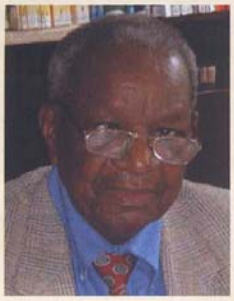
TaCRI

TANZANIA COFFEE RESEARCH INSTITUTE

Annual Report 2004

CONTENTS

CHAIRMAN'S & DIRECTOR'S MESSAGES



CHAIRMAN'S MESSAGE

Once again, it gives me great pleasure to write a foreword to this second Annual Report of the Tanzania Coffee Research Institute. This represents another significant step in the life of this young Institute.

In my foreword to the first Annual Report, I stated that TaCRI has started well and that stakeholders had very high expectations from the Institute. I am pleased to say that in the year under review, performance has exceeded expectations. Our top priorities have been to unlock on-shelf coffee technologies accumulated from earlier research, carried out in the country over more than half a century, and to give urgent attention to the release of high yielding, high cup quality, disease resistant varieties as identified by our stakeholders. The improved varieties offer the only hope to coffee growers in Tanzania, within the current scenario of high costs of production and lowest ever coffee prices. I am pleased to note that important progress has been made on both of these priorities, as reported elsewhere in this report.

On behalf of Tanzania's coffee producers, I would like to express our appreciation for the government's efforts and encouragement and ensuring that concrete steps are implemented to put the coffee industry on a progressive path. These steps, including the formal pre-release of the five improved Arabica varieties would not have been possible without the generous support of the European Union to whom we are most grateful.

It is my hope that the government and the EU will continue with this support to TaCRI and to the industry generally, along with growers contributions, so that coffee can regain its position as one of the pillars of the economy.

However, I regret to have to report that some key TaCRI staff positions could not be filled during the year for a variety of reasons. We expect to take corrective measures during the coming year to recruit the qualified dynamic and energetic staff required to complete the team.

On behalf of all coffee stakeholders and the Board of Directors I should like to record my appreciation to the TaCRI management and staff for their dedication and achievements over the last year, and for meeting their responsibilities to stakeholders.

Mr Edwin I. M. Mtei
Chairman, Board of Directors
Tanzania Coffee Research Institute

CHIEF EXECUTIVE DIRECTOR'S MESSAGE

At TaCRI, we have made some important progress over the year. We have now completed the first year's implementation of the 5-year Strategic Action Plan and are now prepared for the second year's activities.

Our most significant achievement was the pre-release of five of our new improved, high cup quality hybrids. This is a major milestone that will provide the springboard to accelerate the process of mass multiplication and distribution of the new varieties to farmers across the country.

We reached our target for the establishment of a primary nursery at Lyamungu with 10,000 plants of the high yielding varieties now planted. We expanded and

perfected the technique for clonal propagation with a rooting success of more than 90%. We have also perfected our grafting techniques to achieve a success rate of almost 100%.

Looking further afield, each of our three substations around Tanzania is now fully operational and we successfully recruited four extension agronomists to manage the rejuvenation of coffee cultivation in the four major growing zones.

Internationally, we completed discussions with CIRAD, France for the establishment of a research tissue culture laboratory at Lyamungu capable of multiplying between 100,000 and 150,000 plantlets a year. We also made progress in establishing collaborative linkages with CIFC, Portugal to strengthen capacity for breeding for resistance to CLR & CBD, and we benefited from the Netherlands Management Consultancy Programme (NMCP), which financed the visit of a senior coffee breeder, Dr. Herbert van der Vossen, in January this year. NMCP will continue to support other professionals as requested. We also made initial contacts with the Swedish University of Agricultural Sciences, Alnarp for germplasm enhancement and multiplication of the new varieties. We also strengthened regional collaboration through participation in the launching of CORNET (the Coffee Research Network for Eastern Africa) and in the African Coffee Research Network (ACRN). Finally, we supported staff participation in important coffee conferences including the East African Fine Coffee Association's (EAFCA) first conference and exhibition in Nairobi in February 2004 and the Speciality Coffee Association of America Conference in Atlanta, USA in April 2004.

