

Miti ni Mali Newsletter

Social Forestry Extension Model Development Project (SOFEM) for Semi-arid Areas in Kenya

July 2002 Issue No. 5



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Editorial Committee

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Social Forestry Extension Model Development Project for semi-arid Areas in Kenya (SOFEM)

Mr. M. Mukolwe	KEFRI	Muguga
Mr. M. Nakamura	SOFEM/JICA	Muguga
Mr. P. Barasa	KEFRI	Muguga
Mr. P. Kariuki	FD	Karura
Mr. B. Owuor	KEFRI	Muguga
Ms. J. Wamboi	FD	Karura
Ms. K. Shimizu	SOFEM/JICA	Muguga
Mr. A. Ioki	SOFEM/JICA	Muguga
Ms. J. Kimiti	KEFRI	Kitui
Mr. A. Mwamburi	KEFRI	Kitui
Ms. J. Musyoki	KEFRI	Kitui

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SOFEM Project is Evaluated

M. Mukolwe, K. Shimizu and
M. Nakamura, KEFRI/SOFEM

A project is an essential development tool, while a participatory evaluation is an inevitable process that is designed to ascertain the planned outcomes, improve the operations and management and to draw useful lessons, but not as often misconceived as looking for mistakes and criticisms. It is in this context, that the Social Forestry Extension Model Development Project (SOFEM) whose overall goal is to equip the inhabitants of semi-arid areas in Kenya with appropriate techniques to plant and manage trees through establishing farm forests by the local residents was evaluated as scheduled from 8th - 17th April 2002. SOFEM project was initiated in November 1997 and is expected to end in November 2002. Kenya Forestry Research Institute (KEFRI) and Forest Department (FD) have collaboratively implemented the project with technical and financial support from Japan International Cooperation Agency (JICA). The project area is in Kitui District, while administrative and management operations are jointly carried out in KEFRI and FD headquarters in Muguga and Karura, respectively.

SOFEM's activities are implemented through three sections, namely: i) Technology development (On-station and On-farm), ii) Farm Forestry Establishment and iii) Extension Method and Information.

SOFEM's expected outputs are: i) practical techniques for tree planting and management for establishment of farm forestry are provided to farmers through on-station and on-farm technology development and verification, ii) appropriate method of farm forest establishment is developed with initiative of the local residents through selection of target farmers and practical training of farmers and extension agents, and iii) information on farm forestry establishment is shared by the people and other related organisations.

Objectives of evaluation

The two main objectives of the final evaluation were: i) to execute a comprehensive evaluation of SOFEM's achievements in accordance with the original plan described in the Record of Discussion (R/D), Tentative Schedule of Implementation (TSI) and Project Design Matrix (PDM), and ii) to make recommendations and suggestions on measures to be taken after the termination of the cooperation of the SOFEM project.

The Team

The members of the final evaluation team comprised 5 Japanese lead by the Director, Forestry and Natural Environmental Department, Mr. Hideki Miyagawa and 9 Kenyans jointly lead by KEFRI's National Drylands Forestry Programme Coordinator, Dr. Ben Chikamai and the Deputy Chief Conservator of Forests Mr. D.K. Mbugua.

The other members of the Japanese team and their field(s) of evaluation were: Mr. Keiji Imai - (Division Director, Technical training Institute, Forestry Agency, Ministry of Agriculture, Forestry and Fisheries - Technology Development - TD and Farm Forest Establishment - FFE), Mr. Osamu Shimada (Section Chief for Planning, Management Division, National Forest Department, Forestry Agency, Ministry of Agriculture, Forestry and Fisheries - Extension Method - ME), Mr. Hiroyuki Hashimoto (Forestry and Environment Division, a Forestry and Natural Environmental Department, JICA headquarters - Planning Evaluation - PLE) and Mr. Tsuneo Kuwahara (Consulting Engineer, Nippon Giken Inc. - Participatory Evaluation - PAE).

The other members of the Kenyan team from KEFRI and FD were: Mr. James Kimondo, (Centre Director, KEFRI Kitui as a Technical Advisor in TD), Ms. Jacinta Kimiti, (Extension Manager, KEFRI Kitui, as Technical Advisor in FFE), Ms. Jane F. Wamboi (Forest Officer, Forestry Extension Division, FD in EM), Mr. Patrick Kariuki, Project Coordinator, Forestry extension Division, FD as a Technical Advisor in PLE), Mr. Michael Mukolwe, Training Manager, KEFRI as a Technical Advisor in PAE). The other members of FD in PAE were Mr. Ben Wandago and Mr. M. Wanyiri.

Evaluation procedure

Evaluation process was based on a 5-point criteria recommended by the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD). The criteria elements include efficiency, effectiveness, impact, relevance and sustainability. Table 1, presents an outline of the participatory evaluation process for comparing the plan, outcomes and issues adopted by SOFEM Evaluation Team.

