

ナミビア共和国
半乾燥地域農業開発計画

1. 全国共有地農業支援システム整備
 - (1) 農業開発センター建設計画
 - (2) 農業支援システム開発調査
2. ため池及び小ダム建設計画

プロジェクト ファインディング
調査報告書

1991年11月

社団法人 海外農業開発コンサルタント協会

はじめに

本調査は、平成3年9月19日より10月1日まで、ナミビア共和国に於いて、下記の農業・農村開発関連のプロジェクトファイナディング調査を実施した。

「半乾燥地域農業開発計画」

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これらのプロジェクトに対して、現地側関係者より必要な情報を収集すると共に、今後のプロジェクトの方向づけなどについて協議を重ねた。いずれのプロジェクトも、日本よりの経済、技術協力案件としての候補になりうるもので、今後のプロジェクトの展開が期待される。

最後に本調査団に対して適切な助言と御指導を賜った在ジンバブエ国日本大使館、ナミビア国の計画省、農業省、国連世界食糧プログラム（WFP）をはじめとする政府関係機関及び援助組織の御関係者に対し、深甚なる謝意を表したい。

平成3年12月25日

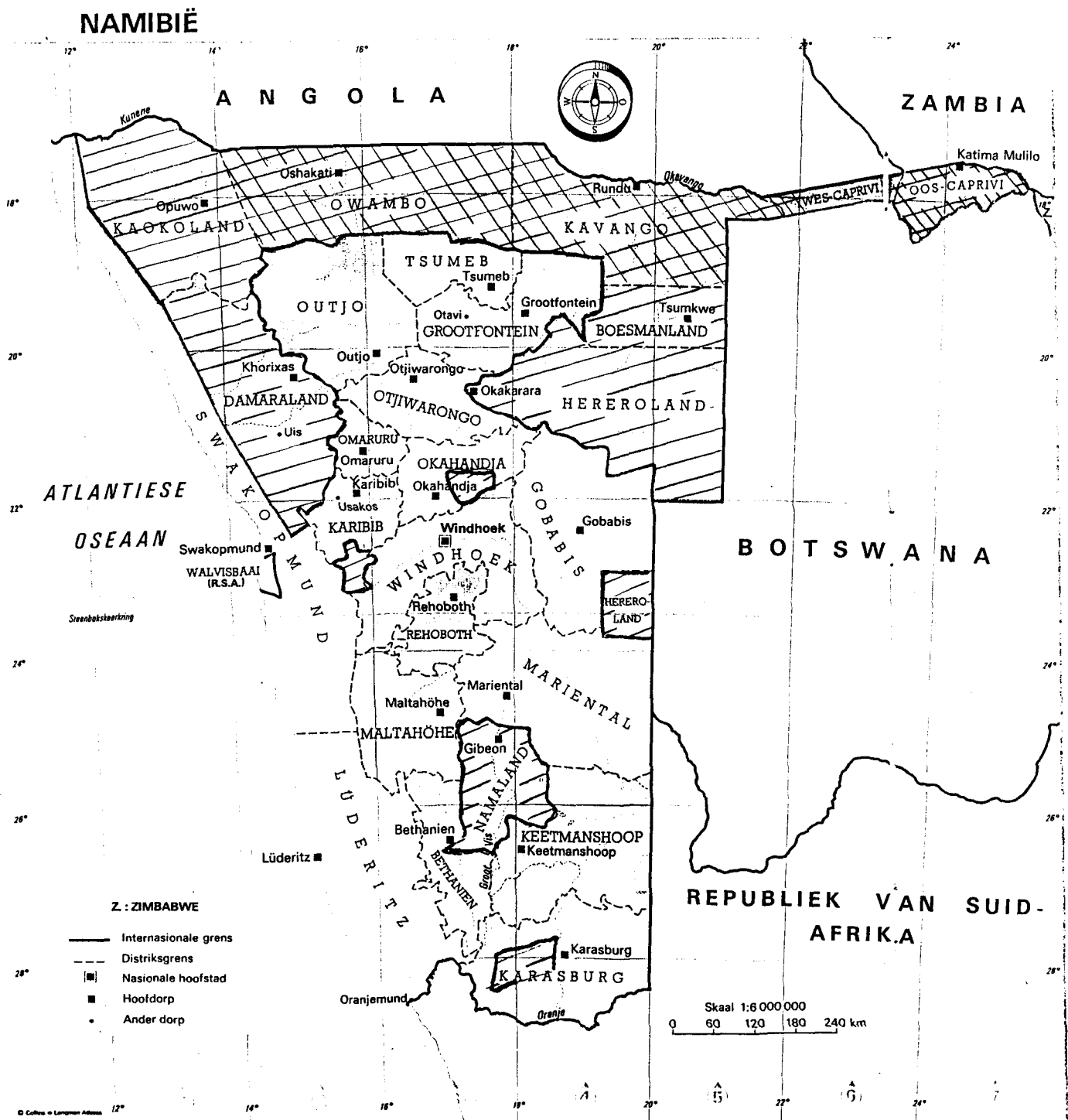
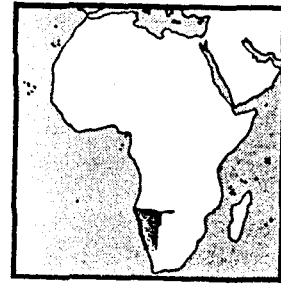
ADCAプロジェクトファイナディング調査団

団長 戸 田 利 則

（株式会社 建設企画コンサルタント）

Namibia ナミビア

調査対象地域

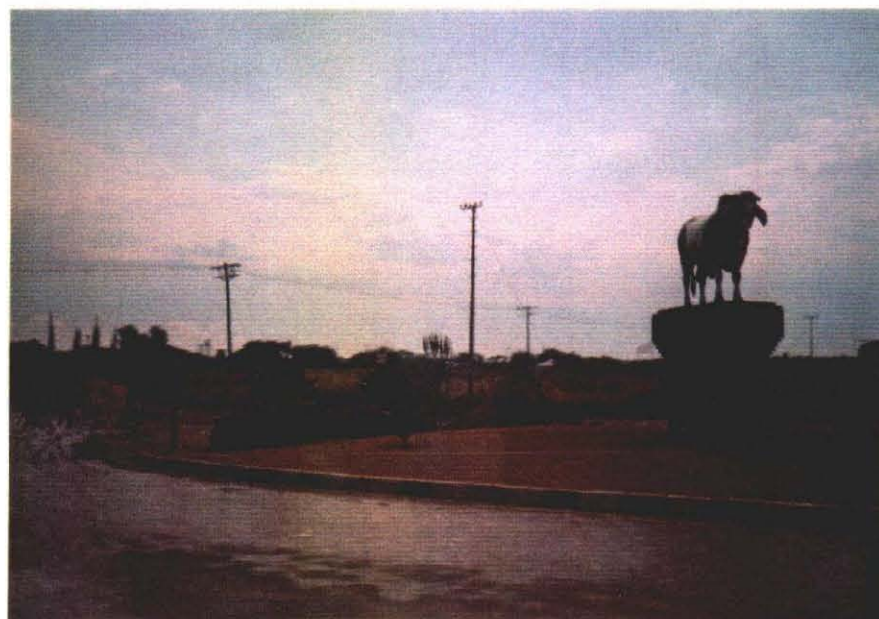




商業地域の農場



牧場の給水設備



ゴバビス市入口の牛のモニュメント



首都ウィンドフック



ゴバビス (Commercial Land の地方都市)



ゴバビス市内



共有地の農民の住居



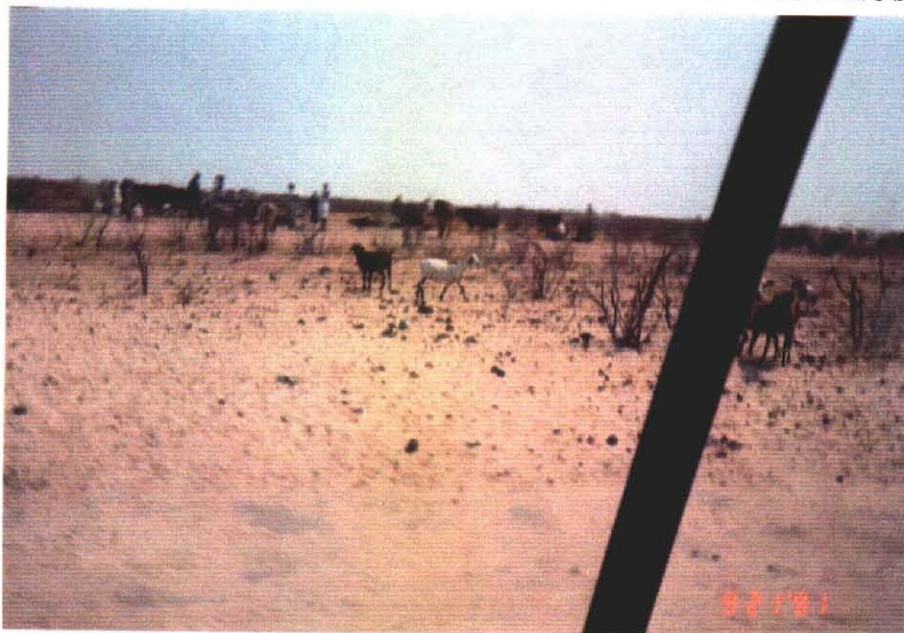
収穫物保存庫



オシャカチ：共有地（オカンボ州）の中心都市



オカンボ州の地方役場



共有地の放牧



共有地の給水施設



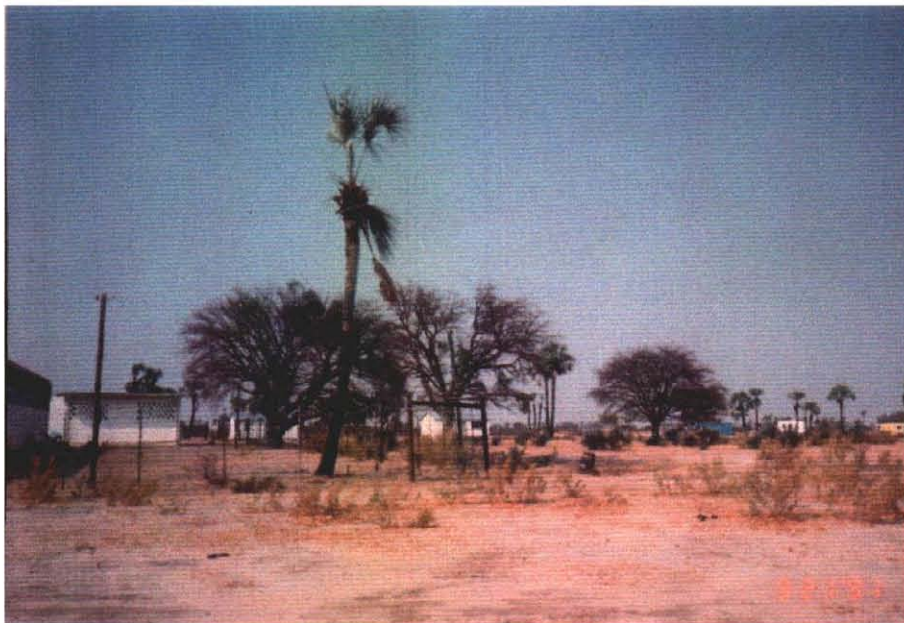
農業開発センターの候補地（旧トライバルガバメントの跡）



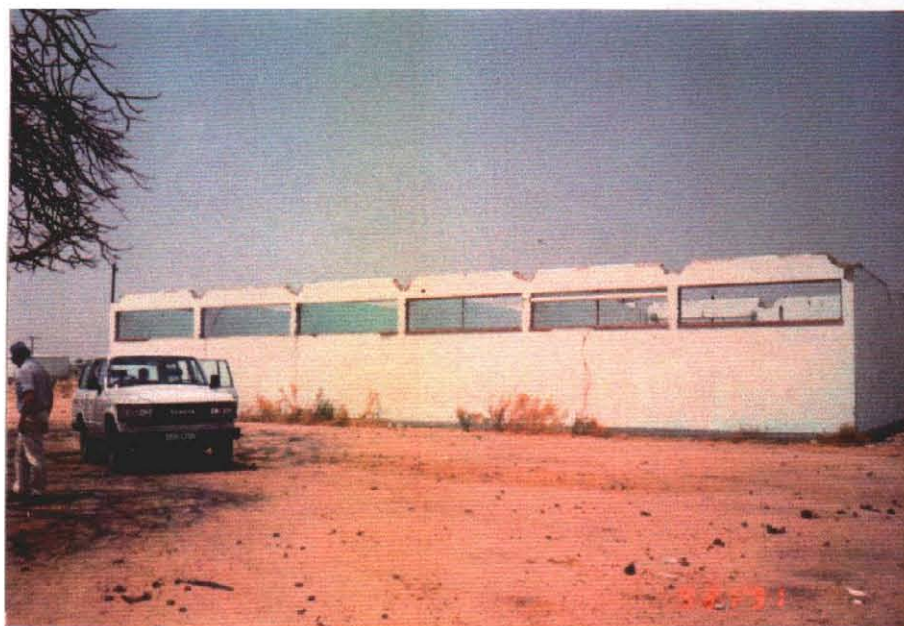
同上：外観



同上：内部



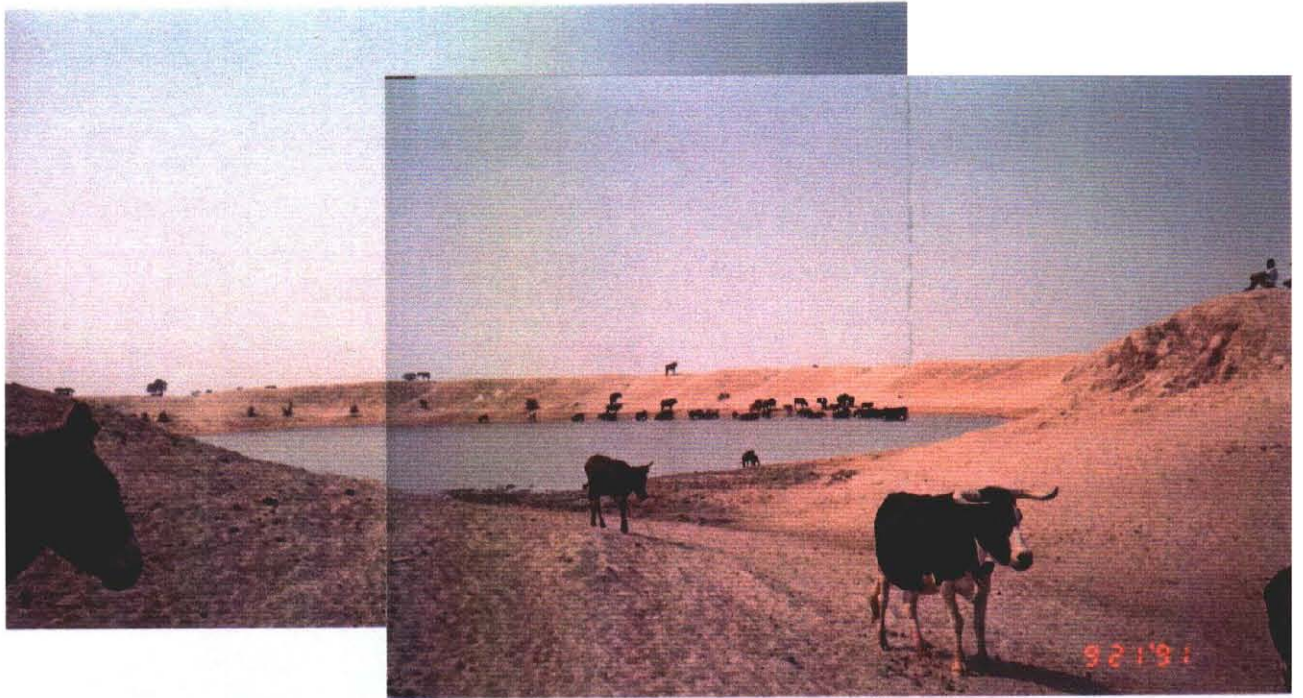
オカンボ州地方役場



農業開発センターの候補地



同上：内部



共有地のため池：放牧用の水飲場



共有地のミレットの耕作地



共有地の村落配置状況

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添付書類

- I. 調査者経歴
- II. 調査日程
- III. 面会者
- IV. 収集資料

V. 英文要請書（案）

1. 農業開発センター修復プロジェクト
2. 農業支援システム開発調査プロジェクト
3. 小ダム建設プロジェクト

第1章 ナミビアの経済社会構造

1. 一般指標

- | | |
|--------|---|
| (1) 首都 | ウィントフック |
| (2) 政体 | 共和政（1989年第一回制憲選挙） |
| (3) 元首 | マジョマ大統領（SWAPO政党） |
| (4) 面積 | 82万3,000km ² （日本の約 2.2倍） |
| (5) 人口 | 約13万人。人口密度 1.6人/km ² 。人口増加率 3 %。 |
| (6) 通貨 | 南ア・ランド |
- 1 ドル=0.354095南ア・ランド（91年10月22日現在）

2. 政治, 社会, 経済概況

2.1 政治

1989年11月に憲法を制定するための総選挙が行われ、SWAPOが制憲議会の過半数を獲得し、1990年2月には憲法が制定され3月21日に、南アフリカ共和国（以下南ア）よりナミビア共和国として独立した。総選挙の結果は、添付資料に示す。

ナミビア憲法は、大統領制、二院制、多数政党制、司法の独立を明記し、大統領の任期を5年間とし、再選を許している。一般投票で50%以上の支持を必要とする。大統領の権限は、主に、内閣閣僚、国防指令官、公共サービス委員会の任命権、下院の解散権、非常事態宣言及び戒厳令の布告の権限を有している。

更に、ナミビアの土地、水、資源については、その所有者への所属を認めており、国家が然るべき対価を支払って法律に基づき国の資産にしない限り、公共的目的に利用できないことになっている。

但し、後述する様に、土地問題に関しては、上記の土地所有権の明確な個人所有地帯（Commercial Land）と、土地共同所有制地帯（Communal Land）及び国有地に分割されている。歴史的に、植民地化の過程の中で、故人所有地は白人所有で国土の44%を占め、南アに近い中部、南部に存在している。部族による共同所有地は、主に国土の北部アンゴラ国境沿いを中心として存在し、国土の41%程度を占めている。国有地は、西部の太平洋岸に沿うナミビア砂漠など、自然公園やダイヤモンド鉱山などを占めている。

土地所有制度の全国分布については、図1-1 を参照されたい。

現在、「入り合地」的な共同所有地域での、故人による不法な土地囲い込みも、独立後進んでおり、白人の大規模所有に対する北部黒人側からの批判も含め、「土地問題」が新たな政治課題になりつつある報告もある。

2.2 産業別一般動向

(1) 農業・水産業

北部地域を中心とした農業のGDPに占める比率は6%にしか過ぎないが、国民の70%が農業に依存して生活している。

同国の農業は、歴史的な植民地化の過程の中で、現在の土地所有制度に極端に見られる様に、先進国型の市場中心の商業農業（主に国際的な畜産食肉市場を対象）と、共同体の自給自足農業という2つの構造に分断されてきた。特に、アンゴラ内乱への南ア政府の介入は、最も耕作に適している同国の北部地方での農業開発を事実上不可能にしてきた。

北部地方は、人口の3分の2が住む部族共同体所有地区で、天水により主要農産物のアワが生産されている。更に、アンゴラの南部地域を交易の対象として、放牧による畜産も行われている。この地方は、かんがいが進めば、米、砂糖、豆類、キャッサバ、落花生、トウモロコシ、ヒエ、小麦などの生産も可能である。

国土の6割強の地域で放牧が可能なため、中・南部を中心に大規模酪農が行われている。牛、馬、ロバ、羊、山羊、豚、鶏などが飼育され、それらの肉、乳、毛皮などは主な輸出産品となっている。但し、北部からは、国際市場への食肉の輸出は、伝染病のおそれのため、輸入国側が禁止している。

国土の2割強は森林だが、管理が不十分で産業用木材や薪などは不足している。

ベンゲラ海流の流れるナミビア沿岸は良好な漁場で、アンチョビー、ニシン、サワラ、タラなどが豊富である。平成3年度末には、漁業資源調査のためJICA調査が予定されている。

(2) 鉱業

ダイヤモンド、ウラン、銅、鉛、亜鉛、スズ、金などが産出されている。ダイヤモンドの生産量は、西側世界の約7%、ウランの生産量は同10%程度に達している。

(3) 観光業

広大な国土に比べて人口は少なく、ナミビアは世界でも自然が保護されている残り少ない国である。

世界第4位の面積をもつナミブ・ノウクルフト公園をはじめ、スケルトン・コースト公園、エトシヤ国立公園などは動物の宝庫で、20種類以上のシカや黒サイなどが生息する。鳥類は620種が生息するといわれ、うち11種はナミビアでしか見られない。

施設としては、88年現在でホテル64、ペンション42、迎賓館7、キャンプ地31ヵ所、サファリ用ロッジ40ヵ所などがある。

2.3 インフラストラクチャーの現状

(1) 交通

鉄道が大きな役割を占める。

鉄道が最も重要な手段。1988年の輸送量でみると鉄道が貨物200万t、旅客48万人であったのに対し、道路は貨物18t、旅客5万人に止まっている。鉄道総延長は2,382kmで、大部分がドイツ植民地時代に建設された。

90年現在の道路の総延長は4万1,762kmで、うち舗装されているのは1割強である。砂漠や大雨など気候的に不利な条件があり、道路建設費は割高で、しかも厳しい保守管理が必要である。

貿易港としてはウォルビス・ベイとデリッツがあるが、前者は南アが租界して統治を続けている。

空港はウィントフックの北東のストリドーム空港が国際空港。そのほか国内空港が主要都市近郊にある。

(2) 通信

63ヵ国とダイヤル通話可能

通信網はアフリカでは最も整備されたものの一つで、郵便局71局、同代理店16、郵便ポスト3万4,505ヵ所などのほか、遠隔地には移動郵便局も設けられている。

電話器は約7万台あり、63ヵ国とダイヤル通話が可能。電話普及率は17家族に1台。また電話のない農村部では、常設ラジオ局65局と移動ラジオ局51局を利用して通話を行うことができる。

ラジオ放送は、英語、ドイツ語、現地部族語など11言語の放送が7チャンネル、FMで行われている。テレビは1チャンネルで、英語とアフリカーンス語で放映。

(3) エネルギー

将来は輸出国の可能性秘める。

現在はエネルギー輸入国だが、水力発電、天然ガス、石炭など未開発のエネルギーは多くあり、将来は輸出国になり得る可能性を秘めている。

(4) 保健・衛生

望まれる予防医学の向上

特に農村や黒人居住区で、子供たちの栄養失調、小児マヒ、ジフテリア、破傷風、百日咳、はしか、結核、マラリアなどが多い。

医療機関は病院が61、クリニックが156あり、人口が比較的少ないこともあって医療従事者も不足していないが、問題は治療よりも予防医学の向上にあるようだ。

(5) 上下水

地域間格差大きい。

西部の砂漠地帯の降水量はゼロに等しく、北東部の森林地帯は年間700mmに達する。

北部と南部の国境沿いの川は、年間を通じて水があるが、内陸では雨期にのみ川に水が流れる。

そこで北部の川から内陸部の都市にダムやパイプで給水する126の計画を進めてきた。

なお首都のウィントフックには下水浄化循環システムも完成している。

3. 経済開発計画（1990－94）

3.1 概 要

独立から2ヶ月後の90年5月、ニューヨークで援助国および国際機関による援助会議が開かれた。これに提出すべく策定されたものが「ナミビア政府の総合政策」(Namibia : Challenging the Future) である。

