



National Agricultural Support Services Programme (NASSP)

Title: NAMIBIA: DRAFT SEED POLICY

NASSP Report No. x/2003

**Ministry of Agriculture, Water and Forestry
Po Box 86743
Government Office Park
Windhoek
Namibia**

Date: June 2005

The National Agricultural Support Services Programme (NASSP) is jointly funded by the European Union through the European Development Fund (EDF) and the Government of the Republic of Namibia (GoN).

The Programme is complementing the Government of Namibia's efforts to enhance the livelihood of smallholder households. The Programme has 5 components : institutional support, rural enterprises development and finance, livestock development, crop diversification and mahangu (millet) development.

The Programme is implemented by the Ministry of Agriculture, Water & Rural Development in co-operation with parastatal organisations (Meat Board, Agronomic Board, Meatco), non-governmental organisations (NGOs) and the private sector. Technical assistance to the Programme is provided by Natural Resources International Ltd (NR International) in association with the Natural Resources Institute (NRI) and local co-operation of the Southern Africa Development & Consulting (CRIAA SA-DC) and the Namibian Economic Policy Research Unit (NEPRU).

Disclaimer

Although this report was prepared under EDF funding, the EC bears no responsibility for, nor is in any way committed to, the views and recommendations expressed herein.

Acknowledgements

The consultant would like to express gratitude to members of the Interim Seed Council as well as to all the individuals she interviewed during the study. She is grateful for the input from Namibia's SADC seed focal point, Mr K. Fleissner and is indebted to Mr S. Ipinge who made all the appointments on her behalf in addition to managing the logistics during the study. Support provided by NASSP is gratefully acknowledged.

List of acronyms and abbreviations

CBD	Convention on Biological Diversity
DART	Directorate of Agricultural Research and Training
DEES	Directorate of Extension and Engineering Services
DUS	Distinctness, Uniformity and Stability
EU	European Union
GMO	Genetically modified organism
ISTA	International Seed Testing Association
MAWF	Ministry of Agriculture Water and Forestry
NASSP	National Agricultural Support Services Programme
NAU	Namibian Agricultural Union
NCR	North Central Regions
NCA	Northern Communal Areas
NNFSGC	Northern Namibia Farmers Seed Growers Cooperative
NPGRC	National Plant Genetic Resource Centre
SACU	Southern African Customs Union
SADC	Southern African Development Community
VCU	Value for Cultivation and Use

Table of contents

Item	Page Number
Acknowledgements	i
List of acronyms and abbreviations	ii
Table of contents	iii
Introduction	1
Summary of Key findings and recommendations	2
Main report	5
Annexes	
Terms of reference	23
Bibliography	25
Persons met	26
Constitution of the National Seed Council	27

Introduction

Overview of Namibia's Crop Production Sector

1. In Namibia, the agricultural sector is divided into a commercial farming sub-sector, where farms are privately owned, and a communal farming sub-sector, where farmers operate on land held under a communal tenure system. Crop production is concentrated in the northern regions of Namibia, which are semi-arid and whose soils have low fertility.

2. The Northern Communal Areas (NCAs) comprise of seven regions, reflecting different ethnic groups, traditions, settlement patterns, and farming and cropping systems. These are the four North Central Regions (NCRs), namely Omusati, Oshana, Oshana, and Oshikoto, as well as the Kunene, Kavango and Caprivi Region. The majority of the population is concentrated in the NCAs, with the North Central Regions being the most populous. The major part of the cropped area is within the NCAs with production predominantly for subsistence. Within these areas, crop production is further limited by a scarcity of productive soils. Soils have inherently low fertility and water holding capacity, so the timing, consistency and amount of rainfall are critical to output. Productivity is low, and traditionally there is no use of purchased inputs. However, the NCAs have the greatest requirement for seed as the most basic of inputs.

3. The staple grain crops of the NCAs are pearl millet, sorghum and white maize with limited but widespread planting of cowpea, groundnut and bambara nut. Millet is the dominant crop of the NCAs and is widely grown in seven regions covering about 355 200ha. Conditions are more favourable for maize production in Caprivi. The policies pursued in the NCAs by the Government of Namibia since independence in 1990 have been motivated by the primary objective of improving food security and raising household income levels.

4. The Commercial farming areas comprise of large privately owned cattle ranches with fodder and grain production in the Otjozondjupa and Omaheke Region. Commercial crop farming is concentrated in a triangle (the so-called 'Maize Triangle') formed by the towns of Grootfontein, Tsumeb and Otavi estimated at 25 000ha. Production is rain fed with supplementary irrigation. Major commercial crop production areas under irrigation are the Hardap irrigation scheme in the Hardap Region, the Naute Dam and Aussenkehr irrigation schemes in the Karas Region.

5. In the Commercial farming sector seed is predominantly purchased from agro-dealers operating within Namibia. These agro-dealers source their seed predominantly from South Africa. However, some commercial farmers produce their own seed of some crops.

National Agricultural Policy

6. The ultimate goal of the National Agricultural Policy is to sustain and increase the levels of agricultural productivity, real farm incomes and national and household food security, within the context of Namibia's fragile ecosystem. The specific objectives relating to agricultural inputs include the following:

- i) to support the private sector to ensure that adequate inputs are made available to all farmers at the right time and place, at competitive prices, and that, to the extent possible, they are used correctly and at the optimal time;
- ii) to encourage foreign investment in agricultural input industries, particularly those dealing with seeds, planting material and crop protection services.

7. A specific objective of Government's National Agricultural Policy relating to seed, is the intention 'to supplement the private sector's efforts to ensure the availability of staple food crops in times of critical shortages. The Government will endeavour to increase seed accessibility in general, as well as the availability of improved seed varieties, particularly drought tolerant and early maturing varieties, and safeguard genetic purity and variation in crops. Seed production and distribution systems will be carefully handed over to the private sector once a Government seed certification service has been established'.

Summary of Key findings and Recommendations

8. There is no Seed law in Namibia, which regulates and directs activities in the seed sector. There is no seed certification scheme with validated field and laboratory seed quality standards, to regulate seed production and certification. There is need for the enactment of a Seed Act whose implementing regulations will include an official Seed Certification Scheme.

9. The organization and implementation structures dealing with seed issues in MAWF are not appropriate for effective implementation of seed legislation. There is need to establish a Competent Authority i.e. Seed Certification Service as enunciated in paragraph 116 of the National Agricultural Policy. The competent authority should have personnel who are trained in Seed Technology or alternatively Crop Production. In addition to enforcing the seed law, the same personnel would be expected to conduct research on seed issues, as they arise. The sub-unit responsible for crop breeding is unsuitable for this function and there should be a clear separation between the sub-unit/personnel responsible for breeding or seed production and the Seed Certification Service.

10. There is no official seed testing laboratory in Namibia, which tests and approves seed before it is marketed. This laboratory when set up would form part of the Seed Certification Service, and is expected to develop into a centre of excellence on all seed testing issues in the country. The laboratory would be available to test imported seed if required, and would be resorted to in times of dispute between buyers and sellers of seed. This official laboratory will have the authority to accredit other laboratories in Namibia, who meet the requirements of the law, to test seed before it is marketed. The official laboratory would be able to participate in SADC's proficiency testing programme for seed testing laboratories, and this would help to keep the official laboratory's standards in check.

11. An insufficient number of people within MAWF are adequately trained in seed certification and quality control, as well as seed law enforcement. Once the Seed Certification Service is identified it would be prudent to send the appointed personnel

for attachment in laboratories that are accredited by the International Seed Testing Association, so they can familiarise themselves with Seed Law enforcement, and obtain training in seed crop inspections, seed testing, seed health testing, control growing, distinctness, uniformity and stability (DUS) testing, value for cultivation and use (VCU) testing etc.