Closer to home, we have expanded our Train the Trainers Programme, which has provided training for farmer groups to initiate village-based secondary nurseries, and we have done the same with estate-based nurseries. We also strengthened village-based training in Mbinga, which has already improved smallholder coffee production in Mbinga District.

During the year, we made concerted efforts to increase awareness amongst stakeholders about TaCRI and its work. For example, in early June we had a very successful stakeholders meeting for Estate growers (mostly members of Tanganyika Coffee Growers Association (TCGA) and the Tanzania Coffee Association (TCA)) to discuss the potential of the new varieties. We also had visits from the Parliamentary Committee on Land and Agriculture in January and a visit by the EU Commissioner for Development and Humanitarian Assistance late last year. Very successful and well-patronized Field Days were held at Lyamungu and Ugano during the year. We have also begun the process of producing simple and informative extension messages for distribution to farmers. Awareness and information dissemination will expand greatly in the coming year as our communications strategy falls into place.

New initiatives included successfully implementing the initial steps for the management of Coffee Wilt Disease in Kagera, and initiating work to develop compact coffee varieties. And we have a new logo.

Our ability to function effectively as a Research Institute for all our stakeholders is very largely down to personnel and I am pleased to say that we have a strong team of people at TaCRI. We held an important teambuilding workshop in August 2002 followed by a performance management event in November 2003 and we are in the initial stages of implementing a performance management system for the Institute to ensure that we get the best from all our employees, whilst assisting them to achieve their full potential.

In a nutshell, this is a summary of our achievements over the past year. Within the detail of the Annual Report you will see specific evidence of our progress and our proposed actions for the coming year.

I wish you all a very successful forthcoming year and would like to extend a very warm welcome to all our stakeholders to Lyamungu, and our sub-stations, Maruku, Mbimba and Ugano. We have a popular saying that every day is an open day at TaCRI!

Professor James M. Teri
Chief Executive Director
TaCRI

TACRI MAJOR ACHIEVEMENTS 2003- 2004

Full accounts of this last year's achievements and the priorities for the next 12 months are detailed in the following pages for each TaCRI department. The key highlights are summarised as follows:-

Pre-Release of 5 improved Coffee Varieties

In March, the Institute reached a crucial milestone, with the pre-release of 5 new improved coffee hybrids, by the National Variety & Seed Certification Committee. Each of the new varieties boasts resistance to coffee berry disease (CBD) & coffee leaf rust (CLR); they are high yielding; have big bean sizes - more than 70% of the beans are AA or A grades, (32% higher than current commercial varieties); and their liquor quality is of export class (Classes 4-6). The benefit of these new varieties is significant; they will reduce costs of production by up to 50%, with farmers no longer being required to protect their crop against CBD & CLR.

Farmer Groups Start Mass Multiplication of New Varieties

The Crop Productivity & Primary Processing Department, in collaboration with the Technology Transfer & Training Department, has produced over 70,000 clonal seedlings of the 5 new pre-released varieties. Of these, 18,000 have so far been distributed to Farmer Groups who have been trained to develop their own low-cost clonal gardens to multiply their own clones for onward distribution to individual farmers.