本計画は、大略の開発計画の方向を示したもので、次の様な構成となっている。

1. 序 章

2. 将来のための挑戦

- (1) 農 業
- (2) 漁 業
- (3) 水資源
- (4) 保健衛生
- (5) 教 育
- (6) 住 居
- (7) インフラストラクチャー
- (8) その他

3. 将来に向けて

- (1) 政府機関

（章構成は、調査団による）

その目標と戦略は、国民の福祉の増大に向け、①公共施設サービスの全国民の平等提供、②栄養、衛生状態の維持・改善、③女性の雇用確保、④環境システムの維持・保護——などを行うとしている。

マクロ経済指標の達成目標は、(1)実質GDP（国内総生産）成長率を年平均4～5%とする、(2)雇用増大率を年平均3.5%とし、92年までに失業率を現在の30%から15%に半減する——などである。部門別にみると、特に漁業、建設の伸び率を高く設定している。

総投資額は明示されていないが、90年～92年の2年間の投資額は12億5,000万ラントで、うち4億ラントを政府が、8億5,000万ラントを民間が投資するとしている。

ただし資金調達については、3年間で2億7,000万ドル（前記投資額12億5,000万ラントの約57%）を、外国の援助に期待している。

本計画書の中で、農村開発、農村環境整備は、各セクターでの課題となっている。

現在、本政策に基づく、具体的政策に入っており、調査時点では、政府内での調整中ということであった。

3.2 プライオリティー

(1) 分野別プライオリティー

分野別プライオリティーとしては、農業、保健及び住居、水資源、交通・運輸が考えられている。これらの分野別プライオリティーは、全国に存在する共有地区の生活改善及び所得向上に焦点が当てられている。

特に、農業（畜産も含め）は、共有地区の住民の大部分が従事する産業がある。農村地区の生活改善は、現政府にとっての重要な課題となっている。

(2) 地域別プライオリティー

住民の大部分が生活する共有地区の経済の後進性は、ナミビア国にとっての南地問題である。民有地（コマーシャルエリア）は、白人しかその所有が許されていなかったこともあり、十分に経済的には自立できえる水準にあり、ほぼ南ア、ヨーロッパの生活水準とかわりない。

新政権は、その支持母体を共有地の黒人層と、民主的な白人層に依拠している。特に、独立運動が北部のオワンボ地区を中心に行われたことから、戦争の被害と農村部の被エイが大きく、北部に対して十分に手厚い政策を進める考えである。

1. 背景

ナミビアは、土地の所有形態が① Commercial Land ② Communal Landの2つに分割されている。Commercial Land（私有地）は、土地の登録もされており、白人が所有。個人の大規模農場（主として畜産）を展開し、食肉として、南ア、ヨーロッパへ輸出、国の主要輸出産品となっている。一方、Communal Landは、部族による共同所有地で、各部族毎にTribes Landがあり、各部族の「行政区」が存在していた。放牧と天水によるミレット及びソルガム栽培を中心とした自給自足的農業を行っている。市場も、周辺国のアンゴラ等と交易を行っている規模で、南部のように、世界市場とは直結していない。

南ア統治下では、各部族の10の「行政区」が、Communal Landを分割統治していたが実質的な経済開発は行われておらず、農民の生活は、自給自足経済の域を出ていない。

2. 農業開発の2つのアプローチ

独立後、中央政府が出身人口の60%以上を占めるCommunal Landの地域開発は、最優先の政策にとりあげられた。このうち、農業セクターは、他地域も含めこれらの住民の大半が従事しているため、最優先セクターとしてとりあげられている。

しかしながら、中央政府にとってどのような農業開発政策をとるのか議論の最中であり、今後の結論をみることになるが、そのアプローチとして次の2つのが考えられる。

一つには、中・南部のCommercial Landで展開されている農業技術を適用する形でのCapital investment型プロジェクトによる農業開発手法。もう一つは、現在Communal Landで実施されている伝統農業の見直しと改善を通じた農業開発の手法である。

少なくとも、現地で農業省の担当官との議論を行った中では、後者の方法が実際的であるとの結論を得た。特に、住民の福利厚生、Basic Human Needsの改善に重点を置くと、便益を受ける農民を出来るだけ公平に兼つ大多数であるためには、従来農法の改善より着手してゆき、農村生活の安定の上に、大規模開発があるべきである。ということである。

3. プロジェクトの構想

Basic Human Needs を基本においた視点で、プロジェクトの形成を考えると、生活基盤として農村生活改善と生産基盤として伝統農業の改善を中心とすることが必要である。

上記の2点からプロジェクトの形成を考えた場合、1つの大きな問題が存在する。それは、南ア統治下の行政機関であった「行政区」(Tribal Communal administration)が、解体したために、農民への直接の援助のシステムが欠けていることである。この援助システムの基礎となる農業省の地方組織－日本の農政局と農事試験場と農協組織を組み合わせたものの確立が、最急の課題となっている。

この構想の軸になるものが、全国規模でCommunal Landを対象とした農業支援システム(農業普及センターを中心に、農業試験場、パイロットファーム、農民教育、生活改善、農村鉱業、農業協同組合、食糧保障の導入)の構築プロジェクトである。

農業支援システムの目的は、農村生活の改善、農業技術の普及及び食糧保障等を通じ、地域住民の生活安定及び経済活動の改善を計るものである。これら、具体的なサブコンポーネントについては、今後の調査が必要となる。

上記の、農村環境整備のための基本システムの構築の生活基盤を主として対象としたプロジェクトと同時に、伝統的農業にもとづく生産基盤の改善については、ため池及び小ダムプロジェクトを提案したい。

第3章 農業開発センター建設プロジェクト

1. 現 状

農業は、ナミビア国にとって最重要分野であるが、先に述べたように、共有地区への具体的援助・支援の活動の基本的体制が形成されつつある段階である。組織的には、中央政府農業・農村開発省の下に各地方（Region別）レベル、地区（Sub-region別）レベルで、その整備が進められている。

現在、支援の核となる農業開発センターは、従来の植民地支配の下につくられたトライバルガバメント（部族毎の自治組織）の事務所跡を、修復する形で、進められているが、ほとんどの事務所は独立戦争時、攻撃と対象となり、破壊されている。

わずかに残る建物の部屋を、地方の事務所として使っているのが、現状である。

2. 背 景

共有地区の農民への具体的支援として、農業支援センターのネットワークを確立することが、現在ナンビア政府で計画されている。この支援ネットワークは、共有地区の農民に技術指導や訓練、農業の新技術の紹介を農民組織に行うと共に、融資やマーケティング、販売を助け、農村コミュニティ及び農村社会の発展を支援するものである。

現在、共有地区の農業開発のための支援インフラが欠如していることによって、農業開発が阻害されている。共有地の小農による農業生産の向上は、本プロジェクトで計画されている農業開発センターで行われる支援サービスによって達成される。

支援サービスの内容としては、

- －効果的な農業普及活動
- －農民を対象とした訓練
- －獣医のサービス、補助的な食糧、種子、肥料、その他必要資材の供給
- －放牧の改良プログラムの実施

である。

3. プロジェクトの内容

(1) 農業開発センターの計画

第一次計画として最も人口の集積している中・北部地区14ヶ所に、農業開発センタ

ーを確立する。その後、全ての農村地域24ヶ所に、農業開発センターを確立する。合計38ヶ所にネットワークとして、設立する予定である。

(2) 位置図

添付の図面を参照の事。

(3) 内容・規模

添付図面を参照の事。

実施予算としては、第一フェーズで約10億円の予算を考えている。但し、建屋の金額で、支援サービスに必要な機器類、車両等により、変動がある。

4. プロジェクトの効果

ナミビアは、共有地区に人口の3分の2が生活しているにもかかわらず、この地区は、農耕が制約され、後進地域である。オワンボ北部で、3人に1人の子供が栄養不足である。

本プロジェクトは、農業開発センターを通じて全ての農民に公平に便益を供与できる。特に農村婦人は、住居周辺での園芸栽培など実際の訓練・指導により組織される。

第一フェーズでは、次の共有地の住民に便益が行き渡る。

(a) オワンボ／カオコ地域（人口最密集地域）	50万人以上
(b) カバンゴ地域	11万人～15万人
(c) ヘレロランド地域	10万人
(d) 東部カプリブ地域	4万6千人

5. 日本への援助要請の内容

- (1) 緊急農業支援システムの確立のための調査（長期的には次章参照）
- (2) 農業開発センターの建物の修復及び建設
- (3) 農業支援資機材の供与
- (4) 農民への技術指導（専門家及び青年海外協力隊の派遣）

6. 必要な調査団の構成

- (1) 農業・農村環境
- (2) 農業施設
- (3) 農業普及

第4章 農業支援システム開発調査

1. 背景

ナミビア全土の農業発展には、長期的な開発計画を策定する必要がある。長期的な農業開発の方向としては、以下の様に考えられる。

(1) 農業支援システムを、独立前の行政レベルまで回復すること。

具体的には、地域の農村の行政組織を、農業支援センターのネットワークの確立によって回復させる。農業開発センターは、天候の変動に希弱な農村経済及び農民の生活を支えるため、食糧保全 (Food Security) のために、緊急的に必要である。

中央政府の援助、支援が、農村のすみずみまで公平に行き渡ると共に、中・長期の開発計画の策定のための基礎的データ、統計の収集を行うことができる。

(2) 農業支援システムの発展

中・長期的な農業支援システムの確立及び発展のために、共有地の基本的問題点と、ナミビア農業の構造（コマーシャルエリアと共有地の農業技術のレベルの格差）の問題点の中で、農業を自立した経済セクターとして発展させる方向を明らかにする必要がある。

独立後、個々のプロジェクトが個別に提案されているが、中・長期の戦略の中でのプロジェクトの位置づけがされていない。

2. 調査内容

(1) 農業開発計画

- ① 農業分野の問題・課題（生産性、最適技術、農業インフラ、機械化、近代化、自然（かんばつ）対策。
- ② 農業分野開発に際しての環境問題（自然環境、社会環境）
- ③ 農業分野の人材の現状、技術レベル、人材育成上の問題点
- ④ 農村環境の整備課題（特に、婦人問題）
- ⑤ 上記の対策の検討

(2) 農業支援システム

- ① 既存の支援システムの状況，問題点およびそれらのリハビリの必要性・可能性
- ② かんがい等農業インフラの状況，問題点およびそれらのリハビリの必要性・可能性
- ③ 実施中あるいは計画中の農業インフラ案件の概要・実施状況
- ④ 上記の対策の検討

(3) 派遣に必要な専門家

- ① 農業開発
- ② 農村環境
- ③ 農業施設

第5章 ため池及び小ダムプロジェクト

1. 背景

伝統農業を基礎とした農業基盤の改善には、現在の雨期・乾期の降雨パターンから、通年かんがいを取り入れた農業が考えられ、農業省もいくつか、定住地構想（Resettlement project）の中に導入を企図している。通年かんがいのための水源としては、河川水及び地下水（井戸）を考えている。河川水源は、クネネ川とオガバンゴ川で、クネネ川からは、ルアカナを取水点として現在約 2.4 m³/SECの水を取水し、開水路及びパイプラインで、都市及び農村へ飲料水（家畜も含む）を供給している。

オガバンゴ川からは、現在北部への水の供給はない。このように、河川水は、水配分の優先を飲料水においており、特にクネネ川の水量がここ10数年のかんばつにより低下し、これ以上の取水が当分見込めない時点では、この水をかんがいに配分することは、適切でない。更に、地下水は、塩分濃度が高く、使用できない。

水源の不足と共に、かんがい農業は、伝統農業の内に入っていない。農民は、かんがい農業に未経験である。このため、大規模かんがいを導入したとしても、（水源をみつけ）、農民がこれを有効に理由できない。現在の農法に、かんがい農業を導入するためには、農民がかんがいによる効果を確認し、経験を積む方法から始める必要がある。

最も初源的（プリミティブ）ではあるが、過程の雑用水の排水を利用し、住居の周辺から野菜栽培を導入（Garden irrigation）することから開始し、そのOver-productを、上記センター内の定期市場で販売することを通じ、かんがい効果を体得し、小規模パイロットファームに結びつけ、水源の確保（河川からのパイプライン）の上、節水型の通年かんがいを導入することが望ましい。

2. プロジェクトの内容

ため池及び小ダムプロジェクトは、上記のかんがい導入のプロジェクトの中で、家庭かんがいからパイロットファームのかんがいの段階で、水源の確保として位置づけられる。

現在、北部オワンボ地区を中心として、ため池が掘られ、家畜用水として乾期の間も利用されている。このため池は、3～4 m深にある伏流水を集めたものである。塩分の含む地下水の利用ではない。

このため池を、各地に建設することによって、家畜用水の利用から、かんがい用水の確保まで、広く拡げる。本プロジェクトは、適地がほぼ北部地区全土に広がるため、その便益が公平にかつ広範な人口に行きわたるものである。更に、野菜栽培を通じて、衛生状態の改善と、農村婦人の現金収入にもなる。

南部・中部地区のCommunal Land については、山岳地区でもあるところからSmall dam の建設を行う必要がある。

上記、ため池及びSmall dam 建設のため、建設機械類の供与が必要である。

3. 計画内容

(1) 地域及び計画数量

第一フェーズとして人口の最も密集した共有地を対象とする。

① オバンゴ	溜池	30ヶ所
② カバンゴ	溜池	30ヶ所
③ ブッシュマンランド	小ダム	10ヶ所
④ ヘレロランド	小ダム	10ヶ所

(2) 受益人口

① オバンゴ	500,000人
② カバンゴ	110,000人
③ ヘレロランド	100,000人
④ ブッシュマンランド	3,000人

4. 必要建設機械類

(1) 掘削・築堤工事用

① ブルドーザ	200HP	10台
② 掘削ショベル	0.4m ³	5台

(2) 支援機械類

① ブルドーザ運搬用トレーラ	20 t	3台
② 資材運搬用トラック	6 t	5台

③ ピックアップ 4×4 10台

総コストは、スペアパーツ15%を考え、約5億円である。

5. 実施機関

農業・水資源省 (Ministry of Agriculture, Fisheries, Water and Rural Development) は、十分な施工能力を有しており、すでに手元の機械で、数ヶ所の溜池を建設している。

ナミビア共和国は、独立して日も浅く新政権がようやくその体制を整備しつつある段階にある。農業分野における緊急課題は、全国に散在する「Communal Area」（共有地）の農業及び農村の生産基盤及び生活環境を整備することにある。これら共有地は、全国の3分の2の肥沃な農地を占める「Commercial Land」（個人所有地）と比べ、半乾燥地域に広がっている。後者は、近代的農業（主として商業農業）が営まれ、ヨーロッパ、南アへ輸出を行っている。前者は、放牧と天水耕作が中心で、自給型農業にとどまり、生活の格差は、絶大なものがある。

ナミビア政府は、このような国内の「南北問題」（この場合、南が豊かで、北が貧しい）の解決抜きには、国民統合が成功しないことを理解しており、共有地の生活向上に開発のプライオリティーをおいている。

しかしながら、共有地の農民への援助、支援のための体制が整備されておらず、更に諸々の提案されている開発プロジェクトは、長期的な開発戦略の中から出たものではなく、又、現在の共有地農民の要望に答えるものになっていない。

本調査は、農水省及び計画省との討議を通じて、全農民、特に、婦人が大きく開発に参画できるものとして、「農業支援及び開発センター構想」と、「小ダム（ため池を含む）」の水資源開発構想を討議した。

これらは、現在の農政の緊急の課題であり、その便益が、公平に共有地農民にゆきわたるものであることを確認した。

ナミビア政府も、上記プロジェクトの実施について多大の感心を示している。

添 付 書 類

I. 調査者経歴

団 長	戸 田 利 則	建設企画コンサルタント海外本部プロジェクト 開発室次長 昭和47年3月岡山大学農業工学科卒 昭和47年－51年 大豊建設株式会社 昭和52年－55年 青年海外協力隊（モロッコ） 昭和56年－現在 ㈱建設企画コンサルタント
団 員 (現地参加)	植 草 五 郎	建設企画コンサルタント嘱託 住友商事ヨハネスブルグ支店副所長 昭和51年3月 東京外大スペイン語科卒 昭和51年4月現在 住友商事株式会社

Ⅱ. 調査日程表

(平成3年9月19日～10月1日)

日 数	月 日	
1	9 / 19日	成田～フランクフルト 移動
2	20日	～ナミビア (ウインドフック着)
	(午前)	国家計画局訪問
		農業省訪問
	(午後)	運輸省訪問
		国連世界食糧プログラム
		ナミビア支局訪問 (WFP)
3	21日	ウインドフック～オシャカチ 現地調査
4	22日	オシャカチ～ウインドフック 移動
5	23日	ウインドフック 書類整理／調査団打合せ
6	24日	ウインドフック～ゴバビス 現地調査
		～ウインドフック
7	25日	ウインドフック 農業省報告
		運輸省報告
8	26日	(午前) 調査団打合せ
		WFP報告
	(午後)	ウインドフック～ハラレ 移動
9	27日	ハラレ ジンバブエ大使館表敬及び報告
10	28日	ハラレーフランクフルト 移動
11	29日	フランクフルト～東京 移動

Ⅲ. 面会者一覧表

1. 国家計画局 (NATIONAL PLANNING COMMISSION)

Mr. SCHUMAN DIRECTOR (局長)

2. 農業者 (MINISTRY OF AGRICULTURE)

Dr. V. SHIVUTE DEP. PERMANENT SECRETARY
(次官補)

Mr. DE KLERK DIRECTOR (AGRICULTURE)
(局長)

Mr. MATTHYEU DIRECTOR
(局長)

Mr. HUGO REGIONAL DIRECTOR
(オワンボ農政局長)

3. 運輸省 (MINISTRY OF WORKS, TRANSPORT, AND CONSTRUCTION)

Mr. ZAPKE DIRECTOR (ROAD)
(道路局長)

Mr. B. GERIKE CHIEF ENGINEER, (MECHANICAL SERVICES)

4. 国際連合世界食糧プログラム 松浦支局長

5. ジンバブエ日本大使館 森野一等書記局

IV. 収集資料

1. 総選挙結果

2. 農業統計

- (1) 農業生産物
- (2) 商業農業の土地の分布（1982）
- (3) 共有地域の農業人口及び生産状況
- (4) 農業の現状（1980－1989）
- (5) 農業生産高（商業農業のみ）
- (6) 畜産の現状（1979－1989）
- (7) 商業農業の農業信用の現状（1981－89）
- (8) 長期農業ローンの現状（1980－90）
- (9) 小型ローンの内容
- (10) とうもろこし価格の変動（1985－90）
- (11) としもろこし価格の比較
- (12) とうもろこしの輸出入価格

3. ナミビア政府予算（1991／92）

4. 同 上 （1990／91）

NAMIBIA ELECTION – 1989: VOTE RESULTS SUMMARY

Ordinary plus Tendered Ballots

No.	NAME OF DISTRICT	ACN	CDA	DTA	FCN	NNDP	NNF	NPF	SWAPO-D	SWAPO	UDF	REJECT	TOTAL
01	Bethanie	301	32	1,314	55	4	8	15	16	461	87	44	2,337
02	Damaraland	175	28	2,579	34	9	109	62	25	4,204	7,838	152	15,215
03	Gobabis	1,940	158	11,684	173	50	391	377	59	2,458	442	379	18,111
04	Grootfontein	1,606	115	8,818	236	32	66	376	51	6,417	1,319	566	19,602
05	Hereroland	68	89	9,880	193	33	705	1,935	40	2,353	100	209	15,605
06	Kaokoland	64	91	8,180	120	70	48	2,480	24	1,330	71	316	12,794
07	Karasburg	4,820	54	10,068	367	30	40	152	39	2,378	739	126	18,813
08	Karibib	406	24	1,989	67	2	56	161	14	2,244	1,533	86	6,582
09	Kavango	527	449	24,817	401	179	151	497	319	30,755	1,336	1,995	61,426
10	Keetmanshoop	1,458	100	9,249	335	58	432	209	113	5,496	1,518	301	19,269
11	Lüderitz	521	17	2,138	89	14	218	67	26	7,753	390	45	11,278
12	Maltahöhe	388	15	668	161	13	8	14	9	848	383	71	2,578
13	Mariental	1,467	85	7,665	403	26	77	101	29	3,024	1,036	169	14,082
14	Okahandja	672	42	4,273	56	9	81	334	23	3,718	1,142	30	10,380
15	Omaruru	213	40	2,959	48	5	206	318	24	1,281	589	89	5,772
16	Oos-Capri	104	168	13,786	436	44	44	687	93	10,415	556	673	27,006
17	Otiwarongo	699	49	5,213	81	12	134	114	19	4,020	1,835	142	12,318
18	Outjo	765	37	3,072	88	3	31	52	13	1,197	1,483	163	6,904
19	Ovambo	465	489	10,745	150	214	95	505	1,706	225,621	5,167	3,014	248,171
20	Rehoboth	127	66	7,746	5,010	84	304	243	48	3,015	462	251	17,356
21	Swakopmund	1,271	32	5,931	395	5	241	145	64	14,123	1,736	140	24,083
22	Tsumeb	922	36	4,028	96	11	46	72	57	7,254	1,202	148	13,872
23	Windhoek	4,749	279	34,730	1,458	77	1,853	1,777	350	44,202	6,910	749	97,134

GRAND TOTALS	23,728	2,495	191,532	10,452	984	5,344	10,693	3,161	384,567	37,874	9,858	680,688
PERCENTAGES	3.49 %	0.37 %	28.14 %	1.54 %	0.14 %	0.79 %	1.57 %	0.46 %	56.50 %	5.56 %	1.45 %	100.00 %
Constituent Assembly Seats	3	0	21	1	0	1	1	0	41	4		72

Table 1: Composition of agricultural production; 1987/88

Products	Gross agricultural output (Rand million)	Per cent
Wheat	2.04	0.44
Maize	2.48	0.54
Other crops	1.22	0.26
Vegetables	3.36	0.73
Crop total	9.10	1.97
Cattle	299.00	65.10
Small stock	59.68	13.00
Pelts	42.55	9.27
Game	21.74	4.73
Other livestock	27.24	5.93
Grand total	459.30	100.00

Source: Development of Agriculture and Conservation, Windhoek 1987.
 Note: Data do not include production from communal areas.

Table 2: Distribution of land in the commercial agricultural sector 1982

District	Number of owners	Average farm size (ha/farm)
<u>A: Mainly beef producing areas</u>		
Gobabis	592	6823
Grootfontein	451	5886
Karibib	138	10038
Okahandja	207	6918
Omaruru	118	7205
Otjiwarongo	293	6267
Outjo	387	6789
Tsumeb	127	7035
Windhoek	444	7895
Total	2757	7017
<u>B: Mainly sheep producing areas</u>		
Bethanien	167	12545
Mariental	702	6435
Keetmanshoop	342	9518
Luderitz	55	19086
Maltahoe	188	10977
Karasburg	249	13992
Total	1703	9165

Note: Farm size may include more than one holding.
Source: Fiona Adams, et al. 1990: The land issue in Namibia: An inquiry; Namibia Institute for Social and Economic Research.