12. Quantities of 'certified' seed produced by the cooperatives are variable (some times sufficient, some times in surplus) and the quality is at times questionable. Seed testing is conducted by NNFSGC and is restricted to a germination test. Skills needed for business planning and management, marketing, forecasting seed demand and supply, and technical knowledge about seed are inadequate within NNFSGC. Business management and comprehensive seed testing training will benefit members of management of NNFSGC. Furthermore, the Seed Certification Service's official laboratory when established set up and conduct a referee testing programme with the cooperative's laboratory. All other laboratories in the country that are testing seed e.g. Directorate of Forestry laboratories, should participate in the referee testing programme.

13. Pre-basic (breeder) seed and basic (foundation) seed is produced by MAWF on research stations. There was an unsuccessful attempt to devolve foundation seed production to NNFSGC. It is difficult to attain recommended isolation distances for foundation seed production in the NCAs, and consequently the NNFSGC attempted to produce the seed off-season. In the process they lost the millet foundation seed harvest to birds. They also attempted to produce cowpea foundation seed and there was an admixture of varieties. There is therefore need to build capacity on seed quality control within NNFSGC and other seed producers. Furthermore it is recommended, that the Ministry's Agronomy and Horticulture Research Subdivision should continue to produce foundation seed until private seed producers can prove that they are able to comply with the quality standards required, otherwise the quality of the subsequent 'certified seed' would be compromised.

14. Commercial farmers buy seed from agro-dealers who source it from South Africa. Currently, there is no requirement for the agro-dealers to produce seed lot certificates from the exporting country, when they apply for permits to import at MAWF. Seed lot certificates have information on the quality of the seed. This is standard practice internationally, when nations import seed. Namibia's seed regulations when promulgated should have quality standards for imported seed. Seed lot certificates from the country of origin of the seed should show that any seed intended for importation meets Namibia's requirements, before the seed can be allowed into the country.

15. There is no requirement that varieties should be evaluated under Namibian agro-ecological conditions, before they can be imported and sold to Namibian farmers. As a consequence, some farmers have bought and planted seed varieties that are not adapted to Namibia's conditions. Furthermore these varieties have not given good yields. It is important that farmers only use varieties that are adapted to the local environment as these are expected to perform well. Varieties should therefore be evaluated under Namibian conditions before being made available in Namibia. This should be followed by the compilation of a list of varieties adapted and recommended for Namibia. DART could collaborate in this exercise with the seed companies which

produce these varieties. (In most SADC countries, one cannot import a variety into the country, unless it has been independently evaluated, released and listed on the official National Variety List).

16. Seed and planting material imported into Namibia include ornamental plants. The importation of seeds of ornamentals and trees needs to be regulated and monitored, as these can be sources of plant diseases which can later find their way to crop plants. Furthermore, ornamental plants and trees imported into some countries have become alien invasive plants, when they have been grown in environments devoid of their natural enemies. Seed legislation should therefore not be restricted to agricultural crop seeds.

17. There are polarised views among Commercial farmers on the issue of production of genetically modified crops, with some farmers in favour and some against any introduction of genetically modified seeds into Namibia's agricultural sector. The process of enacting legislation to regulate biotechnology and biosafety issues is currently underway. It is important to encourage debate amongst farmers and consumers on these pertinent issues so that all views are given adequate consideration. Furthermore since Namibia's main source of seed for the commercial seed sector, South Africa, produces genetically modified seed, it will be important to factor in these elements when procedures for seed importation are spelt out in the seed legislation.

18. Before one can import seed into Namibia, one has to apply for a permit from the phytosanitary authority as required by the law (The Agricultural Pest Act), and they must obtain a phytosanitary certificate from the exporting country. Documents that are used in most SADC countries to process applications for seed imports deal with three issues: seed quality, phytosanitary status, the GMO issue. When the Seed Act and Biosafety Act are in place it will be important that applications for seed imports meet the requirements of all three pieces of legislation. However it will be important that the process of approving the applications is streamlined to avoid unnecessary delays.

19. Namibia has limited water resources and the rainfall distribution is erratic, consequently variability in seasonal rainfall can play havoc with rain fed crop production and lead to major shortages in food supply. Quality seed of improved varieties is an important agricultural input, and unavailability of seed is one of the reasons why under disaster conditions, the normal cycle of food production may collapse. Access to quality seed is important in ensuring the resilience of the production base, which provides the inherent capacity of a country to respond to, and mitigate the impacts of a disaster. The Government of Namibia has an agreement with the NNFSGC, which requires the cooperative to keep a strategic seed reserve of 100 tonnes of millet seed. This is commendable, and the cooperative should be supported to maintain this important seed reserve.

Main Report

Methodology

20. The terms of reference required the consultant to solicit views of principal stakeholders. The list of people interviewed by the consultant during the study period is in Annex III. Information was also obtained from a review of secondary sources which included the National Agricultural Policy, Minutes of the Interim Seed Council Inaugural Meeting, policy and regulations of genetically modified organisms, the Plant Quarantine Bill, Access to Genetic Resources and Related Traditional Knowledge Bill, Proceedings of National Seed stakeholder workshops, reports of supervision missions of the seed cooperatives, Marketing Consultancy reports, Crop variety improvement consultancy report, Seed legislation mission report, SADC seed legislation harmonization proceedings, Commercialisation of Mahangu report, among others. The consultant also reviewed seed legislation of SADC member countries as well as reports that have emanated from meetings that have been held to attempt to harmonise seed legislation in the SADC region.

Scope of the Seed Policy

21. The policy deals with issues surrounding the quality of seed and vegetative planting material, whether be it agricultural, ornamental or for forestry. It focuses on the development and implementation of seed programmes in order to avail adequate high quality seed and planting material to the farming community. The policy underscores the principle that both the private and public sector offer invaluable potential to accelerate development within the agricultural and forestry sectors. It is geared towards achieving increased agricultural productivity, food security and poverty alleviation through good governance, transparency and accountability. All these issues are spelt out in the context of the national development objectives. The primary objective is to enhance availability of good quality seed and thereby ensure household food security.

Objectives of the Seed Policy

22. This policy addresses the challenges in the seed sector with respect to research and extension, seed imports, seed production, processing and quality control, marketing, distribution and strategic seed reserves, as well as the institutional and legal framework.

Research and Extension

23. Strong research and extension support is indispensable for seed industry development and increased agricultural productivity. Crop research and extension in Namibia is undertaken by the public sector. Food crop research is conducted by DART, while extension is conducted by DEES. In the plant improvement programme there are five research officers, – two in the cereals programme, two in the legume programme, and one for root crops. Some of the work being conducted by the plant improvement team involves accessions that were collected by the National Plant

Genetic Resources Centre (NPGRC) from local farmers, in addition to the materials from the Consultative Group on International Agricultural Research (CGIAR) centres. Plant improvement research is conducted on station and evaluations are also made on farmers' fields in collaboration with DEES. Farmer participatory plant breeding work has also been conducted at Omahenene Research Station under the umbrella of Farming Systems Research and Extension (FSRE). Work with the farmer participatory plant breeding group included storage, pounding and palatability tests.

24. Breeding, variety evaluation, 'release' and production, of pre-basic¹ and basic² seed of pearl millet, sorghum, bambara nut, cowpea and groundnuts is conducted by DART at its research stations. There is an unofficial variety release committee composed of personnel from DART and a representative of DEES who consider evaluation data that is presented by the breeder, after which a variety is considered 'released'.

25. After a variety is 'released', pamphlets are developed that have a description of the variety. Over the years Namibia has developed several varieties. Three millet, one sorghum, two cowpea, one groundnut, and one bambara nut variety were developed by DART, in addition to two millet varieties that were developed by farmers- Kantana and Maria Kaherero.

26. In addition to the varieties developed by DART, work has also focused on the evaluation of germplasm of other crops, including cotton, sweet potato vines and more recently indigenous melons. However there is no official mechanism for variety release covering all crops. There is also no official variety list in place in Namibia.

