Records
		Project presentation at ICO, ACRN	INCA, ICO, ACRN	ICO, ACRN memorandum on presentations

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	4	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Research activities	INCA, experimental station	Trials
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		First workshop on project experience with representatives of technical brigades	INCA	Workshop realised
2	1	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Research activities	INCA, experimental station	Trials
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
	2	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Research activities	INCA, experimental station	Trials
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		Mid term review of support services component	Independent consultant	Report, recommendations

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	3	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Research activities	INCA, experimental station	Trials
		Training of superior research staff Maintenance of demonstration plots	INCA INCA, technical brigade, dinamizadores	Staff trained Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		Disbursement of credit for production	Bank, INCA, technical brigade, farmer organisations	
		Second mission of credit expert	INCA, consultant	Report, recommendations
		Project presentation at ICO, ACRN	INCA, ICO, ACRN	ICO, ACRN memorandum on presentations
		Visit of representatives from other interested coffee producing countries	INCA, ACRN	Visit report
	4	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Research activities	INCA, experimental station	Trials
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		Second workshop on project experiences with representatives of technical brigades	INCA	Workshop realised

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
3	1	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Research activities	INCA, experimental station	Trials
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
	2	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Research activities	INCA, experimental station	Trials
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		Visit of representatives from other interested coffee producing countries	INCA, ACRN	Visit report
	3	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Research activities	INCA, experimental station	Trials
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		Disbursement of credits for production	Bank, INCA, technical brigade, farmer organisations	Records
		Project presentation at ICO, ACRN	INCA, ICO, ACRN	ICO, ACRN memorandum on presentations

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	4	Training of farmer organisations	INCA, UNACA	Farmer organisations trained
		Research activities	INCA, experimental station	Trials
		Maintenance of demonstration plots	INCA, technical brigade, dinamizadores	Demonstration plots
		Field extension staff training	INCA	Staff trained
		Agricultural extension	INCA, technical brigade, dinamizadores	Improved practices
		Workshop for exchange of experiences	INCA, consultant, CFC/ ICO	Proceedings
		Ex post evaluation of support services component	CFC/ ICO	Report

Component No. 5: Institutional Support

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
1	1	Procurement of equipment	INCA	Tender documents
	2	Evaluation of tenders and purchase of equipment	INCA	Contracts
		Design and setting up of management information system	INCA, consultant	Management information system
	3	Distribution of equipment	INCA	Equipment available at corresponding departments
		Training of staff for management information system	INCA	Staff trained
		Use of management information system	INCA	Management information
		Mission of expert for market information systems	INCA, consultant	Market information system
		Initial staff training in market information systems	INCA, consultant	Staff trained
		Provision of market information to sector participants	INCA	Information available in the field
		Exchange with relevant institutions	INCA	Improved knowledge

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	4	Training of staff for management information systems	INCA	Staff trained
		Use of management information system	INCA	Management information
		Provision of market information to sector participants	INCA	Information available in the field
2	1	Use of management information system	INCA	Management information
		Provision of market information to sector participants	INCA	Information available in the field
	2	Use of management information system	INCA	Management information
		Provision of market information to sector participants	INCA	Information available in the field
		Mid term evaluation of institutional support component	Independent consultant	Report, recommendations
	3	Use of management information system	INCA	Management information
		Provision of market information to sector participants	INCA	Information available in the field
		Exchange with relevant institutions	INCA	Improved knowledge
	4	Use of management information system	INCA	Management information
		Provision of market information to sector participants	INCA	Information available in the field
3	1	Use of management information system	INCA	Management information
		Provision of market information to sector participants	INCA	Information available in the field
	2	Use of management information system	INCA	Management information
		Provision of market information to sector participants	INCA	Information available in the field
	3	Use of management information system	INCA	Management information
		Provision of market information to sector participants	INCA	Information available in the field
		Exchange with relevant institutions	INCA	Improved knowledge

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	4	Use of management information system	INCA	Management information
		Provision of market information to sector participants	INCA	Information available in the field
		Ex post evaluation of institutional support component	CFC/ ICO	Report

Component No. 6: International Technical Assistance

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
1	1	Long term technical assistance	Consultant	TOR
		Establishment of TOR for short term consultancies	INCA, consultant	TOR
		Recruitment of experts for short term consultancies	Consultant	CVs, contracts
1-3		Long term technical assistance	Consultant	Co-director