Table 3: Population and agricultural activities in communal areas; 1989

Regions	Population (000)	Agricultural area (ha millions)	Activity	No. of livestock LSU(000) SSU(000)	
Kaokoland	20.5 (20.5) ¹	4.9	Stock farming	na	na
Ovambo	659.7 (648.6)	5.6	millet & stock	362.6	362
Kavango	142.5 (136.2)	4.2	maize, millet & stock	79.9	27.6
Caprivi	55.7 (55.7)	1.2	maize, millet, sorghum & draught cattle	na	na
Damara- land	37.2 (30.2)	4.8	limited irrigation extensive small stock	na	na
Bushman- land	3.3 (3.3)	2.4	limited agriculture	na	na
Herero- land	32.5 (32.5)	5.9	stock	326.4	392.8
Rehoboth	37.9 (19.1)	1.2	stock and limited cropping	na	na
Namaland	34 (13.9)	2.2	extensive small stock	7.9	220.7
Total	1022.3 (959.9)	32.2		na	na

Sources: Population: Namibia: Development Information Report, Table 2.2.
Others: Adams *et al* 1990: The land issue in Namibia: An inquiry.
Data also assembled by the authors.

Notes: 1. Number in brackets are rural population. The population of Namaland is that for Keetmanshoop.
2. LSU = Large stock unit; SSU = small stock unit.

Table 4: Recent Trends in Agriculture

Values at 1980 prices
(Includes fisheries unless stated otherwise)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Growth pa (%)
<u>Contribution to GDP (Rand '000,000)</u>											
Value of agricultural output	166.3	171.8	155.6	121.1	107.3	116.7	116.8	149.1	151	156.9	-1.00
Agriculture's share of GDP (%)	11.52	11.96	11.04	8.88	7.97	8.39	8.40	10.41	10.36	10.75	-1.22
Annual change in value	24.5	3.31	-9.43	-22.17	-11.40	8.76	0.09	27.65	1.27	3.91	
Fixed capital stock	631	630	630	630	628	624	620	616	611	607	
Gross domestic fixed investment	22.2	21.3	21.1	20.2	18.1	16.3	15.6	16.4	15.3	16.6	
Share of total GDFI (%)	5.08	5.58	6.68	8.49	9.18	8.27	8.41	8.41	6.88	7.16	
<u>Physical output (selected products only)</u>											
Cattle sales ('000)	423.18	463.17	473.38	323.32	268.65	268.89	301.05	304.08	348.20	327.00	-4.00
Karakul pelt sales ('000)	3006.82	1956.95	1346.26	850.48	717.72	825.17	556.48	694.97	623.85	654.69	-14.66
Small stock sales ('000)	369.531	335.72	750.74	714.04	467.64	538.77	747.47	685.25	786.61	778.69	7.86
Maize output (tonnes)					7600	18289	6779	14415	21000	26500	23.59
<u>Agricultural exports (Rand '000 at current prices)</u>											
Cattle	72.3	119.0	74.3	48.0	51.6	64.7	83.2	138.9	148.9	154.9	8.48
Small stock	9.1	25.8	22.2	10.7	15.5	30.5	40.7	53.0	57.6	95.4	24.24
Karakul pelts	42.8	20.1	13.3	10.2	16.2	19.7	18.4	34.6	34.6	25.0	3.52
Other	7.4	9.2	10.7	8.8	11.8	12.6	14.6	15.4	17.3	18.4	10.20
Total agricultural exports (x)	131.6	174.1	120.5	77.7	95.1	127.5	156.9	241.9	258.4	293.7	10.10
Share of total exports (%)	11.6	18.4	11.9	8.3	8.6	8.0	7.9	13.5	12.1	11.0	
External terms of trade (y)	100	81.6	80.3	73.8	81.6	93.5	86.2	77.9	85.6	93.4	0.10
Barter value (x*y/100)	131.6	142.1	96.8	57.3	77.6	119.2	135.2	188.4	221.2	274.3	10.21

Source: Statistical/Economic Review, Namibia 1989.

Note: Annual growth rates estimated by log-linear regression.

Table 5: Agricultural production, 1989 (commercial sector only)

Products	Output (ton)	Value (R mil)	Deficit (% import)
Wheat	4122	2.00	88.0
Yellow maize	1366	0.52	91.0
White maize	22548	9.91	64.0
Sunflower	707	0.54	92.0
Cotton	73	2.07	N.A.
Vegetables	18342	8.90	65.0
Fruit	1503	1.45	65.0

Source: Agronomic Board, Namibia and personal estimates

Table 6: Livestock market flows (1979 to 1989)
('000 head)

Year		1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<u>Cattle</u>												
Factories	no	162.8	173.6	104.8	94.7	113.3	-	-	-	-	-	-
	%	38.5	37.5	22.1	29.3	42.2						
Swameat	no	-	-	-	-	-	118.5	120.9	112.4	115.9	120.8	138.2
	%						44.1	40.2	37.1	33.3	36.9	39.9
Oshakati abbatoir	no	na	12.0	3.5	11.3	5153.0	0.3	3.6	5.2	5.6	5.9	5.1
	%		2.6	0.7	3.5	1.9	0.1	1.2	1.7	1.6	1.8	1.5
Butchers	no	31.6	41.1	34.4	32.3	35.9	37.6	39.1	44.2	42.6	40.2	40.0
	%	7.5	8.9	7.3	10.0	13.4	14.0	13.0	14.5	12.2	12.3	11.6
RSA controlled	no	126.1	127.1	90.3	70.1	53.2	50.9	64.1	69.1	50.8	37.2	44.1
	%	29.8	27.5	19.1	21.7	19.8	18.9	21.3	22.7	14.6	11.4	12.7
RSA open	no	102.8	109.3	240.3	114.9	61.1	61.6	73.3	73.1	133.4	122.9	119.0
	%	24.2	23.5	50.8	35.5	22.7	22.9	24.3	24.0	38.3	37.6	34.3
TOTAL		423.2	463.2	473.4	323.3	268.6	268.9	301.0	304.1	348.2	327.0	346.4
<u>Small stock</u>												
Swameat	no	-	-	28.2	59.5	65.6	89.7	57.6	41.1	44.0	49.0	87.2
	%			3.8	8.3	14.0	16.7	7.7	6.0	5.6	6.3	8.3
Butchers	no	121.5	131.7	139.3	140.0	142.3	146.8	143.4	118.2	137.6	132.1	117.0
	%	32.9	39.2	18.6	19.7	30.4	27.3	19.2	17.2	17.5	17.0	11.2
RSA controlled	no	62.6	60.7	185.2	176.5	116.0	89.7	143.7	142.4	244.2	246.9	314.1
	%	16.9	18.1	24.7	24.7	24.8	16.6	19.2	20.8	31.0	31.7	30.0
RSA open	no	185.5	143.4	398.0	338.0	143.7	212.5	402.8	383.5	360.8	350.8	529.0
	%	50.2	42.7	52.9	47.3	30.8	39.4	53.9	56.0	45.9	45.0	50.5
TOTAL		369.5	335.7	750.7	714.0	467.6	538.8	747.5	685.2	786.6	778.7	1047.3
<u>Pigs</u>												
Swameat	no	-	-	0.1	0.6	0.3	0.2	0.2	0.4	0.3	0.2	0.0
	%			0.4	1.7	0.8	0.4	0.6	0.9	0.7	0.4	0.0
Butchers	no	318.6	316.7	33.0	33.2	37.4	35.2	37.0	41.1	45.2	51.6	53.9
	%	100.0	100.0	99.6	98.3	99.2	99.6	99.4	99.1	99.3	99.6	100.0
TOTAL		318.6	316.7	33.1	33.8	37.7	35.3	37.2	41.5	45.6	51.8	53.9

Source: Development and Information Report, Namibia 1990.

Note: 'RSA controlled' refers to exports under a quota agreement with South Africa. In addition, South African buyers operate in Namibian markets. These result 'open' export sales from Namibia.

Table 7: Agricultural Credit: outstanding loans to the commercial sector by source and year (1981-89)¹
(R million)

Year at 31 March	Advanced by the Landbank	Bank loans secured by mortgages over property ²	Loans by government ³	Total credit (nominal terms)	Investment deflator ⁴	Total credit (1980 prices)
1981	65.2	18.4	24.2	107.8	114.0	94.6
1982	65.0	25.7	40.4	131.1	132.0	99.3
1983	68.5	29.5	38.6	136.6	149.0	91.7
1984	75.1	43.4	39.1	157.6	150.0	105.1
1985	85.9	44.3	48.9	179.1	188.0	95.3
1986	98.7	40.6	74.4	213.7	235.0	90.9
1987	102.9	49.7	88.1	240.7	262.0	91.9
1988	108.2	63.2	93.2	264.6	297.0	89.1
1989	121.2	86.1	93.2	300.5	346.0	86.8

Sources: Development Information Report: 1990.
Statistical/Economic Review 1990 (for deflator calculations)

- Notes:
1. Excludes leasing and hire-purchase credit.
 2. Excludes loans to farmers secured by other means.
 3. More than 97 per cent granted by the Administration for Whites.
 4. The deflator has been calculated by dividing domestic fixed investment in agriculture and fisheries at current prices with the corresponding investment at 1980 prices.
 5. The amounts for 1988 and 1989 are preliminary.

Table 8: Subsidies on long term agricultural credit
Loans outstanding: 1980 to 1989

Year to 31 March	Bank loans secured by farm mortgage	Commercial interest rates (prime)	Subsidy	Landbank long-term mortgages	Interest rates	Subsidy	Central government	Interest rates	Subsidy	Ad'istration for Whites	Interest rates	Subsidy	Total credit	Total subsidy
	(a)	(b)		(c)	(d)	(e) [c*(b-d)]	(f)	(g)	(h) [f*(b-g)]	(i)	(j)	(k) [i*(b-j)]		
	R million	per cent	R million	R million	per cent	R million	R million	per cent	R million	R million	per cent	R million	R million	R million
1980	na	15.0	0.0	60.7	5.0	6.1	na			na			na	
1981	18.4	15.0	0.0	65.2	5.0	6.5	3.8	4.0	0.4	20.4	4.0	2.2	107.8	9.2
1982	25.7	15.0	0.0	65	7.0	5.2	6.4	4.0	0.7	34.0	4.0	3.7	131.1	9.6
1983	29.5	15.0	0.0	68.5	7.5	5.1	6.6	4.0	0.7	32.0	4.0	3.5	136.6	9.4
1984	43.4	15.0	0.0	75.1	9.0	4.3	0.5	4.0	0.1	38.6	4.0	4.2	157.6	8.6
1985	44.3	20.0	0.0	85.9	10.0	8.6	0.5	4.0	0.1	48.4	4.0	7.7	179.1	16.4
1986	40.6	14.0	0.0	98.7	10.0	3.9	0.5	4.0	0.1	73.9	4.0	7.4	213.7	11.4
1987	49.7	12.5	0.0	102.9	10.0	2.6	0.4	4.0	0.0	87.7	4.0	7.5	240.7	10.1
1988	63.2	15.0	0.0	108.2	10.0	5.4	0.3	4.0	0.0	92.9	4.0	10.2	264.6	15.7
1989	86.1	20.0	0.0	121.2	12.5	9.1	0.3	4.0	0.0	92.9	4.0	14.9	300.5	24.0
1990	na	21.0	0.0	161.1	14.0	11.3	na	na	na	92.9	4.0	15.8	254.0	27.1

Notes for Table 8

1. Landbank interest rates averaged where change occurred during financial year.
2. Subsidies may be underestimated where increases in interest rates were not applied to outstanding loans immediately.
3. Commercial prime rate data may not be accurate in all cases.
4. Data for lending by the Administration for Whites in 1988-90 are provisional.
5. Although the subsidy to the sector is significant in aggregate, the income transferred by means of subsidies per account should be seen in relation to total farm revenue. The subsidy transfer per account is illustrated below with reference to Landbank accounts only.

Landbank	No of Accounts	Average loan (Rand)	Subsidy per account (Rand)
1980	3432	17694	1769
1990	1909	84376	5906

Sources: Namibia: Development Information Report; Urban-Econ (1990)
Annual Report; Land and Agricultural Bank of South West Africa (1990)
Landbank (personal communication)

Table 9: FNDC's mini-loan scheme: interest rates charged

Amount borrowed	interest charged per person	equivalent interest rate per annum
R 200	R 10 in 1 month	60.0%
R 500	R 32 in 2 months	38.4%
R 1000	R 80 in 4 months	24.1%
R 2000	R290 in 8 months	21.7%
Average commercial farm borrowing		18.0%
Prime commercial rate		21.0%

Source: FNDC.

Note: The interest rates are calculated by the authors.

Table 10: Maize price trends 1985-90

		1985	1986	1987	1988	1989	1990
<u>Namibia prices</u> (Rand)							
Nominal	(a)	310.0	328.0	338.5	370.7	439.5	441.0
Interannual change (%)			5.8	3.2	9.5	18.6	0.3
Consumer price index (base year 1980)	(b)	181.4	205.7	231.6	261.4	300.9	325.5
'Real' (base year 1985)	(a*181.4/b)	310.0	289.3	265.1	257.2	265.0	245.7
Interannual change (%)			-6.7	-8.4	-3.0	3.0	-7.3
Exchange rate	(c)	2.2	2.3	2.0	2.3	2.6	2.6
Dollar price (nominal)	(d) = (a/c)	141.6	144.5	166.7	163.3	167.8	172.3
<u>World prices</u> (US dollars)							
Yellow maize (Gulf fob)	(e)	105.0	73.0	86.0	118.0	111.0	113.8
Sea freight	(f)	43.0	42.0	37.0	26.0	42.0	54.0
Dollar border price	(g) = (e+f)	148.0	115.0	123.0	144.0	153.0	167.8
NPC's	(d/g)	0.956	1.256	1.355	1.134	1.096	1.026

Sources: Agronomic Board, Namibia 1990
FAO Global Food Information System Reports 1990

Notes: NPC = Net Protection Coefficient (see Table 12 and text for discussion)

Ministry of Agriculture economists in Namibia believe that input cost inflation has followed the CPI closely. Changes in 'real' producer price estimates shown in this table may therefore be indicative of changes in agriculture's terms of trade.

Table 11: White maize: Namibian import parity prices with Zimbabwe and the Rest of the World and their Nominal Protection Coefficients

Year	1985	1986	1987	1988	1989	1990
<u>Nominal domestic prices</u> (R/ton)	310	328	338	371	440	441
<u>Rest of the World</u>						
fob + sea freight (US\$/ton) (1)	148	115	123	144	153	167
Exchange rate (US\$/R)	2.19	2.27	2.03	2.27	2.62	2.56
Prices (R/ton) (2)	324	261	250	327	401	404
NPCs (1/2)	0.956	1.256	1.355	1.134	1.096	1.026
<u>Zimbabwe</u>						
Freight prices (Z\$/ton)	180	180	180	195	215	225
Exchange (US\$/Z\$)	1.55	1.6	1.65	1.7	1.85	1.8
Prices in US\$/ton	116	113	109	115	116	125
Prices (R/ton) (3)	254	255	221	260	304	320
Border prices (R/ton) (4)	331	332	288	338	396	416
NPCs (1/3) (a)	1.219	1.284	1.526	1.425	1.445	1.378
NPCs (1/4) (b)	0.938	0.988	1.174	1.096	1.112	1.060

Sources: Grain Marketing Board Annual Reports, Zimbabwe
Agronomic Board reports, Namibia.

Notes: NPCs = nominal protection coefficients.
a: assumes Zimbabwean exports are subsidized by the transport costs from the local market to the Namibian border.
b: assumes includes transport costs.

Table 12: Namibia's Import and Export Parity Prices for Maize (1985-1990)
(US\$ per tonne)

Year	1985	1986	1987	1988	1989	1990	Av Price
Zimbabwe export parity (wrt RoW)	125.17	92.97	98.37	121.97	133.92	148.30	120.12
Zimbabwe import parity (wrt RoW)	170.83	137.03	147.63	166.03	172.08	187.36	163.49
Zimbabwe price	114.00	129.00	131.00	141.00	135.00	124.00	129.00
Average border price	141.81	141.81	141.81	141.81	141.81	141.81	
Namibia export parity (wrt Zimb.)	106.83	121.03	125.63	133.03	124.08	113.53	120.69
Namibia import parity (wrt Zimb.)	166.83	181.03	185.63	193.03	184.08	173.53	180.69
Namibia price	141.55	144.49	166.72	163.29	167.76	172.25	159.35
Average border price	150.69	150.69	150.69	150.69	150.69	150.69	
Namibia export parity (wrt RoW)	118.00	85.00	93.00	114.00	123.00	137.83	111.81
Namibia import parity (wrt RoW)	178.00	145.00	153.00	174.00	183.00	197.83	171.81
Namibia price	141.55	144.49	166.72	163.29	167.76	172.25	159.35
Average border price	141.81	141.81	141.81	141.81	141.81	141.81	

Sources: Agronomic Board Annual Report 1990
SADCC Food Security Unit
FAO Global Information System 1990
TransNamib (personal communication)

Note: All data are in US dollars: exchange rates are shown in Table 10 & 11.

Table 13: Production costs of pearl millet per hectare

Production costs	Commercial farm ¹		Communal farm ²	
	Rand	(person-days)	Rand	(person-days)
Capital costs	252.2		84.7	
Labour costs (R4/person-day)	27.6	(7)	122.4	(30.6)
Management cost	20.2	(0.3)	0.0	
Total per hectare	300.0		207.2	
Break-even output (R600/ton)	500kg/ha		345kg/ha	

Source: Cost and labour data are provided by the First National Corporation experiment in Kavango region; calculations by the authors.

Notes:

1. Commercial farm: mechanized discing, planting weeding, harvesting & threshing.
2. Communal farm: mechanized discing - other tasks by hand.
3. Fertilizer application in both cases, 30kg/ha.
4. Capital costs include the costs of fertilizers, seeds, machinery, services and depreciation.

Budget of Government of Namibia for 1991/92

Total budget: 3120 Million Rands

<u>Ministry</u>	<u>Budget(Million Rands)</u>	<u>Percentage</u>
Min. Lands,Resettlement and Rehabilitation	30.2	0.97
Min. Agriculture, Water and Rural Development	232.4	7.45
Min. Fishery and Marine Resources	18.8	0.60
Min. Education and Culture	580.6	18.61
Min. Youth and Sports	5.6	0.18
Min. Health and Social Services	387.9	12.43
Min. Local Government and Housing	142.3	4.56
Min. Wildlife,Conservation and Tourism	30.8	0.99
Min. Trade and Industry	10.0	0.33
Min. Works, Transport and Communication	646.6	20.72
Min. Mines and Energy	33.5	1.08
Min. Foreign Affairs	72.3	2.31
Min. Defense	181.8	5.83
Min. Finance	321.8	10.31
Office of the President	29.6	0.95
Office of the President (Auditor-General)	3.3	0.11
Office of the Prime Minister	141.0	4.52
Min. Home Affairs	156.8	5.02
Min. Justice	22.6	0.72
Min. Information and Broadcasting	58.6	1.88
Min. Labour and Manpower Development	13.5	0.43

Total:	3120.0	100.00

Note:

- 1) Source: Estimate of Revenue and Expenditure for the Financial
Year ending 31st March, 1991, Republic of Namibia
State Revenue Fund Presented to the Parliament
- 2) Percentage has been worked out by Mr. Matsumura.

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Budget of Government of Namibia for 1990/91

Total budget: 2576.1 Million Rands

<u>Ministry</u>	<u>Budget(Million Rands)</u>	<u>Percentage</u>
Min. Lands,Resettlement and Rehabilitation	15.9	0.62
Min. Agriculture, Water and Rural Development	178.4	6.93
Min. Education, Culture, Sports and Youth	469.0	18.21
Min. Health and Social Services	351.7	13.61
Min. Local Government and Housing	106.1	4.12
Min. Wildlife,Conservation and Tourism	28.8	1.12
Min. Trade and Industry	9.1	0.35
Min. Works, Transport and Communication	549.9	21.35
Min. Mines and Energy	10.1	0.39
Min. Foreign Affairs	45.9	1.78
Min. Defense	122.7	4.76
Min. Finance	379.5	13.65
Office of the President	30.6	1.19
Office of the Prime Minister	52.7	2.05
Min. Home Affairs	140.7	5.46
Min. Justice	18.4	0.71

Total:	2509.5	96.34

Note:

1) The budgets for Min. Labour and Manpower, Min. Information/Broadcasting, Min. State for Security, National Planning Commission and Auditor-General are not known. The budgets for National Planning Commission and Auditor-General might be included in the Office of the President above mentioned. However, the total budget for those Ministries will amount to 66 million rands, equivalent to 3.66 percent.

2) The above information on budget was obtained during the visit to Rundu in June in connection with IFAD mission.

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V. 英 文 要 請 書 (案)

1. 農業開発センター

修復プロジェクト

APPLICATION FORM FOR JAPAN'S GRANT AID

APPLICANT:

The Government of
Republic of Namibia

PROJECT TITLE

Agricultural supporting System
in Communal areas,
Agriculture Development Centres
(Communal Areas)

ECONOMIC SECTOR

Agriculture

PROJECT TYPE

- [1] Facilities Construction
- 2. Equipment Supply

TOTAL PROJECT COST

Rand 20,200,000 (US \$ 7,200,000)

RESPONSIBLE MINISTRY

(Ministry requesting aid)

IMPLEMENTING AGENCY

(Agency incharge of execution of
the project)

Ministry of Agriculture,
Water and Rural Development

Directorate Agriculture

1. PROJECT DESCRIPTION

1. BACKGROUND

- (1) Current Situation of the Sector

Agriculture is marked to play an important role in an Independent Namibia. Now that political independence has been achieved. Economic independence must be of paramount importance. At present, agriculture contributes 10.2% of GDP: this figure must be increased in order to provide

Namibia with economic independence. The commercial agriculture sub-sector employs about 16% of the available work-force, and in certain communal areas up to 90% of the total population, occupying nearly 41% of the total area of Namibia is engaged in agriculture.

(2) Problems to be solved in the Sector

Taking cognizance of the fact that more than 70% of Namibia's needs in grain products, mainly maize, wheat, and rice have to be imported, it can be deducted that locally produced grain could be absorbed by internal markets. Likewise the production of Millet (MUHANGO) could serve to enhance self-sufficiency in food production of the country as a whole.

Because of the annual mean rainfall that averages between 600 mm in the East to 400 mm in the West, the economic base of the inhabitants of the northern regions is primarily influenced by the potential for animal husbandry and crop production.

(3) Necessity and Importance of Improvement in the Sector which lead to the formulation of the Project.

In order to deliver practical assistance to the communal farmer, it is planned to expand the network of rural agricultural support centres to serve all the agricultural regions of the projects that have been established on a small scale over the past few years by the First National Development Corporation and others. The support centres will provide training and extension to the farmers, transfer the results of agricultural research to the farming community, assist with financing and credit, marketing and trade as well as support community and social development activities.

Development of agriculture is hampered by a general insufficiency of the necessary supportive agriculture development infrastructure, especially in the communal areas. The upgrading of the agricultural practices exercised by communal small-scale farmers will have to be accomplished through services rendered by agricultural development centres. These services should, inter alia, include the following:

- efficient extension work
- non-formal training of farmers
- provision of veterinary requirements, supplementary stock feed, seeds, fertilizers, and other inputs.
- implementation of a stock and veld improvement program.

