New Partnership for
Africa's Development (NEPAD)

Comprehensive Africa Agriculture
Development Programme (CAADP)

Food and Agriculture Organization
of the United Nations

Investment Centre Division

GOVERNMENT OF THE REPUBLIC OF NAMIBIA

SUPPORT TO NEPAD–CAADP IMPLEMENTATION

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Volume IV of VII

BANKABLE INVESTMENT PROJECT PROFILE

Development of Infrastructure for Marketing Horticultural Produce

July 2005

NAMIBIA: Support to NEPAD–CAADP Implementation

Volume I: National Medium–Term Investment Programme (NMTIP)

Bankable Investment Project Profiles (BIPPs)

Volume II: Infrastructure Upgrade of Rural Water Supply

Volume III: Support to Smallholder Irrigation Schemes

Volume IV: Development of Infrastructure for Marketing Horticultural Produce

Volume V: Integrated Farming Support Programme for Resettled Farmers

Volume VI: Livestock Improvement

Volume VII: Support to Aquaculture Development

NEPAD–CAADP BANKABLE INVESTMENT PROJECT PROFILE

Country: Namibia

Sector of Activities: Horticulture

Proposed Project Name: **Development of Infrastructure for Marketing Horticultural Produce**

Project Area: Khomas (Windhoek), Oshana (Oshakati) and Kavango (Rundu) Regions

Duration of Project: 5 years

Estimated Cost: Foreign Exchange ..... US$11.0 million
Local Cost ..... US$11.3 million
Total ..... US$22.3 million

Suggested Financing:

Source	***US$ million***	***% of total***
Government	11.3	51
Financing institution(s)	11.0	49
Beneficiaries	–	–
Total	***22.3***	***100***

NAMIBIA:

NEPAD–CAADP Bankable Investment Project Profile

"Development of Infrastructure for Marketing Horticultural Produce"

Table of Contents

Currency Equivalents

(July 2005)

Local Currency	=	Namibian dollar (N$)
US$1.00	=	N$6.57
N$1.00	=	US$0.15

Abbreviations

CAADP	Comprehensive Africa Agriculture Development Programme
DEES	Directorate of Extension and Engineering Services
GRN	Government of the Republic of Namibia
GSIP	Green Scheme Irrigation Policy
MA	Marketing Authority
MAWF	Ministry of Agriculture, Water and Forestry *(since January 2005)*
MAWRD	Ministry of Agriculture, Water and Rural Development *(prior to January 2005)*
MU	Management Unit
NAB	Namibian Agronomic Board
NamWater	Namibia Water Corporation
NEPAD	New Partnership for Africa's Development
NDP2	Second National Development Plan
NHDI	National Horticulture Development Initiative
NHTT	National Horticulture Task Team
NPRAP	National Poverty Reduction Action Programme
NSA	Non–State Actors
PRS	Poverty Reduction Strategy

I. PROJECT BACKGROUND

A. Project Origin

I.1. The idea to develop a horticultural infrastructure for marketing freshly produce came a long way. In 1998, the government commissioned consultant to investigate the potential to produce more food with the aim to replace most imported products with local produce. The study indicated that about 90 percent of all Namibia's needs such as pork, chicken, and horticultural products are imported. Government, as a result of the report, undertook the *National Horticulture Development Initiative* (NHDI) by setting up a *National Horticulture Task Team* (NHTT) made up of producers, wholesalers, consumers and government officials. The work of the team was to spear head the horticulture initiative in order to increase local production through supporting small–scale farmers, which are still subsistence oriented.

I.2. In 2003 the President of the Republic of Namibia made a statement of intent for the *Ministry of Agriculture, Water and Forestry* (MAWF) to invest N$1bn in the sector with the aim to increase local production, reduce import and enhance food security. The idea of the President was endorsed by Cabinet in 2004. To implement the Cabinet decision and the ideas that came from the NHTT, the Ministry launched two initiatives: (a) *Green Scheme* to promote horticulture and high value cash production and, (b) the development and implementation of freshly produced marketing infrastructure. The ministry through its agent, *Namibian Agronomic Board* (NAB), commissioned an independent consulting company to investigate and advise on a possible model for freshly produce marketing infrastructure, the sustainability of such a system and prepare financing proposal for setting up the infrastructure.