Component No. 7: Project Management

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
		Selection of consultant	CFC, ICO, INCA	Technical and financial offer, contract
		Project planning workshop	INCA, international consultant/moderator	Project operation plan and budget, first annual operation plan and budget
1	1	Establishment of project office	INCA, consultant	Office operational
		Meeting of PSC	INCA, PSC members	Approved plan of operations
		Recruitment of office personnel	INCA, consultant	Personnel employed
		Procurement of equipment	INCA, consultant	Equipment
		Preparation of short term expert missions	INCA, consultant	TOR, logistical arrangements
	2	Co-ordination and organisation of project operations	INCA, consultant	
		Continuous monitoring	INCA, consultant	
		Meeting of PSC	INCA, PSC members	
		Preparation of six-monthly report	INCA, consultant	Report

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	3	Co-ordination and organisation of project operations Continuous monitoring Meeting of PSC	INCA, consultant INCA, consultant INCA, PSC members	
	4	Co-ordination and organisation of project operations Continuous monitoring Preparation of annual report Preparation of workplan and budget for year 2 Supervision mission Auditing of project accounts	INCA, consultant INCA, consultant INCA, consultant INCA, consultant ICO Independent auditor	Report Workplan, budget Report Report
2	1	Co-ordination and organisation of project operations Continuous monitoring Meeting of PSC	INCA, consultant INCA, consultant INCA, PSC members	
	2	Co-ordination and organisation of project operations Continuous monitoring Meeting of PSC Preparation of six-monthly report Project midterm evaluation	INCA, consultant INCA, consultant INCA, PSC members INCA, consultant Independent consultant	Report Report, recommendations
	3	Co-ordination and organisation of project operations Continuous monitoring Meeting of PSC	INCA, consultant INCA, consultant INCA, PSC members	

Annex 7a

PY	QRT	Main Activities to be Implemented	Responsibilities	Output
	4	Co-ordination and organisation of project operations Continuous monitoring Meeting of PSC Preparation of annual report Preparation of workplan and budget for year 3 Supervision mission Audit of project accounts	INCA, consultant INCA, consultant INCA, PSC members INCA, consultant INCA, consultant ICO Independent auditor	Report Workplan, budget Report Report
3	1	Co-ordination and organisation of project operations Continuous monitoring Meeting of PSC	INCA, consultant INCA, consultant INCA, PSC members	
	2	Co-ordination and organisation of project operations Continuous monitoring Meeting of PSC Preparation of six-monthly report	INCA, consultant INCA, consultant INCA, PSC members INCA, consultant	Report
	3	Co-ordination and organisation of project operations Continuous monitoring Meeting of PSC	INCA, consultant INCA, consultant INCA, PSC members	
	4	Co-ordination and organisation of project operations Continuous monitoring Meeting of PSC Preparation of final project report Audit of project accounts Ex post project evaluation	INCA, consultant INCA, consultant INCA, PSC members INCA, consultant Independent auditor CFC, ICO	Report Report Report

Annex 7b

Implementation Schedule

Component No. 1	Activity	PY1				PY2				PY3			
		QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4
	1.1 Procurement of seed	---				---				---			
	1.2 Establishment of coffee nurseries	-----											
	1.3 Production of seedlings	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1.4 Distribution of seedlings			-----				-----				-----	
	1.5 Identification of farms for rehabilitation and renovation	-----	-----										
	1.6 Preparation of fields for planting		-----										
	1.7 Planting of coffee			-----									
	1.8 Coffee and food production			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1.9 Taking of soil samples	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1.10 Procurement of soil analysis kit for INCA	-----											
	1.11 Procurement of agricultural inputs and tools		-----										
	1.12 Distribution of inputs and tools		-----										
	1.13 Agricultural extension	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1.14 Baseline survey	-----											
	1.15 Mid term review production component						-----						
	1.16 Ex post evaluation of production component												-----

Annex 7b

Implementation Schedule

Component No. 2	Activity	PY1				PY2				PY3			
		QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4
	2.1 Marketing study	-----											
	2.2 Feasibility analysis of investments	-----											
	2.3 Design of coffee hulling station	-----											
	2.4 Tendering for hulling equipment and civil works	-----	----										
	2.5 Evaluation of offers for hulling station (civil works and equipment) and contracting of companies		-----										
	2.6 Production of hulling machinery			-----	-----								
	2.7 Civil works			-----	-----								
	2.8 Delivery of hulling equipment					-----							
	2.9 Installation of hulling equipment						-----						
	2.10 Staff training in use of hulling equipment						-----						
	2.11 Use of new hulling equipment							-----	-----	-----	-----	-----	-----
	2.12 Procurement and distribution of moisture meters	-----	----										
	2.13 Procurement and installation of equipment for quality laboratory	-----	----										
	2.14 Training of liquorers		----										
	2.15 Mission of quality trainer			-----									
	2.16 Cup testing of export lots			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	2.17 Set up of credit scheme for commercialisation		-----										
	2.18 Disbursement of credit for commercialisation			-----	-----	-----		-----	-----	-----		-----	-----
	2.19 Processing and commercialisation of coffee			-----	-----	-----		-----	-----	-----		-----	-----
	2.20 Recoupment of commercialisation credit						-----				-----		
	2.21 Mid term review of commercialisation component						-----						
	2.22 Ex post evaluation of commercialisation component												-----