(4) Relation between the Sector and the Project

In order to help farmers, under aforementioned circumstances to strengthen food production and develop the people in the country, agriculture development centre's and some necessary agricultural inputs should be made readily available to the farming community. This kind of support shall enable the farmers to improve the yield of crops and better their meat production so as to contribute greatly to the increase of food production and general upliftment of living standards.

(5) Reasons why Japan's Grant Aid is requested for this particular Project

The Government of Japan has provided very efficient assistance to the country's highest priority project since Independence. The first aid for housing materials is one of monumental aid to the urban poor out of the context of basic human needs. The Project aims to improve living conditions and standards of the rural farmers in communal areas which

remain underdeveloped and keenly require financial and technical assistance. The Project also is clearly mentioned as top priority project, and deemed as the most suitable project for the Japanese Aid policies.

2. OBJECTIVES AND OUTLINE OF THE PROJECT

(1) Objectives of the Project

(i) Short-term Objectives

Short-term objectives are shown below;

- (a) agricultural extension services (an extension officer would have to be stationed at each ADC).
- (b) rural development and community development services (an officer stationed at each ADC).
- (c) non-formal training of farmers. (by short courses, addressing identified training needs in specific farming communities).
- (d) demonstration of farming method and practices on demonstration plots.
- (e) input supply
 - seed
 - fertilizer
 - veterinary requirements (a veterinary officer stationed at each ADC),
 - appropriate technology
- (f) implementation of stock-and veld improvement program,

- (g) implementation of dry-land cropping program
- (i) credit facilities to assist farmers in the purchase of input supplies

(ii) Medium and Long term Objectives

The following are major objectives in the medium and long term:

- (a) to make agriculture knowledge available to the farming community;
- (b) to rehabilitate marginal and fallow land,
- (c) to promote increased food production in order to meet the needs of the growing population,
- (d) to contribute towards the aim of self-sufficiency in food production;
- (e) to enhance and foster full participation of small scale farmers in income generating activities,
- (f) to upgrade socio-economic conditions (the quality of life) of poor rural communities through an integrated rural development program, in which agriculture development has a key role to play.
- (g) to change perceptions of farmers and communities that may inhibit agricultural and rural development.

- (iii) Please fully describe the relations between the project and objectives, and how the project

contribute to the accomplishment of the objectives.

The above objectives will be achieved through a network of agricultural development centres in communal regions. Without ADC network, any agricultural project cannot reach the communal farmers. The project is a very basic one for further development projects in the agricultural sector.

- (2) Outline of the Project (Please give a full description of each facility and equipment and their detailed specifications)

- (i) Number of Agricultural Development Centres

Initially fourteen agricultural development centres (ADCs) in much populated areas, Ovambo/Kaoko (8 ADCs), Kavango (2 ADCs) Caprivi (1 ADC) and Hereroland (3 ADCs) will be established in the short-term. Another 24 agriculture development centres will be followed in the future throughout all the rural areas. Total estimated number will be 38. As a pilot and urgent case, eight (8) ADCs in Ovambo/Kaoko are to be created in this request for Japanese Grant Aid.

- (ii) Description

The detailed description and typical drawing are shown in attached documents.

(3) Location Plan of each Facility and/or Equipment

(i) The region in need for ADC's (see map 1)

(a) [/////////] : All the rural areas concerned (communal)

(b) [/////////] : Priority regions for the implementing of the first phase; Kavango (2 ADC's), ovambo/Kaoko (8 ADC's), Caprivi (1 ADC), and Hereroland (3 ADC's)

(ii) Specific localities within the priority regions (see map 2 and 3).

(a) Ovambo/Kaoko 8 ADC/s (Map (2))

- | | |
|--------------|----------------------|
| 1. Outapi | 5. Onayena |
| 2. Eenhana | 6. Onankali |
| 3. Ondangwa | 7. Otjisoko Tjongava |
| 4. Ohangwena | 8. Kaoko Otavi |

(b) Kavango 2 ADC (map 3)

1. Kaisosi-Rundu
2. Mile Thirty

(c) Caprivi 1 ADC (map 3)

1. Katima Mulilo

(d) Hereroland 3 ADCs

4) Cost estimates:

(i) Total program cost is estimated as follows:

- R 75,530.00 (alternative 1) (US \$ 26,700.00)
- R 42,500,00 (alternative 2) US \$ 15,000.00)

(ii) Total project cost (for 8 ADCs in Ovambo/Kaoko)

(a) OUTAPI:

Buildings	:	R 2,400.00	(850,00 U\$)
Facilities	:	R 687,750	(243,900 U\$)

(b) EENHANA:

Buildings	:	R 1,500,000	(531,900 U\$)
Facilities	:	R 687,750	(243 900 U\$)

— (c) ONDANGWA

Buildings	:	R 2,410,000	(850,000 U\$)
Facilities	:	R 687,750	(243 900 U\$)

— (d) OHANGWENA:

Buildings	:	R 1 740,000	(617 000 U\$)
Facilities	:	R 687,750	(243,900 U\$)

(e) ONAYENA:

Buildings	:	R 1,670,000	(59200 U\$)
Facilities	:	R 687,750	(243 900 U\$)

(f) ONANKALI:

Buildings	:	R 1,880,000	(666 000 U\$)
Facilities	:	R 687,750	(243 900 U\$)

(g) OTJISOKO TJONGAVA:

Buildings	:	R 1,500,000	(531 900 U\$)
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Facilities : R 687,750 (243 900 U\$)

(h) KAOKO OTAVI:

Buildings : R 1,600,000 (567,400 U\$)

Facilities : R 687 750 (243 900 U\$)

Grant Total: : R20,202,00 (± 7,200 000 U\$)

3. Benefit, Effect and Publicity of the Project

(1) Population that will benefit directly from the project

In Namibia, two-thirds of the population lives in the communal areas, where farming is restricted and underdeveloped; one in three children in northern Ovambo are reportedly undernourished. Through the Project, all of the farmers will benefit directly by ADC's functions. In particular, women in the village will be organized for participating in their own rural development projects such as garden farming.

In the first stage, the population of the following communal areas will benefit;

- (a) The Ovambo/Kaoko region has more than 500,000 inhabitants. The region has the highest population density. Approximately 9 inhabitants per square kilometre.
- (b) The Kavango region has a population of about 110,000 to 115,000.
- (c) The Hereroland region has a population of about 100,000.

(d) The Eastern Caprivi has a population of about 46,000.

(2) Population that benefits indirectly from the project.

The Project will benefit indirectly nation-wide population through improving living conditions of rural areas and increasing agricultural production.

(3) Area that will benefit from the project

The area that will benefit from the project is particularly the communal areas where two-thirds of the population lives. In the first stage, the following areas are mentioned as priority;

- (a) The Ovambo/Kaoko region; an area of 56,072 square kilometres
- (b) The Kavango region; an area of nearly 51,000 km²
- (c) The Hereroland region; an area of 110,000 km²
- (d) The Eastern Caprivi region; an area of 11,600 km²

(4) Economic and Social Effects of the Project:

(i) Current situation

Approximately two thirds of the population live in the northern regions, a territory that bore the brunt of the armed conflict prior to Independence. The target areas and population have suffered from poor standards of living conditions without having any positive government support of traditional agricultural farming. Most of infrastructure is less developed and requires to improve substantially in the underdeveloped communal areas.

The farmer who depends on traditionally self-sufficient agriculture earns only approximately 63 US \$ GNP per capita.

ii) Expected effect of the Project

The project directly benefits at least two thirds of population of Namibia who live in poor living conditions in communal areas through improving rural living conditions and traditional agriculture. Household food security, food self-sufficiency on a national scale, community participation and policy application will be enhanced by the concept of ADC's.

(5) Publicity:

Two-thirds of the population of Namibia are to realize the benefit of the project, in particular, in the densely populated areas of less developed regions.

The Project will sustain the important role of improving rural life and agriculture from generation to generation.. So the project has a positive effect and good publicity when it is completed.

4 Request to other Donors

- (1) Is there any request made to other donors for assistance closely related to this project?

"NO"

(2) If yes, please fill in below:

(i) Name of the donors;

"None"

(ii) Title and outline of the assistance;

"None"

(iii) Possibilities that the donor will extend the assistance requested;

After establishing ADCs by Japanese Grant, training and education will be requested in various programs. The Ministry would like to sincerely consult the relevant ministries and agencies of Japan and also to discuss extension of assistance with other donors and NGOs. The Government has already assistance from multi lateral agencies and private welfare organizations to improve rural living conditions in the health sector. If Japanese Government provide the grant, there are high possibilities to obtain any kind of assistance requested for the Project.

(iv) In the case where other donors do not extend assistance, please describe in detail the appropriateness and effectiveness of this project;

Namibia has a strong private sector in agriculture and sophisticated agricultural system in commercial farming. The Ministry will be able to recruit experienced engineers and technicians in the case where other donors do not extend assistance. However, the Ministry will request to the Government of Japan any financial and technical assistance where Japan has advantageous capacity.

5. PRIORITY

Public sector investment priorities are put on agricultural and rural development, on which the livelihood of the majority of the Namibian people depends, and education and training to give an opportunity to all Namibians to participate fully in the development process: The other is affordable housing for the disadvantaged, for which the Government of Japan provided a very effective grant just after Independence. This project aims to achieve the above two top priorities and is aimed at the priority areas where the majority lives below the basic human needs. The project sector was clearly declared as top priority in the Agricultural sector as part of an integrated rural agricultural support system on the occasion of a donors conference held in New York in 1990.

6. MINISTRY AND AGENCY IN CHARGE OF THE PROJECT

(1) Outline of Implementing Agency :

(i) Organization Chart of the Agency (in general)

The institutional organization and structure to effect optimal efficiency within the Department of Agriculture and Rural Development is indicated on Organogramme 1,2 and 3:

- (a) Organogramme 1: Broad Organization of how Agricultural Development will be facilitated within the Ministry.

- (b) Organogramme 2: Management of Agricultural Development on regional and sub-regional level.
- (c) Organogramme 3: Research, Training and Extension support within the Department to Agricultural Development Centres.

(Please attach detailed organization chart pointing out the responsible department, division and sections in charge of this project)

(ii) Authorities and Duties of the Agency

The new Namibian Government attaches a high priority to the intensified development of the less developed communal areas in the country. The Department of Agriculture and Rural Development is an implementing agency within the Ministry of Agriculture, Water and Rural Development, and responsible for governmental functions concerned with an increase in agricultural production and the upgrading of socioeconomic conditions in rural areas. To address the needs of farmers in these communal areas, the concept of Agricultural Development Centres will be implemented.

(iii) Personnel:

Please see attached document.

(iv) Budget: (Revenue and Expenditure)
Please see attached document

(2) Outline of Supervising Ministry (Please describe in detail)

The Ministry of Agriculture, Water and Rural Development is a supervising Ministry.

(i) Organization Chart of the Ministry (in general):

Please see attached document.

(ii) Authorities and Duties of the Ministry

The Ministry of Agriculture, Water and Rural Development has responsibilities to enhance the quality of life, wealth and stability of all inhabitants of Namibia by the optimal utilization and conservation of natural resources. Essential services, including extension, training, regulatory and supportive services are to be rendered as a means of achieving the mission. Agricultural development is the economic basis for integrated development and requires a multi-disciplinary approach.

For achieving the above, the ministry is divided into two department; Department of Agriculture and Rural Development and Department of Water Affairs.

(iii) Personnel

Please see attached document

(iv) Budget (Revenue and Expenditure)

(If mentioned in local currency, please state the latest foreign exchange rate of the currency to the U.S. dollar or the Japanese yen).

1 U\$ = 2.82 Rand

7. PREPARATION

(1) Project Site (Please attach photographs and maps of the site with the various scales including that of 10,000:1)

(i) (a) Address of the Site
see attached document

(b) Total Area of the Site
see attached document

(ii) Land preparation

(a) To which extent has the land been expropriated for the project?

In communal areas, all lands belong to the state, so there is no problem occurring to expropriation of land for the project.

(b) When will the expropriation of the land be completed?
see the above.

(2) Electricity, Water Supply, Telephone, Drainage and Other Facilities.

Electricity, water supply and telephone facilities are substantially required because the sites of the Project are

substantially required because the sites of the Project are mainly located at remote villages having no above facilities, except ones located near regional towns.

8. CAPABILITIES OF THE IMPLEMENTING AGENCY

(1) Current Situation

The Department of Agriculture and Rural Development has enough capabilities to plan, supervise, and monitor the project in the central government level. For regional and sub-regional level, the Ministry is proceeding to enhance its capabilities. Most of architectural plan and detailed design are carried out by the local private architecture under the contract of the Department.

(2) Problems of the Agency

For the region and sub-regional level, the staff shall be trained by inter-ministry programme.

(3) Improvement Plan:

Not yet decided.

9. OPERATION AND MANAGEMENT OF THE PROJECT

(1) Personnel (Please fill in the number of personnel)

	Current	When the Project is completed
Supervising Ministry	2	2
Implementation Agency	3	3
Directly Responsible Personnel	8	± 40 officials

(2) Budget:	91/92	92/93	93/94
1. Ministry of Agriculture, Water & Rural Development	6,602	7,398	8,000
2. Direct Budget of this Project (8 ADC's)		13,466	6,733

(In the case where additional budgetary allocation is needed for the implementation of the project, please answer the following question).

- (i) Has the additional budget been already allocated?
 - 1. Yes. : 6,602 during 1991/92 from Namibia's own Budget
- (ii) If no, how and when will the additional budget be allocated for 1992/93
 - Not yet decided
- (3) Technical Abilities of Local Staff
 - (i) Technical abilities of local staff for operating the project are sufficient, and if training and lecture to rural peoples in specific programs requires special technology, the experts can be recruited from outside of the Ministry.
 - (ii) Detailed educational background of those who are in charge of the operation and management of the facilities and equipment.

Candidate for Region

- 1. Chief Extension Specialist
- 2. Control Technician

Final Education

- University/College equiv.
- ditto-

3. Program Managers

-ditto-

Sub-Region

1. Principle Extension Officers

-ditto-

2. Chief Technican

-ditto-

ADC

1. Development Officer

-ditto-

2. Field Officer

High school/ministerial
training

10. LIST OF RELATED PROJECTS

(Please fill in below if there is a project executed by another donor country of international organization in related areas).

(1) Name of Donor

Swedish International Development Authority (SIDA)
ILO

(2) Project Title

The maintenance of proclaimed gravel and earth roads in Owamboland.

(3) Project Outline

To improve the tertiary and secondary road network in Ovambo in such a way that the roads will stimulate and promote regional development and contribute to the social welfare of the local population.

(4) Type of Assistance (grant, loan, technical assistance)

Technical assistance for Owambo road master plan
Grant for implementation by labour intensive construction.

(5) Project Period

(5) Project Period

Just started in 1991.

(6) Relations with this Project

The project will also aim to improve infrastructure in rural areas.

11. TECHNICAL ASSISTANCE

(1) Has technical assistance been extended to this project?

No.

(2) Is technical assistance needed for the implementation of this project?

No.

(3) If no, please describe the reasons why technical assistance is not needed.

Have at present enough skilled people within Namibia to implement the project effectively.

(4) If yes, please fill in below

(i) Short-term experts

(ii) Long-term experts

(iii) Acceptance of trainees

(iv) Project-type Technical Cooperation

(If needed, please describe the proposed project outline).

(v) Japan Overseas Cooperation Volunteers

(If needed, Please describe the proposed sector and related information.

(vi) Development Survey Programme (Feasibility Studies; and master Plan)

(If needed, please describe the outline of the proposed development survey program.

development survey program.

For above (i) to (vi), we would like to have any suggestions and recommendations from the relevant agencies of Japan.

- (5) Has an official request for technical assistance been already made?

No.

- (iii) If yes, please mention the date of the request.

- (iv) If no, please describe the reason why the official request has not yet been made.

The Project of creating ADC is very urgent.

- (v) When will the request be made to the Embassy of Japan?
Before or on the 31st of January 1992

II. GENERAL DEVELOPMENT PLAN

1. Title of the Plan:

General development plan is under preparation with the assistance of the United Nations.

2. Economic and Social Situation

- (1) GNP

GNP 4,326 millions of Rands (1988) R.2.48=81)

- (2) National Income, Sector by sector

GDP 1989

	(million R)	(%)
Agriculture/Fishing	489.5	11.3

Mining	1,258.7	29.1
Manufacturing	210.3	4.6
Construction	113.3	2.6
Electricity/Water	77.2	1.8
Transport/Communication	265.0	6.1
Trade	532.8	12.3
Finance/Real Estate	311.2	7.2
Government	855.7	19.8
Services	85.1	2.0
Other producers	129.4	3.0

- (3) Unemployment Rate approximately 30%
- (4) Inflation Rate 17.7% (1989)
 13.2% (1984-1989)
- (5) Growth Rate; GDP 0.2% (1989); fixed price in
 1980
- (6) Balance of International Payments
 99 million Rand
- (7) Labour Population

Labour population is estimated at approximately 500,000.

Employment by formal sector is shown below according to manpower survey in 1988.

-	Primary	46,133	25%
-	Secondary	23,372	13%
-	Tertiary	115,288	62%

However, population of 250,000 are reportedly engaged in self-sufficient agriculture in the northern communal areas.

(8) Debt Service Ratio; 8.5 (1989)

(9) Outstanding Debt; 426 million Rand

(10) Major Items of Exports and Imports and their value

(i)	Major imported item in 1988 (R mn)	
-	Food & beverages	425
-	Industrial & non industrial chemicals	391
-	Vehicles & transport equipment	372
-	Manufactured products	265
-	Clothing & footwear	255
-	Machinery & equipment	109
-	Basic metals & minerals	93
-	Others	445

(ii)	Major exported items in 1988 (R mn)	
-	Minerals	1543
	Diamonds	654
	Other	889
-	Agricultural products	257
	Cattle	148
	Karakul pelts	35
	Other	74
-	Fish products (un-processed)	93
-	Manufactures	120
-	Other	130

II Major Trading Partner

(i)	Main destinations for exports in 1986 were	
-	Switzerland	31%
-	Republic of South Africa	25%
-	West Germany	15%

-	USA	5%
-	UK	5%
-	Others	19%

(ii) Main origins of imports in 1986 were

-	Republic of South Africa	75%
-	West Germany	10%
-	USA	5%
-	Switzerland	5%
-	Others	5%

(12) Population and its Growth Rate
1.29 million in 1989 3% p.a.

(13) Average Life Expectancy (Male and Female)_

(14) Death Rate and Birth Rate

(15) Medical Structure

Hospital	61
Clinic	156
Available bed	8,800

(16) Ten Disease most afflicting the nation
- malaria, tuberculosis

(17) Illiteracy Rate (or Literacy Rate)
65%

(18) Other data

3. OUTLINE OF THE PLAN

(1) Most Important Sectors in the Plan
- Agriculture

Health and housing

(2) Basic Objectives of the Plan

(Please describe in detail the objectives by using concrete figures)

The Plan aims at developing the country by the full participation of all Namibians. The basic policy is to reduce unemployment in densely populated rural areas by promoting productive activities, namely agriculture. the harmonious development of the country shall be achieved by increasing the revenue of the rural population and by raising their living standards.

The projected growth rates of GDP for next 5 years are as follows:

	1990	1992	1993	1994	1995
GDP w/o fisheries	4.6	2.8	2.7	2.0	2.1

The growth rate of agriculture sector during the same period is estimated at 3%.

(3) How will the above-mentioned objectives be achieved?

The strategy adopted for achieving the objectives of the Plan is to develop the rural areas in northern part of the country. Those areas are most densely populated and have the highest rate of unemployment and underemployment. The development of the areas shall be realized through the activation of agriculture. The northern areas have high potentiality of growing crops, such as millet, maize, sorghum, beans etc.

4. When will the plan be executed and completed?

1993/94

5. Relation between this project and the general development plan.

The Project aims to achieve directly the objectives of the general development plan, and is listed as the top priority in the of agricultural sector in the public investment program.

6. Is here any assistance that other donors have extended/will extend to the project?

No.

(iii) If yes, please give basic information on the assistance.

Not applicable

The Government of Namibia requested financial and technical assistance on the grant basis to donors conference initiated by United Nations in June 1990. Total amount of request is a sum of 316 million US \$ and pledge amount is a sum of 219 million that covers 69% of the government request. However, according to bureaucratic producers, 154 million US\$ of loan agreement in January 1991 for various prioritized sectors.

The major donor countries are EC, German, Japan, Sweden, Finland, Norway, Denmark, USA and South Africa.

NORMAN GESS AND PARTNERS

QUANTITY SURVEYORS

BOUREKENAARS

101. CARL LUST HAUS
P. O. BOX / POSBUS 134
TEL (061) 37540
FAX (061) 225305
WINDHOEK 9000

7th March, 1991.

AGRICULTURAL DEVELOPMENT CENTRE - OWAMBO (Pilot scheme at Ombalantu)

Alternative 2

ESTIMATED CAPITAL COSTS.

Administration block	384 733,00
Workshops block	150 366,00
Stores block	192 701,00
Gravel in courtyard, fence, entrance gate, sign board	41 016,00
Electrical installation	55 000,00
Generator and standby generator	200 000,00
Water tank and stand	160 000,00
Borehole, pumps and piping to tank	12 500,00
Kraal	18 660,00
Food store	7 200,00
Fence around agricultural area	12 000,00
Houses, complete with garages, fences and septic tanks 4 x 137 900,00	551 600,00
	<hr/>
	1 785 776,00
Allowance for contingencies	54 224,00
Allowance for escalation	70 000,00
Professional fees	191 000,00

R 2 101 000,00
=====

No allowance has been made for loose equipment such as furniture, tools and vehicles.

NORMAN GESS AND PARTNERS

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BOUREKENAARS

101, CARL LIST HAUS
P. O. BOX / POSBUS 134
TEL. (061) 37540
FAX (061) 225305
WINDHOEK 9000

7th March, 1991.

