# KILIMANJARO REGION INTEGRATED DEVELOPMENT PLAN

# **FOLLOW-UP REPORT 1995**

## Project data

Region:

Africa

Country:

United Republic of Tanzania

76

Sector / Subsector:

Development Plan/Integrated

Regional Development Plan

Code No:

AFR TZA/S 102/77

Type:

Master Plan

Counterpart Agency:

Kilimanjaro Regional Development

Directorate

Fiscal Year Completed:

1977

Consultants:

Yachiyo Engineering Co., Ltd

Expenditure:

92,705 (¥'000)

Present Status:

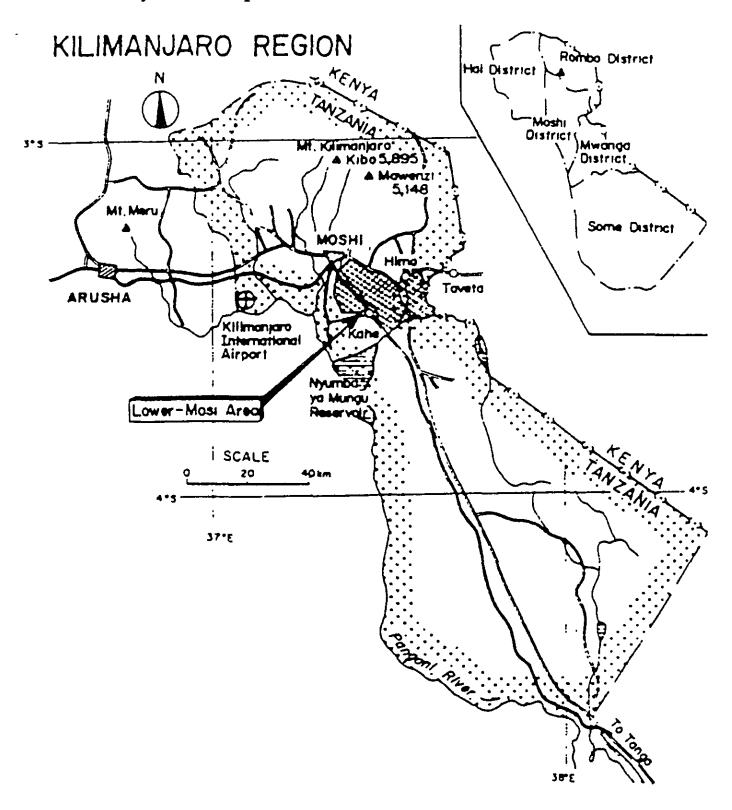
In Progress

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# Project site map / location



# Project site map / location

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## 1 Executive Summary

#### Summary of survey results

There have been a number of development initiatives which have originated out of the 1977 Kilimanjaro Integrated Development Plan (KIDP). Of these, the Government of Japan has supported projects through grant aid, technical cooperation, and development loans in the following areas:

- Agricultural Development;
- Medium and Small Scale Industrial Development;
- Lower Moshi Agricultural Development;
- Tractor Hire Service:
- Electrification;
- Mkomazi Valley Irrigation Development;
- Social Forestry.

#### Conclusions

Due to the reliance on donor funding, the KIDP has not been implemented in a rational sequence. At best it has acted as a guideline of development ideas for the region from which donors, and to a lesser extent the Kilimanjaro Regional Development Development Directorate (KRDD), select projects to implement.

After two decades of rapid development, the integrated development plan is now obselescent in both detail and broad objectives.

#### Recommendations for JICA

JICA should examine its role in the development of the Kilimanjaro region. JICA should reconsider, in consultation with the KRDD, what it is trying to achieve and how its current commitments actually fit within the existing development framework of the region.

#### Dissemination and following action

In addition to the JICA UK, and JICA Tanzania Offices, it is anticipated that this report will be circulated to the Kilimanjaro

Regional Development Directorate where it is anticipated that it will be distributed to the appropriate departments within that agency.

# 2 Results of survey: Project Design

# Identification and outline of project rationale

In 1970 the Government of Tanzania requested assistance from the Government of Japan to survey the Kilimanjaro region with a view to developing an integrated regional development plan. For 11 months, from November 1976 to October 1977 a large team of Japanese consultants surveyed the region and in late 1977 to early 1978 produced a master plan for the integrated development of the region. This plan was to be adopted into Tanzania's third five-year national development plan (1976-80).

# Short description of project

The project assessed the current socio-economic status of the Kilimanjaro Region, and proposed an integrated development plan which would allow the region to develop a strong base from which step-by-step industrialisation could occur. This development plan was to cover all aspects of the region's resources and potential for development.