B. General Information

I.3. ***Features of the sector.*** The primary significance of the agriculture sector in Namibia lies in its contribution to the livelihood of the over 70 percent of the population living in rural areas. The majority of these families spend over 60 percent of their earning (from selling their agricultural produce) on basic needs such as food, education and health care. In addition, the sector is the major employer in the country, directly supporting majority of the population. The sector also contributes to the improvement of the lives of most Namibian through its contribution to the country's foreign exchange earnings.

I.4. Major agricultural products traded across Namibian borders include: livestock and livestock products, grapes, cotton, date and to a certain extent some horticultural products.

I.5. Namibia is a vast (824 300 km²) and relatively unpopulated (1.8 million inhabitants) country. Two main deserts border the country and the land between them is not prime agricultural land. It is estimated that a few hectares, but as many as 10, are needed to sustain one person on a long–term basis in the north, where the land is good for agriculture. The climate is marginally suited to dry–land subsistence crop production, with the exception of areas in the North and Northeastern parts of the country.

I.6. The country has a low average annual rainfall (330–500 mm) and surface water is scarce, making rainfed cultivation highly risky. Irrigation is possible only along the bordering perennial rivers and where either dams feed irrigation schemes or were sub–artesian water can be utilized. This makes the country's food security situation unstable and unreliable. This leave the country with only two options — to rely on imports for everything it cannot produce locally through rainfed production, or

utilising water from its perennial rivers all of which Namibia shares with its neighbouring countries (Angola, Botswana, South Africa and Zambia). Another problems faced by the agriculture sector of Namibian is its dualism. This means, the sector provides income and food for the poorer sections of community based on low input and low output farming system. On the other hand the sector provides high income to a small number of wealthy farmers. Small farmers lack technical–know–how, and credit facilities to enable farmers to increase and/or diversify their production. There has however been policy move towards improving the performance of these small–scale farmers by spending about 80 percent of the sector's allocation.

I.7. ***National Policy Framework.*** The national development strategy for Namibia consists of a long and medium term development perspectives. *Vision 2030* is the long–term perspective that provides a framework for medium and short–term implementation of development plans and programmes/projects. It is a framework that defines where Namibia is today and where it wants to be by 2030, and how to get there. The document calls for high sustainable economic growth that places Namibia in the high–income category of nations, elimination of duality in the economy and insurance of equity in the pattern of economic growth. This calls for: competitiveness and diversification of the economy. Diversified economy will provide opportunities to all Namibians, who are able and willing to have opportunity to be gainfully employed or access to productive resources; provision of adequate social services and equity in income distribution across all groups and the disparity between rural and urban areas, in terms of social and economic conditions, minimised.

I.8. To realise this long–term goal, the government has put in place policy instruments to implement and monitor. These instruments include, firstly, the *National Development Plans* (NDPs). NDPs contain national, regional, sectoral and cross–sectoral policy issues. They have clear objectives to reduce poverty and creating employment opportunities. Secondly in 1998, the Government of the Republic of Namibia developed a *Poverty Reduction Strategy* (PRS) to provide a framework for pro poor growth. The objectives of PRS are in line with the *National Development Plan 2* (NDP2) being currently used. The PRS states that economic growth that reduces poverty can only be achieved with investment in human capital and creating the necessary infrastructure. An action plan, titled *National Poverty Reduction Action Plan* (NPRAP) that outlines the mechanism on how the PRS is to be implemented has also been developed. The NPRAP focuses on three areas that are considered key to progress in poverty reduction namely: (i) How to foster more equitable and efficient delivery of public services (in the context of regional decentralisation); (ii) How to accelerate equitable agricultural expansion, including a consideration for food security and other crop development options; and (iii) Options for non–agricultural economic empowerment, including an emphasis on the informal sector and self–employment options. These three areas are then translated into 63 Action Profiles in the NPRAP. The profiles are being implemented by sector ministries with the assistance of *Non–State Actors* (NSA).

I.9. Agriculture is central to this policy document because of its importance to the livelihood of the rural poor. Thus, MAWF, as one of the ministries to implement the 63 actions in the NPRAP, has put in place a *National Agricultural Policy* and its *Strategy*. The main objective of the *Agricultural Policy* is to increase agricultural production at national and household levels and promote livelihood opportunities. Furthermore, the ministry has developed the *Green Scheme Irrigation Policy* (GSIP) as another instrument aimed at increasing agricultural production including horticulture, and employment creation. The GSIP encourages crop diversification, because of the unreliability of the rainfed cropping.