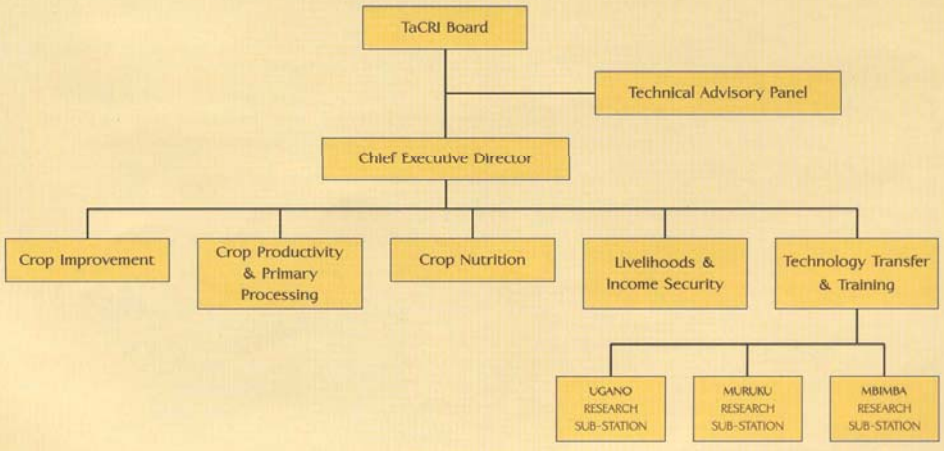
Training Manuals Produced

The Technology Transfer & Training Department has produced a training manual and module for vegetative multiplication. This is being used by Extension staff and nursery supervisors to promote the planting and multiplication of the new improved hybrids. To date, 27 farmer groups and 2 central nurseries have been through the course.

Tissue Culture Clones Continue to Perform

The 9 tissue culture clones established in 2002 in 25 sites reflecting the diverse coffee growing areas of the country, continue to perform well (show hybrid vigour, and resistance to CBD & CLR).

TaCRI ORGANISATIONAL STRUCTURE



CROP IMPROVEMENT DEPARTMENT

One of the major constraints to productivity and growth of the industry has been the continued cultivation of old varieties that are low yielding and highly susceptible to diseases. The Crop Improvement Department's responsibility is the development and promotion of new Arabica & Robusta varieties that are high yielding, disease resistant, and which boast good bean size and cup quality. Already, results of research to develop these new varieties have borne fruit with new varieties being distributed to farmers to begin their own cultivation of improved coffee trees.

MAJOR ACHIEVEMENTS 2003-2004

New varieties growing at Lyamungu

- In March, the National Variety & Seed Certification Committee authorised the official pre-release of 5 new improved coffee varieties to coffee growers. These 5 varieties all feature the required high yield, disease resistance and bean and cup quality selected for new hybrids.
- The description of 5 varieties was completed using internationally accepted coffee descriptors.
- 67 crosses were made between 32 Colombian compact lines & 61 tall hybrids from F. 23. A total of 20 of the 67 were selected as the best crosses.
- The 9 tissue culture clones that were established between the end of 2001 and mid 2002 in 25 selected sites around the country, continue to show plant vigour and resistance to CBD and CLR.
- Clonal comparative trials from 20 best selections in F. 23 were initiated. These will be ready for testing in multilocational trials at the beginning of 2005.
- A CWD resistance selection programme was initiated which has screened 216 Robusta lines to date from Maruku germplasm. A total of 15 of the Robusta lines showing apparent CWD resistance, were planted out in CWD hot-spots.
- A CWD management plan was implemented with the continuation of the eradication of wilt-affected trees. During the year, 20% of CWD affected trees were uprooted in Bukoba, Muleba & Karagwe districts.
- 1382 farmers and 98 extension staff were trained in CWD management to create awareness and initiate CWD management strategies.

MAJOR PRIORITIES 2004-2005

- Initiate Distinctness Uniformity Stability (DUS) tests on the 5 pre-released coffee varieties, in partnership with the Tanzania Official Seed Certification Agency (TOSCA), to meet the criteria required to achieve full official release.
- Establish a programme with ARI Mikocheni for the genetic fingerprinting of all improved varieties.
- Continue the selection & propagation of new clones for release.
- Continue with the development of compact-type hybrid cultivars.
- Install and operationalise a research tissue culture laboratory at TaCRI by the end of 2005.
- Continue selection for Robusta CWD resistance.
- Continue with vigourous cup tasting of improved hybrids in collaboration with the Crop Productivity and Primary Processing Department, and with internal and external partners.