The final evaluation team realised its objective by collecting information through holding interviews and workshops with stakeholders, site visits and inspections, discussions and reviews of project documents based on the 5 evaluation criteria. The main output of the evaluation was jointly compiled into a Joint Evaluation Report, which was endorsed by the Leader of the Final Evaluation Mission, Mr. Hideki Miyagawa and Ambassador Francis Muthaura, Permanent Secretary, Ministry of Environment and Natural Resources on behalf of the Government of Kenya.

Conclusions and Recommendations

The 5 key elements of conclusions and recommendations of the Joint Evaluation Report are respectively as outlined:

Conclusions

1. From results of project's accomplishment and evaluation based on five criteria, it is evaluated that efficiency, effectiveness and impact are excellent, and relevance and sustainability are good. As the planned targets will be accomplished by the end of the project, the project will be completed as scheduled.
2. The progress of the project is on schedule and the project purpose and outputs will be achieved by the end of the project except for some experiments, which will be completed by KEFRI counterparts.
3. It is evaluated that most impacts are positive especially to the implementing agencies and beneficiaries, but there seems a long way to go to the overall goal from the present situation. ☆

4. The project is evaluated relevant because the project purpose and overall goal accords with the national policy and residents' needs. However, it was regrettable that counterpart fund was not clearly designated at the initial stage of the project, so FD could not withdraw appropriate budget. Nevertheless, there is a favourable environment being created through the new Forests Bill and Policy.
 5. Although the financial constraints of the Kenyan government have affected smooth implementation of the project, the new Forests Bill and Policy will back the sustainability of the activities. They were recently approved by the government and are due for discussion and enactment in parliament during the current session. Both documents recognise the role and potential of farm forestry as the way forward to forestry development in the country. Their publication will provide favourable environment for the government and partners to support farm/social forestry in the country.
- Recommendations**
1. The project should compile various documents to finalise all the outputs and arrange them in a useful manner before the end of the project. Furthermore, the project should hold workshops and seminars to share the information of those documents among all concerned.
 2. After the completion and hand over of the project, necessary experiments for technology development should be continued and developed techniques should be extended to local farmers, especially the following items:
 - Elaboration of extension materials for more effective farmer-to-farmer extension.
 - More verification studies of developed technologies are needed. Meanwhile cost and labour analysis of the verified technologies should be carried out under various farmers' conditions.
 - Information sharing with farmers concerning the criteria used for selection of core farmers should be enhanced.
 - Further dissemination including outputs of the SOFEM project through publication, seminar, workshop, etc.
 3. The project purpose, development of model for farm forest establishment, will have been achieved through extension to model farmers and its verification before the end of SOFEM. If additional technical support will become necessary after SOFEM in order to enhance further efforts to apply the developed model to the surrounding farmers, dispatch of JICA expert(s) in extension of farm forest establishment is to be considered to the future achievement of the overall goal. The Team will recommend this issue to the Government of Japan.
 4. FD and KEFRI should make best efforts to secure necessary funds. However, it is important to prioritise and restructure the activities, which Kenyan side can manage sustainably for further development and expansion of farm forests through extension of SOFEM model.
 5. FD should take initiative for realising the overall goal, nationwide extension of farm forest in semi-arid areas in Kenya, through the following countermeasures:
 - Promote initiatives to influence rapid enactment of the Forests Bill 2002.
 - Better collaboration with KEFRI in terms of technical support.
 - Better collaboration with relevant departments, ministries, other agencies, international organisations, donors, NGOs, farmers and other stakeholders.
 - Strengthening of human and financial resources.
 - Formulation of extension action plan for further development and expansion of farm forest establishment. ☆

Table 1. Outline of the evaluation process

	Efficiency	Effectiveness	Impact	Relevance	Sustainability
Overall goal			What positive and negative effects, either direct or indirect, has the implementation of the project had?	Are the project purpose and overall goal still meaningful as objectives at the time of evaluation?	To what extent will the recipient country's organisation be able to retain the positive effects of the project after the withdrawal of cooperation?
Project purpose		Whether the project purpose has been achieved and how much contribution did the outputs make?			
Outputs	To what extent have inputs been converted to outputs?				
Inputs					

National Tree Planting Season

P.M. Kariuki, FD

The national tree planting season is a period when all citizens should rededicate their resolve to supporting the noble cause of environmental conservation through tree planting.

In Kenya, the launching of the National Tree Planting Season has a long history dating back to 1964 when the first launch was at the Uhuru Gardens. There after, this became an annual national event until 1992 when there was a shift in strategy to decentralize the occasion from one event where enormous resources were assigned for one occasion. This saw the evolution the annual tree planting events carried out in all provinces and all districts in the country for the duration of the long rains climaxing in the launching of the tree planting season by the Minister for Environment and Natural Resources.