I.10. In addition to formulating the above policies, a number of studies have been carried out to determine the potential areas in the sectors worth investing in. Some of the studies undertaken include: DECOSA, to determine the potential for import substitution of agricultural production into Namibia;

the Feasibility Study into the development of infrastructure for the market of horticulture produce in Namibia and the Grain Market Review: analysis of the Mahangu (Pear Millet) post harvest chain and review of the progress implementation of the sorghum and Mahangu action plan. All these initiatives indicate the importance the GRN attaches to the agricultural sector as a contributor to exports earnings, employment creation, poverty reduction and prosperity.

C. Horticulture Development

I.11. Horticulture production is not fully developed in Namibia and the current production is done on a small scale, (subsistence oriented). Small horticultural farmers produce mainly for own consumption, and only a small part is sold to the local (surrounding) market, as they cannot afford transportation to other markets. As such, farmers, find it difficult to penetrate big market. Fewer large–scale farmers however, penetrate the local markets by sending their fresh products first to Cape Town and some of these products eventually come back to Namibia via wholesalers. Three distinctive problems are cited as the cause to these. Limited market and marketing infrastructure; lack of horticultural skills, and limited incentive (credit facilities) for farmers to improve and increase their production which eventually leads to increasing the quantity needed to supply the market on a continuous basis. Because of the problems indicated, Namibian horticultural producers find it difficult to comply with factors that are important in horticultural marketing — quantity, quality and continuity. Many if not all small farmers are still inexperience (emerging farmers) compare to their counter part in South Africa who are well establish and have all the know how in producing and marketing horticulture produce.

I.12. In many instance, production in the country is not well coordinated. This means that production is not linked to markets and marketing. Furthermore, production areas are remote from the main urban localities where people with purchasing power are. Transportation if available is not synchronised and could be expensive for an individual farmer to hire.

I.13. Unless the above issues are addressed, horticulture producers in Namibia will always struggle to increase market share and eventually increase their production.

Table 1: Consumption, imports and local production of fruits and vegetable

	Value (N$ '000)	% of consumption	Quantity (tons)	% of consumption
Total Consumption	195,468	100	92,937	100
Imports	160,141	82	69,442	75
Local production	35,327	18	23,495	25

Source: DECOSA 2001

I.14. Table 1 above highlights that local horticulture producers only manage to supply 23,495 tons (25 percent) out of the 93,000 tons needed for consumption in the country and the rest is imported. Some of the major produce produced in the country includes: vegetable (carrots, cabbages, pumpkins, green maize) along the Kavango and Zambezi rivers. Oranges, mango and lemon are grown in the area of Otavi, Tsumeb and Grootfontein areas. A number of small–scale farmers are actively producing tomatoes and cabbages along the Olushandja Dam in the north central. Small–scale farmers at the Etunda Irrigation Project produce crops such as, watermelon, potatoes onions, and butternut for the South Africa markets.

I.15. From economic point of view, horticulture production is vital to any country, because it is financially rewarding if done professionally. It is therefore intention of the Government of Namibia to

increase the local production of fruit and vegetables and other horticultural products and eventually replace most of the imported products with in–house production. In order to achieve these, the MAWF have launched two initiatives namely: (i) The development and implementation of fresh produce production coordination and marketing infrastructure and (ii) The *Green Scheme* to promote horticulture production in order to supply the proposed marketing infrastructure.

D. Constraints and Opportunities

I.16. ***Constraints.*** The agricultural sector in Namibia experiences some constraints. These range from the inadequate and undeveloped market and marketing infrastructure, especially in remote areas of the country. The marketing infrastructure referred to include cold storage, regular and reliable refrigerated transportation for horticultural produce from areas of productions, (where water available for irrigation) to market areas, particularly urban centres. This has led to post harvest losses constraining the agricultural growth in terms of crop production. Post harvest losses occur almost at every level between harvesting and marketing and are not always accounted for in agricultural statistics. Some losses are experienced due to lack of proper and limited storage facilities, especially for perishable horticultural produce, and during bumper harvest of grain crops is realised (maize, sorghum, pearl millet). Insufficient market transparency, that is, the degree to which farmers are aware of the range of selling options open to them constrains the growth of the sector has also been experienced by many producers, especially small scale farmers. Furthermore, inadequate access to transport and good feeder roads from production areas limits the marketing of many produce. The recurrent drought is another constraint that affects the yield and subsequently limits the continuous supply of many produce to the market. All the above constraints (could) lead to limited opportunities for crop diversification; low level of production and high post–harvest losses in volume and value, and low return to marketing effort due to excessively high marketing costs. This in turn discourages farmers from investing in increased production.