CASE STUDY

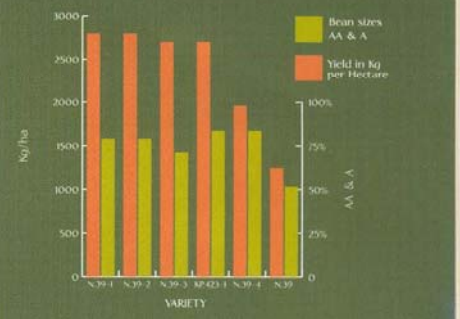
The Future of Tanzania Coffee after Release of New Disease Resistant Hybrids

The official pre-release of 5 new improved coffee varieties by the National Variety & Seed Certification Committee in March 2004 opened a new chapter for the Tanzanian Coffee Industry. Tanzanian coffee growers are at last having the advantage of using improved coffee varieties. The salient features of these carefully selected varieties include:-

- Higher productivity: yields range from 1,961 to 2,763kg/ha compared to 1,286kg/ha for the commercial variety (N 39) (34.5-115%), with additional savings on fungicides and their applications
- Bigger bean size: an average of 59% AA compared to only 37% for N 39; 78% AA & A, compared to only 53% for N 39.
- Good cup quality: comparable or better than N 39 (Classes 4-6); medium body, medium acidity, cup is good and balanced in both body and acidity, with pleasant aroma.
- Resistance to CBD and CLR: the impact of the new varieties will be significant, reducing farmer costs of production by 50% in the first instance, since there will be no need to spray against major diseases. The coffee industry has been investing around US $40 million annually in importing fungicides for the control of CBD and CLR.
- Fewer suckers: this minimises the need for pruning and hence reduces the costs associated with pruning. Open canopies also minimise pest infestations.
- It must be stressed that no Catimors have been used as parents in the development of all Tanzanian coffee hybrids, and that these hybrids are not genetically modified (GMOs)

Smallholder and estate coffee growers are highly encouraged to use these new varieties because of their significant competitive advantage over existing commercial varieties.

PERFORMANCE OF NEW VARIETIES vs OLD (N 39)



Stakeholders comparing new vs existing varieties

CROP IMPROVEMENT DEPARTMENT

CASE STUDY

Coffee Wilt Disease (CWD): a threat to livelihoods in Kagera Region

Robusta coffee trees killed by CWD

Robusta coffee is an important commodity for smallholder farmers in Kagera region, supporting the livelihoods of around 70,000 families. However, Robusta coffee is seriously attacked by Coffee Wilt Disease (CWD), that is incited by a fungus that blocks xylem vessels, interfering with water flow, and resulting in wilting and death of diseased plants.

On average, approximately US$ 11 million is earned annually from Robusta coffee exports. However, since the outbreak of CWD in 1997, annual losses amount to almost 300 tonnes, worth more than US$ 200,000.

TaCRI has initiated a number of measures to manage the disease in collaboration with national and international partners:

- A survey was conducted across all the coffee growing areas of Tanzania to determine the extent and severity of the disease. CWD was only found to attack Robusta coffee.
- 1382 farmers and 98 extension staff in Kagera were trained in Coffee Wilt Disease (CWD) management activities. Training encompassed symptoms identification, safe handling, and destroying of diseased Robusta trees to minimize further spread.
- Eradication campaigns were implemented in Bukoba, Muleba and Karagwe districts. 1402 trees out of the 5000 Robusta coffee trees estimated to have been attacked by CWD were eradicated, significantly reducing further spread of the disease.
- An awareness campaign was initiated through the publication of articles in newspapers, radio and local TV in Kagera Region, and the publication of posters & leaflets, alerting farmers to the dangers of the disease. Approximately 400 leaflets and 500 posters have been distributed to date.
- Policy maker forums were used to disseminate information on CWD. For example, in May last year TaCRI and representatives from the Ministry of Agriculture and Food Security were invited to attend the Regional Central Committee of Kagera, chaired by the Regional Commissioner Major Gen. Tumainiel Kiwelu. Highlights and strategies on management of CWD were presented. The meeting had significant impact on policy makers who supported the eradication programme and training of extension workers and farmers using funds from district councils.
- Trials of short-term control measures including the testing of chemicals, agronomic and cultural practices were initiated on 12 farms located in hot-spot areas in Bukoba & Karagwe districts. This is the second year of testing and results are promising.
- Selection for wilt resistance is in progress. To date, 67 Robusta lines from Maruku germplasm are under screening in a CWD garden in Ibosa, selected from a total of 216 lines. In an effort to enrich Robusta coffee germplasm, 15 plants showing apparent CWD resistance in farmers fields have been identified in hot-spot areas in Bukoba and Karagwe.