Germplasm conservation and utilization

27. The Directorate of Forestry conducts research and extension on forestry while the National Plant Genetic Resources Centre (NPGRC) of Namibia housed at the National Botanical Research Institute conducts explorations and collections of germplasm throughout Namibia. Their focus is on conservation of genetic resources of indigenous, wild, cultivated and other introduced plant species in Namibia both in situ and ex situ. The NPGRC is also involved in the evaluation and characterisation of local germplasm. Germplasm collections of pearl millet and other crops are kept at the NBRI and some research stations eg. at Omahenene. This material is used in the plant breeding programme.

28. Viable and effective germplasm collection, conservation and utilization supports sustainable research and development. Indigenous crops and tree species also play a major role in food security, health and environment. However there has been pressure on these resources due to over-exploitation, and habitat loss, which are made worse by related rapid loss of indigenous knowledge. Domestication and commercialisation of these useful plant species remains a challenge for conservation of biodiversity.

¹ - pre-basic seed means the seed of generations preceding basic seed and of the generations between parental material and basic seed.

² - basic seed means seed which has been produced under the responsibility of the maintainer and is intended for the production of certified seed.

To mitigate some of these challenges, the Namibian Access to Genetic Resources and Associated Traditional Knowledge Bill has been drafted, but it is yet to be enacted into law.

Capacity Building

29. Biotechnology can contribute to agricultural productivity and food security. However mechanisms for handling any adverse effects of biotechnology need to be put in place. The potential and perceived risks of biotechnology especially genetic engineered products to human health and the environment are not well understood in Namibian society, and there is need to put in place appropriate mechanisms and capacity to address them.

30. In Namibia issues in the realm of seed science and technology including seed health, are not adequately addressed and coordinated. There is for instance no seed health laboratory that farmers can resort to for diagnostics, if their crops are beset by seed borne diseases. Within DART there is lack of information on seed science issues including seed research and science based seed testing.

Policy statements

31. In order to address the challenges in research and extension, the Government will:

i) Provide adequate financial support for variety development, seed science and seed health research and extension, commensurate with the seed sector's importance to the economy.

ii) Support and encourage, variety development and maintenance programmes, as well as the production of basic seed.

iii) Exhaustive variety testing under research conditions without assessing farmers' preferences will be avoided.

iv) Encourage breeders to continue sourcing variable germplasm to broaden the genetic base of various crops and plant species, and support domestication and conservation of biodiversity.

v) Put in place a streamlined and official process of variety evaluation, release and registration in order to avail new varieties to users in the shortest possible time.

vi) Ensure that seed companies and seed cooperatives have equal access to varieties developed by the Public Sector.

vii) The use of improved varieties of seed will be promoted in extension messages and materials by Directorate of Extension and Engineering, and in farmer training by DART. Demonstrations will be used to reinforce the message.

Seed Importation

32. The seed industry in Namibia is made up of the formal and the informal sector. Within the formal sector there are no private seed companies involved in seed production. The main crops grown by commercial farmers are maize, wheat, cotton, groundnuts and field beans. In the current season approximately 9000ha of white maize was planted by commercial farmers (including the irrigation schemes), 700ha of cotton, in addition to approximately 200ha of groundnuts and 200ha of field beans. Agri-business companies such as Agra, Agro Business Consultants and Hardap Corporation, supply all the necessary inputs, including seed, which are mainly sourced from South Africa. These companies also import pasture, vegetable and flower seeds.

33. There is no seed testing of imported seed in Namibia. Furthermore the application process for importation of seed does not require that importers produce seed lot certificates originating from the exporting country. There is therefore lack of information on the planting quality of seed imports

34. In addition to the agri-business companies, individual farmers can also import seed. There is no requirement for registration as a seller of seed before one can import or sell seed. Some individuals import substandard seed illegally without applying for a permit, and may sell this seed to unsuspecting farmers. There is a danger that this substandard seed could be contaminated with diseases. Registration of seed importers and seed dealers as entities that handle seed, and have appropriate facilities to handle and store seed, could help to address this problem. Only registered seed merchants would be given permits to import large amounts of seed.

35. A problem that has been encountered by some farmers is that of planting varieties that are not adapted to local conditions. This is because there is no local evaluation of the varieties under Namibian agro-ecological conditions, by the companies that produce them. Furthermore, there is no requirement that a variety be registered in Namibia before it can be imported. An owner of one of the agri-businesses welcomed legislation and quality control on seed activities, as this would protect both the genuine dealers as well as the farmers. In addition to the requirement for a phytosanitary certificate, imported seed should be accompanied by a seed lot certificate¹.

36. Instances when commercial farmers have had problems with the quality of seed that they have used were mentioned during the interviews. Recently several farmers at the Hardap Irrigation Scheme bought seed which germinated poorly (germination of about 60%). The seed appears to have started germinating within bags before it was planted, probably as a consequence of inappropriate packaging or storage. Namibian Agricultural Union (NAU) is concerned that there is no mechanism in place to check imported seed before it is planted. NAU has also noted an increase in farmers that are having to cope with diseases such as karnal bunt, *Ustilago maydis* and *Diplodia* spp, which may have been introduced with the seed.

¹ seed lot certificate is a seed analysis report of quality attributes of the seed lot.

37. NAU has requested the seed dealers to check the quality of the seed before it is sold to farmers, but the seed dealers do not have seed testing facilities. Furthermore there is no legal requirement for them to test the seed. Farmers have expressed the need for certified seed. However not all seed produced in South Africa is certified, as South Africa practices voluntary certification. Information on prevention and control of crop diseases, was also increasingly requested by farmers.

38. Within the Commercial sector, there are farmers who are keen to produce genetically modified crops, while on the other hand, there are those that are opposed to production of GMOs. The latter, do not want their crops to be contaminated by GMOs, because they would like to have access to perceived niche markets where GMOs are not accepted. NAU therefore felt that there was an urgent need for regulation in this area, so that the interests of all stakeholders are protected.

39. In the forestry sector, there are concerns that alien invasive plants can come into Namibia through unregulated imports of planting material. It is common knowledge that alien invasive plants, which have proved to be extremely difficult to control in many countries, were largely imported into those countries for ornamental purposes. In the absence of their natural enemies they then grow out of control in the countries into which they have been imported. Regulation of importation of ornamental and forest planting material will also be valuable in this regard.

Policy Statements

40. To address the above challenges in seed importation the Government will:

- i) Ensure that the focus of all seed activities shall be to provide the highest quality seed (in genetic, physical, physiological, and phytosanitary quality components) which is economically feasible.
- ii) Require that wholesalers of seed including seed aid providers¹ with the appropriate seed handling and storage facilities, be registered with the seed Certification Service as seed sellers. Only registered dealers will be given permits to import large amounts of seed, in addition to being permitted to sell seed to farmers.
- iii) Prescribe procedures which seed merchants should follow when they import and export seed, as well as the minimum requirements with respect to seed quality, packaging and labelling that the seed should comply with.
- iv) Prescribe requirements for maintenance of proper records and official documents required for international seed trade.
- v) Require that importers of seed should produce seed lot certificates from the country of origin of the seed, when they apply for permits to import seed.

¹ – Seed aid providers include donors, non governmental organisations and providers of seed gifts.

vi) Produce a list of varieties for prescribed crops¹ that are adapted to Namibian conditions for the information of Namibian farmers. Evaluation of the varieties, before they are placed on the list will be conducted by DART in collaboration with the Private Sector.

vii) Develop guidelines to provide for the isolation of genetically modified from non-genetically modified seed crops.

Seed Production, Processing and Quality Control

Seed Production in the formal sector

41. The Northern Namibia Farmers Seed Growers Cooperative (NNFSGC) is the main formal or organised seed production and supply organisation in Namibia. Beside this cooperative, whose major focus is on the North Central Regions, KAFASEPA (Katimo Mulilo Seed Producers Association) in Caprivi and LFC (Likorere Farmers' Cooperative) in Kavango recently entered the seed sector. Efforts towards the development of the seed industry in Namibia have mainly been focused on development of improved varieties of millet, sorghum, groundnut, bambara nut and cowpeas by the subdivision of Agronomy and Horticulture within the Plant Production Division of DART. The improved varieties have potential to enhance farmers' yields, improve household food security and income generation.