# Detailed design

Examination of the following sectors for development were undertaken and guidelines for 45 development projects were proposed including:

- agriculture: including irrigation & extension of cultivated land;
- water resource: hydrological mapping;
- manufacturing;
- forestry: production forest;
- game conservation: wildlife survey in Mkomazi Game Reserve;
- tourism: airport complex;
- transportation: roads:
- communication: telephone exchange;
- town: housing supply;
- community: village rehabilitation project;
- public services: water supply, electricity;
- social services: health, education.

Before implementation of any of these projects full feasibility studies and/or master plans would be required.

## **Funding**

Two phases of development of three year's duration each were proposed, with funding coming from both the Government of Japan and the Government of Tanzania at agreed levels of contribution.

Phase I: From 1977/78 to 1980/81 at 81,805 (US\$'000) Phase II: From 1981/82 to 1985/6 at 129,163 (US\$'000)

## Review of project design

March 1 Commence

The master plan was very comprehensive but has proved to be largely impractical in financial and human resource terms for the KRDD to implement. Most of the proposed development was relatively sophisticated and required a high level of initial expenditure and capital investment and this meant that the KRDD would have been highly dependent on donor funding. A number of the proposed projects (eg: forestry production, tourism development) also lay outside the mandate of the KRDD. Although important to the region's development, the anomaly of how these developments could proceed, and incorporate both the national and regional government, was not addressed.

# 3 Results of survey: Project Implementation

#### Implementation and monitoring

A number of projects were generated out of the Kilimanjaro Integrated Development Plan. Where JICA has been involved, Japanese experts have been present in both long and short term capacities. There have also been a number of internal and external reviews of the existing projects.

#### Development to date

Following the presentation of the KIDP, in 1978 the Government of Tanzania requested assistance from the Government of Japan in fourteen projects in the Kilimanjaro region. The following six were agreed upon:

- agricultural development (technical cooperation);
- medium and small scale industrial development (technical cooperation);
- Lower Moshi agriculture development (survey and loan);
- tractor hire service (technical cooperation);
- electrification (survey and loan);
- Mkomazi irrigation development (survey and grant).

These produced the following development programmes.

#### A. Agriculture

i 1978-86 The Kilimanjaro Agriculture Development Centre (KADC) was established (¥2bn grant aid).

The role of the KADC was to promote agricultural development in the Kilimanjaro Region through:

- technical advice and supervisory works;
- establishment of a trial farm (1982 ¥23m grant aid);
- extension services:
- training of manpower;
- planning and coordination.

Assistance to this programme has been through technical cooperation (assignment of experts), grant aid, surveys, and loans.

- ii 1986-93 The Kilimanjaro Agricultural Development Project (KADP) was established. The KADP assumed the responsibilities of the KADC while also further expanding extension services and initiating new development projects. These included:
  - Lower Moshi Agricultural Development Project (1987 OECF loan of ¥3.3 bn);
  - Kilimanjaro Post Harvest Facility (1988 ¥5.5m grant);
  - Mkomazi Irrigation Development Project (1990 ¥1.8bn grant);
  - Feasibility Study on Lower Hai and Lower Rombo Irrigation Development Projects (1990 ¥300m grant).

Assistance to this programme has been through technical cooperation (assignment of experts), grant aid, surveys, and loans.

iii In 1978 The Kilimanjaro Regional Tractor Hire Service was established (1978 ¥800m grant).

The role of the Kilimanjaro Regional Tractor Hire Service was to assist farmers in the Kilimanjaro region increase agricultural production through more efficient and effective use of the land by making more readily available modern agricultural machinery. Initially 60 Kubota M7500 81hp tractors with spares were supplied to the KRDD in 1978/9 and a management facility was constructed near to the KADC facility in Lower Moshi. In 1984/85 a second grant of 170 tractors with disc ploughs was provided by the Government of Japan. There were also 10 harrows, 7 trailors, and 5 Mobile Management Units (mobile workshops) provided.

iv In 1994 the Kilimanjaro Agricultural Training Centre (KATC) was established.

The primary role of the KATC is to strengthen the technical capability of extension and technical personnel, as well as key farmers, with particular respect to irrigated rice cultivation. The KATC also carries out applied and adaptive research into biogas, horticulture, health pest control, and integrated production systems.

## B. Industry

1979 Kilimanjaro Small-and-Middle Scale Industry Development Project (part of ¥2m grant to establish KADC). This involved two phases of development:

- Phase I (1981-88) involved the transfer of basic industrial technology in a machinery workshop, foundry, forge, and ceramics facility (tableware & earthenware);
- Phase II (1988-93) involved in transfer of applied technology in the above fields.

Five JICA experts were provided (one for each area of activity) throughout the programme and two JICA short-term experts were provided annually.