Annex 7b

Implementation Schedule

Component No. 3	Activity	Prior to Project start	PY1				PY2				PY3			
			QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4
	3.1 Identification and selection of land	-----												
	3.2 Land survey to establish boundaries and internal divisions	-----												
	3.3 Initiation of process for granting land concessions to settlers	-----												
	3.4 Rehabilitation of access roads to area foreseen for settlement	-----												
	3.5 Selection and contracting NGO		-----											
	3.6 Selection of settlers		-----											
	3.7 Acquisition of food or arrangement with co-operating NGO for food distribution		-----											
	3.8 Organisation and preparation of settlers		-----	-----										
	3.9 Training of key farmers			-----	-----									
	3.10 Handing-over/concession of land title(s)			-----										
	3.11 Rehabilitation of access roads		-----	-----										
	3.12 Construction of housing		-----	-----										
	3.13 Acquisition of tools and seeds		-----	-----										
	3.14 Agricultural production and rehabilitation of coffee plantation/ production of coffee			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	3.15 Agricultural extension			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	3.16 Construction of social infrastructure			-----	-----									
	3.17 Maintenance of access roads							-----			-----			
	3.18 Mid term review settlement component							-----						
	3.19 Maintenance social infrastructure								-----			-----		
	3.20 Evaluation of settlement component													-----

Annex 7b

Implementation Schedule

Component No. 4	Activity	PY1				PY2				PY3			
		QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4
	4.1 Identification and assessment of farmer organisations	-----											
	4.2 Training of farmer organisations	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	4.3 Procurement of equipment	-----	---										
	4.4 Evaluation of tenders and purchase of equipment		----										
	4.5 Distribution of equipment			-----									
	4.6 Research activities	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	4.7 Establishment and maintenance of demonstration plots	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	4.8 Field extension staff training	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	4.9 Agricultural extension	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	4.10 Training of superior extension staff			-----	-----								
	4.11 Extension study			---									
	4.12 Mission of credit expert	-----											
	4.13 Set up fiduciary fund	-----	----										
	4.14 Disbursement of credits for production		----	-----				-----				-----	
	4.15 Project presentation at ICO, ACRN			--				--				--	
	4.16 Workshop on project experience with representatives of technical brigades				--			--			--		
	4.17 Visit of representatives from other interested countries						--			--			
	4.18 Workshop for exchange of experience												---
	4.19 Mid term review of support services component						----						
	4.20 Ex post evaluation of support services component												-----

Annex 7b

Implementation Schedule

Component No. 5	Activity	PY1				PY2				PY3			
		QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4
	5.1 Procurement of equipment	-----											
	5.2 Evaluation of tenders and purchase of equipment		-----										
	5.3 Distribution of equipment			-----									
	5.4 Desing and setting up of management information system		-----										
	5.5 Training of staff for management information system		-----	-----									
	5.6 Use of management information system		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	5.7 Mission of expert for market information system		-----										
	5.8 Initial staff training for market information system		-----										
	5.9 Provision of market information to sector participants			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	5.10 Exchange with relevant institutions			-----				-----				-----	
	5.11 Mid term evaluation of institutional support component						-----						
	5.12 Ex post evaluation of institutional support component												-----

Annex 7b

Implementation Schedule

Component No. 6 and 7	Activity	Prior to Project start	PY1				PY2				PY3			
			QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4	QRT1	QRT2	QRT3	QRT4
	6.1 Selection of consulting agency	-----												
	7.1 Project planning workshop and preparation of workplan and budget for year 1	-----												
	6.2 Long term technical assistance		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	6.3 Recruitment of experts for short term consultancies		-----											
	7.2 Establishment of project office		-----											
	7.3 Recruitment of office personnel		---					-----			-----			
	7.4 Procurement of equipment		-----						-----			-----		
	7.5 Establishment of TOR for short term consultancies		---											
	7.6 Preparation of short term expert missions		-----	-----	-----	-----			-----	-----				-----
	7.7 Co-ordination and organisation of project operations		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	7.8 Continuous monitoring		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	7.9 Meeting of PSC		---	---	---	---	---	---	---	---	---	---	---	---
	7.10 Preparation of six-monthly report			---				---				---		
	7.11 Preparation of annual report					---					---			
	7.12 Preparation of workplan and budget for year 2 and 3					---					---			
	7.13 Preparation of final project report													---
	7.14 Supervision mission					---					---			
	7.15 Auditing of project accounts						---				---			---
	7.16 Project midterm evaluation							----						
	7.17 Ex post project evaluation													---