42. Pre-basic seed and basic seed are produced by Plant Production Division of MAWF who sell it to the Board of the NNFSGC. From there it is sold to the seed growers of NNFSGC, but also to KAFASEPA and LFC. In the 2002/03 season there was an attempt to devolve basic seed production to the NNFSGC. However the cooperative failed to produce good basic seed. There was a mixture of varieties in the cowpea basic seed. Furthermore, very little millet basic seed was harvested, after an attempt to produce it off season (to avoid anticipated isolation distance problems), as the seed was eaten by birds, before it was harvested.

43. The NNFSGC sells the basic seed to its growers (who are members of the cooperative), the KAFASEPA and LFC, who then produce 'certified seed' according to the standards that were established by DART. A field inspection service is provided by staff members from DART (with a breeding background) and technicians from DEES (with seed certification training). A member of the management of NNFSGC, KAFASEPA or LFC occasionally joins the inspections.

¹ – The National Seed Council will prescribe the crops whose varieties will be listed

44. This is part of the government's attempt to privatise activities it has been involved in which could better be performed by the private sector. The NNFSGC grew out of a group of seed growers who were involved in seed production of Okashana 1 together with DART in Omahenene Research Station. In 1996 they formed NNFSGC, and they have been producing 'certified seed' since then. The NNFSGC is made up of a Board of Directors, the Supervisory Committee and members. The cooperative has right of use of seed screening, grading, threshing, cleaning, processing, storage, bagging, and labelling facilities as well as a seed treatment unit, which belong to government and are located at Omahenene Research Station. Several buildings and a seed testing laboratory within the facilities at Omahenene, also belong to government. There is a management contract between the two parties (Government and the NNFSGC) regarding use of the infra-structure and equipment.

45. Some members of staff of the NNFSGC have been trained in seed certification according to the standards set by the government. After harvest and delivery to the NNFSGC, each seed lot from a seed producer is tested for germination by staff of the Cooperative after which it is processed.

46. The agreement between the NNFSGC and the government (July 1998) states that '.... seed shall be produced in quantities sufficient at all times to meet the varying domestic demands of the Namibian market'. Seed supply estimates of the amount of seed produced by NNFSGC are in the range 30-45% of the estimated annual seed consumption in the North Central Regions areas, and production has sometimes been erratic (Deputy Director Plant Production Research MAWF, personal communication).

47. The agreement between Government and NNFSGC states that the cooperative shall ensure that the seed is grown exclusively from basic seed procured by the Ministry. However there have been instances when some of the growers have planted 'certified seed' instead of basic seed. However, it appears as if in recent times growers have sometimes been allowed to produce seed from 'certified seed'. This system was introduced by a donor funded seed project. This seed is termed 'quality declared seed'. The germination percentage that the quality declared seed is required to meet is lower than that of 'certified seed' and it is sold at a lower price.

48. The seed producers of the LFC in the Kavango region and KAFASEPA in the Caprivi Region recently ventured into seed production, at a much smaller scale. These two cooperatives are getting support from Extension staff of MAWF. However, within MAWF, issues surrounding seed certification, seed quality control, seed industry regulation and the accompanying legislation are not adequately catered for. There is need to put in place appropriate mechanisms and capacity to address these issues.

49. Members of management of the cooperatives received some technical training in Sweden as well as in Zambia. However because of staff turnover and apparent internal management problems, the objectives of the cooperatives for a steady increase in seed production could not be met. Production has fluctuated and some disgruntled members have left the cooperatives. Some members have even bought basic seed from the cooperatives, had their crops inspected and approved, but then refused to deliver the seed and sold the seed on their own.

The Informal sector

50. In the informal sector, sources of seed for farmers are farm saved seed, farmer to farmer exchange and local markets. This may simply be grain or grain selected for seed before or after harvest. These practices often result in low quality planting material with a subsequent reduction in yields. In general, the informal sector operates in areas which are not served by the formal sector, as well as for crops for which no improved varieties exist. From a macro-economic point of view, this planting material is not the most cost-effective and its contribution to national food production is limited. Despite the fact that such seed may be the best option by the farmer, it is often used because improved seed is not available and/or the farmer does not understand the benefits of improved seed.

51. A significant proportion of farmers procure seed from the informal sector in the communal areas. It appears as if farmers prefer their own traditional varieties of millet, some of which tend to have a requirement for a longer growing season as compared to the improved varieties. Researchers have observed that if the rainy season starts early, farmers tend to plant their own traditional varieties, but if the start of the rainy season is delayed, they tend to buy seed of improved varieties, which have a shorter growing period.

52. However, the government recognises that farmer seed selection and retention is a good practice, which should not be discouraged. This is especially important in Namibia where farmers periodically go through long periods of drought. Seed saving of traditional varieties by farmers increases diversity on farmers' fields.

Forest seed

53. Seeds of forest trees and other plants are collected from natural populations, tested for germination and then dispatched by staff of the Directorate of Forestry. However protocols for handling seed of some indigenous forest species have not been developed. In addition, the quality of the seed is not assured, partly because there is no official seed testing laboratory which monitors and provides technical back-up to the tree seed laboratory. Furthermore, research on forestry seed issues has not been given adequate support.

Policy Statements

54. To address the challenges in seed production and marketing, Government will:

i) Establish through appropriate policies and programmes, an environment conducive to the development of the seed industry. It recognises the importance of both public and private investments and the need for these to be prioritised. Direct Government investments will include research, training, seed certification and testing. Private investment will be encouraged through policies which promote ease of entry to markets, fair competition and the provision of support services. The private sector shall be responsible for production, processing, distribution and marketing of seed.

ii) Encourage and support the Private Sector to produce all seed required by farmers. Government shall not competitively produce and market seed of any kind supplied by the private sector. Government shall only produce seed/planting material that is required by farmers but is not available from the private sector, or seed classes (e.g. pre-basic seed, basic seed) that are required by the private sector for the production of certified seed. Government seed production shall wherever possible be under contract with private farmers who shall be paid, guided, supported and supervised in a manner which enables them develop financially, and in their ability to organize and apply improved seed and crop production technologies to ultimately become self-sustaining private-sector seed entrepreneurs.

iii) Enact Seed Act governing the seed industry. A realistic seed law is essential to ensure reliable standards of seed quality, protect seed users and suppliers, and develop a quality-oriented seed industry.

iv) Promulgate a Seed Certification Scheme as part of the enabling regulations of the Seed Act. This will be a set of technical rules, which will stipulate field and laboratory standards, which certified seed has to meet.

v) Ensure harmonisation of seed legislation, regulations and procedures with SADC member countries to facilitate seed trade.

vi) Seed certification will be voluntary. Government however, will enforce Truth-in Labelling and conduct spot-checks of seed that is sold in the market. Government may introduce compulsory certification¹ of high value strategic crops, or crops that are particularly susceptible to problem diseases e.g viral diseases.

vii) Establish a variety release and registration procedure. Variety registration will be voluntary. However, compulsory registration¹ will be necessary for a limited number of strategic crops.

viii) Encourage use of irrigation facilities for increased seed production

ix) Establish an accurate, detailed and up-to-date seed data base which provides information on seed use and national seed demand for seed suppliers to plan seed production and distribution. Farmers also need information on seed availability. The National Seed Council shall be responsible to establish and maintain such a data base and collect and disseminate such information on a timely basis, in order to support management and decision-making by seed suppliers and users.

x) Develop and define modalities for seed production and handling protocols of forestry and other plant species exhibiting special attributes.

¹ – The National Seed Council will recommend to the Minister the strategic crops that will be eligible for compulsory certification and compulsory registration.