Primarily a training project, training was to be in three areas:

- on the job training, particularly for counterparts;
- overseas training for qualified counterparts;
- training for outside artisans (ie: dissemination of acquired skills).

The project was completed in 1993. The Industrial Centre is currently awaiting cabinet approval for a proposal to establish a trust to operate the centre. A trust is proposed as the only mechanism by which the centre can operate successfully as a financially independent entity. The goal remains the same; to promote and supervise the development of small-scale industries in the region based on the technologies and materials available. Of necessity the new operation will be commercial in nature.

#### C. Utilities

1979 Electricity Distribution Network Feasibility Study completed.

- Phase I Electricity distribution improvement (1980 ¥1.6 loan)
- Phase II Electricity distribution improvement (1995)

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#### D. Natural Resources

Since the 1978 agreement for technical cooperation and assistance with the Kilimanjaro RDD, the Japanese Government has also assisted the Forestry Division of the Ministry of Tourism, Natural Resources, and Environment develop the following projects in the Kilimanjaro Region:

- 1987 Feasibility Study on Semi-Arid Forest Management Plan:
- 1991 Village Forestry Design Study;
- 1991 technical cooperation began for the Kilimanjaro Village Forestry Project, based in Same district;
- 1993 implementation phase began (five years).

#### Note:

The following project areas recommended by the 1977 master plan as important for development in the region have yet to be implemented by the KRDD:

- Water resources mapping
- Forestry production forest (however, considerable effort has been put in by JICA and the Ministry of Tourism, Natural Resources, & Environment into the development of a social forestry programme)
- Game conservation wildlife survey (no progress yet as this involves two regions and therefore falls under the mandate of the national government - ie: Ministry of Natural Resources and Tourism)
- Tourism Airport complex (no progress as this involves two regions and therefore falls under mandate of the national government -ie: Ministry of Works and Transportation)
- Transportation: roads. German cooperation is currently working on a road maintenance programme in the region.
- Communication telephone exchange
- Community village rehabilitation project
- Public Services water supply. JICA was initially interested but the IRBD (World Bank) proposed its own programme as part of its initiative to improve water supply in the 8 major municipalities in Tanzania, and JICA withdrew. There has been no development since then.
- Social services health, education
- Town housing supply

#### **Processes**

An eleven month survey of the Kilimanjaro Region was performed by a team of 32 experts carrying out field trials and surveys in all aspects of the socio-economics of the region. These experts included engineers, agriculturalists, foresters, and sociologists.

#### **Impacts**

The development of an extensive agricultural development and irrigation programme and the provision of tractors for hire has made a significant impact on agricultural development and production in the region. Although at the expense of other crop production, high yielding rice varieties and associated agricultural practises have been adopted by farmers outside the project areas. Traditional agricultural techniques (particularly irrigation) have also been improved and extended by the impact of improved agricultural extension services.

Improved electricity supply has allowed for an improved quality of life. As this programme continues it will support the development of small and medium sized industries in the region.

The Kilimanjaro Industrial Training Centre (KITC) has had some success in producing skilled personnel, but the centre has not been able to apply the skills learnt to develop a broader base of skills in the region. As such, there has been only minimal impact in encouraging local small-scale entrepreneurs to become established and produce items which were previously imported into the region. This is primarily because the final stage of training (ie: local artisans) in the programme did not take place.

# Sustainability

The KRDD has not been able to independently initiate any of the recommendations outlined in the 1977 KIDP. Primarily, this has been because KRDD had both inadequate human and financial resources and, until recently, insufficient staff with the technical background to do so. This lack of resources available to the KRDD continues up to today, greatly reducing their ability to maintain any of the donor-assisted initiatives already in place.

The larger agricultural initiatives are likely to experience difficulties in continuing to operate efficiently after donor withdrawal. The Lower Moshi scheme has received extended funding in an attempt to improve sustainability of management. However, this project is now seriously threatened by water shortages caused by abstraction upstream which will require a significant investment (not available to the KRDD) to resolve.

The ability of the KRDD to continue to support the ADP initiatives is currently masked by the continued low level inputs from JICA through technical cooperation and the establishment of the KATC. There is still no real income for the KRDD being generated by any of the agricultural initiatives in the region which would allow it to continue to support these unaided. However, if donor support should withdraw in the short-term, there will be no mechanism in place which would allow the KRDD to meet the basic costs of its technical officers and extension officers, either in support of the JICA aided projects or across the region.

# 4 Results of survey: Conclusions

# General comments on development

## A. Agriculture

JICA supported projects have succeeded in greatly raising the productivity and revenue generated from agriculture in the Kilimanjaro region. This has been achieved through considerable investment. This investment level and the scale of individual operations differs significantly from the 1977 KIDP. The KIDPP proposed to implement a programme of adaptive agricultural development that improved broad-based small-scale production systems throughout the region.