Annex 8a

SENSITIVITY ANALYSIS

PRICE PROSPECT - REDUCTION OF WORLDMARKET PRICE BY 30%

Price related sensitivity was analysed by reducing the long term world market price level by 30% .
At the same time the differential for Amboim coffee was eliminated.

Item	US\$/t
Long term world market price for Robusta coffee ¹	1.099,70
Long term c.i.f. differential for Amboim coffee 2 ^a Quality BB ²	0,00
Long term f.o.b. differential for Amboim coffee 2 ^a Quality BB ³	-60,00
Projected f.o.b. value of Amboim coffee 2 ^a Quality BB ⁴	1.039,70
Present f.o.b. value of Amboim coffee 2 ^a Quality BB ⁵	1.404,94
Overall reduction in value compared to present price levels	365,24
Percentage reduction in value	26,00%
Long term value of hulled coffee ex-warehouse of the hulling station ⁶	576,24
Long term value of dried cherries at farm gate level ⁷	483,74

Notes:

¹ US\$/t 1,571.00 - 30%

² US\$/t 0.00

³ c.i.f. differential - US\$/t 60.00 (cost, insurance, freight to Europe)

⁴ US\$/t 1,099.70 - US\$/t 60.00

⁵ See Table "Angola - Indicative Costs and Margins in the Commercialisation of Coffee"

⁶ US\$/t 778.70 - 26.00%

⁷ US\$/t 653.70 - 26.00%

Annex 8a

SENSITIVITY ANALYSIS - CASH FLOW AT REDUCED WORLDMARKET PRICE

(all figures in USD)

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
(a) INFLOWS												
Revenue ¹	87,00	116,00	203,00	290,00	348,00	348,00	348,00	348,00	348,00	348,00	348,00	348,00
TOTAL INFLOWS	87,00	116,00	203,00	290,00	348,00	348,00	348,00	348,00	348,00	348,00	348,00	348,00
(b) OUTFLOWS												
Equipment ²	-58,00			-58,00			-58,00			-58,00		
Establishment	-320,39											
Costs of Production	-116,36	-131,36	-157,36	-189,36	-212,36	-212,36	-212,36	-212,36	-212,36	-212,36	-212,36	-212,36
TOTAL OUTFLOWS	-494,75	-131,36	-157,36	-247,36	-212,36	-212,36	-270,36	-212,36	-212,36	-270,36	-212,36	-212,36
CASH FLOW BEFORE FINANCING (a) - (b)	-407,75	-15,36	45,64	42,64	135,64	135,64	77,64	135,64	135,64	77,64	135,64	135,64

Internal Financial Rate of Return	15%
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Annex 8a

SENSITIVITY ANALYSIS - CASH FLOW AT REDUCED WORLDMARKET PRICE

(all figures in USD)

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
(a) INFLOWS												
Revenue ¹				116,00	232,00	348,00	464,00	464,00	464,00	464,00	464,00	464,00
TOTAL INFLOWS	0,00	0,00	0,00	116,00	232,00	348,00	464,00	464,00	464,00	464,00	464,00	464,00
(b) OUTFLOWS												
Equipment ²	-58,00			-58,00			-58,00			-58,00		
Establishment	-355,00											
Costs of Production		-95,00	-88,00	-133,00	-171,00	-224,00	-262,00	-262,00	-262,00	-262,00	-262,00	-262,00
TOTAL OUTFLOWS	-413,00	-95,00	-88,00	-191,00	-171,00	-224,00	-320,00	-262,00	-262,00	-320,00	-262,00	-262,00
CASH FLOW BEFORE FINANCING (a) - (b)	-413,00	-95,00	-88,00	-75,00	61,00	124,00	144,00	202,00	202,00	144,00	202,00	202,00

Internal Financial Rate of Return 9%

Annex 8a

SENSITIVITY ANALYSIS - CASH FLOW AT REDUCED WORLDMARKET PRICE
(all figures in USD)