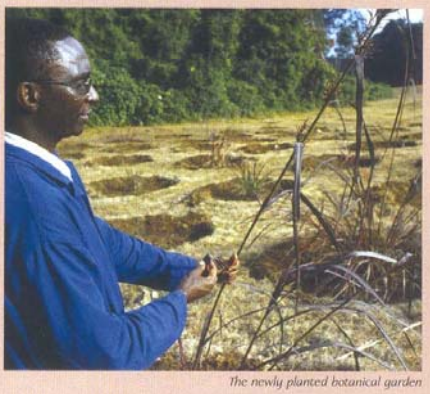
CROP PRODUCTIVITY & PRIMARY PROCESSING DEPARTMENT

TaCRI's Crop Productivity and Primary Processing Department is spearheading the development of best crop husbandry practices and integrated pest management systems that are suited to the various different coffee farming systems in Tanzania. The objective is to increase productivity per unit area or tree, reduce the costs of production, and enhance quality at the primary processing level.

A farmer trained to graft improved varieties on to old coffee trees

MAJOR ACHIEVEMENTS: 2003-2004

- More than 70,000 clonal seedlings have been nurtured and are currently in the nursery at different stages of development ready for distribution to farmers. They will set up their own vegetative propagation units in collaboration with the Technology Transfer & Training Department. Distribution is in progress.
- 8 technologies on crop husbandry and integrated pest management have been compiled and packaged into leaflets & posters for pre-testing by the Technology Transfer & Training Department before widespread distribution to coffee growers. These include information on intercropping, pruning, primary processing & major coffee pests (leaf miner, antestia bugs, berry borer, white stem borer and green scale).
- Information on coffee husbandry practices has been published and is providing the model for planning on-farm and demonstration trials that will be initiated for different agro-ecological zones.
- Perfected the technique for grafting improved coffee hybrids on rootstocks of old varieties as a cheap alternative way to rehabilitate old plantations, with a success rate of 70-90%. More than 1,000 old trees have been successfully grafted with the new hybrids at Lyamungu.
- Tested various promising rooting media for using in propagation boxes as an alternative to the traditional Kisangiro sand and forest soils. This is useful for growers who do not have access to the traditional rooting media.
- 100 coffee samples for cupping and liquoring tests were sent to different liquorers in Tanzania and elsewhere. The samples included the 5 pre-released hybrids, 77 elite materials and 33 from F.23, earmarked for the development of new compact varieties. Results are very promising.
- Prepared the first draft on coffee Integrated Pest Management (IPM) and initiated IPM trials.
- Initiated field surveys to study natural enemies to coffee pests (such as antestia, leaf miner and scales) at Lyamungu and in nearby villages.
- One staff member attended a one-month meteorological training course conducted by the Tanzania Meteorological Authority.
- An international consultant, Dr. Herbert van der Vossen, provided a backstopping visit to the Department in January 2004



The newly planted botanical garden

CROP PRODUCTIVITY & PRIMARY PROCESSING DEPARTMENT

MAJOR PRIORITIES: 2004-2005

Natural pest control

- Recruit an IPM specialist
- Initiate field experiments on crop husbandry practices for the improved varieties, including the tonic effects of limited copper applications.
- Renovate and equip the insectary
- Rehabilitate & equip the Integrated Pest Management & Entomology laboratory
- Rehabilitate the small processing factory at Lyamungu used for processing small samples of coffee for cupping, and retrain staff in cupping sample preparations
- Work with the Crop Improvement Department to implement Distinctness Uniformity Stability (DUS) tests for the pre-released coffee varieties.
- Collaborate with the Technology Transfer & Training Department to start on-farm demonstrations and trials of new technologies, including pruning, conversion cycles, mulching, and grafting, to improve coffee quality
- Support the clonal multiplication of hybrids for research and distribution by the Technology Transfer & Training Department.
- Collaborate with the Technology Transfer & Training Department to prepare extension messages on shade versus sun and sun drying versus artificial drying, with an emphasis on coffee quality
- Collate and report met data from Lyamungu and the regional TaCRI substations.