In general, JICA aid to the agricultural sector has acted in the contrary to the guidelines produced in the 1977 KIDP. In particular, it has failed to deal with the broader development of agricultural practises, crops, and land which fall outside the scope of formal and intensive rice cultivation. This has served to increase the income disparities for many people of the Kilimanjaro region who are not fortunate enough to live in areas which can support rice. Although each of the irrigation projects is meant to be a model for the KRDD to replicate or expand upon, under the current economic climate and financial management regime, the KRDD is in no position to do so.

#### Lower Moshi ADP

The scale and complexity of the Lower Moshi ADP may be questioned with regard to overall sustainability. However, a significantly large impact may have been necessary to develop the marketing structure. The burgeoning market for rice has provided an incentive to change agricultural change in the region. The large number of people involved on the scheme has also undoubtedly helped disseminate improve irrigation agronomy and related skills over a wide area.

#### Mkomazi Valley Area IDP/Ndungu ADP

In the simplest analysis of yield per hectare of paddy rice, project performance is acceptable as it falls within the projected range. The paddy yield per hectare is 5.2 tons/ha of which 40% of land produces a second crop in the dry season, ie: average yield per year over the whole project of 7.3 tons paddy/ha/yr.

However, the Ndungu project ultimately had an investment cost approaching US\$20,000/ha. With zero investment cost, the yield under traditional irrigation systems, before the introduction of high-yielding varieties and inorganic fertilizer, was approximately 2.35 tons/ha. With an investment cost of US\$175/ha, improved traditional irrigation management and agronomy provides stable yields approaching 4 tons/ha with some land cultivated twice in a year.

Despite this poor assessment, the high initial investment made at Ndungu should not be lost to short-term objectives. The project management at Ndungu ADP specifically requested that JICA review the project financial and technical management and develop a strategy to achieve a longer-term self-sustaining management structure.

#### Lower Hai and Lower Rombo

Despite technical problems with water quality, quantity and cost; the projects represent development ideas that might be considered if the Tanzanian economy could fund the development, and if the internal economic rate of return (IRR) shifted in favour of the projects. However, at present it is probably more cost-effective to exaamine improvements of traditional irrigation schemes, using the lessons from the Mkomazi valley.

It is felt that the area and productive value of indigenous irrigated areas was under-estimated in the JICA study. If the economic IRR of the Hai and rombo projects was reviewed in the light of the viability of inidgenous irrigation systems and existing social structures, the outcome would not be attractive.

The environmental impact of the scheme also requires closer scrutiny, not only to examine impact on wildlife and regional biodiversity, especially in Boloti swamp, but also in the

perceived impact on local land-use surrounding the project area.

## Tractor Hire Services Programme

RDD representatives feel that the tractor hire services programme was in general effective and worthwhile implementing. However, a number of problems contributed to the less than efficient running and, ultimately, the failure of the programme to continue independently of assistance:

- all revenue collected by the RDD had to return Treasury in Dar es Salaam. This revenue was not returned in sufficient quantity for the RDD to adequately reinvest in the programme. This was essential if the tractors were to be maintained appropriately and replaced at the end of their working life;
- insufficient training inputs. Only 2 Japanese experts were assigned, and for only one year, to establish the workshop facilities and training regime. Some additional training inputs did come from the KADC/KADP but this was not part of the formal programme;
- JICA left an inadequate mangement structure before handing over;
- ineffective supervision of tractor use in the field;
- very little supervision of fees collection;
- low charge rates which did not allow for high fuel and spare part costs. Charge rates in the private sector are higher and reflect the market potential and willingness to pay;
- supply of spares proved difficult to obtain once those provided through the grant assistance had been utilised.

This programme should have been planned with greater flexibility and more supervision and monitoring. The problems of training, supervision, poor revenue collection processes, and the return of funds to central government should have been easily identifiable problems prior to project implementation. It is surprising these issues were not identified and rectified before the second grant of tractors.

Private tractor operators have worked successfully in the Kilimanjaro region since the 1930's. Their existence implies that there is no economic reason that the RDD could not have effectively implemented the tractor services hire programme, if they had been able to establish an appropriate support structure. This would have included improved management,

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revenue collection, budgeting, maintenance, and training programmes.