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<u>(a) INFLOWS</u>										
Revenue ¹	58,00	116,00	174,00	174,00	174,00	174,00	174,00	174,00	174,00	174,00
TOTAL INFLOWS	58,00	116,00	174,00	174,00	174,00	174,00	174,00	174,00	174,00	174,00
<u>(b) OUTFLOWS</u>										
Equipment ²	0,00			-58,00			-58,00			-58,00
Costs of Production	-135,00	-117,00	-132,00	-132,00	-132,00	-132,00	-132,00	-132,00	-132,00	-132,00
TOTAL OUTFLOWS	-135,00	-117,00	-132,00	-190,00	-132,00	-132,00	-190,00	-132,00	-132,00	-190,00
CASH FLOW BEFORE FINANCING (a) - (b)	-77,00	-1,00	42,00	-16,00	42,00	42,00	-16,00	42,00	42,00	-16,00
INCREMENTAL CASH FLOW BEFORE FINANC.	-77,00	-78,00	-36,00	-52,00	-10,00	32,00	16,00	58,00	100,00	84,00

Internal Financial Rate of Return 17%

Annex 8b

SENSITIVITY ANALYSIS - CASH FLOW AT INCREASED INPUT PRICES

(all figures in USD)

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
<u>(a) INFLOWS</u>												
Revenue ¹	103,50	138,00	241,50	345,00	414,00	414,00	414,00	414,00	414,00	414,00	414,00	414,00
TOTAL INFLOWS	103,50	138,00	241,50	345,00	414,00	414,00	414,00	414,00	414,00	414,00	414,00	414,00
<u>(b) OUTFLOWS</u>												
Equipment ²	-58,00			-58,00			-58,00			-58,00		
Establishment	-437,24											
Costs of Production	-142,10	-156,80	-184,02	-217,85	-241,46	-241,46	-241,46	-241,46	-241,46	-241,46	-241,46	-241,46
TOTAL OUTFLOWS	-637,34	-156,80	-184,02	-275,85	-241,46	-241,46	-299,46	-241,46	-241,46	-299,46	-241,46	-241,46
CASH FLOW BEFORE FINANCING (a) - (b)	-533,84	-18,80	57,48	69,15	172,54	172,54	114,54	172,54	172,54	114,54	172,54	172,54

Internal Financial Rate of Return 15%

Annex 8b

CASH FLOW (all figures in USD)

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
(a) INFLOWS												
Revenue ¹				138,00	276,00	414,00	552,00	552,00	552,00	552,00	552,00	552,00
TOTAL INFLOWS	0,00	0,00	0,00	138,00	276,00	414,00	552,00	552,00	552,00	552,00	552,00	552,00
(b) OUTFLOWS												
Equipment ²	-58,00			-58,00			-58,00			-58,00		
Establishment	-485,51											
Costs of Production		-115,86	-106,31	-154,88	-194,71	-247,51	-287,95	-287,95	-287,95	-287,95	-287,95	-287,95
TOTAL OUTFLOWS	-543,51	-115,86	-106,31	-212,88	-194,71	-247,51	-345,95	-287,95	-287,95	-345,95	-287,95	-287,95
CASH FLOW BEFORE FINANCING (a) - (b)	-543,51	-115,86	-106,31	-74,88	81,29	166,49	206,05	264,05	264,05	206,05	264,05	264,05

Internal Financial Rate of Return	10%
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Annex 8b

CASH FLOW
(all figures in USD)

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
(a) INFLOWS										
Revenue ¹	69,00	138,00	207,00	207,00	207,00	207,00	207,00	207,00	207,00	207,00
TOTAL INFLOWS	69,00	138,00	207,00	207,00	207,00	207,00	207,00	207,00	207,00	207,00
(b) OUTFLOWS										
Equipment ²	0,00			-58,00			-58,00			-58,00
Costs of Production	-139,83	-119,53	-134,65	-134,65	-134,65	-134,65	-134,65	-134,65	-134,65	-134,65
TOTAL OUTFLOWS	-139,83	-119,53	-134,65	-192,65	-134,65	-134,65	-192,65	-134,65	-134,65	-192,65
CASH FLOW BEFORE FINANCING (a) - (b)	-70,83	18,47	72,35	14,35	72,35	72,35	14,35	72,35	72,35	14,35
INCREMENTAL CASH FLOW BEFORE FINANC.	-70,83	-52,36	19,99	34,34	106,69	179,04	193,38	265,73	338,09	352,43

Internal Financial Rate of Return 57%