AGRICULTURAL DEVELOPMENT CENTRE - ONAMBO (Pilot scheme at Ombalantu)

Alternative 1

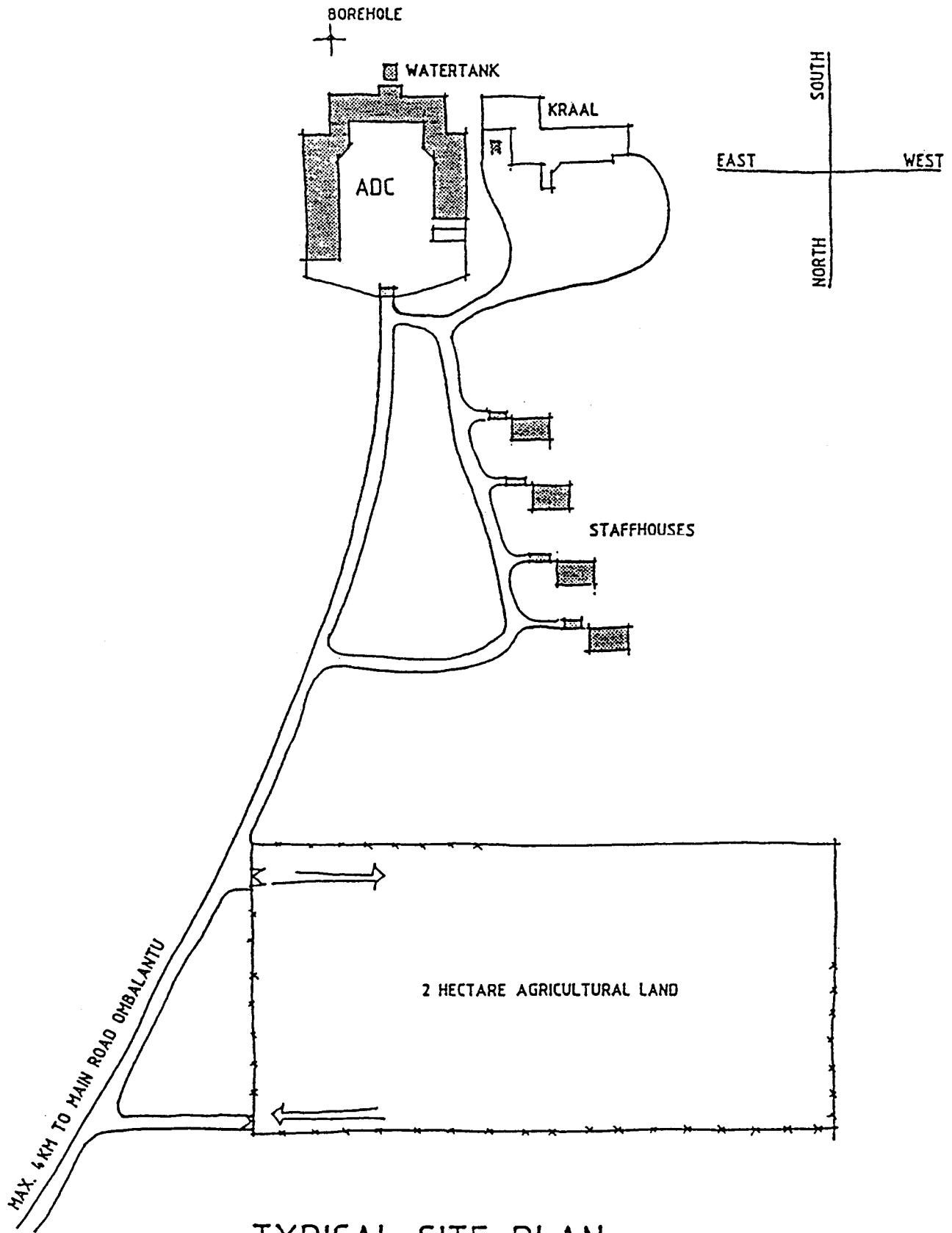
ESTIMATED CAPITAL COSTS.

Administration block		441 590,00
Workshops block		329 346,00
Stores block		449 630,00
Gravel in courtyard, fence, entrance gate, sign board		56 160,00
Electrical installation		110 000,00
Generator and standby generator		300 000,00
Water tank and stand		160 000,00
Borehole, pumps and piping to tank		12 500,00
Kraal		18 660,00
Food store		7 200,00
Fence around agricultural area		12 000,00
Houses, complete with garages, fences and		
septic tanks	4 x 137 900,00	551 600,00
Road	4 km x R180 000/km	720 000,00
		<hr/>
Allowance for contingencies		3 168 686,00
Allowance for escalation		81 314,00
Professional fees		150 000,00
		340 000,00
		<hr/>

R 3 740 000,00

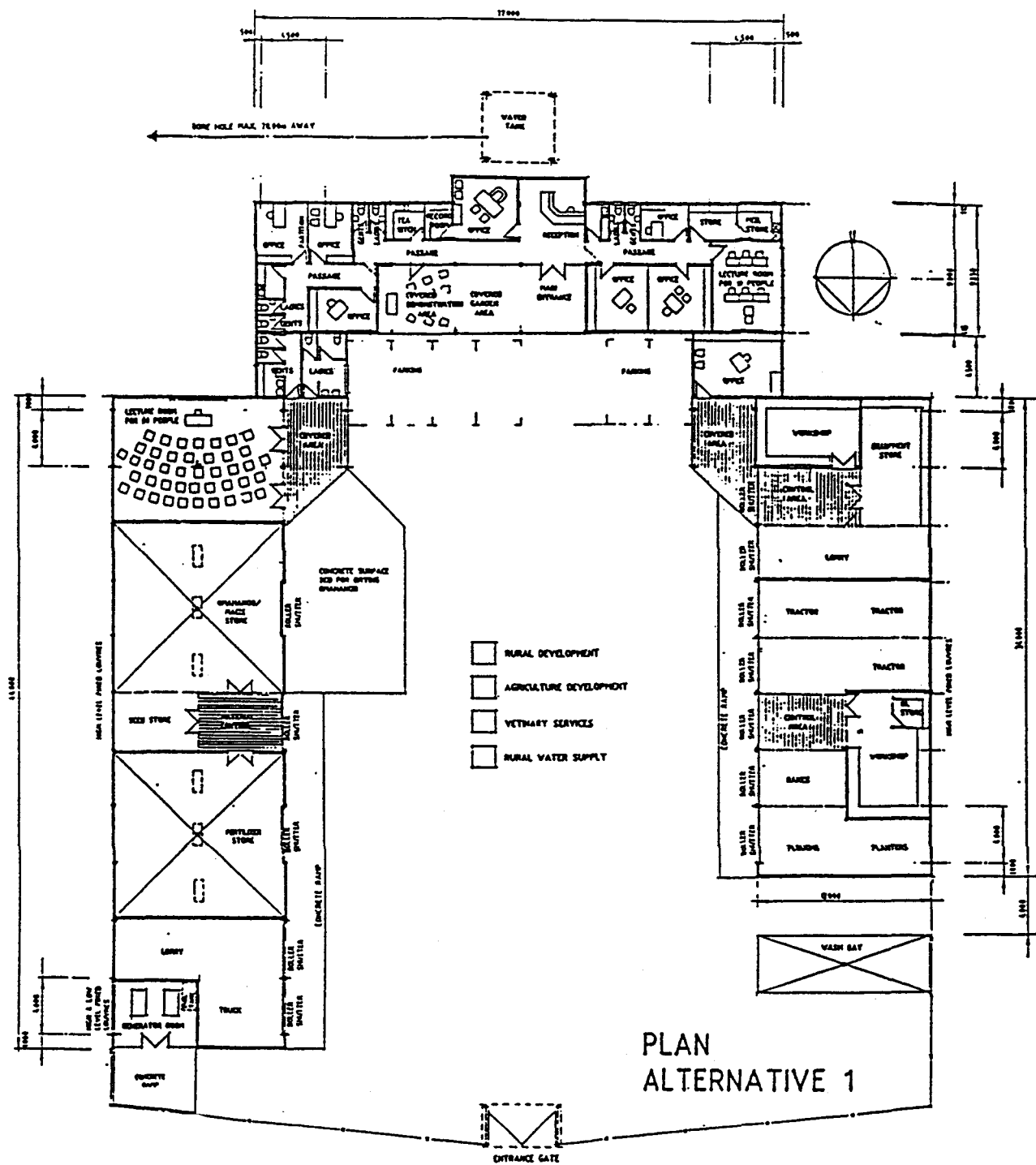
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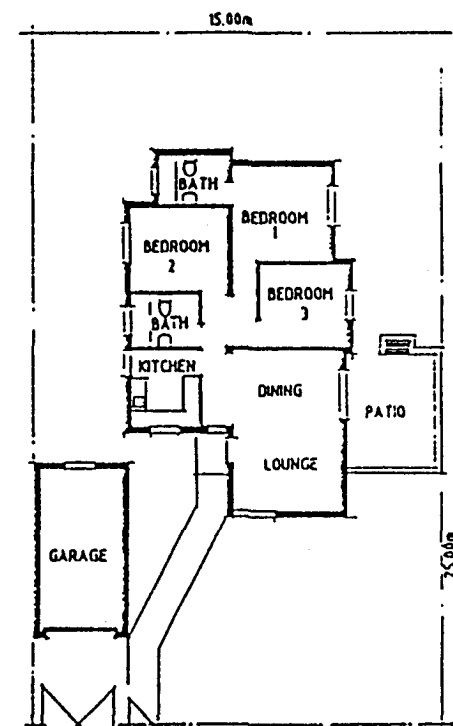
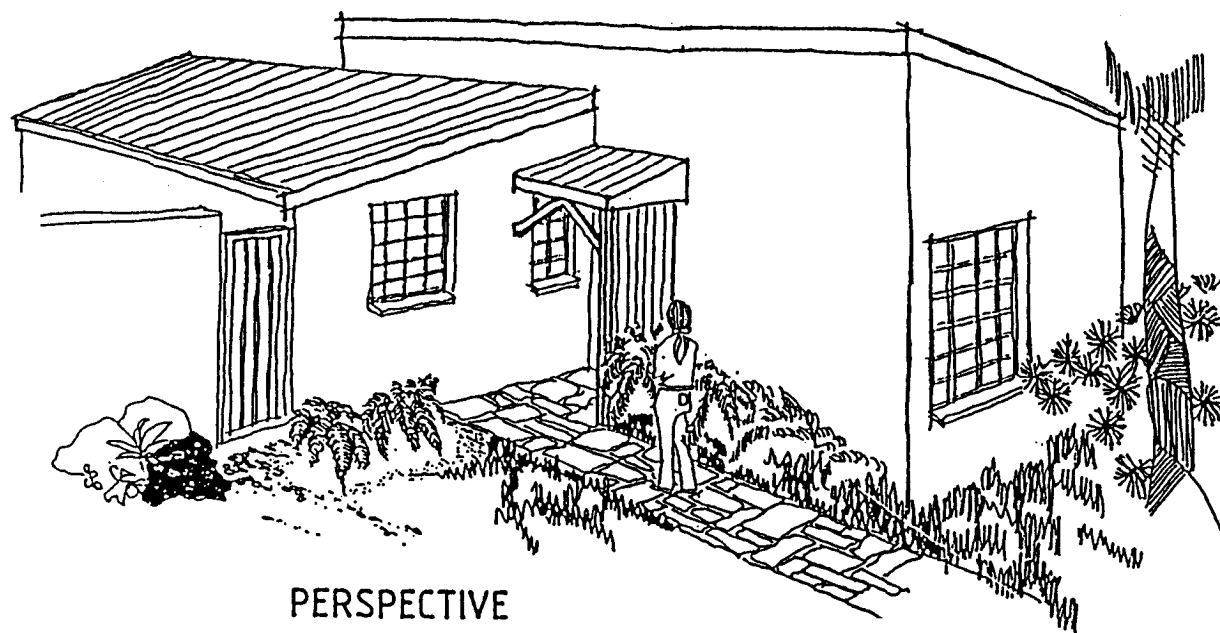
No allowance has been made for loose equipment such as furniture, tools and vehicles.



TYPICAL SITE PLAN
ALTERNATIVE 1

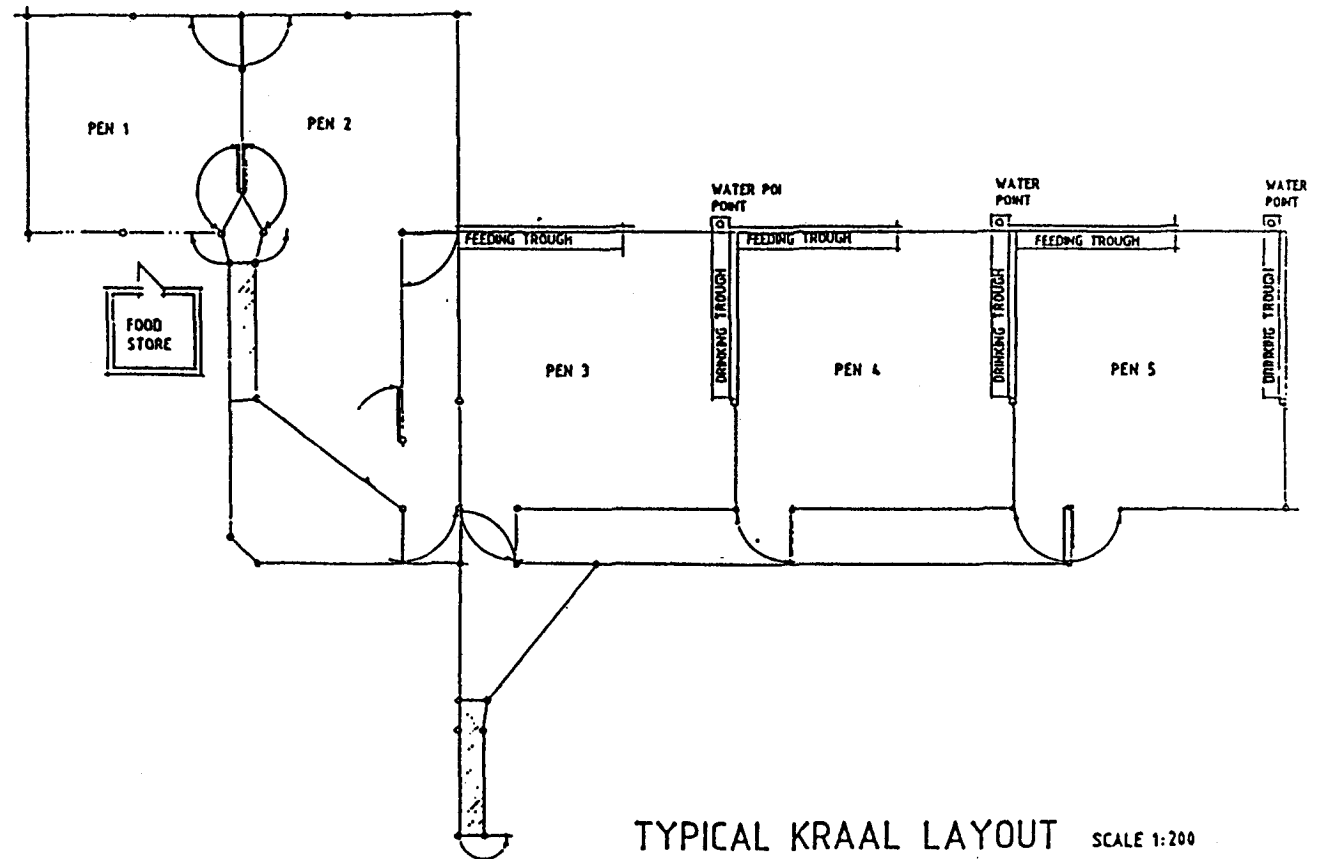
SCALE 1:2000

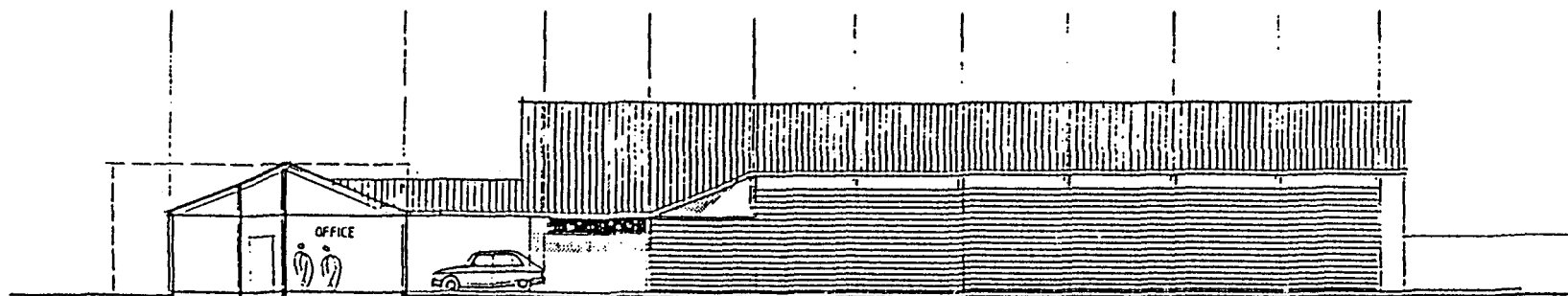




TYPICAL STAFF HOUSE SCALE 1:200

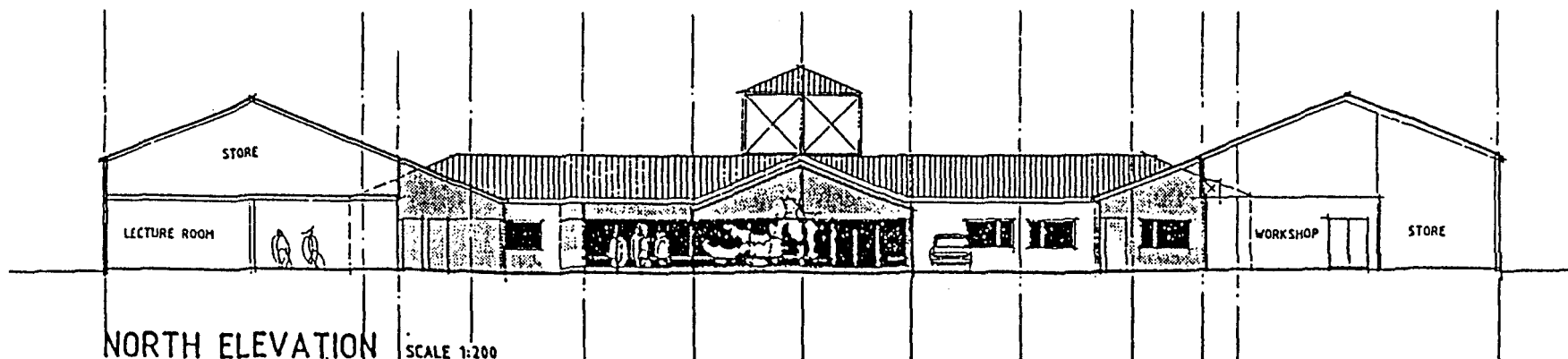
4 NO. OFF REQUIRED.
 AREA OF HOUSE = 92.73m²
 AREA OF GARAGE = 22.35m²