## Kilimanjaro Agricultural Training Centre

The KATC programme is very comprehensive and quite elaborate. However, concerns already exist about its ability to establish itself as a self-sustaining national training centre in five years. It is anticipated that by the project's termination in 1999, it should have achieved training of local (ie: Arusha, Kilimanjaro and Tanga Regions) technical officers, extension officers, and key farmers. It will otherwise develop only as a repository for current resource materials and research on rice cultivation in Tanzania. Due to the high cost of transport, allowances, and general communication difficulties, the value of the training programmes, information, and research may be limited for the other more distant regions of Tanzania.

It is possible that if the centre adopted a process of independent revenue generation for the centre such as the expansion into courses for commercial operations and contract research, the training centre may be able to subsidise the small amount of financial support the programme is likely to receive from the government. If this policy was adopted, it would be best carried out while experts from JICA were available to assist in its development.

# B. Utilities: Electrification

No detailed information was obtained in this survey. The planning department of the KRDD was able to confirm that Phase I had been completed but was unable to provide detailed information. TANESCO officials in Moshi, the regional headquarters, were equally unable to assist but could confirm that there had been an ongoing programme of improvement in the distribution network for the greater Kilimanjaro region in which a number of donor agencies have been involved (eg: Power 4 Singida - Arusha, Deresa, Tanga, and, Power 6 - Irish Aid). Phase II of the JICA programme will include voltage improvement in areas not covered by the Power 4 & 6 projects.

# C. Industry: Kilimanjaro Small-and-Middle Scale Industry Development Project

The inflexibility of the project document and subsequent implementation meant that the potential for development was never fully realised. Initiatives by the KIDC to achieve sustainability through the commercialisation of its activities while still operating as a project were actively discouraged by the donors. The centre now lies largely idle with personnel trained through the project becoming increasingly frustrated. A small amount of revenue is currently being raised through the production and sale of kiln-fired bricks, clay tiles, and fire-blocks. Design staff have also produced a locally made water pump and diesel engine which could possibly find a market within the region. The lack of resources available to the centre has meant they have been unable to capitalise on developments of this nature.

There was a failure of the project to achieve the major goal of training and developing the skills of local artisans. This had only just begun as the Japanese support finished. Although this was primarily because the Government of Tanzania was unable to fulfil its own commitments to the project, it did mean that once the Japanese inputs ended (on schedule) one of the key outputs of the entire programme was abandoned before it made significant progress.

If the donors had been more flexible and moved to support the development of the third stage, allowing a greater amount of skills transfer outside the centre, many of the initiatives of the KIDC may still be operating. The centre could now be making a significant input by supplying trained artisans to the independently established and funded Small Industrial Development Organisation programme. This is a programme established by the Ministry of Industries to promote local entrepreneurs through providing management assistance and facilities.

Administrators of the project find it all the more surprising now, two years after the project has finished, with renewed Japanese Government interest in the possibility of assisting the centre in becoming more market oriented and commercially based.

It appears that there was a fundamental design fault in the planning and establishment of the center, particularly in

reference to its continued operation after termination of Japanese assistance.

# D. Natural Resources: Forestry

The semi-arid forest management plan was adopted by the Government of Tanzania and incorporated into the Tanzanian Forest Action Plan. Implementation of its recommendations are being carried out as and when it is possible by the Department of Forestry, Ministry of Tourism, Natural Resources, & Environment (ie: as funding allows on a national basis). At present there is no such initiative in the Kilimanjaro region.

Although the Same Village Forestry Project is primarily a project in collaboration with the Department of Forestry and may yet have a significant national impact; the low level of regional involvement may seriously affect the success of the project as model of social forestry within the Kilimanjaro region. The lack of involvement of the KRDD is of concern when it is possible that responsibility for at least part of this programme may fall into the KRDD's hands after its completion. It is also a concern that there is no formal or effective co-ordination of activities with other social forestry initiatives within the Same district carried out by other donors, NGOs, and government initiatives.

In light of the Ministry of Natural Resources and the KRDD financial problems, and that other agencies are also operating in the Same district, closer co-ordination should have been encouraged from the feasibility study stage. This might have allowed for a more viable, effective, and comprehensive social forestry programme, not only in the Same district, but possibly across the region to become established.

# Specific comments on JICA's role

JICA has been inflexible in adapting individual project guidelines to accomodate socio-economic and other changes. As a result, the KRDD has not been able to introduce proposed alterations during the life of many of the initiatives originating from the KIDP. These changes may, or may not, have increased the likelihood of the initiatives succeeding after donor support was completed. However, regional level management could have developed through the experience.

JICA have funded large-scale and high-profile projects. Some of the projects, and their mode of implementation, were not in line with the priorities of the KRDD. Although the KRDD must generally support any donor initiative for a project's inception, it is clear that the initiative is often derived more from the donor's activities than the recipient's needs. Meanwhile the political ability of the KRDD to re-direct or even refuse donor aid is limited. An example of this can be seen in the recent agricultural development of the region. It appears that JICA have promoted a rice-based culture over other agricultural practices and, although successful, this was contrary to the original JICA recommendations in the KIDP.