CASE STUDY

Coffee and banana intercropping: the economic benefits

The coffee and banana based cropping system is the most widespread smallholder farming practice in the Kilimanjaro, Mbeya, Kagera and Arusha regions of Tanzania. The key benefit of adopting this system versus a pure coffee system is that it offers higher returns to smallholder growers.

A typical smallholder farm where poor plant configuration will not optimise profitability for the farmer

Farm sizes featuring coffee-banana interplanting average about 0.5 hectare, with the banana being the main subsistence crop and coffee a subsidiary cash crop. In the past few years lower coffee prices have caused many farmers to neglect their coffee in favour of banana, significantly reducing the revenue potential of their farms. High production costs, especially in controlling CBD and CLR have further eroded coffee's profitability to farmers.

The first steps that TaCRI has taken to address these specific issues are in the development of improved coffee hybrids that are resistant to CBD and CLR.

In specific respect to intercropping, field trials and surveys were carried out on the improved hybrids firstly to assess their suitability in the coffee-banana interplanting system, and secondly to identify the best configuration of coffee-banana interplanting that would provide the greatest economic return to smallholders.

The results revealed that a crop arrangement of one banana stool to 6 coffee trees was optimal and a dramatic improvement on the traditional system where farmers tend to plant very close, at a ratio of one banana stool to one coffee tree.

In economic terms the results were very clear indeed. Total revenues generated by adopting the optimal coffee-banana intercropping system were 50% higher than a pure coffee system, and 42% higher than the traditional system of one banana to one coffee.

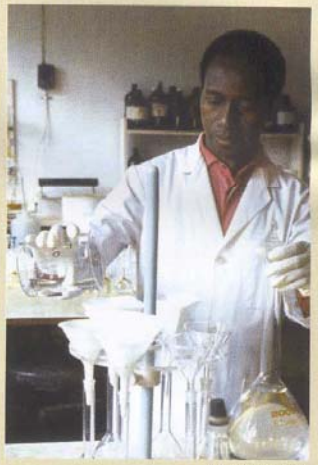
The results have been written into leaflets & posters for farmers. In summary, to maximise scarce land resource, TaCRI recommends that smallholder farmers in suitable areas adopt this intercropping system using the following plant configuration:-

- Plant one row of bananas after every three rows of coffee.
- Use the following spacing rules: allow 2.5m between each row of coffee and allow 1.25m between each plant within the row.
- Each row of bananas will thus be 10m apart and 2.5m should be allowed between each banana plant within the row.
- Use one or two debes of farmyard manure during planting time.

The study clearly concludes that by adopting this optimal system, both productivity and profitability improves for smallholder growers. The development of good crop husbandry practices and technology is a very important aspect of TaCRI's work and research is on-going to identify other cost-effective technologies that are easy to implement whilst having a major impact on incomes.

CROP NUTRITION DEPARTMENT

TaCRI's Crop Nutrition Department is focused on developing and promoting relevant and cost-effective nutrient management systems to help farmers make balanced decisions about how they can best manage soil fertility. The department is also responsible for producing soil and plant analysis and reporting procedures, linking coffee growers to regional analytical laboratories in the country.



Laboratory testing

MAJOR ACHIEVEMENTS: 2003-2004

- The initial compilation of on-shelf technologies was completed and led to the production of three leaflets on chemical fertiliser, farmyard manure, and Minjingu rock phosphate. These leaflets will be pre-tested with farmers in collaboration with the Technology Transfer & Training Department.
- Plans were finalised together with the other TaCRI departments, to initiate on-farm trials of Integrated Soil Fertility Management (ISFM).
- The Department continued to advise farmers from Hai & Moshi Districts on matters related to soil fertility & nutritional problems in coffee
- A total of 89 soil samples were collected and analysed from research trials for determination of soil fertility status.
- Advisory services were provided to TaCRI research departments on soil nutrient problems.