Seed Quality Control

55. In order to realise the genetic potential inherent in improved plant varieties for sustainable agriculture, quality control is critical. Seed quality control is essential in providing consumer protection in regard to purity, germination capacity, genetic integrity and freedom from diseases. It also aims to ensure provision of high quality seeds to users. However, monitoring of seed quality for crop seeds, vegetable seed, flower, tree seed, vegetatively propagated material and other plant species is weak and sometimes non-existent within Namibia and at border entry points. This could result in the influx and use of planting material of unknown quality, and may pose a threat to national food security and sustainable agriculture. There are several seed merchants, nurseries and garden centres, which provide planting material to farmers in Namibia, but they are not registered as seed traders with MAWF. They do not receive advisory services from MAWF, and their activities are not regulated or monitored.

56. Seed quality control is assured through certification. Seed certification is a legally prescribed scheme underwritten by provisions of a Seed Act. The basic objective of seed certification is to make available seed of superior qualities and to guarantee these qualities by means of a certificate, seal and label. The emphasis is on genetic quality, which is, varietal trueness to type, with high requirements for germination and physical purity. Stringent field requirements are also laid down for seed production.

57. Seed certification involves the following:

- registration of seed merchants, seed growers and seed crops,
- field inspection,
- processing,
- sampling,
- laboratory testing,
- sealing and labelling,
- lot examination, and
- pre and post control testing.

However, an official seed certification scheme is not yet in place in Namibia. The Handbook of Crops Seed Production, which is used by members of NNFSGC was an attempt to put in place interim seed standards that seed growers could use as guidelines. The capacity of the 'regulatory' bodies (DART and DEES) in terms of infrastructure and personnel is currently inadequate for effective service delivery.

Policy Statements

58. To address the challenges in seed quality control, the Government will:

i) Establish an official seed testing laboratory within the Seed Certification Service, which will test seed according to International Seed Testing Association (ISTA) rules and ensure that farmers are availed good quality seed.

ii) Facilitate the official seed testing laboratory so it can join the ISTA.

iii) Establish through the Seed Certification Service a national referee seed testing and analyst training program to ensure standardized procedures and repeatable test results,

because reliable, repeatable seed testing results are essential for orderly seed supply. This will initially cater for the seed testing laboratories under Directorate of Forestry Research as well as the laboratory currently operated by NNFSGC.

- iv) Strengthen the capacity in the seed producing cooperatives, through regular technical training of seed growers and management.
- v) Adequate control of seed quality requires constant supervision, checks, inspection and tests, consequently every seed producing organisation, must have its own internal quality control unit.
- vi) Invest in strengthening the capacity of the Phytosanitary services for efficient and effective service delivery.
- vii) Ensure that appropriate and effective penalties are put in place in the Seed law to deter those who provide poor quality seed to farmers.
- viii) Set standards in conformity with international standards for appropriate packaging materials for various crop species.
- ix) Develop certification guidelines for tree seeds and other plant species of commercial interest in consultation with stakeholders.
- x) Ensure that relief seed¹ supplies are sourced only from registered seed enterprises and that they are of known quality.
- xi) Promote education of farmers and other stakeholders to understand and appreciate the benefits of using good quality seed.

Seed Marketing, Distribution and Strategic Seed Reserve

59. Marketing of seed imported into Namibia is undertaken by wholesalers who are not registered as seed merchants as there is no requirement for them to register as such. Good storage conditions are necessary for maintenance of seed quality, and it is therefore important that the seed storage facilities of seed merchants are inspected and approved, to ensure that there are suitable before they are registered to market seed. Seed sellers should also be required to keep a record of all the seed that they handle which in turn helps to improve the traceability of the seed.

60. Marketing of the seed produced by NNFSGC is achieved by:
- a) the Cooperative selling directly to farmers; and
 - b) traders buying from the Cooperative and then selling to farmers.

These traders are not registered as seed sellers, nor is there any advisory service which provides them with information regarding how seed should be handled and stored.

¹- Relief seed supply includes seed provided through donor support, donor projects and gifts.

61. The agreement between the NNFGSC and the government requires that seed prices should only be reviewed upwardly every three years. To keep prices stable over this period despite inflation the NNFGSC is paid a subsidy by government, which should compensate the cooperative for potential losses in income. This subsidy will decrease with time until it is removed completely. Prices are negotiated between the government and the cooperative. The wholesale seed price that was agreed in 1998 was \$5/kg, for all varieties of pearl millet, sorghum and cowpeas and in 2005 it was \$6/kg.

62. The NNFGSC is also required to maintain a strategic seed reserve of 100 tonnes of millet seed for government. However, in some years there has been under provision of this strategic seed reserve. In the current year for example, the cooperative has only managed to store a reserve of about 75 tonnes of seed. This suggests that supply of seed to farmers could be insufficient.

Policy statements

63. To address the above challenges on seed marketing, distribution and strategic seed reserve, the Government will:

- i) Prescribe minimum standards for qualities of seed that may be traded.
- ii) Promulgate seed regulations to govern seed trade and require that seed traders be registered with government if they meet prescribed requirements.
- iii) Provide advisory services for seed traders and seed stockists regarding the way in which seed should be handled, and in which seed premises should be maintained.
- iv) Encourage competition in the seed industry.
- iv) Encourage the export of seed, provided national seed requirements are met (under suitable material transfer agreements where necessary), or when such seed has been produced from crops that are registered solely for export.
- v) Ensure that seed cooperatives sell seed at a viable price and work towards the eventual removal of seed price control.
- vi) Ensure availability of seed in the event of drought or other disasters by maintaining a national seed reserve for strategic crops.
- vii) In emergency situations, Government may consider temporarily relaxing certain aspects of quality standards, which do not affect genetic quality, to facilitate provision of seed relief on a case- by -case basis, with specific time limits.

Institutional and Legal Framework

64. There are several organisations involved in the seed sector in Namibia. However, the government has not yet designated or constituted a regulatory organisation for overseeing the seed industry although the National Agricultural Policy mentions that the Seed Certification Service will be established. There is no seed association in the Private Sector.

Policy statements

65. In order to address the above challenges on institutional framework the Government will:

- i) Identify key actors in the sector with the aim to assign appropriate roles that are dictated by the needs of the industry.
- ii) Establish the National Seed Council (by transforming the Interim National Seed Council) which will advise the Minister of MAWF on matters relating to the planning and coordination of the seed sector, as well as implementation and updating of seed policy.
- iii) Establish an implementation agency-the Seed Certification Service, which will ensure that all seed offered for sale will be subject to the requirements of the Seed Act. This seed certification service will conduct external quality control operations, protecting both seed users and suppliers and will be responsible for enforcing the Seed Act. It will perform all the necessary tasks in the seed certification programme, including seed crop inspection and operation of the official seed testing laboratory. It will be responsible for training of seed inspectors and seed analysts in seed technology to meet the needs of the Namibian seed industry. Government will ensure that the required human, financial and infrastructural resources are provided. N.B. The unit of Plant Production Research responsible for crop breeding is unsuitable for this function and there should be a clear separation between the unit responsible for breeding and seed production and the Seed Certification Service. However the Seed Certification Service could still be placed within Plant Production Research Directorate as is the case in some SADC countries (e.g. Malawi, Zambia, Zimbabwe).
- iv) The production of all pre-basic, basic and certified seed will be under the supervision of the Seed Certification Service.
- v) Because of the strategic nature of seed and security of domestic supply, the government will provide resources for setting up the Seed Certification Service, and for the work of the Seed Certification Service.
- vi) To the extent possible, the Seed Certification Service will recover some of its costs by charging for the services that it will provide, and the charges will be reviewed annually. In this regard a Seed Services Fund will be established.

vii) Establish a Variety Release Committee (whose registrar will be provided by the Seed Certification Service). The Variety Release Committee will protect the interests of farmers but will not unduly constrain the entrance of new varieties to the market.

viii) Nominate the Seed Certification Service as the independent institute that will conduct, or delegate the conduct of DUS and VCU tests to evaluate varieties before they are presented before the Variety Release Committee.

ix) Promote formation and strengthening of private enterprise including farmer cooperatives and seed companies involved with seed production to enhance the growth of the sector.

x) Encourage seed merchants and seed cooperatives to form a seed association for purposes of articulating their concerns.