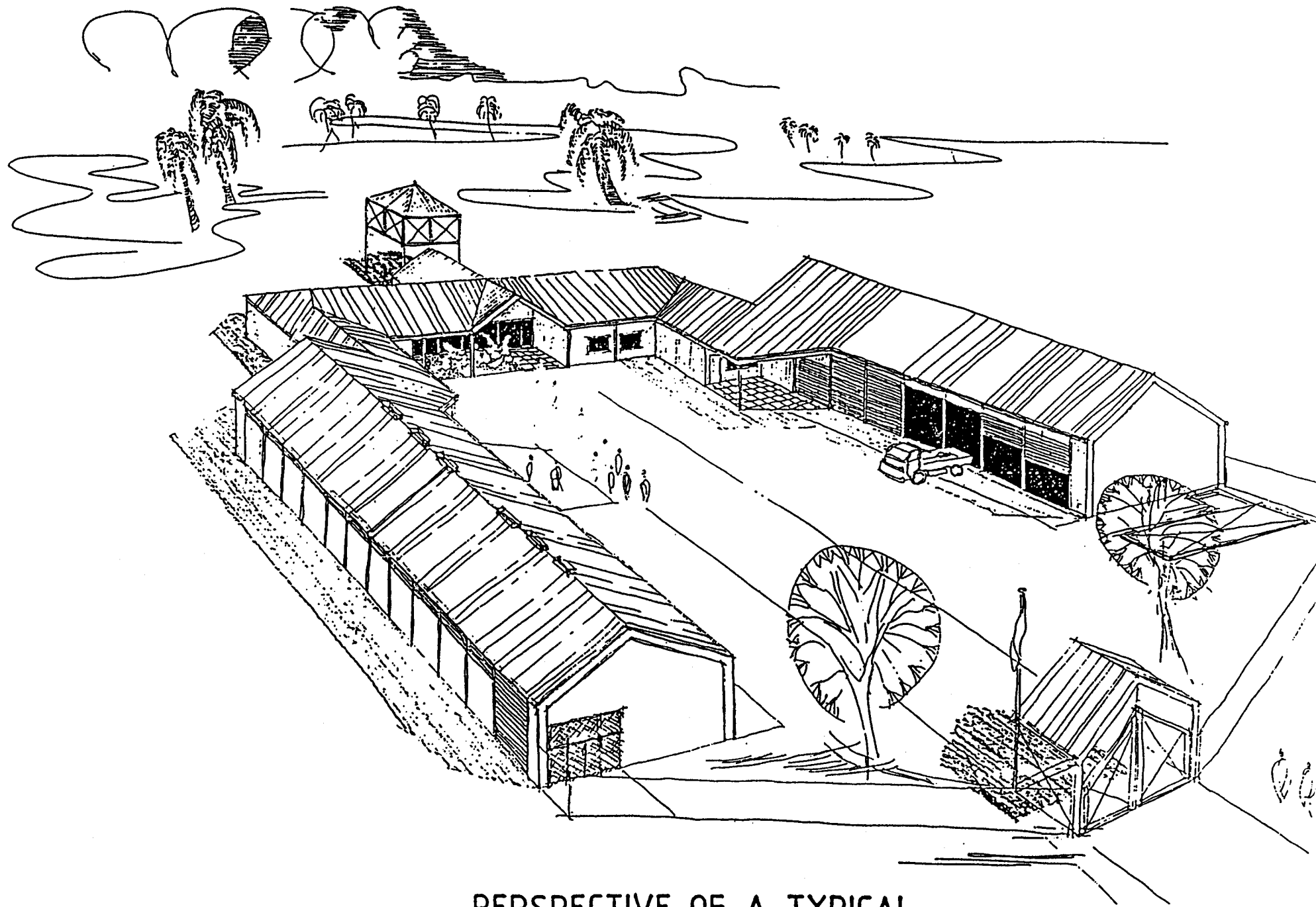
WEST ELEVATION
ALTERNATIVE 1

SCALE 1:200



NORTH ELEVATION
ALTERNATIVE 1

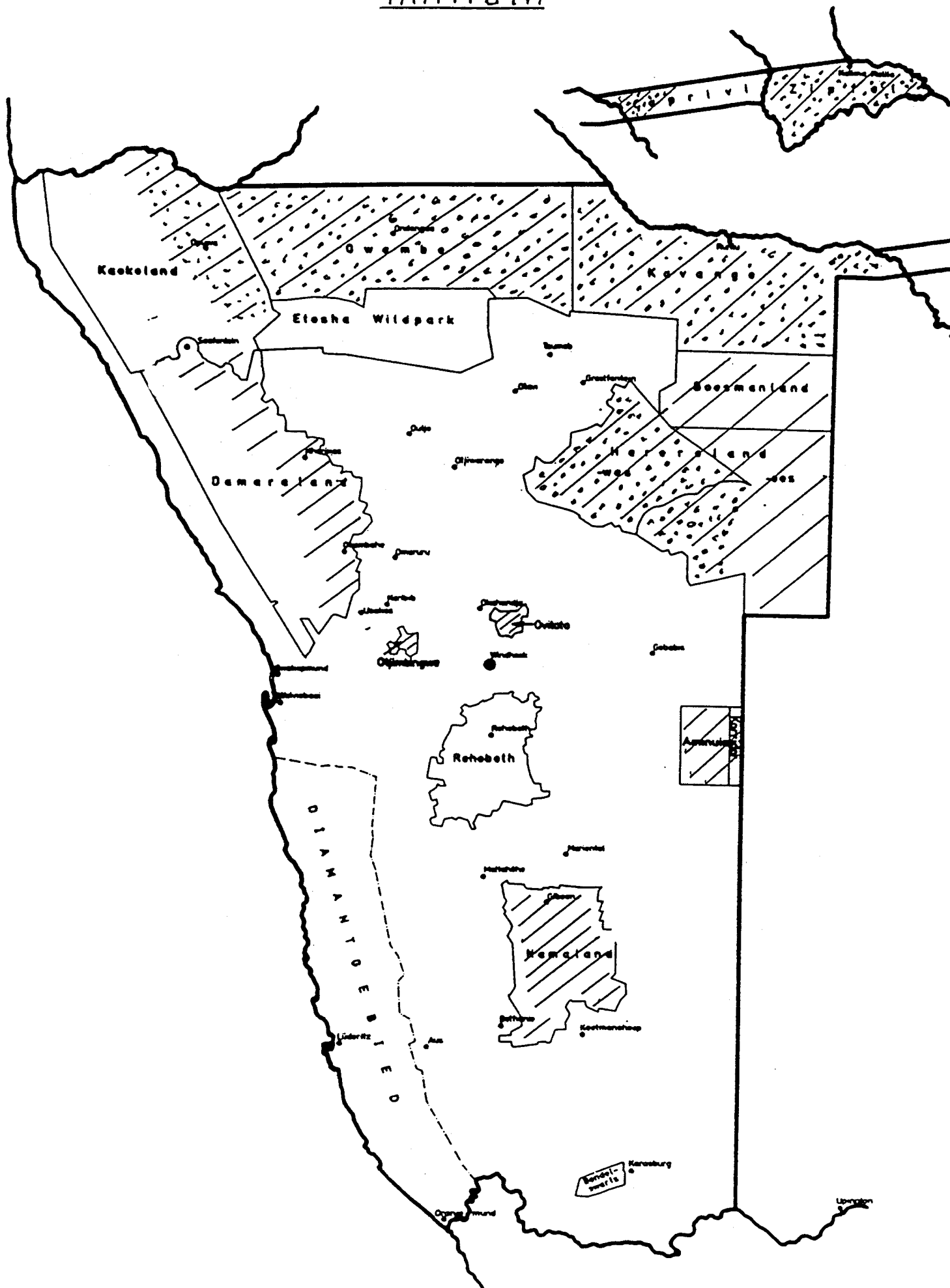
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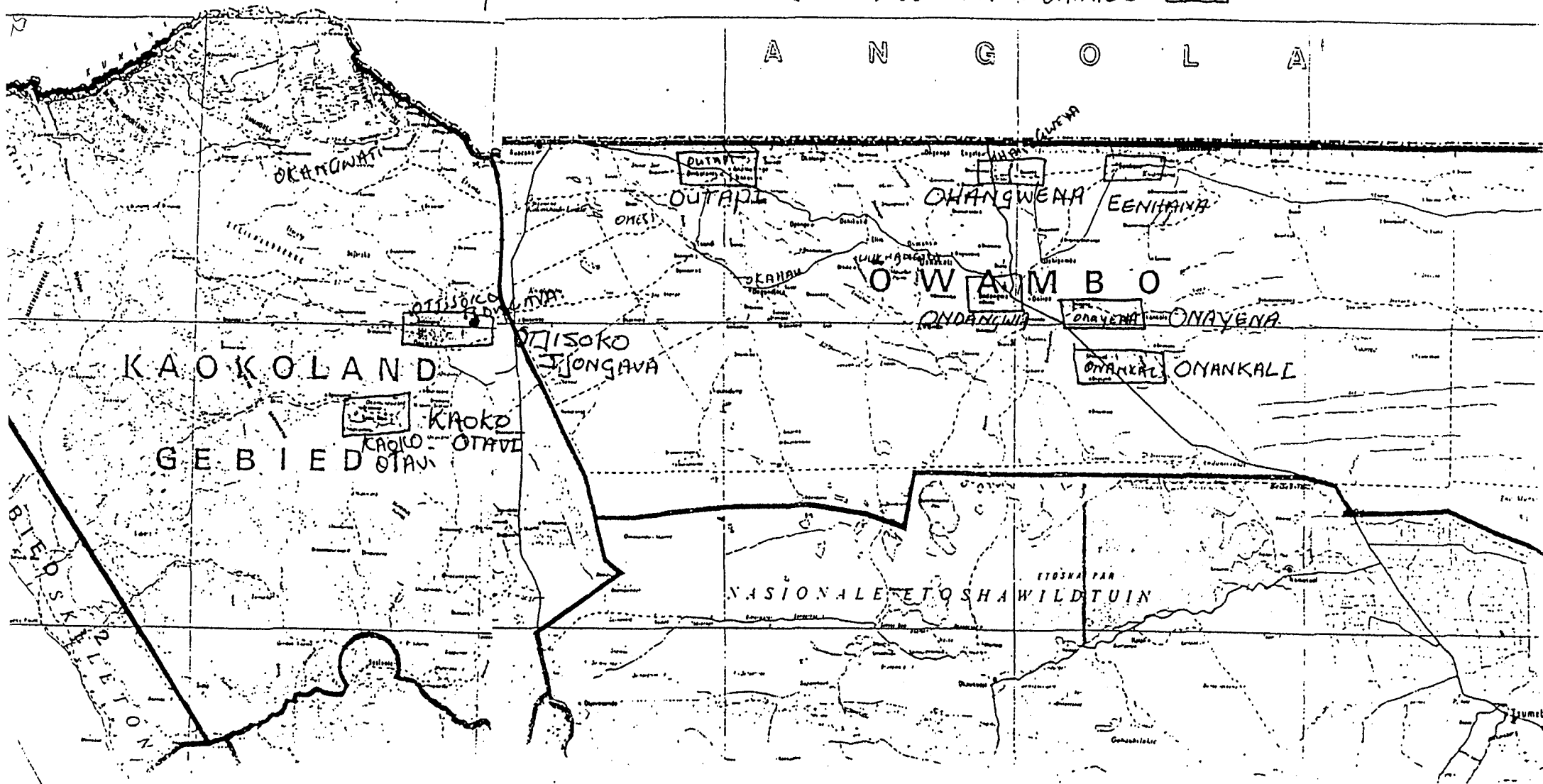


PERSPECTIVE OF A TYPICAL
AGRICULTURAL DEVELOPMENT CENTRE

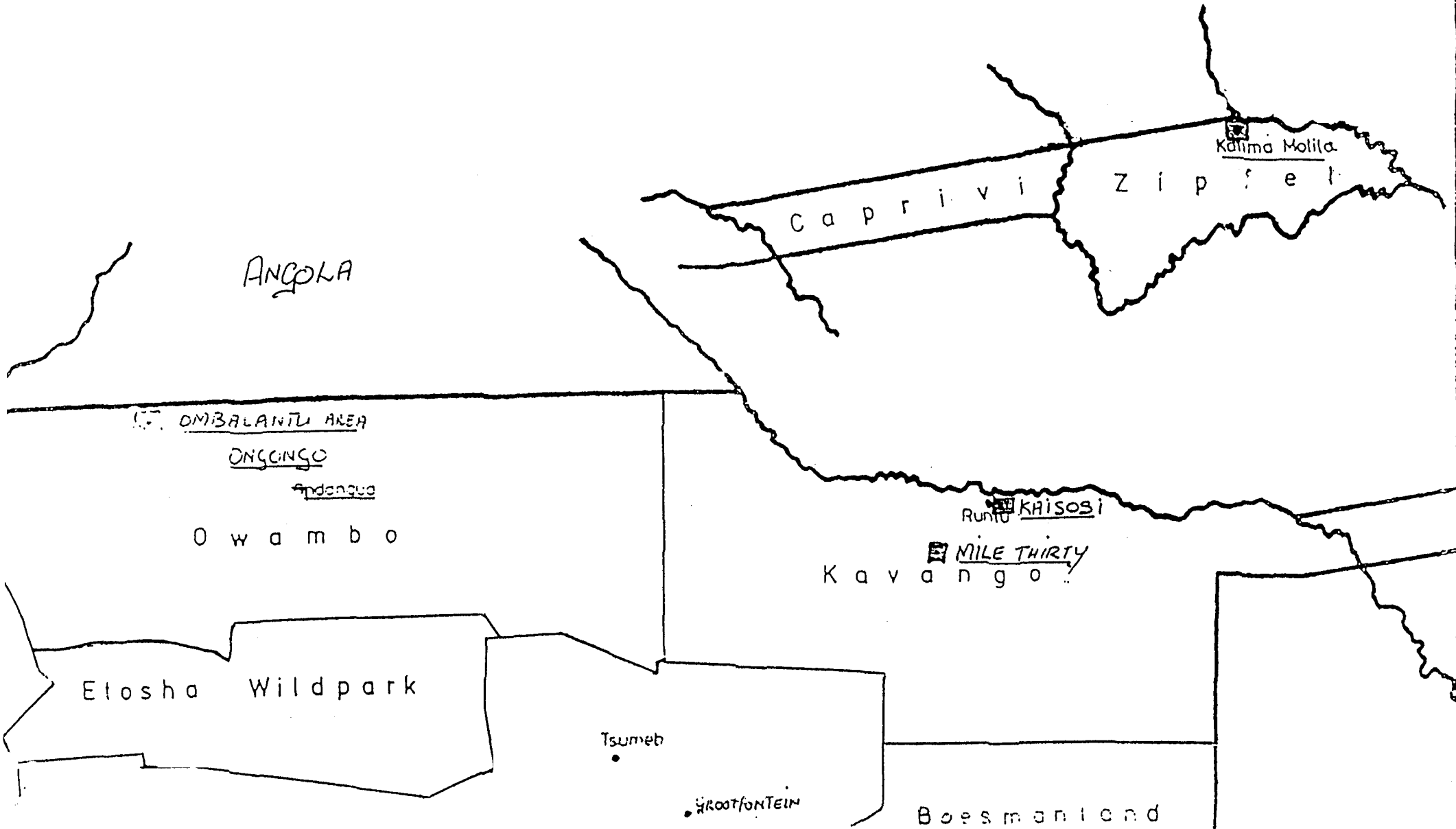
ALTERNATIVE 1

NAMIBIA

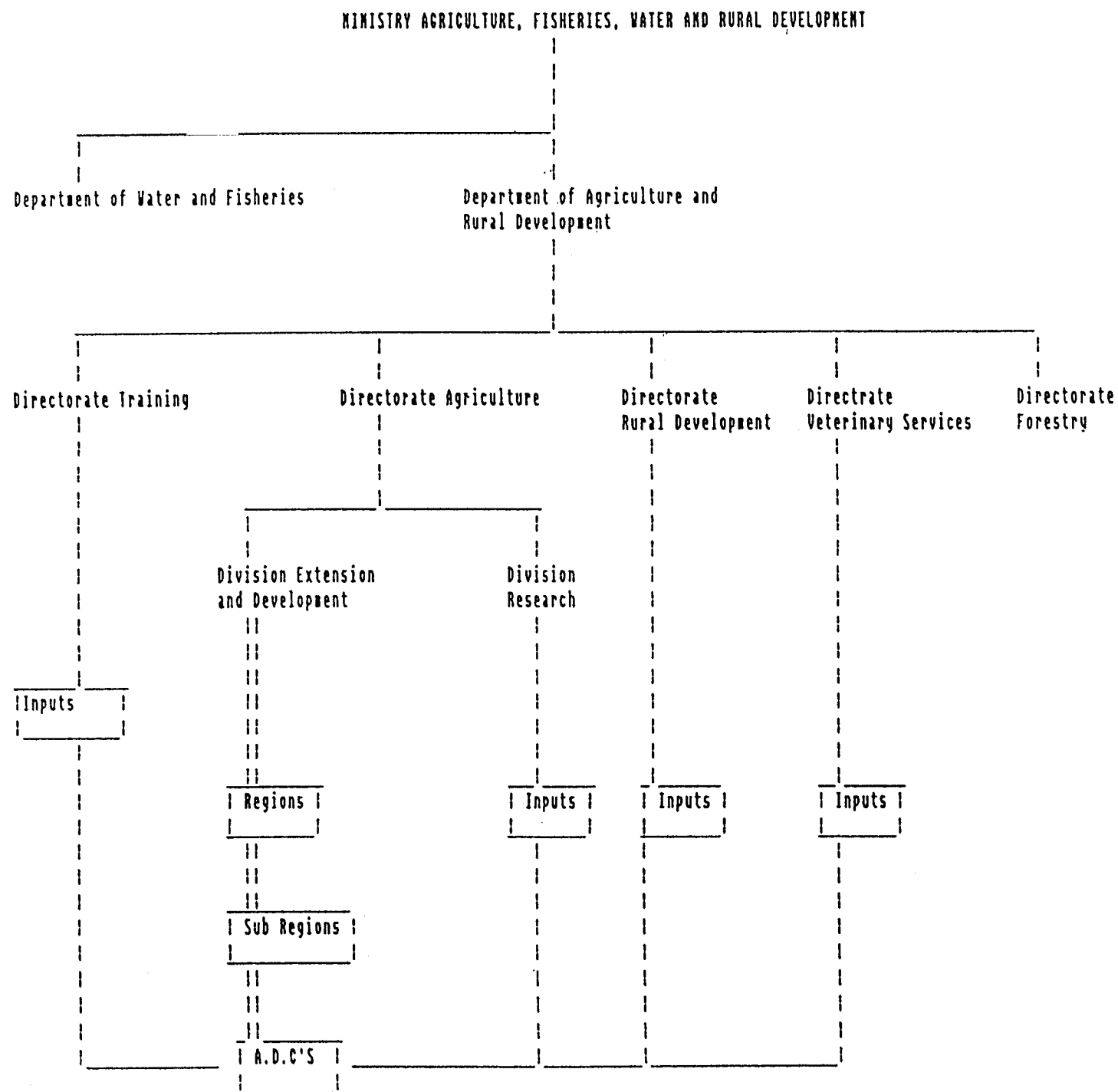


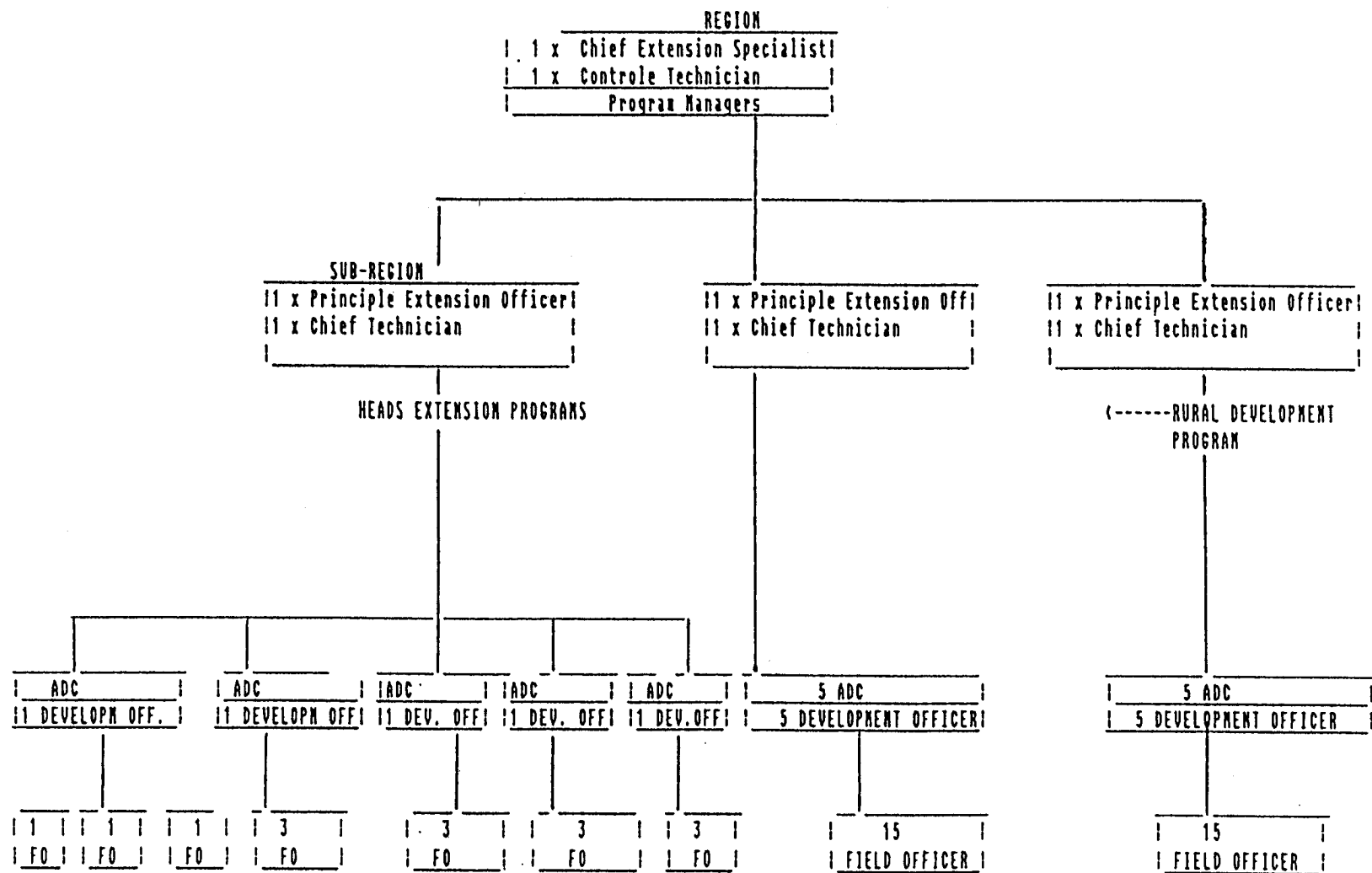


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ORGANOGRAM 1: BOARD ORGANIZATION CHART OF HOW ADC'S WILL BE FACILITATED WITHIN THE MINISTRY



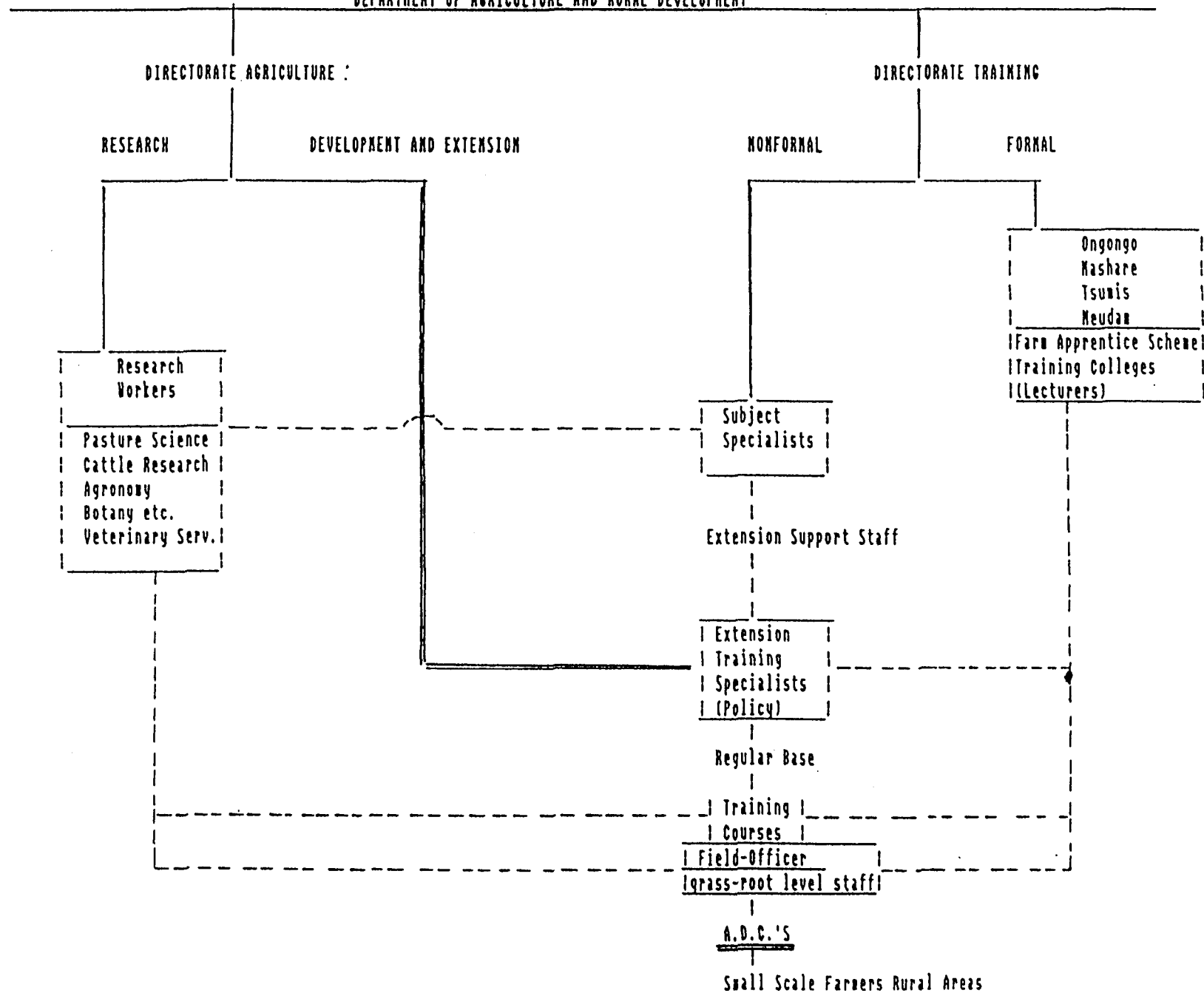


GROUP APPROACH TO FARMERS

ORGANOGRAM 3: RESEARCH, TRAINING AND EXTENSION SUPPORT WITHIN THE DEPARTMENT TO ADC'S

MINISTRY OF AGRICULTURE, FISHERIES, WATER AND RURAL DEVELOPMENT

DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT



V. 英 文 要 請 書 (案)

2. 農業支援システム開発

調査プロジェクト

APPLICATION FOR DEVELOPMENT SURVEY

Name of Project: Establishment of Agricultural Support System in Communal Areas

Agency of Request: Ministry of Agriculture, Water and Rural Development (NAMIBIA)

Agency of Implementation: Directorate Agriculture

I. CONTENTS OF THE PROJECT:

(1) Purposes and details of the Project:

A Master Plan is required for an agricultural support system in communal areas through the project of Agricultural Development Centres. The objective of the Master Plan is to clarify and identify the project concept and priority of the location.

In order to deliver practical assistance to the communal farmer: it is planned to expand the network of rural agricultural support systems to serve all the agricultural regions of the country. This network will incorporate the existing support projects that have been established on a small scale over the past few years by the First National Development Corporation and others. The support centres will provide training and extension to the farmers, transfer the results of agricultural research to the farming community, assist with financing and credit, marketing and trade as well as support communities and social development activities.

(2) Priority of the proposed request for a "Development Survey" and its urgency:

Public sector investment priorities are put on agricultural and rural development, on which the livelihood of the majority of the Namibian people depends, and education and training to give an opportunity to all Namibians to participate fully in the development process. The project concept was clearly declared a top priority in the agricultural sector as Integrated Rural Agricultural Support Centres on the occasion of a donors conference held in New York in 1990.