I.17. ***Opportunities*.** Notwithstanding the above constraints, the sector has opportunity to broaden access to the benefit of modern farming. The perennial rivers whose waters can be used for irrigation purposes surround Namibia. Sufficient irrigable land (40,000 ha) is available to produce food that can feed the entire Namibian population and for export. One[1] of the studies carried out indicated that the demand for horticulture produce exceeds the local production in the country. It is estimated that Namibian producers supply only 18 percent of the total consumption according to he value of the demand while 82 percent is imported. These are indications that much room exist for local producers to increase their market shares and production scale.

I.18. Relevant policies that seek to promote the investment in agriculture and encourage especially small farmers to produce more are in place as referred to under section I.C.

I.19. In addition, ongoing and planned programme/projects as measures of contributing to food security and create employment opportunities are another opportunity that the sector has. These programme/projects could complement the activities of proposed project. Some of the projects are: (i) *National Agro–ecological Zoning* that involves field surveys to collect and analyse data on climate, soils and vegetation so as to develop soil agrometology maps and erosion acid mapping. The project will, in future, include the identification of most vulnerable agro ecological zones of Namibia; (ii) *Horticultural Production and Marketing Support Project* that aims at introducing more productive farming systems in the northern communal areas. The project will also set up strategic marketing facilities such as cool rooms, buying refrigerated trucks and establishing market options. This will

[1] DECOSA 2001

complement this proposed project; and (iii) *Establishment of a Research and Development Unit* that will ascertain which type of crops (apart from the crops that are currently cultivated along the Orange River basin), the farmers in that areas can farm with, taking irrigation into consideration. This project will also collect and anlayse data pertaining to soil, water quality, salinity, and fertiliser for research alternative crops on the bank of the river. The *Etunda* and *Orange River Irrigation Projects* become a source of supply to this envisaged markets.

II. PROJECT AREA

II.1. ***Geography, Climate and Socio–economics.*** The proposed project to develop marketing infrastructure for horticultural produce will be located at the following areas; the Central Market will be located in the Windhoek – Central Namibia, while the District Markets will be established in Oshakati – North Central, and Rundu – Northeast. These city and towns are strategically located in a sense that they are highly populated. According to the 2001 population census, Windhoek has 233,529 inhabitants, Rundu 44,413 population while Oshakati has 28,255 residents, which makes up 12 percent, 2.4 percent and 1.5 percent of the total population (1,830,330), respectively. These urban localities are far apart making it possible to avoid competing for the produce from producers in the same area. Instead they can complement each other by supplying areas that are short of produce. Windhoek is so chosen because is the central economic hub of the country and will receive imported and local produce for distribution and selling respectively. Oshakati and Rundu are 700 km and 500 km from Windhoek respectively. Marketing hubs will be constructed in Uutapi, Katima Mulilo, Mariental, and Tsumeb, which are also far apart.

II.2. The proposed markets are closer to good production areas where arable land is available, and rainfall average is above 300 mm. Average rainfall in the northeast (Caprivi and Kavango Regions) of the country is higher compare to the rest of the country and two rivers (Kavango and Zambezi) bordered these regions, making it possible for them to be the major horticultural producing areas through irrigation resulting in an increasing production. By far, Caprivi is the largest potential for growing fruits and vegetable. This will make the supply to the Rundu District Market reliable, continuous and sufficient, which in turn supplies other market, especially the Central Market.

II.3. ***Infrastructure.*** Namibia's infrastructure is considered well developed and maintained. The majority of towns and communities can be reached by network of tarred and quality gravel roads. Main agricultural producing areas are accessible and connected to main roads. The Central Market will be situated in Windhoek, which is also the centre of main economic activity in the country. The city is connected to other town through main high ways, Trans–Kalahari and Trans–Caprivi. These highways provide link between Windhoek and the port of Walvisbay. The Trans–Caprivi high way runs through Rundu and Caprivi linking Namibia to its land locked neighbours (Botswana, Zimbabwe and Zambia). The highway will provide regional transport and will reduce the time span for movement of exports and imports of agricultural produce from Namibia to outside markets or vice versa.

II.4. Furthermore, the three proposed areas (Windhoek, Oshakati and Rundu) are connected to national electricity grid making the operation of the proposed marketing infrastructure such as cooling and chilling rooms a reality. A railway line runs from Windhoek to Tsumeb, and it is now being extended to the to connect to towns in the northern such as Omuthiya Gwiipundi, Ondangwa, Oshakati and Oshikango, which is at the boarders of Namibia and Angola making it possible for some produce to be sold onto the Angolan markets.