Legal Framework

66. There is no overall Act which governs the seed industry in Namibia, although there is some existing legislation relevant to this field, which however dates back to the time of the South African administration. The Agricultural Pest Act 1973 provides for requirements relating to freedom of seed lots from pests and diseases and for phytosanitary requirements for imported seed. The Plant Quarantine Bill to combat the introduction of plant pests and diseases (which when enacted will repeal The Agricultural Pest Act 1973), and the Biosafety Bill which intends to establish a regulatory regime, for research and production within the country as well as for export and import of genetically modified organisms and their products, are expected to be enacted into law in the near future. These pieces of legislation are to be enforced by different institutions hence coordination will be important.

67. The Seed Act when enacted is expected to regulate the seed industry.

Policy statements

68. To address the challenges in the legal framework, the Government will:

i) Ensure that the Seed Act is in harmony with other existing related Acts in Namibia, and international agreements that Namibia is party to.

ii) Ensure that the Seed Act is in line with the SADC harmonization process.

iii) The Seed Act should comprehensively address all legislative issues relating to seeds/planting materials. These issues include making provision for:

- a seed certification scheme, seed classes and standards which comply with international requirements,
- setting of penalties that deter flouting of the seed laws, and
- incorporation of regulations covering forestry seed and other species.

Policy Advisory and Updating

69. Government further recognizes that its present seed policy is relevant to the current state of development of the seed sector and the institutional capacity to undertake the required activities. As this is an evolutionary process, periodic reviews of seed policy will be undertaken to ensure that it continues to be appropriate to the needs of the farmers.

70. To keep this National Seed Policy current and applicable to changing conditions, the National Seed Council, shall meet regularly, deliberate on all factors affecting seed supply and use, and advise the Minister on policy modifications needed to keep policy current and supportive. The Minister shall consider such recommendations, discuss them as appropriate, and in accordance with applicable laws, issue modifications in the National Seed Policy to improve its suitability and applicability to current conditions without changing its long-term intent and validity.

Steps necessary to implement the Seed Policy

71. Draft and enact the Seed Act of Namibia.

72. There is need to draft and publish the enabling regulations of the said Act. These regulations should comprise a seed certification scheme which is a set of technical rules and quality standards. This will stipulate field as well as laboratory standards that seed produced and marketed in Namibia should comply with, in addition to procedures that should be followed when registering seed organisations, associations, companies, seed wholesalers, and possibly seed retailers. Procedures to be followed by seed importers and seed exporters should be stipulated. Procedures for evaluation of varieties, DUS and VCU testing of varieties and application for recognition of varieties should be described. The mandate and composition of the variety release committee, as well as the roles to be played by applicants for variety release should be clarified. The maintenance of the national variety list, the registration of seed growers, licensing of seed inspectors, seed samplers and seed analysts, seed testing rules and procedures, seed labelling requirements and issues surrounding seed containers should form part of the regulations.

73. The Minister must designate an organization, public or private, to exercise the powers, perform the functions and carry out the duties conferred upon, assigned to or imposed upon the National Seed Certifying Authority in the legislation i.e. the Seed Certification Service that will implement the legislation.

74. Appoint National Seed Council - for the purpose of implementing the National Seed Policy: it is imperative that the Government of Namibia constitutes a National Seed Council which should be a high level policy making body.

According to SADC Seed Subcommittee recommendations this body should comprise the following members:

- i) Minister or Permanent Secretary responsible for Agriculture as Chairperson.
- ii) High level representatives of Government Ministries and agencies whose support is essential to the seed programme.
- iii) Agro-industries and crop seed production and marketing agencies including Agricultural universities.
- iv) Representatives of the farming community.

75. The functions of this council among others will be:
- i) formulation and updating of seed policy statements and implementation guidelines;
 - ii) monitoring and coordination of the implementation process of the national seed programme and other relevant institutions;
 - iii) identifying and documenting actions requiring donor funding as well as facilitating and coordinating donor assistance in the seed programme;
 - iv) advising the Agriculture Ministry on any matters concerning the national seed programme; and
 - v) identifying and commissioning special studies in any aspect of the seed programme.

76. An Interim National Seed Council whose constitution is in Annex I, has been established within MAWF and the consultant recommends that this interim body should facilitate the enactment of seed legislation and should be transformed into the National Seed Council, once seed legislation is in place.

77. The National Seed Council will be charged with the responsibility for the overall policy guidelines and monitoring of the development of the national seed system.

Two bodies-

- a) the Seed Certification Service (in 72 above), and
- b) the Crop Variety Release committee,

will report to the National Seed Council. Each body will be responsible to the Council on matters pertaining to its mandate.

78. Crop Variety Release Committee – the assessment of a variety and control of its release to farmers is crucial to a country's seed industry development programme. The importance of this is twofold. Firstly it avoids the harmful effect on crop production caused by the use of varieties that are not adapted to their environment, and the consequent monetary loss to farmers at household level, and secondly, it gives protection to breeders against unauthorised exploitation of their varieties.

79. The Crop Variety Release Committee will be a statutory committee whose functions will include:

- i) to review proposals for release of new varieties;
- ii) define eligibility requirements for varieties;
- iii) arrange for reciprocal recognition of varieties with other SADC member countries;
- iii) preparation of a national variety list;
- iv) delete or add to the variety list; and
- v) establish an independent variety testing institution/mechanism.

80. The Crop Variety Release Committee should be comprised of the Registrar (from the Seed Certification Service), representatives of relevant government and private sector institutions including seed trade organisations, agro-industries and seed growers, Agricultural universities, farmers' organisations, quality control organisations, produce processors e.g. millers, ginneries etc.(depending on the crop).

81. Within the Seed Certification Service there will be: a) a seed testing laboratory and b) a seed inspectorate.

82. **Seed Testing Laboratory:** An important step for quality control is the establishment of an official seed testing service within the Seed Certification Service, partly for enforcement purposes and partly to provide an advisory service to farmers and seed processors. The basic tests that would initially be conducted by the laboratory are i) purity analysis, ii) germination test and iii) determination of other seeds species; commonly referred to as routine tests and reported on a seed analysis certificate.

83. The seed testing laboratory will be staffed by seed analysts who are also official seed samplers.

Functions:

- seed sampling;
- purity testing and identification of other seeds;
- germination test;
- seed moisture test;
- seed health test;
- seed testing research.

84. With regards to seed analysts the current situation is as follows: Two DART technicians underwent a seed testing course in Pretoria in 2005. During the course they received some seed testing manuals. However, the analysts have not had opportunity to practice what they trained for as they are involved in other duties. These technicians could form the core of the seed analysis team as more analysts are trained. However they both already have other functions within DART.

85. Training for seed analysts is available in South Africa. However a very effective way of having seed analysts trained is to send them for attachment to one of the ISTA-accredited laboratories in SADC. These are the government laboratories in South Africa, Zambia and in Zimbabwe. Training is also available in Europe and attachment to an ISTA-accredited laboratory in Europe could also be beneficial.

86. **Seed Inspections:** Seed multiplication must be carried out by registered seed producers who should adhere to prescribed seed production standards. To ensure that the standards are adhered to, seed crops should be subjected to field inspections conducted at all important stages of crop development. The intended result is the avoidance of contamination of seed crops and hence provision of high quality seed. Furthermore, since it is usually very difficult to distinguish seeds of two varieties of the same species in a seed laboratory, examination of growing plants through field inspections and control growing (planting samples of the produced seed) may be the only practical means of ensuring variety purity during seed multiplication.

87. Within the Seed Certification Service there will be:

- i) Seed inspectorate – composed of seed inspectors who are also official seed samplers.