(3) Desirable time and period of the survey

1992

- (4) (a) Estimate of the cost of the project
 - (b) Prospect of budget allocation for the Project
 - (c) Management and operation of the Project
(See attached project proposal)
- (5) (a) Reason of the request and process of the Project in the past.

The Government of Japan has provided very efficient assistance to the country's highest priority project since independence. The first aid for housing materials is one of monumental aid to the human poor in the context of basic human needs. The proposed project aims to improve living conditions and standards of rural farmers in communal areas, who reside on underdeveloped land and keenly require financial and technical assistance. The project also is clearly mentioned as top priority project, and deemed a most suitable project for Japanese aid policies.

- (b) Has aid request been made for the Project to other countries or international organizations?

No.

- (6) If other countries or international organizations have extended assistance to similar project, outline the projects.

- (1) Name of Donor:
Swedish International Development Authority (SIDA)
ILO
- (2) Project Title:
The maintenance of proclaimed gravel and earth roads in Ovamboland.
- (3) Project Outline:
To improve the tertiary and secondary road network in Ovambo in such a way that the roads will stimulate and promote regional development and contribute to the social welfare of the local population.
- (4) Type of Assistance:
Technical Assistance for Ovambo road master plan
Grant for implementation by labour intensive construction.
- (5) Project Period: 1992 - 1994
- (6) Relations with this Project:

The project will also aim to improve infrastructure in rural areas.

- (7) Availability, kind and content of ready-made information materials of the circumstances of the Project: (See attached project proposal)

II. National level economic development plan.

1. Name of the National Development Plan
The General Development Plan is under preparation and not yet published.

2. Purposes and contents of the National Development Plan:

Most Important Sectors in the Plan;

- Agriculture
- Rural and water infrastructure development
- Education and training
- Health and housing

The plan aims at developing the country by full participation of all Namibians. The basic policy is to reduce unemployment in densely populated areas by promoting productive activities namely agriculture. The harmonious development of the country shall be achieved by increasing the revenue of the rural population and by raising their living standards.

The Projected growth rates of GDP for the next five years are as follows:

GDP w/o	1990	1992	1993	1994	1995
Fisheries	4.6	2.8	2.7	2.0	2.1

The growth rate of agriculture sector during the same period is estimated at 3%.

The strategy adopted for achieving the objectives of the Plan is to develop the rural areas in northern part of the country through the activation of agriculture.

3. Prospective time and period of implementation of the National Development Plan:

1993 - 1998

4. Status of the Project in the National Development Plan:

The Project aims to achieve directly the objective of

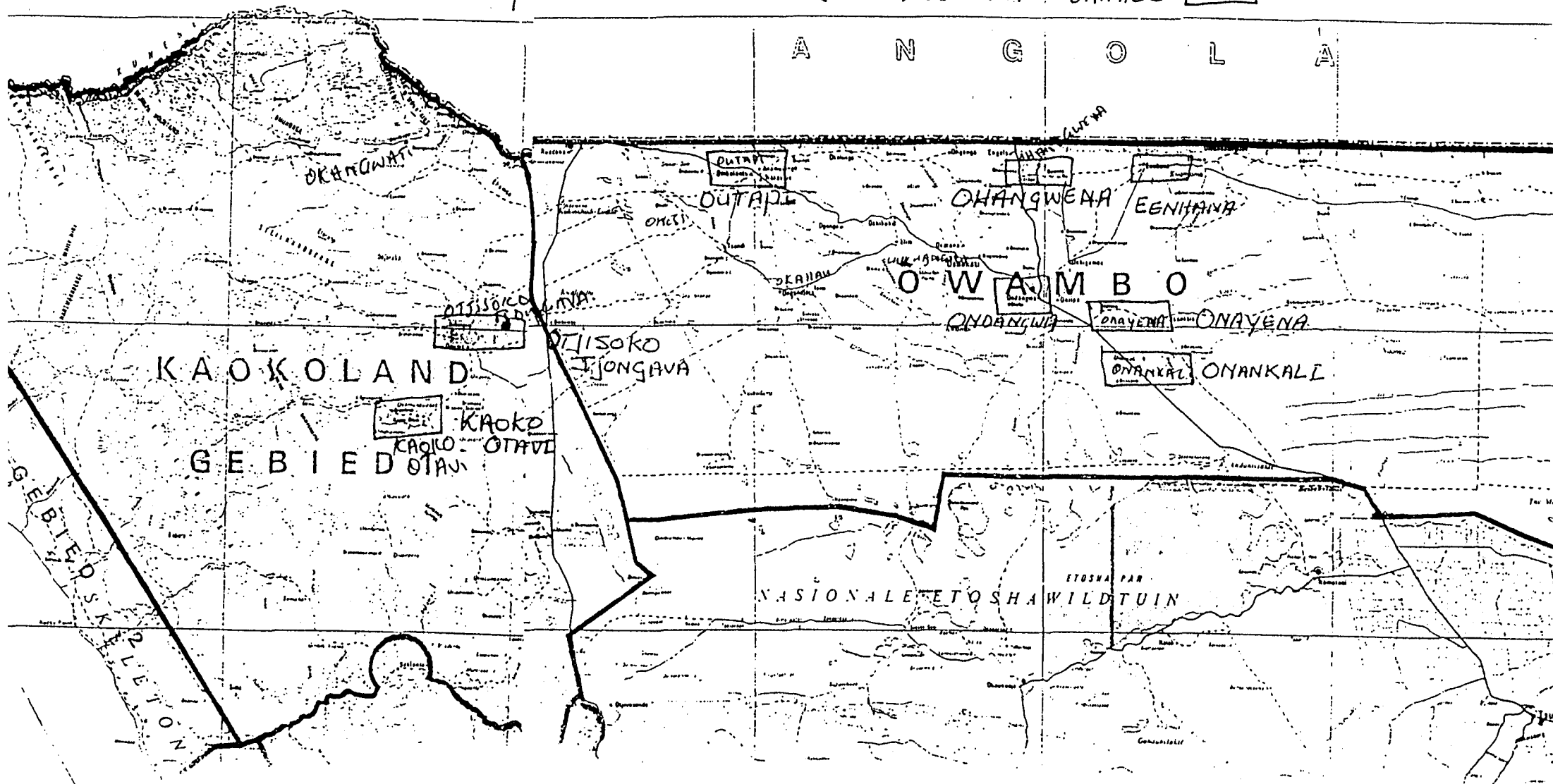
the general development plan, and agriculture is listed as the top sector in the public investment programme.

5. If aid has been extended to the National Development Plan by other countries or international organizations in the form of capital cooperation or technical co-operation, outline the aid.

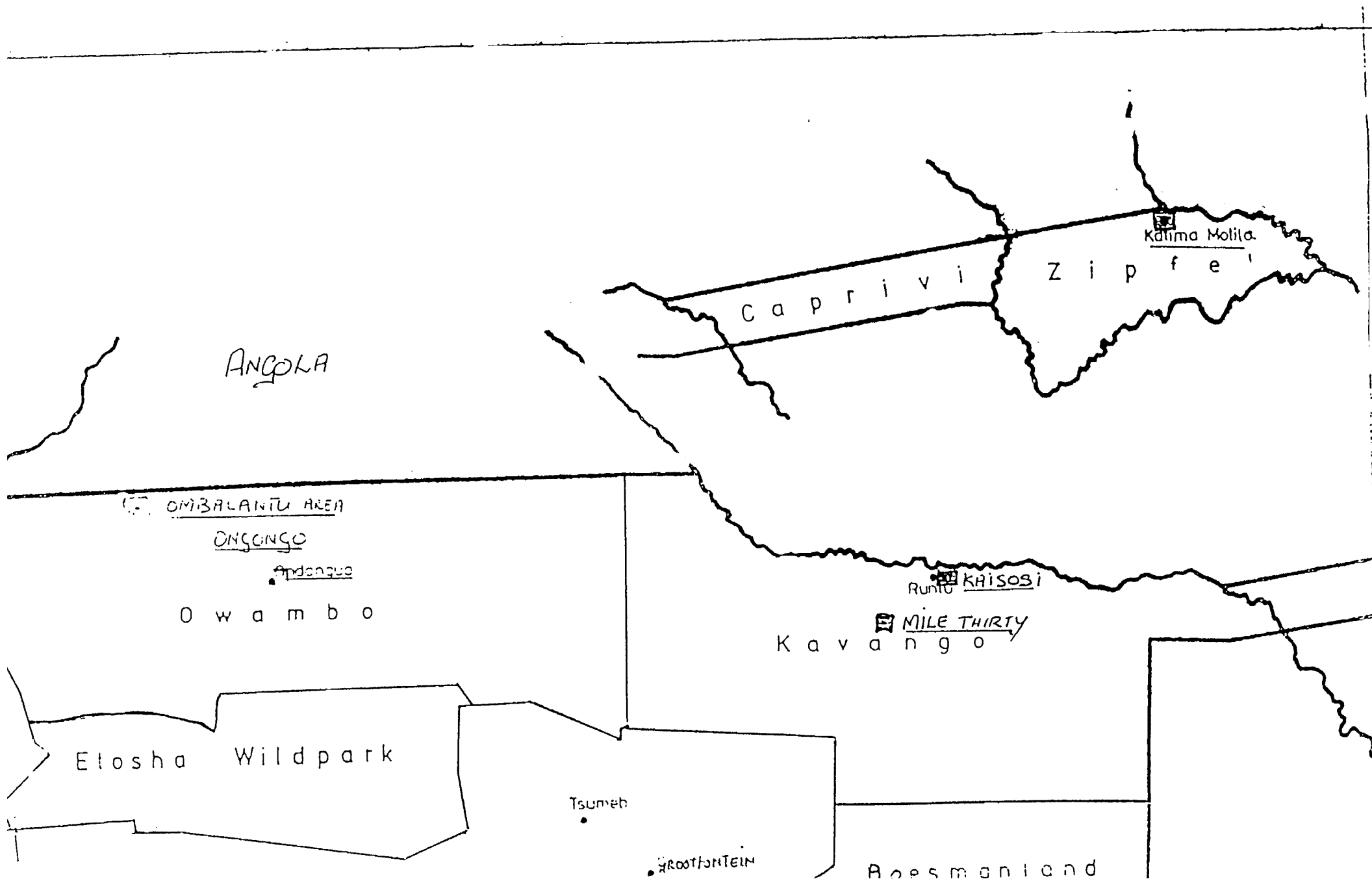
The Government of Namibia requested financial and technical assistance on the grant basis to donors conference initiated by United Nations in June 1990. Total amount of the request is a sum of 316 million US Dollars and the pledged amount is a sum of 219 million that covers 69% of the government request. 154 million US Dollars of loan agreement in January 1990 for various prioritized sectors.

The major donor countries are EC, Germany, Japan, Sweden, Finland, Norway, Denmark, USA and South Africa.

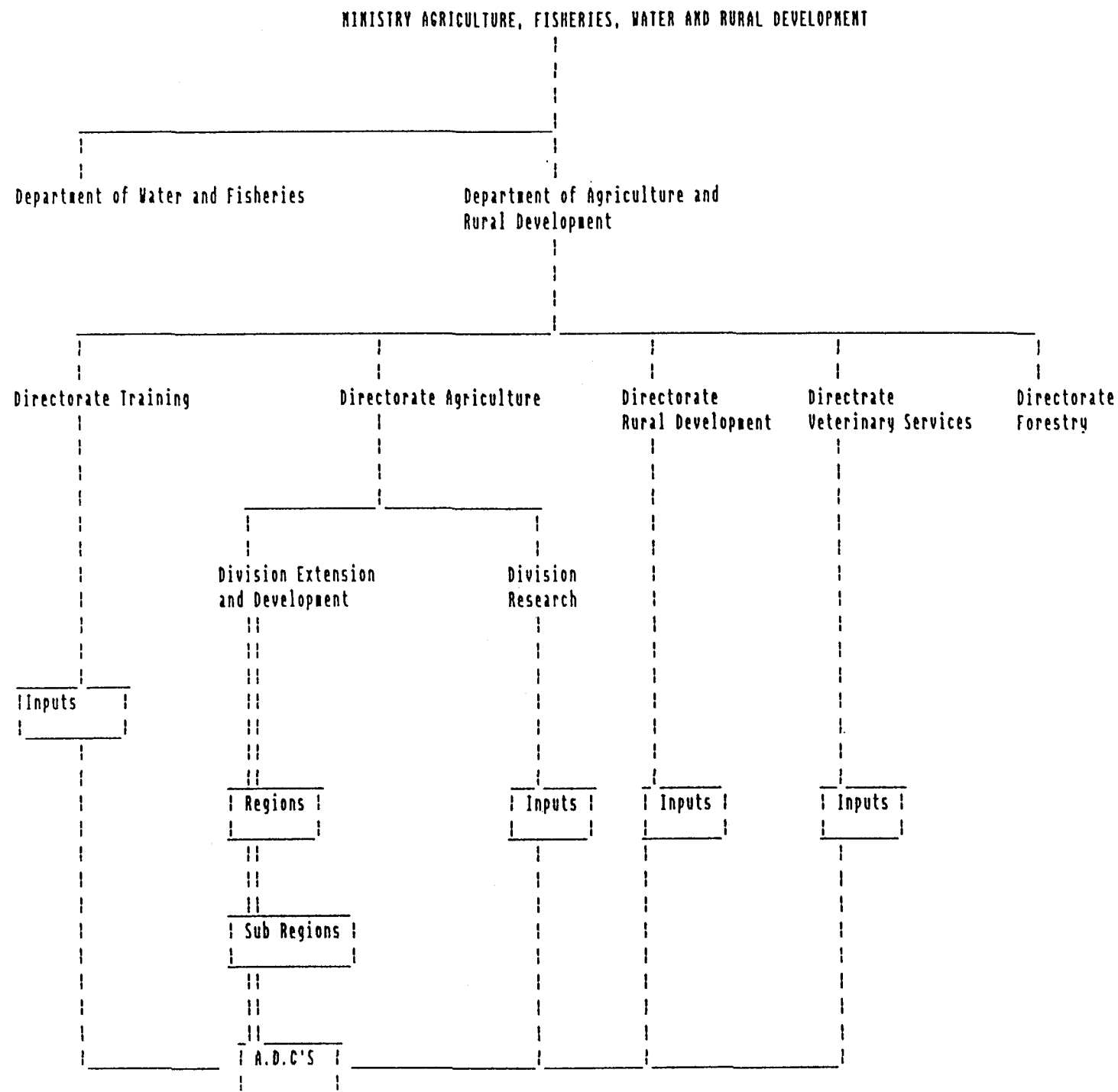




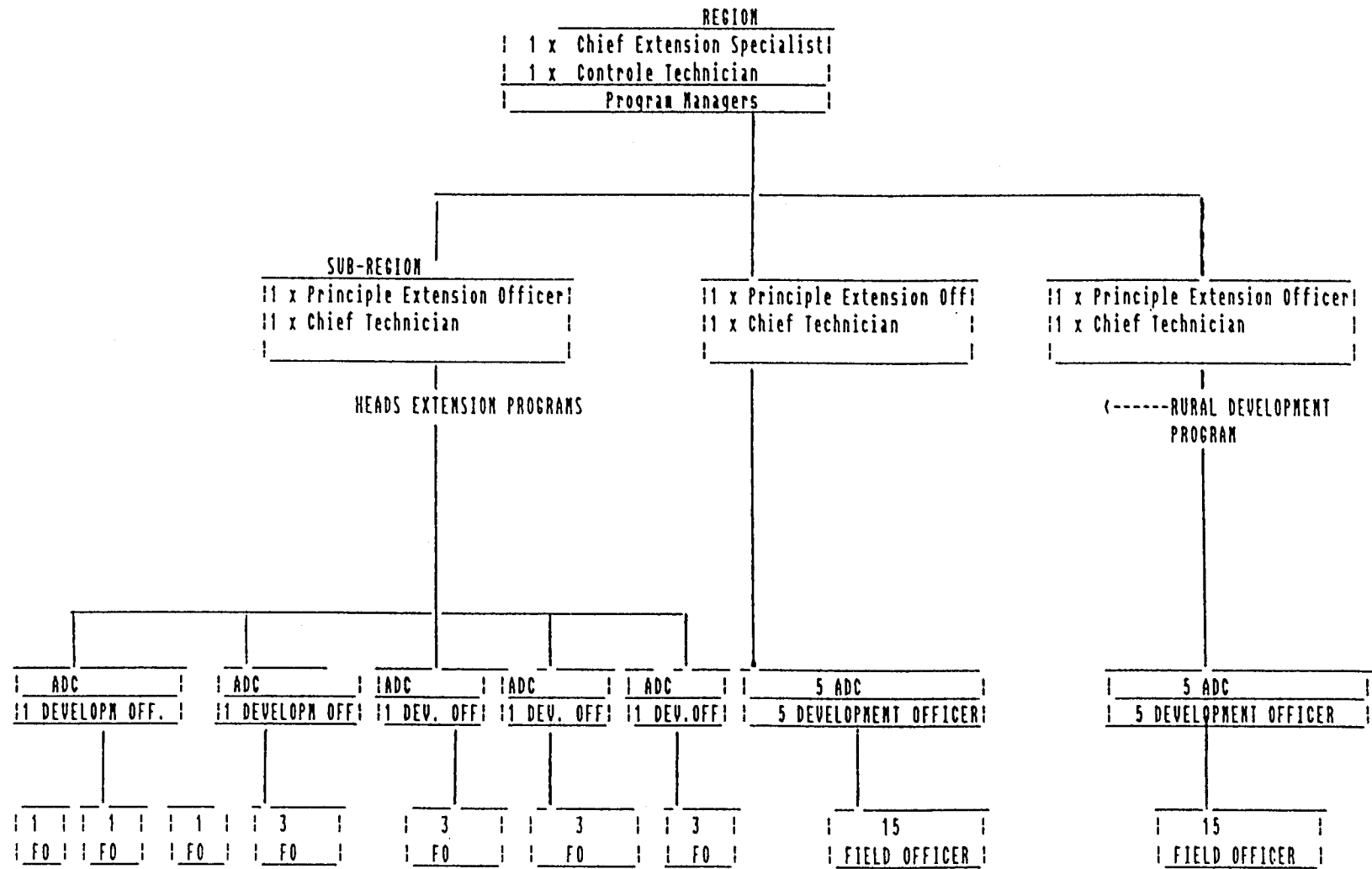
N A M I B I A



ORGANOGRAM 1: BROAD ORGANIZATION CHART OF HOW ADC'S WILL BE FACILITATED WITHIN THE MINISTRY



ORGANOGRAM 2: MANAGEMENT OF ADC'S ON REGIONAL AND SUB-REGIONAL LEVEL

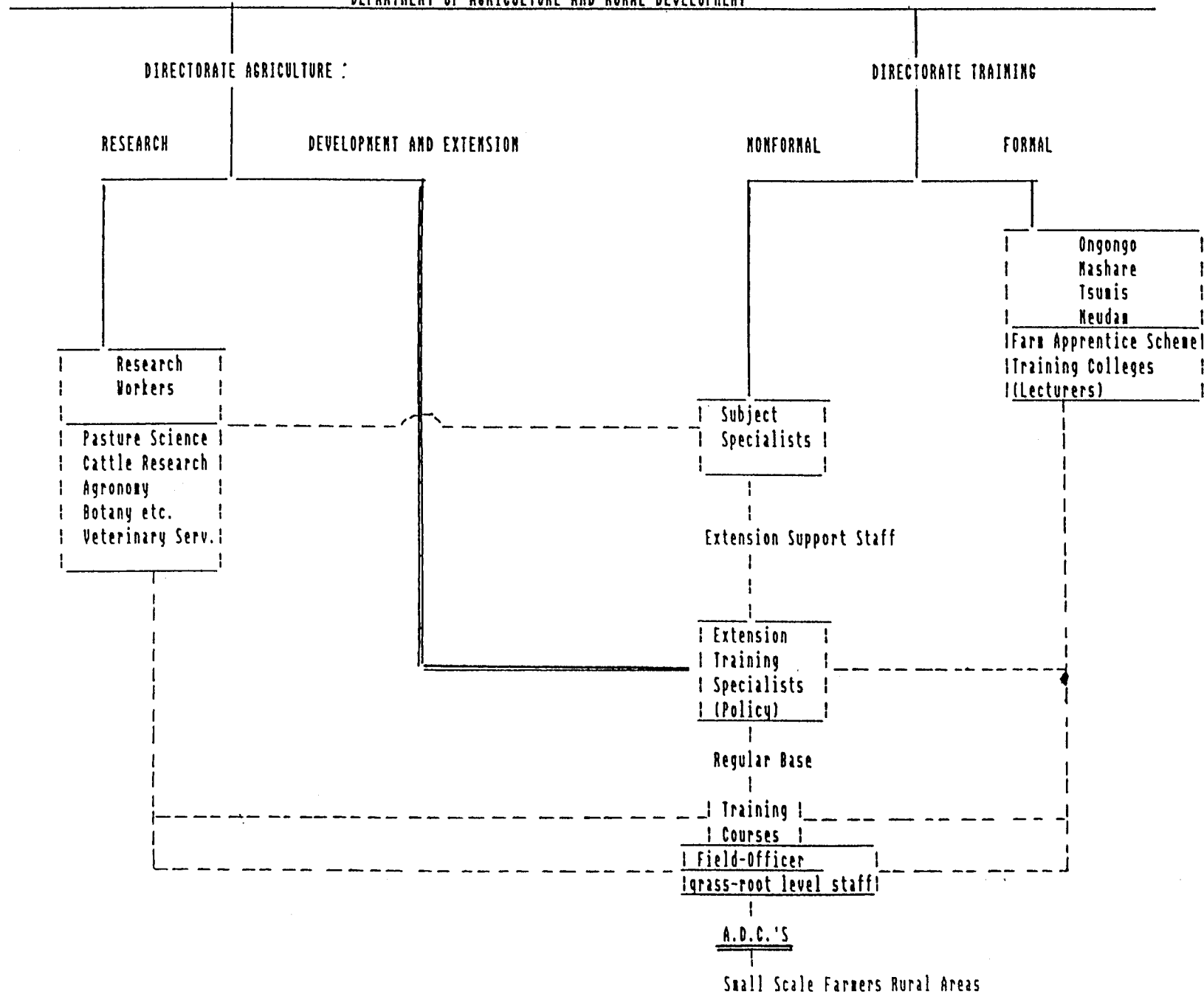


GROUP APPROACH TO FARMERS

ORGANIGRAM J: RESEARCH, TRAINING AND EXTENSION SUPPORT WITHIN THE DEPARTMENT TO ADC'S

MINISTRY OF AGRICULTURE, FISHERIES, WATER AND RURAL DEVELOPMENT

DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT



V. 英 文 要 請 書 (案)

3. 小ダム建設プロジェクト

APPLICATION FORM FOR JAPAN'S GRANT AID

Applicant	Project Title
The Government of Republic of Namibia	Irrigation ponds and small dams construction project(Communal Area)

Economic Sector	Project Type
Agriculture	1. Facilities Construction [2] Equipment Supply

Total Project Cost

Responsible Ministry (Ministry requesting aid)	Implementing Agency (Agency in charge of execution of th project)
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Ministry of Agriculture, Fisheries, Water and Rural Development	Directorate Rural Development
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I. Project Description

1. Background (Please describe in detail)

(1) Current Situation of the Sector

Agriculture, contributing around 10% to the GDP, is the second most important sector of Namibia's economy. Although mining is the major contributor to the GDP, the effect of agriculture on the domestic economy is greater in terms of work opportunities, profits kept in Namibia and contribution to regional development. It is estimated that the livelihood of about 16% of the total labour force is employed in the commercial farming sector.