II.5. ***Target Population and Scope for Development.*** This marketing infrastructure project will only be established in areas were the population is 20,000 or above. Windhoek, Oshakati and Rundu meet this criterion. No population target is set for the places where the hubs will be constructed.

III. PROJECT RATIONALE

III.1. It has been already stated that horticulture in Namibia is not fully developed. Most of the fruits and vegetable consumed in Namibia are imported with much of the imports from South Africa. For example, total imports of horticultural produce from South Africa (January to December 2003) was 69,442 tons, at a value N$2,306 per ton, giving the total value of N$160.1m. Local producers supply only 23,495 tons (18 percent) at a value of N$1.6m according to value of demand, while 82 percent is imported. This means that local producers are battling to increase their market share.

III.2. Figures extracted from a study by DECOSA in 2001 also indicated the value of Namibia's imports (horticulture produce):

Table 2: Value of Namibia horticultural imports

Produce	Value (N$ million p.a.)
Onions	7.8
Potatoes	65.6
Citrus fruits	27.4
Tomatoes	19.6
Total	120.4

Source: DECOSA 2001

III.3. The table indicates that Namibian spent about N$120m to bring horticultural produce in the country in 2001. The report by DECOSA indicates that fresh produce consumption in Namibia is estimated at N$201m (93,000 tons) per annum. While Namibia has potential to increase production, it faces the problem of market and marketing facilities especially for small farmers who are remote from formal markets and good feeder roads but where good soils and water are available. Currently, small farmers tend to market their produce to finance their immediate needs. The limited marketing infrastructure coupled with harsh conditions lead farmers to sell their produce in poor quality denying them good price for their produce. Large commercial farmers are better off in terms of marketing as they seem to have secured the market for their produce in South Africa. Furthermore, farmers are constrained by lack of credit facilities to help them increase their production of horticultural crops such as: onions, potatoes, carrots, green beans, spinach, mango, guavas and citrus fruits.

III.4. It is in this light that the Government of Namibia, through the MAWF has taken a step to address the situation through a number of initiatives. One is the recently adopted *Green Scheme Irrigation Policy* to which an indicative amount of N$1bn has been allocated for a period of ten years. The GSIP will address the increase in production, setting up the needed market and marketing infrastructure as well as train those who will utilise them. The proposed project to be set up would be able to address: (i) physical infrastructure including cold storage, processing facilities like washing, waxing and grading of fresh produce; (ii) inadequate and poor dissemination of market information; and (iii) human resource development of those to be involved in the implementation, management, operation and maintenance of the infrastructure and equipment. The project further aims at addressing the constraints faced by farmers particularly those in communal areas to the north and those remote from markets due to historically poor input and output market development.

III.5. It is expected that once these problems are addressed, the following will be realised: (i) increased self–sufficiency of fruit and vegetables in the country; (ii) increased food security; (iii) decreased economic dependency on South Africa; (iv) increased employment opportunities; (v) decreased capital outflow from Namibia; (vi) increased processing potential; (vii) increased export possibilities; and (viii) increased overall development

IV. PROJECT OBJECTIVES

IV.1. ***Overall Objective***. To contribute to the improvement of food security both at households and national levels and to create employment through improving market and marketing infrastructure

IV.2. ***Immediate Objectives:***

- To construct one big Central Market that will serve as main receiving and distribution centre for imported and locally produced horticultural products;
- To build two District Markets that will receive produce from farmers and distribute to the Central Market;
- To erect five hubs to serve as collection points for local production mainly in production areas where critical mass of production is 6,000 tons or more;
- To set up the implementation agencies and management structure;
- To build and enhance the needed capacity of those involved in the implementation of the project.

V. PROJECT DESCRIPTION

V.1. The proposed project will run for a period of five years. It will be implemented in phases to allow government and its Development Partners solicit for the needed funds. Phase one involves the construction of a fully equipped central and District Markets in Windhoek, Oshakati and Rundu respectively. The markets will consist of buildings and equipment need to market the produce received either through import or from local producers. The second phase which will involve the construction of Rundu District Market and the hub will be developed at a later stage depending on local production, which will be implemented under the GSIP The project will have ***five outputs*** that are described below.