MAJOR PRIORITIES: 2004-2005

- Organise technical backstopping visits by international consultant
- Rehabilitate the plant nutrition laboratory, including the procurement and installation of equipment
- Continue to manage on-station trials
- Collaborate with the Technology Transfer and Training Department to carry out on-farm demonstrations/trials on ISFM
- Determine the optimum combination of organic and inorganic fertilisers for sustainable Arabica coffee production
- Carry out soil conservation and soil fertility management of coffee with the aid of leguminous shrubs and trees (multi-purpose function of shade, mulch and source of nutrients on erosion control)
- Determine the fertiliser requirements of compact-type (TSC hybrid) clones of Arabica coffee with resistance to CBD and CLR
- Compare economic returns between strictly organic coffee farming and coffee production with all standard inputs
- Compare the soil quality and plant nutrient status of organic and conventional coffee production
- Verify the fertility status of field experiments of all TaCRI departments
- Monitor the decline in fertility status on smallholder coffee farms
- Work closely with stakeholders and review progress at regular intervals

Taking soil samples for analysis

CASE STUDY

Maximising fertiliser use with high density planting

Over the past year, the Crop Nutrition Department has been studying the need for fertiliser in relation to increased coffee planting density. Results from the study revealed a significant improvement in the parchment yield by increasing coffee plant density (of the traditional tall varieties) from the current 1330 trees/ha to between 3,200 and 5,000 trees/ha. Beyond 5,000 trees, the research revealed that the heavy canopy obstructs farm operations whilst detrimentally increasing competition for light, nutrients and moisture.

In terms of nutritional support, the yield benefit through optimising plant density can be maximised by increasing N fertiliser dressing to three applications of 60 kg N/ha. This practice provides the opportunity for coffee intensification with the possibilities of either improving coffee yield or releasing land for competing alternative uses, so greatly demanded in populous coffee regions.

TECHNOLOGY TRANSFER & TRAINING DEPARTMENT

Farmers receiving training on good crop husbandry

The Technology Transfer & Training Department plays a crucial role as the mouthpiece for all of TaCRI's work. The Department is responsible for communicating the results of the Institute's work to the industry, and in particular promoting and disseminating appropriate technologies to farmers and associated agencies.

The Department's other major responsibility is driving the mass multiplication and distribution of new improved coffee hybrids to coffee farmers across the country.

New staff members were recruited in 2004, to help achieve the ambitious targets that have been set. The Department is now in the process of developing TaCRI's communications strategy to be accomplished by the end of 2004.

MAJOR ACHIEVEMENTS 2003-2004

- A new vegetative propagation unit (VPU) was constructed, which increased the multiplication capacity of the new improved hybrids by 136,000 cuttings.
- The fine tuning of packaged on-shelf technologies was completed; 13 leaflets and 2 posters have been finished to date.

- Village-based training was successfully conducted with 15 farmer groups in Mbinga. A further 13 farmer groups were helped by TaCRI to sell their coffee direct to auction; as a consequence the groups were able to fetch an average price of Tsh 751/kg compared to the farm gate price of Tsh 350/kg
- A training module on clonal vegetative propagation was published. This is being used for courses targeted at extension staff and nursery supervisors. Four courses were conducted over the year involving 122 participants.
- 27 farmer groups and 2 central nurseries were facilitated to set up their own clonal gardens, including linking with district extension staff in 7 districts (Rombo, Mwanga, Same, Arumeru, Monduli, Karatu and Tarime), for subsequent distribution of clonal seedlings. To date 18,000 seedlings have been planted by groups in these districts
- Continued to create awareness of TaCRI's new technologies to coffee growers and other stakeholders, which heightened demand for these technologies and attracted many visitors to the Institute

KEY PRIORITIES 2004-2005

- To produce detailed recommendations on all aspects of coffee production and primary processing by mid 2005 and promote these to at least 50 farmer groups and 10 estates
- To have training materials on all aspects of coffee production and primary processing developed and ready for testing by the end of 2004
- To establish nurseries, managed by farmer groups and estates, in 5 more districts.
- To continue with aggressive promotion of accelerated propagation and distribution of clonal cuttings through vegetative cuttings and grafting, and to implement this strategy in 12 target districts.
- Build active and effective relationships with extension staff, farmer groups and estates in five more districts during the period.
- Strengthen the involvement of TaCRI research staff and district extension staff in participatory research and technology transfer techniques.