Functions:

- registration of seed growers and registration of seed crops;

- seed crop inspections of breeder, foundation and certified seed;
- phytosanitary inspections;
- pre- and post-control testing;
- distinctness uniformity and stability testing;
- value for cultivation and use testing;
- registration of seed companies, seed traders and inspection of trading facilities;
- spot checks of harvested seed on the market;
- seed sampling;
- Seed Science and Technology research.

88. There is therefore a need to build a seed inspection team, which must be made up of people with some training in Crop Production. Some SADC member countries require that Seed Inspectors must have a minimum of a Certificate in Agriculture, but one will also find personnel with post-graduate training in Agriculture on the Seed Inspection teams. Training for seed inspectors is available in Zambia and the Netherlands.

89. Draft and enact Plant Breeders Rights Act- Namibia may want to do this because of its obligations in the Trade Related Intellectual Property Rights (TRIPs) Agreement of the World Trade Organization. In some countries implementation of this legislation is also a function of the Seed Certifying Authority. This activity has a place in this institution mainly on account of the close relationship between the inspection for cultivar purity under the seed certification scheme and the examination of new cultivars for plant breeders' rights protection.

90. The Act is essentially a sui generis system of private property rights similar to the patents system but differing from that system in certain respects because it deals with living material. Application for the grant of plant breeders' rights must be technically examined on the basis of distinctness, uniformity and stability. If the plant concerned meets the above criteria then the registrar of plant breeders' rights shall grant the applicant plant breeders' rights in respect of the new cultivar.

91. Namibia has an option to join the International Union for the Protection of New Varieties of Plants (UPOV) or not. Zimbabwe has had a Plant Breeders Rights Act since 1971 but is not a member of UPOV. However, Namibia's major trading partner, South Africa is a member of UPOV.

ANNEX I: Terms of Reference.

1. BACKGROUND

The Ministry of Agriculture, Water and Forestry (MAWF) through the Directorate of Research and Training has a well developed variety development and evaluation programme. This programme has resulted in the release of four pearl millet, one sorghum; two cowpea; and one Bambara nut varieties over the past years. A seed production system is also in place which has resulted in a tremendous increase of crop productivity.

Seed is the most important determinant of agricultural production potential on which the efficacy of other agricultural inputs depend. It is generally recognized that the absence of any seed related legislation in any given country is an impediment to the growth of the seed industry in general and crop productivity in particular.

There is a general agreement among agriculturalists that for Namibia to realize the benefits of investments in crop improvement, the country has to move swiftly by putting in place seed legislation. It is against this background that the Ministry of Agriculture, Water and Forestry has initiated the process of establishing a seed council which will be charged among others to specifically address issues related to Seed Policy, Seed Legislation and Seed Act.

In order for Namibia to meet the policy objectives as enshrined in the National Agricultural Policy; National Development Plans and Vision 2030, the Government of the Republic of Namibia is now inviting applications from the SADC Region for a consultancy to draft relevant seed legislation for Namibia in phases. The outcome of this study is expected to develop a comprehensive Namibian seed legislation that is in harmony with other SADC countries seed legislation.

OBJECTIVES – Phase 1

The Government of the Republic of Namibia through the Ministry of Agriculture, Water and Forestry is initiating a consultancy to review and draft seed legislation for Namibia that is in line with new technological development and in harmony with other SADC countries' seed laws and legislations. As a first phase agreement should be reached with respect to national seed policy.

The main objectives of the proposed phase 1 consultancy are:

- To review the existing seed legislation, act and all other relevant literatures;
- To prepare a comprehensive policy document encompassing the view of the main stakeholders for delivery to Cabinet

SCOPE OF WORK

1. Consultant(s) will be required to solicit views from all principal stakeholders (individual smallholder farmers; Extension officials; Crops and Forestry Researchers; seed retailers; milling industries; seed co-operatives; National Agricultural Support Services Programme (NASSP); Namibian Agronomic Board (NAB), Interim Seed Council etc.).
2. Review existing SADC seed laws and policies;
3. Consider other relevant policies and legislation for example the draft bio trade legislation; access and benefit sharing; CBD; International Treaty on Plant Genetic Resources for Food and Agriculture; the proposed Plant Protection Act etc.

Duration for the consultancy will be for a maximum period of 12 working days including travel time, commencing immediately upon signing the consultancy agreement.

SPECIFIC DUTIES.

The consultant(s) shall, in consultation with the Directorate of Research and Training (DART); Division of Plant Production Research, of the Ministry of Agriculture, Water and Forestry develop a comprehensive seed policy for Namibia's seed requirements. In particular the consultant(s) shall:

- a). Review existing and new draft seed act governing the seed sector, taking into account the Government's policies and priorities and the need to conform the legislation to the models of other countries in the SACU region in particular and SADC Region in general;
- b) In consultation with relevant stakeholders prepare a National Seed Policy document agreed by all;
- c) Validate proposed policy;
- d) Present findings in a report;
- e) Recommend steps necessary to implement the policy including developing new legislation

ANNEX II: Bibliography

Anonymous, 2001. Biosafety Regulation for Namibia Draft 10-2001.

Gastel van A.J.G. and Gregg, B.R. National seed policy and strategies for the near East and North Africa. IITA/GTZ Seed Project.

Government Gazette of the Republic of Namibia, 1996. Promulgation of Co-operatives Act. Act of Parliament 23 of 1996, 20 December, 1996.

Ministry of Agriculture, Water and Rural Development, 1995, National Agricultural Policy.

Ministry of Agriculture, Water and Rural Development, 2001. Proceedings of the First National Seed Conference, Tsumeb 28 February-1 march 2001.

Ministry of Agriculture, Water and Rural Development, 2003. National Seed Stakeholder Workshop, 13 August 2003.

Ministry of Higher Education, Vocational Training, Science and Technology, 1999. National Policy Document -Enabling the safe use of biotechnology.

Silva-Repetto, R. 1998. Namibia seed legislation – First Mission Report.

Support to Crop Seed Production and Research in Northern Namibia, 2001. Marketing Consultancy for Northern Namibia Farmers Seed Growers Cooperative. September – November, 2001. Agrisystems Ltd, United Kingdom.

Support to Crop Seed Production and Research in Northern Namibia, 2002. Report of Second Supervision Mission, March 2002. Agrisystems Ltd, United Kingdom.

Support to Crop Seed Production and Research in Northern Namibia, 2002. Short-term Consultancy on Crop Variety Improvement. Agricultural Plant Production Research Strategy Conference, 7-8 May 2002. Agrisystems Ltd, United Kingdom.

Support to Crop Seed Production and Research in Northern Namibia, 2003. Report of Third Supervision Mission. April 2003. Agrisystems Ltd, United Kingdom.

Vigne and Associates Consultants, 2004. Options for the Commercialisation of Mahangu in Namibia, February 2004.

ANNEX III: Persons met

Name	Organisation	Position
Bennett Ben	NASSP	Senior Economist: International Trade Negotiations & Marketing
Braun Bianca	MAWF National Botanical Research Institute	Researcher responsible for Plant Product Development
Brock Christoph	Namibian Agronomic Board	Chief Executive Officer
Dausas Albertina	MAWF	Senior Agricultural Research Technician
Geingos Immolatrix	Ministry of Education Directorate Research Science and Technology	Acting Senior Science and Technology Officer
Haindongo Ndesihafela	MAWF-Subdivision Law Enforcement	Chief Agricultural Inspector
Iimbili S.	NNFSGC	General Manager
Ipinge Sheehamandje	MAWF-Plant Production Research	Deputy Director
Ipumbu P.I.	NNFSGC	Chairman
Kandawa-Shulz Martha	University of Namibia	Lecturer
Koekemoer Elize	Agri-grow	Owner
Kolberg Herta	MAWF-NPGRC	Curator
Lusepani-Kamwi Esther	MAWF-Forestry	Deputy Director
Marggraff Harold	NAU	Manager-Commodities
Mashina E	NNFSGC	Deputy Secretary
Rhodes George	MAWF Subdivision Law Enforcement	Chief Agricultural Extension Technician
Snyman A.	NAU	Assistant to Manager-Commodities

ANNEX IV :CONSTITUTION OF THE INTERIM NATIONAL SEED COUNCIL

1. Interpretation

In case of any doubts as to the meaning of any of these concepts or articles, the interpretation placed thereon by the Interim National Seed Council (hereinafter referred to as the "Council") shall be final and binding upon all the members of the Council.