V.2. ***Output 1:*** ***A fully equipped Central Market in Windhoek is constructed.*** This market would be the receiving and distributing centre for horticulture, produces both from internal and external producers. The market requires an area of about 10 hectares to allow expansion of the infrastructure in the future. The size of the Central Market will require a trading floor area of 7,000 m². Other features such as space for hawkers/retailers, the cold storage/ripening and processing facilities needs of 1,000 m² each will also are developed. Activities to be undertaken in order to realise the output include: (i) Erection of a multi–purpose storage and/or ripening complex, (ii) Erect a pack house and processing complex with cold room areas and boiler room; and (iii) Building of office block for operating companies agent and wholesalers and amenities and build a small workshop.

V.3. The Central Market will host the management structure for marketing fresh produce in the country. It will receive produce from both locally or imported produce and distribution to the appropriate markets. The project will also erect the following: bulk storage facilities, trading area for market agents and wholesalers. Retailers trading area for small retailers and hawkers, multipurpose cold storage complex, and a pack house and processing complex with cold room areas. Office block for operating company will also be erected during the first phase.

V.4. ***Output 2: District Markets in Oshakati are erected.*** This is planned to be 3,000 m² with an additional 1,000 m² for cold storage, retail, processing and pack house facilities. The District Market will be situated in area not far from the urban localities. It will receive produce from local producers and sort and grade them accordingly.

V.5. ***Output 3: District Market in Rundu is constructed.*** This will be a replicate of the market in Oshakati, but the size could differ depending on the volume of produce in the area.

V.6. ***Output 4: Five Hubs in Uutapi, Katima Mulilo, Mariental, Tsumeb and Noordoewer/ Aussenkehr are constructed*** as soon as critical mass of 6,000 tons per year is reached in each of these towns. These will be built near main horticultural producing areas and they will become a point of receiving fresh produce from the field. The cleaning and sorting for produce will be done at this level before distributed to District and Central markets. Facilities such as pack house with necessary equipment for grading, sorting and packaging will be built there.

V.7. ***Output 5: Enhancing awareness and building the capacity of the main stakeholders.*** There is a need for a better understanding of this type of market and how it operates. There is a further need to know how the equipment is operated. Proper running of the market centre and perpetual maintenance of the equipment is central to the success of the project and also ensures sustainability in the long run. There is an additional need to mobilise community to understand the importance of using this type of facilities than their traditional one.

V.8. For this reason, the project will organise a two–day awareness creation workshops in each of the towns, for MAWF staff and other stakeholders (wholesalers, retailers, Hawker Association representatives, horticulture producer and extension officers). The workshop will cover among others understanding of horticulture as a food security solution; horticulture production and marketing; overview of the proposed model and how it functions and the benefits to be derived.

V.9. Output 3 and 4 will be realised during the second phase of the project. The costs of these are not included in the indicative costs listed in Table 3 below.

V.10. ***Capacity Building and Institutional Support.*** Horticultural marketing is a highly competitive business requiring strong entrepreneurial and trading skills. Therefore this initiative would require continuous information on prices, marketing techniques and linking the producers with potential buyers.

V.11. The *Marketing Authority* will need to demonstrate the understanding of the value of closer linkages between produces/suppliers and the Project Manager and the Authority itself. There is therefore a need for and experienced technical assistance (short and long term) to take the lead in this work, which will require the development of good relationship through continued presence and interaction on a daily basis over a period of 1–2 years.

V.12. The capacity development is of two types: (i) Establishment of the *Marketing Authority* and its functions; and (ii) Development of the human capacity of stakeholders and MAWF staff.

VI. INDICATIVE COSTS

Table 3: Project Cost Summary per Component					
Component	Local	Foreign	Total (US$ '000)	% Foreign Exchange	% of Total Base Costs
Construction of Central Market (Windhoek)	4,000	3,600	7,600	47	40
Mechanical (Windhoek)	1,300	1,300	2,600	50	14
District Market (Oshakati)	2,000	1,600	3,600	44	19
Mechanical (Oshakati)	1,000	600	1,600	38	8
Capacity Building/Institutional Support	350	250	600	42	3
Technical Assistance	500	1,500	2,000	75	11
Monitoring and Evaluation	500	500	1,000	50	5
Total Baseline Costs	9,650	9,350	19,000		100
Physical contingencies (10%)	965	935	1,900	49	10
Price contingencies (7.5%)	724	701	1,425		7.5
Total Project Costs	11,339	10,986	22,325		117.5

VI.1. ***Key notes*** to the above Table 3:

- ***Markets.*** This component includes building of physical marketing infrastructure both at national and district levels;
- ***Mechanical.*** Under this component, the following are budgeted for: market mechanical, material handling, processing and IT equipment;
- ***Capacity Building/Institutional Support.*** This money will go towards training activities and mobilization of farmers and consumers. Institutional support costs will include office development, furnishing and utility costs;
- ***Technical Assistance.*** This part provides salaries and allowances for short–term and long–term technical assistance staff that could be used by the project when need arise;
- ***Monitoring and Evaluation.*** Monitoring will allows management determine the progress made in the construction of the facilities by inspectors (engineers). A mid term evaluation will be carried out to determine the likely achievement of the project immediate objective;
- ***Physical Contingency.*** This will cover activities that are not being planned in this doc but have to be carried out because of their direct importance to the project are considered;
- ***Price Contingency.*** This component allows for any monetary value loss due to devaluation of the convertible currency.

VII. PROPOSED SOURCES OF FINANCING

VII.1. The total capital costs of the project over a period of five years are US$23m for developing the needed infrastructure mentioned in the project document. Operational costs will be covered by the income to be generated by the market and marketing activities.

VII.2. The Government of Namibia has approved to allocate N$1bn to invest in agriculture for a period of ten years. As such it will provide most of the funding needed for the project. One is aware however, of the budgetary constraints that the government faces, thus other institutions such as development partners and private sector will be approached to contribute to this highly profile bankable project. Development partners and private sector interested in the funding this kind of project have not yet been identified.

VIII. PROJECT BENEFITS

VIII.1. ***Economic and financial benefits.*** It is hoped that if the project is implemented as planned it will impact the beneficiaries, especially the small farmers. Producers will have markets to sell their produce and earn income (after they have paid off expenses) that they could not have earned without a project benefit. Income of producers will increase, as they will produce cash crops under irrigation (through the GSIP) and have access to market. The income to be obtained will enable them to pay for their children school and hospital fees. It is also likely that other economic activities such as petty trading would start to mushroom in the project surrounding area.

VIII.2. The project will also benefit communities in the project surrounding area in three ways: (a) it will generate income for local people who will be employed by the management of the facilities; (b) income earned by local employees will be expended locally; leading to the improvement of the people's living standard, e.g. better houses; (c) food availability that leads to the improved health of the people will also be realised. In addition, other economic activities would be generated in the local community through increased petty trading. Buyers buying from the market centre will resell in cuca shops.

VIII.3. ***Social benefits.*** Apart from increasing the income of the producers, the project will provide employment opportunity to those who will be employed to operate the markets. Further opportunity will be provided through self–employment, as hawkers and retailers who will buy produce from District Market and resell them in their areas, resulting in these people getting income as a result of the marketing infrastructure.

VIII.4. ***Internal migration.*** Although quantification of this movement is difficult, it is clear that effect of the project on rural migration could be felt as young people might opt to remain in the rural areas and participate in petty trading.

IX. IMPLEMENTATION ARRANGEMENTS

IX.1. The government's institution responsible for implementing the project is the *Ministry of Agriculture, Water and Forestry* (MAWF). The MAWF has four technical directorates, namely, Directorate of Planning, Directorate of Veterinary Services, Directorate of Research and Training and *Directorate of Extension and Engineering Services* (DEES) which, through its *Division of Agriculture Engineering Services* is responsible for the planning and developing of all aspects related to agricultural infrastructure (irrigation, marketing, crush pens) and providing extension service to farmers. The DEES also advises the ministry on the type of farming equipment to be bought, how to be installed and maintained. The DEES will therefore be the lead agent and thus become the focal point for co–operation with sponsors. In addition, the MAWF works closely with other statutory bodies, such as NAB, as its implementing agents in cases where capacity is limited and where time

does not allow them. NAB also manages the production, consumption and marketing of cereal and horticultural products.

IX.2. The proposed market infrastructure will be developed in phases with the first phase involving the construction of a fully equipped Windhoek Central and Oshakati District Markets. The second phase will involve the construction of Rundu District Market and the hubs depending on the availability of funds and volume of local produce in the area. The increase in production will be realised as soon as other projects to implement the green Scheme are operational.

IX.3. The MAWF through the DEES will facilitate the implementation of the project by first identifying (in conjunction with municipalities of Windhoek, Rundu and Oshakati) suitable land of 5-8 ha and 3–5 ha for Central Market and District Markets, respectively. Also, the DEES will be responsible for the supervision of the construction. DEES will embark upon a creation of awareness among the stakeholders about the infrastructure and the benefit that it will bring. This will create a sense of ownership of the project especially among stakeholders. When necessary, technical assistance could be provided.