Potting rooted cuttings of new varieties

- Initiate a project to organise farmers to utilise central pulping technology to tap the potential of coffee quality.
- Initiate a study to assess the potential for promoting consumption of coffee in Tanzania
- Continue structured visits to stakeholders.
- Promote extension messages
- Promote outputs from research through the media

A CASE OF SUCCESSFUL SHARED VALUES AND CONFIDENCE BUILDING
Shari: A Model Farm Group

The Shari Group in Hai is a model example of how successfully farmer groups can work. Shari has 25 members who collectively own a mini-pulpery and sell their coffee direct to auction.

In November 2003, Shari became the first farmer group to be involved in TaCRI's accelerated multiplication programme, when the Group was given 750 mother trees to start its own clonal garden. The garden is in outstanding condition and in November this year the farmers are expecting to distribute the first batch of 30,000 seedlings among themselves, for replanting on their individual farms.

By 2005, the Group will be producing an average of 90,000 seedlings each year.

Members of a farmer group receive training from TaCRI

With 300 such farmer groups currently operating nationally, if the Shari model is adopted by these other groups, a turnover of 30 million seedlings could be realised annually, with 135 million seedlings in production within five years.


TaCRI's propagation unit which is now nurturing 500,000 new variety seedlings annually

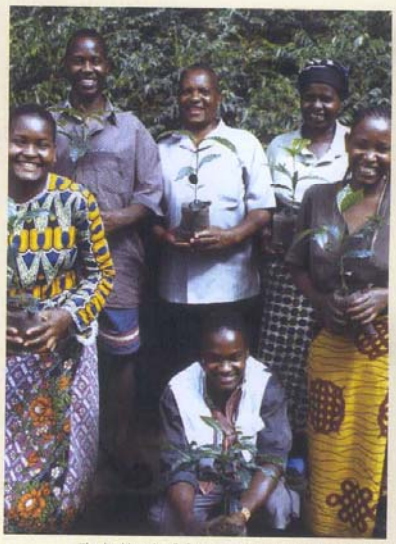
A promising start and optimistic future

TaCRI's target is to distribute the first 500,000 mother trees to farmers as quickly as possible. To date 18,000 seedlings have been distributed to 24 farmer groups. At this rate of distribution it is expected that 100,000 mother trees will have been distributed by December 2004. The TaCRI Board puts great emphasis on the importance of the rejuvenation of the coffee industry, and has made accelerated multiplication of new varieties, the Institute's top priority.

LIVELIHOODS & INCOME SECURITY DEPARTMENT

TaCRI is still seeking the specialist personnel required to manage and operate this important department, and in particular the rural sociologist and economist needed to carry out the surveys required to improve understanding of the issues facing smallholder coffee farmers in Tanzania.

The department has been created because little is known about the social and economic factors that contribute to the sustainability and success of the agricultural systems that smallholder coffee farmers live and work by. In order for TaCRI to provide really meaningful and relevant technologies and advise to these many farmers, it is crucial that more is understood about their environment.



The livelihoods of farmers will improve when they are provided with the new varieties

MAJOR PRIORITIES 2004-2005

- Recruit an economist and rural sociologist.
- Undertake social and economic surveys in a number of representative districts to improve understanding of the issues facing this key stakeholder group.
- Evaluate survey results to identify solutions to improve the livelihoods of coffee farmers.
- Use findings to give practical guidance to other departments within TaCRI to ensure that all the Institute's work continues to be appropriate to the needs of the farmers.

Map of main coffee growing regions of Tanzania showing key coffee research and training centres

This document has been produced with the financial assistance of the European Community. The views expressed herein are those of the Tanzania Coffee Research Institute and can therefore in no way be taken to reflect the official opinion of the European Community

TANZANIA COFFEE RESEARCH INSTITUTE
LYAMUNGU
P.O. Box 3004, Moshi, Tanzania.
Telephone / Fax: +255 27 2756773, Email: tacriced@kicheko.com