In addition to this, JICA, as with many development projects and all donors, failed to recognise the recipient government's inability to fully meet the requirements of the projects and, although repeatedly encountered, failed to adopt measures to minimise the impact of this.

# Specific Development Project Area Recommendations

# Agriculture

After nearly twenty years of investment, it is perhaps an appropriate time for JICA and the KRDD to examine what their roles, expectations, and future inputs to the agricultural development of the Kilimanjaro Region as a whole should be. In particular, the issue of revenue generation which would allow the KRDD to continue to support its and JICA's agricultural development initiatives, must be addressed and resolved.

In addition to looking very closely at agricultural projects of this type in the future, the following recommendations may alleviate some of the problems now faced by the various JICA promoted agricultural development projects:

- JICA and JOCV may wish to consider the placement of volunteers to assist project management and farmers cooperatives in the technical management of the project;
- to allow irrigation projects to raise water charges over a period of time, ie: three or five years, the provision of a loan should be examined;

- some grant aid for specific spot maintenance on the conveyance structures in the irrigation projects may also be considered. Material and equipment supplied under the KRII agreements may be specifically allocated for this purpose;
- JICA may wish to look at the linkages with other regional intiatives, specifically the neighbouring Traditional Irrigation Improvement Project, both projects may benefit from collaboration on training in management and marketing ventures;
- improved revenue collection and disbursement procedures.

#### Utilities

JICA must work to ensure appropriate billing and revenue collection procedures, and an appropriate maintenance regime are established.

#### Industry

JICA is considered inflexible in its implementation of the KIDC project and should examine possibilities of supporting any initiative by the centre to revitalise its activities.

#### Natural Resources

JICA should reappraise its approach to sustainable social forestry at community level. If the objective is still to work at community level, the programme should work formally at districts and regional level. Appropriate technologies and a lower level of external inputs would ensure some sustainability. The emphasis should move to extension work with the villages. This could be achieved with JOCV placements and coordination with other programmes in the area.

# Requests for further surveys

There is presently an application for funds to improve the water supply for Lower Moshi irrigation scheme.

## Annex A: Interviewees

#### **KIDP**

Mrs Benne, Acting Planning Officer Mr Moshi, Director of Lower Moshi Agricultural Development Project Mr Mushi, Regional Natural Resources Officer Mr S. Sugawara, JICA Agricultural Machinery Expert, KADP Mr Temba, Regional Crops Officer Mr Shiratori, Coordinator of KATC Mr Isara, Regional Forestry Officer Dr F.P. Sunguya, Regional Agricultural and Livestock Development Officer Mr Shayo, Principal, KATC Mr Wandera, Agricultural Mechanisation Officer Mr Ibrahim Mapunda, Manager TANESCO Mr Kinasha, Project Manager KIDC Mr Materu, Assistant Project Manager KIDC James E. Hangi, O&M Chief, Mkomazi ADP Mr A.S. Kavumo, Project Manager, Mkomazi ADP

#### Same District

Peter C. Kangwa, District Commissioner, Same District Mr G Moshi, Establishment Officer, Same District Mr Kiviar, Agricultural Development Officer, Same District

Ms Linda Baas, SNV TCO, TIP, Hingilili William Francis, TIP, Hingilili

Forestry Division, Ministry of Tourism, Natural Resources, & Environment

Mr Mtuy, Director of Forestry, Dar es Salaam Mr B.G. Matunda, Project Manager, Same Forestry Project Mr Sato, JICA Expert, Same Forestry Project Mr Ali Maggid, Assistant Extension Counterpart, Same Forestry Project

# Annex B: Photographs of project



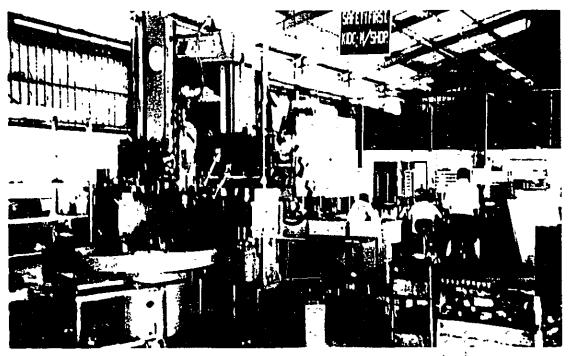
1 Water extraction upstream from Lower Moshi Agricultural Development Project



2 Paddy Planting in Ndungu Agricultural Development Project



3 Tractor operator training course at the Kilimanjaro Agricultural Training Centre



4 Workshop, Kilimanjaro Industrial Development Centre

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# Annex C: Terms of reference and purpose of survey