The concept "Interim" referring to the National Seed Council shall remain until appropriate legislation establishing the National Seed Council is in place.

2. Objective

The overall objective of the Council is to guide and co-ordinate all activities amongst:

- Crop researchers as far as seed issues are concerned;
- Seed producers;
- Seed retailers;
- Seed buyers

Once legislation is in place the Council shall exert overall control on seed issues in Namibia.

3. Terms of reference of the Interim National Seed Council

Until the Seed Act is in place the Council shall have the following tasks and responsibilities:

3.1 Advice and facilitation of drafting seed legislation

The Council shall, within Government policies:

- 3.1.1 Advise the Ministry of Agriculture, Water and Rural Development on seed legislation;
- 3.1.2 Act as a pressure group for the promulgation of seed legislation;
- 3.1.3 Participate in the formulation of seed policies and implementation of guidelines;
- 3.1.4 Make recommendations regarding the interim regulation of seed import and export;
- 3.1.5 Interpret seed policies;
- 3.1.6 Monitor the Namibian seed sector;
- 3.1.7 Facilitate in drafting of regulation on Issues pertaining variety protection.

3.2 Facilitation of formulation and implementation of seed standards

The Council shall within Government policies:

- 3.2.1 Facilitate the formulation and drafting of seed standards;
- 3.2.2 Make recommendations with regard to seed quality and standard requirements;
- 3.2.3 Make recommendations with regard to seed quality control;
- 3.2.4 Ensure that seed inspections are carried out.

3.3 The Council may, within Government policies:

- 3.3.1 Identify and address needs in the seed sector;
- 3.3.2 Coordinate seed production, distribution and marketing;

- 3.3.3 Promote locally produced seed (e.g. mahangu) in the SADC region;
 - 3.3.4 Determine strategies for seed producers;
 - 3.3.5 Advise decision makers on issues that are important to the seed sector;
 - 3.3.6 Fulfil an early warning function to avoid seed shortages;
 - 3.3.7 Produce training materials to assist producers/organisations
 - 3.3.8 For duration of the Seed Adviser contract, receive regular reports from and give guidance to the EU sponsored Seed Adviser;
 - 3.3.9 Initiate and monitor any programmes or consultancies to achieve the objectives of the Interim National Seed Council, subject to funding.
 - 3.3.10 Have delegated powers to agree on its Terms of Reference and scope of work, to enter into and manage contracts, approving interim and final reports and authorising payments.
4. **Secretariat**
The Council may appoint a Secretariat to fulfil the functions as defined and agreed upon.
5. **Composition**
- 5.1 The Council shall initially consist of 10 voting members who shall be appointed by the Minister of the Ministry of Agriculture, Water and Rural Development (hereinafter referred to as "MAWRD"), from Government and non-governmental bodies and persons with specific interest and nominated by their organisations. The nominating organisations shall have the power to withdraw or replace their members:
- 5.1.1 One member from the Directorate Research and Training of MAWRD;
 - 5.1.2 One member from the Division Law Enforcement of the Directorate Extension and Engineering of MAWRD;
 - 5.1.3 One member of the Directorate of Planning in the MAWRD;
 - 5.1.4 One member of the Directorate of Forestry in the Ministry of Environment and Tourism;
 - 5.1.5 One member representing the large-scale commercial seed wholesale/retail sector;
 - 5.1.6 One member representing the small-scale communal seed retail sector;
 - 5.1.7 One member of the Seed Growers Association representing seed producers;
 - 5.1.8 Two members of the Namibia National Farmers Union, one representing the North Central Region and the other, the North Eastern Region;
 - 5.1.9 One member of the Agronomic Producers Association in the Namibia Agricultural Union;
- 5.2 The representatives from MAWRD shall have the power to veto decisions.
- 5.3 The Council may further consist of ex officio non-voting members nominated from:
- 5.3.1 One member representing the Namibian Agronomic Board;
 - 5.3.2 Representative/s from a relevant donor agency;
 - 5.3.3 A representative from the MAWRD seed focal point for the SADC Seed Sub-Committee.
- 5.4 The Council may from time to time co-opt or invite members and/or observers in a non-voting capacity.

- 5.5 The Council may appoint from its voting members an Executive Committee who shall take urgent decisions during intervals between meetings.
- 5.6 The Council may appoint sub-committees or advisory committees to make recommendations to the Council.
- 5.7 A Chairperson and a Deputy Chairperson shall be appointed by the voting members of the Council from among their ranks.
- 5.8 Allowances as determined by the Permanent Secretary of the Ministry of Agriculture/donor body may be paid to members of the Council.
6. Meetings
- 6.1 The Council shall meet regularly and at least 4 times per annum and the Executive Committee (if appointed) shall be obliged to meet as required in order to take decisions regarding any particular urgent issues.
- 6.2 No binding decisions shall be taken at any Council meeting unless a quorum of a simple majority (half of the voting members plus one) is present in person.
- 6.3 Regular meetings at fixed dates and venues shall require 14 (fourteen) days notice to the members, but prior written notice shall be given to all members of any special meetings convened at least 14 (fourteen) days prior to the time of such meeting. Special meetings may be held on shorter notice, provided at least 90 % (ninety per centum) of the members consent in writing to such shorter notice. Any notice shall indicate the time, date and venue of a meeting to be held.
- 6.4 The Chairperson, and failing him/her the Deputy Chairperson, shall preside as Chairperson at every meeting of the Council. If no Chairperson or Vice-Chairperson present fifteen minutes after the set of starting or, he/she is unwilling to act as Chairperson, the voting members present in person shall be a simple majority elect one of their members to be Chairperson, who shall preside at that particular meeting.
- 6.5 The Chairperson may, with the consent of a simple majority, at any meeting at which a quorum is present, adjourn the meeting from time to time and from place to place, but no business shall be transacted at an adjourned meeting other than the business unfinished at the meeting at which the adjournment took place. Save as aforesaid it shall not be necessary to give members notice of an adjournment or of the business to be transacted at an adjourned meeting.
- 6.6 A resolution signed by all the voting members shall be valid as a resolution taken at a duly constituted meeting.
- 6.7 The Council shall cause minutes to be kept for the purpose of all resolutions and proceedings of all meetings of the Council. The minutes of any meeting of the Council and the Executive Committee shall be submitted at the next meeting for approval.
- 7.0 Documents
- All powers to sue or defend, as well as all powers to give and accept transfer of immovable property or to encumber and mortgage all or any of the assets of the Council, and other negotiable instruments, shall be signed for on behalf of the Council by the Chairperson/accountant of the Secretariat.
8. Financial powers and accounts The books of accounts shall be kept at the offices of the Secretariat or at such other place or places as the Council deems fit and shall be open to the inspection by members of the Council.
- 8.2 All accounts shall be subject to annual audit by the Auditor General.

- 8.3 The Secretariat shall cause to be prepared and laid before the Council at its regular meetings a statement of income and expenditure and auditors report together with all or any of such accounts and reports as are required and copies thereof shall be sent to every member together the notice of such meeting.
- 8.4 The Council shall have the power to solicit, receive, administer and coordinate Ministerial and/or donor support in the seed sector.
- 8.5 The Council shall have the power to authorise any payments, subject to concurrence of the MAWRD representatives.
- 8.6 The Council may take any decision regarding financial matters with the concurrence of the MAWRD representatives.

Alterations of articles

It shall be lawful for the Permanent Secretary of MAWRD, on recommendation of the Council, to add, repeal, alter, amend, vary or modify the aforesaid articles of the constitution.