(2) Problems to be solved in the Sector

The major problems facing agriculture in Namibia include lack of expertise, infrastructure and markets for surplus products of small farmers. Before new agriculture areas can be developed, the infrastructure in the rural areas will have to be developed at a cost of million dollars. A total lack of infrastructure, mostly in the form of permanent water supplies, is the reason for the high proportion of fallow land. Technical expertise and assistance will have to be sought from developed countries to develop the rural areas.

Namibia is one of the arid region of the world due to low rainfall and the high evaporation rate. It has perennial rivers only on its northern and southern borders. It therefore has rely to a great extent on its ground water resources. Because of the annual mean rainfall that averages between 600 mm in the East to 400 mm in the West, the economic base of the inhabitants of the northern regions is primarily influenced by the potential for using water to animal husbandry and crop production.

(3) Necessity and Importance of Improvement in the Sector which lead to the formulation of the Project

To sustain water supply to the economic sector, it is important that certain water schemes-particularly in the Owambo and Western regions be augmented. This is most critical to the fishing and mining industries on the West Coast. Since the alluvium aquifers are being over-taxed, the enhancement of recharge to these aquifers should be implemented and additional water sources be identified and developed.

the current water supply system does not feed all of the rural areas. To implement its ambitious agricultural development programme, the Government will have to extend the rural water supply system for domestic use and stock watering in Owambo, Kavango, Caprivi and Bushmanland.

The Project aims to provide water resources for small farmers in communal areas during dry seasons in order to improve their living conditions and introduce irrigation farming in their plots.

(4) Relation between the Sector and the Project

The Project help directly farmers to facilitate access of water resources to use irrigation and stock consumption. This kind of support shall enable the farmers to improve the yield of crops and better their meat production so as to contribute greatly to the increase of food production and general upliftment of living standards.

(5) Reasons why Japan's Grant Aid is requested for this particular Project

The Government of Japan has provided very efficient assistance to the country's most priority project since independence. The first aid for housing materials is one of monumental aid to the urban poor out of the context of basic human needs. The Project aims to improve living conditions and standards of the rural farmers in communal areas which remain underdeveloped long and keenly require financial and technical assistance. The Project also is clearly mentioned as top priority project, and deemed as the most suitable project for the Japanese aid policies.

2. Objectives and Outline of the Project

(1) Objectives of the Project

(i) Short-term Objectives

The Project has objectives to provide water during dry season for small farmers.

(ii) Medium and Long term Objectives

Major objectives in medium and long term stage are to rehabilitate marginal and fallow land by providing water resources, to promote and increased food production in order to meet the needs of the growing population, to contribute towards the aim of self-sufficiency in food production, to enhance and foster full participation of small scale farmers in income generating activities, to upgrade socio-economic conditions (the quality of life) of poor rural communities, in which agriculture development has a key role to play, and to change perceptions of farmers and communities that may inhibit agricultural and rural development.

(iii) Please fully describe the relations between the project and objectives, and how the project contribute to the accomplishment of the objectives.

Now crop production depends on rain-fed irrigation during rainy season. During dry season, there is no water resources except pipeline water from the rivers in north areas where two thirds of the population live. This water is very limited to use for drinking because of insufficient amount of available water from the river and its cost. The Project is to construct shallow earth ponds in northern areas and small dams in hilly areas. Both already exist in the areas. In northern regions, ground water is salted and unfavorable for drinking and irrigation. Infiltration water in shallow bed of the plain is sole water resources for domestic use and cattle consumption during dry season. The possible sites are unlimited in this area so that the project will contribute widely to whole population of the rural areas. When these water resources such as earth ponds and small dams is to be distributed, small farmers can use water for small irrigation in their gardens and plots to plant vegetables firstly as self-consumption and lately to sell over-products as cash crops. At present, there is no available water resources for small farmers to improve their living conditions and traditional agriculture. With providing new water resources to increase agricultural products, the above objectives will be achieved.

(2) Outline of the Project (Please give a full description of each facility and equipment and their detailed specifications)

(i) Number of Earth Ponds to be Constructed

The priority area is the northern part of the country, which is the most populated communal land.

a) First stage

- Ovambo: about 30 ponds per year
- Kavango: about 30 ponds per year

b) Second stage

- Besmanland: 20 small dams
- Hereroland: 20 small dams

Total estimated number will be 60 of the first stage and 20 small dams in the second stage. Both are deemed as pilot projects.

(ii) Description

(a) Pond construction

The size of pond is about 50m diameter by 5 metre depth. (The depth depends on the depth of sub-soil water). Construction is carried out by a bull dozer. Total amount of earthwork is approximately 9,810m³ which requires 40 hours by a bulldoze having 240 m³ per hour capacity. This is 8 days of earth work on the base of 5 hours per day of daily working hour of equipment. Another seven days is needed for mobilization and idling time for miscellaneous works so in total, 15 days is required.

The construction can be proceeded during dry season from May to October. A number of ponds per year to be constructed is counted at 12 ponds per unit of construction fleet composing of two bull dozers, an excavater, and for each region a flat bed trailer to transport heavy equipment. Two pickup trucks are required for supporting work. In total, the five construction units will be needed for 60 number of ponds required in the Ovambo and Kavango areas.

(3) Location Plan of each Facilities and/or Equipment

(i) The region in need for ADC's (see map 1)

- (a) [] : All the rural areas concerned (communal)
- (b) [:::::] : Priority regions for the implementing of ponds in the first phase; Kavango and Ovambo
- (c) [/////] : Priority regions for the implementation of small dams in the second phase.

(ii) Specific localities within the priority regions (see map 2 and 3)

- (a) Ovambo ---- 30 ponds (map 2)
 - 1) Ombalantu area
 - 2) Ongongo

3) Ondangua

(b) Kavango----- 30 ponds(map 2)

1) Kaisosi-Rundu

2) Mile Thirty

(c) Boesmanland----- 10 small dam (map 2)

1) Katima Mulilo

(d) Hereroland -10 small dams (map 2)

(4) Cost estimates (Please describe in detail all the premises on which the cost estimates are based as basic unit prices, inflation rate, foreign exchange rate, and so on. Please attach detailed tables of estimated costs of each facility and item of equipment. If estimated in local currency, please mention the latest exchange rate of the currency to the U.S.dollar or the Japanese yen.)

Please see the detailed estimate in attached document.

3. Benefit, Effect and Publicity of the Project

(1) Population that will benefit directly from the project

Two-thirds of the population lives in the communal areas where farming is restricted and underdeveloped; one in three children in northern Ovambo are reportedly undernourished. Through the Project, all inhabitants and farmers will benefit directly. Women and children in the village will save their time for transport of water and participate in their own rural development project such as garden farming to make vegetables as improving nourishment and further generate as cash crop.

In the first stage, population of the following communal areas will benefit;

(a) The Ovambo region has more than 500,000 inhabitants, which has the highest population density of approximately 9 inhabitants per square kilometre.

(b) The Kavango region has a population of about 110,000 to 115,000.

(c) The Hereroland region has a population of about 100,000.

(d) The Bushmanland has a population of about 3,000.

(2) Population that benefit indirectly from the project

The Project aims to provide water for rural population and to improve living conditions. And also the project will increase

agricultural products, which will improve import-export balance of the country. The population that benefit indirectly from the project is nation-wide.

(3) Area that will benefit from the project

Area that will benefit from the project is particularly communal areas where two-thirds population of the lives. In the first stage, the following areas are mentioned as priority;

- (a) The Ovambo region; an area of 56,072 square kilometres
- (b) The Kavango region; an area of nearly 51,000 km².
- (c) The Hereroland region; an area of 110,000 km².
- (d) The Boesmanland region; an area of about 20,000km².

(4) Economic and Social Effects of the Project (Please describe in detail)

(i) Current situation

Approximately two thirds of the population live in the northern regions, territory that bore the brunt of the armed conflict prior to independence. The target areas and population have suffered from poor standards of living conditions without having any positive government support of traditional agricultural farming. Most of infrastructure is less developed and requires to improve substantially in the underdeveloped communal areas. The farmer who depends on traditionally self-sufficient agriculture earns only 63 US\$ GNP per capita.

(ii) Expected effect of the Project

The project directly benefits at least two thirds of population of Namibia with poor living conditions in communal areas through improving rural living conditions and traditional agriculture. In particular, women in the village who are engaged in traditional farming is ensured equal opportunity to enable them to participate fully in all spheres of society. The Project also secures food security in rural area. By contacting directly farmers and village peoples through the agricultural development centers, further policy making in agricultural and rural development will succeed based on the their basic needs.

(5) Publicity (How many people are expected to notice the benefit or positive effect of the project implemented with Japan's grant aid when it is completed ?)

Two-thirds of population of Namibia are to notify the benefit of the project, in particular, in the very populated areas and less-developed areas. The Project will sustain the important role in improving rural life and agriculture from generation to gener-

ation.

4. Request to Other Donors

(1) Is there any request made to other donors for assistance closely related to this project ?

1. Yes

2. [No]

(2) If yes, please fill in below:

(i) Name of the donors;

(ii) Title and outline of the assistance;

(iii) Possibilities that the donor will extend the assistance requested;

(iv) In the case where other donors do not extend assistance, please describe in detailed appropriateness and effectiveness of this project;

The Ministry will be able to recruit experienced engineers and technicians in the case where other donors do not extend assistance. However, the Ministry will request to the Government of Japan any financial and technical assistance where Japan has advantageous aspects.

5. Priority

(Please describe priority of this project among other projects for which requests are made to the Government of Japan)

Public sector investment priorities are put on agricultural and rural development, on which the livelihood of the majority of the Namibian people depends, and education and training to give an opportunity to all Namibians to participate fully in the development process. The other is affordable housing for the disadvantaged for which the Government of Japan had already provided the very effective grant just after the Independence. This project aims to achieve the above two top priorities and the priority areas where the majority lives under the basic human needs. The project concept is clearly declared with top priority in the agriculture sector as an integrated rural agricultural support centres on the occasion of donors conference held in New York in 1990.

(Please attach project list with priorities)

6. Ministry and Agency in charge of the Project

(1) Outline of Implementing Agency (Please describe in detail)
(the Agency in charge of the execution of the Project)

(i) Organization Chart of the Agency (in general)

The institutional organization and structure to effect optimal efficiency within the Department of Agriculture and Rural Development is indicated on Organogramme 1,2, and 3;

(i) Organogramme 1: Broad Organization of how Agricultural Development will be facilitated within the Ministry.

(ii) Organogramme 2: Management of Agricultural Development on regional and sub-regional level.

(iii) Organogramme 3: Research, Training and Extension support within the Department to Agricultural Development Centres.

(Please attache detailed organization chart pointing out the responsible department, division and sections in charge of this project)

(ii) Authorities and Duties of the Agency

The new Namibian Government attaches a high priority to the intensified development of the less developed communal areas in the country. The Department of Agriculture and Rural Development is an implementing agency within the Ministry of Agriculture, Fisheries, Water and Rural Development, and responsible for governmental functions concerned with the increase in agricultural production and upgrading of socio-economic conditions in the rural areas. To address the needs of farmers in these communal areas, the concept of Agricultural Development Centres will be implemented.

(iii) Personnel (Please mention the number of staff, workers, and employees of the agency and the responsible department, division and section in charge of the Project)

(iv) Budget (Revenue and Expenditure)

(If mentioned in local currency, please mention the latest foreign exchange rate of the currency to the U.S. dollar or the Japanese yen)

(2) Outline of Supervising Ministry(Please describe in detail)

The Ministry of Agriculture, Fisheries, Water and Rural Development is the supervising ministry.

(i) Organization Chart of the Ministry (in general)

(Please mark the responsible department and division in charge of the project and implementing agency)

Please see attached document.

(Please attach detailed organization chart pointing out the responsible department, division, and section in charge of the project and implementing agency)

(ii) Authorities and Duties of the Ministry

The Ministry of Agriculture, Fisheries, Water and Rural Development has responsibilities to enhance the quality of life, wealth and stability of all inhabitants of Namibia by the optimal utilization and conservation of natural resources. Essential services, including extension, training, regulatory and supportive services are to be rendered as a means of achieving the mission. Agricultural development is the economic basis for integrated development and requires a multi-disciplinary approach.

In achieving the above, the ministry is divided into two department of Agriculture and Rural Development and Department of Water and Fisheries.

(iii) Personnel (Please mention the number of staff, workers and employees of the Ministry and the responsible department, division and section)

Please see attachment document.

(iv) Budget (Revenue and Expenditure)

(If mentioned in local currency, please state the latest foreign exchange rate of the currency to the U.S. dollar or the Japanese yen)

7. Preparation

(1) Project Site (Please attach photographs and maps of the site with the various scales including that of 10,000:1)

(i) (a) Address of the Site

(b) Total Area of the Site

(ii) Land preparation

(a) To which extent has the land been expropriated for the project?

In communal areas, all lands belong to the state, so there is no problem occurring to expropriation of land for the project.

(b) When will the expropriation of the land be completed?

see the above.

(Please attach the laws and procedures concerning the expropriation of land)

(2) Electricity, Water Supply, Telephone, Drainage and Other Facilities

(Please describe the extent to which above mentioned incidental facilities have been prepared)

The pond and small dam will not require ~~for~~ for any facilities such as electricity or water supply etc. ✓

(3) Is there any information, statistics and data regarding geographical, geological, meteorological, oceanographical situations, etc.

(If any, attach those information)

All information and data are available in The Ministry.

8. Capabilities of the Implementing Agency

(Please describe the capabilities of the agency to manage, sustain, and operate the project)

(1) Current Situation

Department of Agriculture and Rural Development has enough capabilities to plan, supervise, and monitor the project in the central government level. For regional and sub-regional level, the Ministry is proceeding to enhance its capabilities. Most of architectural plan and detailed design are carried out by the local private architecture under the contract of the Department.

(2) Problems of the Agency

For the region and sub-regional level, the staff shall be trained by inter-ministry programme.

(3) Improvement Plan (If any, please describe in detail the contents of such a plan that will enable the Agency to handle the project more effectively and efficiently)

9. Operation and Management of the Project

(1) Personnel (Please fill in the number of personnel)

	Current	When the Project is completed
Supervising Ministry		
Implementation Agency		
Directly Responsible Personnel		

(In the case of hospital, research institutes, training centres, please attach the functional personnel charts.)

(In the case where necessary personnel are not yet secured, when and how this is to be done)

(2) Budget (Please fill in the budget in the table below.)
(if mentioned in local currency, please refer to the latest foreign exchange rate of the currency to the US dollar or Japanese Yen)

	90/91	91/92	92/92	beyond
Supervising Ministry				
Implementing Agency				
Direct Budget of the Project (WA0004)	50,327	57,513	43,345	38,600

(In the case where additional budgetary allocation is needed for the implementation of the project, please answer the following question.)

(i) Has the additional budget been already allocated ?

1. Yes 2. No.

(ii) If no, how and when will the additional budget be allocated?

(3) Technical Abilities of Local Staff

(i) Please describe technical abilities of local staff operating the project.

Technical abilities of local staff for operating the project are sufficient, and if training and lecture to rural peoples in specific programmes requires special technology, the experts can be recruited from outside of the Ministry.

(ii) Please describe in detail the educational background of those who are in charge of the operation and management of the facilities and equipment.

Candidate for Region	Final Education
1) Chief Extension Specialist	University/College equiv.
2) Control Technician	-ditto-
3) Program Managers	-ditto-
Sub-Region	
1) Principle Extension Officer	-ditto-
2) Chief Technician	-ditto-

10. List of Related Projects

(Please fill in below if there is a project executed by another donor country or international organization in related areas.)

(1) Name of Donor

Swedish International Development Authority (SIDA)
ILO

(2) Project Title

The Maintenance of Proclaimed Gravel and Earth Roads in Owanboland

(3) Project Outline

To improve the tertiary and secondary road network in Owambo in such a way that the roads will stimulate and promote regional development and contribute to the social welfare of the local population.

(4) Type of Assistance (grant, loan, technical assistance)

Technical assistance for Owambo road master plan
Grant for implementation by labour intensive construction

(5) Project Period

(6) Relations with this Project

The project also aims to improve infrastructure in rural areas.

(If there are many projects, please attach a list of those projects explained in the same way)

11. Technical Assistance

(1) Has technical assistance been extended to this project ?

(i) Yes (ii) [No]

(2) Is technical assistance needed for the implementation of this project ?

(i) Yes (ii) [No]

(3) If no, please describe the reasons why technical assistance is not needed.

The project is very simple construction work and the Ministry has already experience of the construction of the ponds and small dam. However for the future extending the pond and small dam in numbers and functions , for example, by using electric power etc., we wish to require the technical assistance from Japanese Government.

(4) If yes, please fill in below.

(i) Short-term experts

(ii) Long-term experts

(iii) Acceptance of trainees

(iv) Project-type Technical Cooperation

(If needed, please describe the proposed project outline.)

(v) Japan Overseas Cooperation Volunteers

(If needed, Please describe the proposed sector and related information.)

For above (i) to (v), we would like to have any suggestions and recommendations from the relevant agencies of Japan.

(vi) Development Survey Programme (Feasibility Studies; and Master Plan)

(If needed, please describe the outline of the proposed development survey programme.)

(5) Has an official request for technical assistance been already made ?

(i) Yes

(ii) [No]

(iii) If yes, please mention the date of the request.

(iv) If no, please describe the reason why the official request has not yet been made.

(v) When will the request be made to the Embassy of Japan?

II. General Development Plan

1. Title of the Plan (Please attach the whole volume of the latest general development plan.)

General development plan is under preparation with the assistance of the United Nations.

2. Economic and Social Situation.

(1) GNP

(GDP) 4,326 millions of Rands (1988) (R.2.48=\$1)

(2) National Income, Sector by sector

GDP 1989

	(million R)	(%)
Agriculture/Fishing	489.5	11.3
Mining	1,258.7	29.1
Manufacturing	210.3	4.6
Construction	113.3	2.6
Electricity/Water	77.2	1.8
Transport/Communication	265.0	6.1
Trade	532.8	12.3
Finance/Real Estate	311.2	7.2
Government	855.7	19.8
Services	85.1	2.0
Other producers	129.4	3.0

(3) Unemployment Rate approximately 30%

(4) Inflation Rate 17.7% (1989)
 13.2% (1984-1989)

(5) Growth Rate; GDP 0.2% (1989); fix price in 1980

(6) Balance of International Payments

99 million Round

(7) Labour Population

Labour population is estimated at approximately 500,000. Employment by formal sector is shown below according to manpower survey in 1988.

- Primary	46,133	25%
- Secondary	23,372	13%
- Tertiary	115,288	62%

However, population of 250,000 are reportedly engaged in self-sufficient agriculture in the northern communal areas.

(8) Debt Service Ratio; 8.5 (1989)

(9) Outstanding Debt; 426 million Round

(10) Major Items of Exports and Imports and their value

(i) Major imported item in 1988(R mn)

- Food & beverages	425
- Industrial & non industrial chemicals	391
- Vehicles & transport equipment	372
- Manufactured products	265
- Clothing & footwear	255
- Machinery & equipment	109
- Basic metals & minerals	93
- Others	445

(ii) Major exported items in 1988 (R mn)

- Minerals	1543
- Diamonds	654
- Others	889
- Agricultural products	257
- Cattle	148
- Karakul pelts	35
- Others	74
- Fish products(un- processed)	93
- Manufactures	120
- Others	130

(11). Major Trading Partner

(i) Main destinations for exports in 1986 were

- Switzerland	31%
- Republic of South Africa	25%
- West Germany	15%

- USA 5%
- UK 5%
- Others 19%

(ii) Main origins of imports in 1986 were

- Republic of South Africa 75%
- West Germany 10%
- USA 5%
- Switzerland 5%
- Others 5%

(12) Population and its Growth Rate

1.29 million in 1989. 3% p.a.

(13) Average Life Expectancy (Male and Female)

(14) Death Rate and Birth Rate

(15) Medical Structure

Hospital	61
Clinic	156
Available bed	8,800

(16) Ten Disease most afflicting the nation

-malaria, tuberculosis

(17) Illiteracy Rate (or Literacy Rate)

65%

(18) Other data

3. Outline of the Plan

(1) Most Important Sectors in the Plan

- Agriculture
- Rural and water infrastructure development
- Education and training
- Health and housing

(2) Basic Objectives of the Plan

(Please describe in detail the objectives by using concrete figures.)

. The plan aims at developing the country by the full participation of all Namibians. The basic policy is to reduce unemployment in densely populated rural areas by promoting productive activities, namely agriculture. The harmonious development of the country shall be achieved by increasing the revenue of the rural population and by raising their living standards.

The projected growth rates of GDP for next 5 years are as follows:

	1990	1992	1993	1994	1995
GDP w/o fisheries	4.6	2.8	2.7	2.0	2.1

The growth rate of agriculture sector during the same period is estimated at 3%.

(3) How will the above-mentioned objectives be achieved?

The strategy adopted for achieving the objectives of the Plan is to develop the rural areas in northern part of the country. Those areas are most densely populated and have the highest rate of unemployment and underemployment. The development of the areas shall be realized through the activation of agriculture. The northern areas have high potentiality of growing crops, such as millet, maize, sorghum, beans etc.

(Please mention specific projects and programme to achieve the objectives)

4. When will the plan be executed and completed ?

1993

5. Relation between this project and the general development plan.

(Please describe the significance of the project in the general plan.)

The Project aims to achieve directly the objectives of the general development plan, and is listed as the top of agriculture sector and water development sector in public investment programme.

6. Is there any assistance that other donors have extended/will extend to the projects and/or programme listed in the general plan ?

(i) [Yes]

(ii) No.

(iii) If yes, please give basic information on the assistance.

- (a) Name of donor
- (b) Project Title
- (c) Project Cost
- (d) Type of Assistance (Grant, Loan, Technical Assistance, etc.)
- (e) Project Outline

The Government of Namibia requested financial and technical assistance on the grant basis to donors conference initiated by United Nations in June 1990. Total amount of request is a sum of

?316 million US\$ and pledged amount is a sum of 219 million that covers 69 % of the government request. However, according to bureaucratic procedures, 154 million US\$ of loan agreement in January 1991 for various prioritized sectors.

The major donor countries are EC, German, Japan, Sweden, Finland, Norway, Denmark, USA, and South Africa.

THE REQUIRED EQUIPMENT LIST AND DETAILED ESTIMATE

NO.& ITEM	NO.of UNIT	FOB	CIF	CIF TOTAL
1. Bull dozer 200HP st. tilt dozer w/ripper (Excavation Job)	10	23,000	27,000	276,000
2. Hydraulic Excavator 80HP 0.4m3 Bucket (Survey Job)	5	10,000	12,000	60,000
3. Flat Bed Trailer 20t (Transportation)	3	10,000	12,000	36,000
4. Flat Bed Truck 6t (Supporting Transport)	5	6,000	7,200	36,000
5. Pick-Up Double Cabin 4X4 (Supporting)	10	2,000	2,400	24,000
Sub Total				432,000
Spare Parts (15%)				64,800
Grand Total				496,800