#### Terms of Reference

- The JICA UK Office has requested the consultants to prepare of an independent follow-up survey in Tanzania.
- It is proposed that the work be a carried out between Thursday 9th November and Friday 22nd December, 1995.
- The survey will comprise a broad evaluation and current appraisal of thirteen (13) Master Plans, Feasibility Studies, and Basic Studies in comparison to the present and future status of the individual projects or studies.
- The scope of work will cover:
  - a) Study on Water Resources Development in the Ruvu River Basin
  - b) Study on Dar es Salaam Road Development Plan
  - c) Natural Soda Development in Lake Natron and Related Transportation Facilities
  - d) Kilimanjaro Region Integrated Development Plan
  - e) Southern Coast Link Road Project
  - f) Proposed Mahale Mountains National Park
  - g) Lower Moshi Agricultural Development Project
  - h) Mkomazi Valley Area Irrigation Development Project
  - i) Expanded Afforestation Work in the Same District of Kilimanjaro Region
  - j) Road Improvement and Maintenaance in Dar es
  - k) Lower Hai and Lower Rombo Agricultural Development Project
  - 1) Rehabilitation of Dar es Salaam Water Supply
  - m) Topographic Mapping of Mwanza-Geita Block in the United Republic of Tanzania
- If possible, the survey will cover recent and relevant developments in the context of each project or study.
- Where appropriate, the reports will comprise questionnaires, interviews and highlight following actions for JICA and/or the Government of Tanzania.

- The reports will contain a detailed itinerary, records of interviews made and sources of information.
- The quantity and quality of information contained in the reports will reflect the availability and accessibility of information in Tanzania.
- The reports will be prepared in draft form and presented to the relevant implementing Ministries for comments before leaving Tanzania.
- Final report texts and layouts will be completed by Friday 22nd December, 1995.

# Purpose of survey

This report comprises a descriptive assessment of the progress of the project against the objectives of the project as described in the original study. The purpose of the survey is to:

- 1. Describe project achievements to date by their:
  - A. Impacts
  - B. Effectiveness
  - C. Relevance
  - D. Efficiency
  - E. Sustainability
- 2. If required, produce specific and general recommendations to improve the performance of this and other similar projects
- 3. Further communication between funding agencies, design consultancies, implementing agencies and project beneficiaries

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# Annex D: Methodology and chronological itinerary

## Methodology

As far as possible, the survey was performed by a structured process:

- identify the authorities involved;
- identify and locate key informants within the authorities;
- locate adequate documentation and reportage;
- define aims of project;
- conduct interviews on specific and general issues;
- define indicators of achievement and/or progress;
- visit the site;
- analyse the collected data;
- prepare draft report;
- discuss the draft report with key informants;
- edit and prepare final report text.

## Chronological Itinerary

## Tuesday, November 21st

09.00 Introductory meeting with RDD Kilimanjaro Region:

Mr Riwa, Acting Regional Development Director Mr Moshi, Director of Lower Moshi Agricultural Development Project

Mr Mushi, Regional Natural Resources Officer

Mr S. Sugawara, JICA Agricultural Machinery Expert, KADP

Mr Temba, Regional Crops Officer

Mr Shiratori, Coordinator of KATC

Mr Isara, Regional Forestry Officer

Mrs Benne, Acting Planning Officer

Dr F.P. Sunguya, Regional Agricultural and Livestock Development Officer

#### 10.00 Meeting with:

Mr Moshi, Director of Lower Moshi Agricultural
Development Project

Mr S. Sugawara, JĨCA Agricultural Machinery Expert, KADP

Mr Temba, Director of Agricultural Extension

12.30 Meeting with:

Mr Shiratori, Coordinator, KATC Mr Shayo, Principal, KATC

13.30 Meeting continued with:

Mr Mushi, Regional Natural Resources Officer Mr Isara, Regional Forestry Officer

#### Wednesday, November 22nd

08.30 Field trip to Lower Moshi ADP with

Mr Sugawara, JICA Expert

Mr Shiratori, JICA, JICA Expert

Mr R.J. Shayo, Principal KATC

Mr Moshi, Director of Lower Moshi Agricultural Development Project

#### Thursday, November 23rd

08.30 Meeting Forestry dept in Moshi

# Tuesday, November 28th

08.00 To Moshi via Lower Hai:

Boloti swamp

Sanya scheme area

14.00 HT Field Survey Lower Rombo

#### Wednesday, November 29th

08.30 Moshi RDD:

Mrs Benne, Acting Planning Officer

Mr Tembo, Chief Agricultural Extension Officer

Mr Wandera, Agricultural Mechanisation Officer

HT Moshi TANESCO:

Mr Ibrahim Mapunda, Manager

11.30 IR KIDC

Mr Kinasha, Project Manager

Mr Materu, Assistant Project Manager,

12.30 HT Same Forestry Project:

Mr B.G. Matunda, Project Manager

Mr Sato, JICA Expert

15.30 JR Same District people

Peter C. Kangwa, District Commissioner, Same

Mr G Moshi. Establishment Officer

| Thursd: | ay, November 30th                                 |
|---------|---|
| 08.00   | HT Mkomazi valley area irrigation. Meetings with: |
|         | Peter C. Kangwa, District Commissioner, Same      |
|         | Mr Kiviar, Agricultiral Development Officer       |
|         | Ms Linda Baas, SNV TCO, TIP, Hingilili            |
|         | William Francis TIP, Hingilili                    |
|         | James E. Hangi, O&M Chief, Mkomazi ADP            |
|         | Mr A.S. Kavumo, Project Manager, Mkomazi ADP      |
| 08.00   | JR Same Forestry field trip                       |
|         | Mr Ali Maggid, Assistant Extension Counterpart    |
| 09.00   | Mwambe, Project Nursery                           |
| 11.30   | Manka, Womens Cooperative Nursery                 |
| 14.00   | Bangalala, Private Nursery                        |
| 14 30   | Makanya, School Nursery                           |

# Annex E: References & reports used in survey

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Government of Tanzania, Prime Minister's Office: <u>The Future Role of the Kilimanjaro Agricultural Developent Centre.</u> (Undated)

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JICA (1980) <u>Feasibility Report on Lower Moshi Agricultural</u> <u>Development Project, Draft Main Report.</u> August 1980

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Nippon Koei Co., Ltd (1988) <u>Lower Moshi Agricultural</u> <u>Development Report. Project Completion Report. Volume I Main</u> <u>Report. March 1988</u>

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JICA (1983) <u>Feasibility Study on the Mkomazi Valley Area</u> <u>Irrigation Development Project. Interim Report, Volume I, Main Report.</u> March 1983

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- JICA (1984) <u>Feasibility Study on the Mkomazi Valley Area</u> <u>Irrigation Development Project. Volume I, Main Report.</u> January 1984
- JICA (1984) <u>Feasibility Study on the Mkomazi Valley Area</u> <u>Irrigation Development Project. Volume II, Annexes.</u> January 1984
- JICA (1984) <u>Feasibility Study on the Mkomazi Valley Area</u> <u>Irrigation Development Project. Volume III, Drawings.</u> January 1984
- JICA (1987) <u>Basic Study Report on The Ndungu Agricultural</u> <u>Development Project. Draft.</u> March 1987
- Nippon Koei Co., Ltd (1988) <u>The Ndungu Agricultural</u> <u>Development Project (Phase II)</u>. <u>Design Report</u>. November 1988
- JICA (1988) Report on the study of development survey for Expanded Afforestation Work in Same District of Kilimanjaro Region, United Republic of Tanzania. August 1988
- JICA (1988) Report on the study of development survey for Expanded Afforestation Work in Same District of Kilimanjaro Region, United Republic of Tanzania: Appendix, August 1988
- JICA (1991) <u>Implementation Design Survey Report for The Kilimanjaro Village Forestry Project.</u> April 1991
- JICA (1991) Implementation Design Survey Report for The Kilimanjaro Village Forestry Project: Annex. April 1991 JICA (1988) Plan of Operations for Topographic Mapping of the Feasibility Study on Lower Hai and Lower Rombo Agricultural Development Project in the United Republic of Tanzania. First Year. August 1988
- JICA (1988) <u>Plan of Operations for Topographic Mapping of the Feasibility Study on Lower Hai and Lower Rombo Agricultural Development Project in the United Republic of Tanzania. Second Year.</u> October 1989
- JICA (1990) The Feasibility Study on Lower Hai and Lower Rombo Agricultural Development Project. Progress Report (2). March 1990

JICA (1990) <u>The Feasibility Study on Lower Hai and Lower Rombo</u> <u>Agricultural Development Project. Volume I, Main Report.</u> November 1990

JICA (1990) <u>The Feasibility Study on Lower Hai and Lower Rombo</u> <u>Agricultural Development Project. Volume II, Annex Report.</u> November 1990

FAO (1991) Forestry for Rural energy, Hai Afforestation Scheme. Project Findings and Recommendations. 1991

Government of Tanzania, Ministry of Local Government and Regional Administration (1991) <u>Details of Miwaleni, Lower Hai and Mwanga Agricultural Development Projects.</u> July 1991.