IX.4. A *Project Steering Committee* to oversee the development of the infrastructure will be set up in Windhoek and be chaired by the Permanent Secretary of the MAWF. At central and district levels, a *Marketing Authority* (MA) made up of buyers wholesalers, retailers hawkers, producers, government officials, and community members to oversee and direct the management of the infrastructure as well as other initiatives, will be establish once the buildings are completed. The body will also be responsible for policy development and guidance. The MA will then appoint a company to implement the plan and to manage the infrastructure for a given period after which the infrastructure will manage on public private partnership. This will be called the *Management Unit* (MU).

IX.5. At hub level, management will be left to producers in those areas, but the MA will help in co–ordinating to ensure that infrastructures developed meet the required standard. The MA will however be responsible to train the management of the hubs to enable manage and run the affairs of the marketing accordingly.

IX.6. A number of committees will also be established to guide and direct the work of different agencies at different levels.

X. TECHNICAL ASSISTANCE REQUIREMENTS

X.1. A combination of short and long term technical assistance would be required during the lifespan of the project. Such skills could be obtained both inside and outside of Namibia.

X.2. The main purpose of such technical assistance would be to undertake studies as and when required, develop training manuals and supervising the implementation of training programmes.

XI. IDENTIFIED ISSUES AND PROPOSED ACTIONS

XI.1. ***Low production.*** The sustainability and full operation of the marketing infrastructure will depend on the volume of horticultural produce supplied on a continuous basis, both from local and outside producers. For this reason, there is a need for the government to speed up the establishment of irrigation infrastructure through the GSIP for farmers to produce as much as they can and supply the market. Where possible, other incentives such as guarantee of credit to farmers to expand and diversify their production are made.

XI.2. ***Capacity Building.*** It has already been indicated in preceding paragraphs that horticulture is practised on a small scale due to limited skills and experience, limited input and above all, limited marketing infrastructure. This calls for the project to hire at its early stage of implementation a local or an international specialist to work with the community to create awareness of the proposed infrastructure, its benefits and the importance of their maximum participation in planning, designing and implementation. Essential issues to be considered should include: that the producers and buyers understand the importance of selling through the suggested market chains instead of their traditional marketing methods and places; the role of community and their contribution to the implementation of the project, especially at hub level. It would be the duty of the specialist together with extension officers from the DEES to ensure that committees are created and members trained on the maintenance of the infrastructure, at different levels to oversee the implementation works.

XI.3. ***Marketing.*** Many farmers, especially small farmers are used to marketing their produce in an informal way. In most cases it might be difficult for them to change the way of doing things. It is important that awareness creation is strengthened on how the new infrastructure will help them improve marketing their produce and keeping them fresh until they are all sold out and thus increases their income.

XI.4. ***Financing.*** The project will mostly funded by the government but its budget is limited, as it has to provide money for other development efforts. It is therefore important that potential development partners are sought to contribute.

XII. POSSIBLE RISKS

XII.1. There are some risks that may abound the project and these are foreseen in the following areas: high transport costs, proper roads to the market from the producing area, cost might overweight the benefit, producers might opt to sell privately, Instability in neighbouring Angola. Some of these risks are outlined below:

- ***Farmers willing to sell through the new marketing infrastructure.*** One of the major problems in agricultural and rural development project is organising farmer efficiently to provide them with service they need, and to adapt to new technology. It should be noted that a small farmer would not take risks that could involve losing his livelihood. Appropriate organisation of farmers into self–help scheme is especially difficult.

- ***Implementation Delays.*** Delays in procurement will result in shortages of construction materials and the needed equipment, especially those to be imported as such the implementation of the project is delayed.

- ***Participatory Approach.*** Many community members prefer a bottom–up approaches where most of them participate, and have their voices heard and their ideas are valued.

Top–down method of planning might result in poor community participation in the implementation of activities. To counter this problem, the community would be involved in the entire cycle of the project from planning to implementation stages.

- ***Availability*** of financial resources timeously will be critical since once the projects commences the infrastructure should be utilised to avoid becoming a "white elephant".
- ***Green Scheme.*** The implementation of this scheme is a prerequisite for the success of the project as projects under this scheme will be the supplying body to the market

Appendix: List of References

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