This strategy has been found to be extremely successful over the last 10 years because:

- Public awareness campaigns last throughout the season sensitizing wananchi on where to obtain seedlings, the species available, how, when and where to plant them.
- This has resulted in more trees being planted especially on farms and their survival has greatly improved.

Theme for the 2002 Season

The theme for the year 2002 is "Community Forestry for Environmental Conservation and Poverty Reduction". The theme highlights the government's concern and efforts being made to reduce the preponderance of poverty in Kenya. In the forestry sector, farmers and other stakeholders are being encouraged to grow high value timber crops which have in the long run been found to yield a high return then agricultural crops in rainfed agricultural systems. The theme also alludes to the current global

environmental management trends that involve communities in all aspects of natural resources management and forest resources in particular.

The Role of the Forest Department as the Lead Agency During the Season

The role of the Forest Department (FD) is to create awareness on the need to plant by all Kenyans. Forest Officers are expected to readily offer technical advice on suitability of species, planting methods and any other technical information to the target groups. On the other hand, FD is expected to make use all the publicity machinery available at the Provincial, District, Divisional and locational levels by collaborating closely all stakeholders in promoting tree planting. This years ' publicity was gracefully supported by JICA through newspaper supplements and the direct active participation of SOFEM in the Voi and the Nakuru occasions. ☆

SOFEM Participates in the National Tree Planting Day

J.K. Musyoki and M. Nakamura, KEFRI/SOFEM

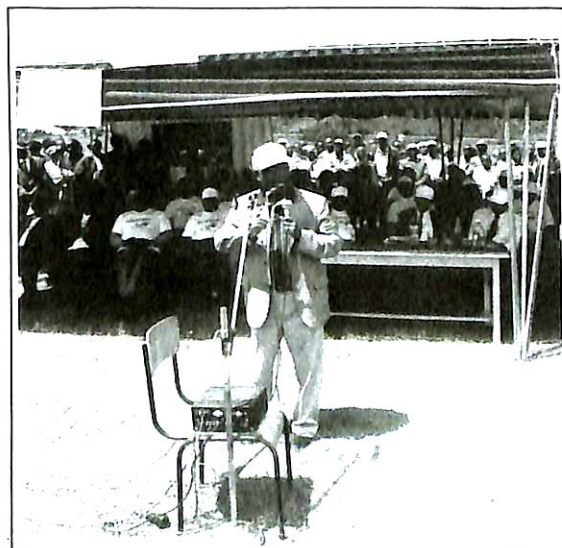
The national tree planting ceremony for year 2002 was conducted twice in different parts of Kenya. The two ceremonies marking the national tree-planting day were respectively held at Taaita primary school, Maushe Division, in Nakuru District on 3rd May 2002 and at Mwange Ward, Voi Division, in Taita Taveta District on 10th May 2002. In the first occasion, the then Chief Conservator of Forests (CCF), Mr. J. Mutie stressed that it is the responsibility of the Ministry of Environment and Natural Resources (MENR) to plant trees in Kenya and that there is need for the local communities' support to achieve its mandate. He mentioned that the gazetted forests alone cannot meet the present and future demands of wood hence all citizens should therefore take up the responsibility of planting and managing trees in their farms properly. At this school, 2,500 trees were planted and 7,500 seedlings distributed to the local

people to plant on their farms.

The Permanent Secretary, MENR, Amb. F. Muthaura stressed the need for people to plant trees to conserve soil and water catchments. He also re-emphasized that the community plant fast growing tree species as recommended by KEFRI Director. He urged the officers involved in tree planting activities to have a set target number of seedlings to be planted each year.

The Minister, MENR, Hon. J. Kamotho stressed the President's urgent plea to the community to conserve the environment and more so forests to avert desertification, depletion of water resources and inadequacy of electrical power thus alleviating poverty. The Minister also emphasised that the District environmental committee use their authority to prevent environmental degradation. He requested them to establish tree nurseries in each district and involve schools to ensure that there are sufficient seedlings in each district. Environmental conservation is

one way of showing patriotism to our country and children. He mentioned that the new Forests Bill should involve the local communities in management of forest resources. The ministry has also directed the CCF and concerned government departments to confirm the boundaries of the forests for conservation purposes. The government has put measures to ensure that the forests are protected. He encouraged the community to plant trees, for both domestic and commercial use. Saw millers and other stakeholders were requested not to major



on gaining from the forests, but to contribute positively to forest conservation for sustainable supply of wood. The community was encouraged to plant trees in the road reserves in consultation with the FD staff, and forest researchers. The role of foresters in helping farmers to select the appropriate tree species in relation to their area was emphasized.

In Voi, heavy surface run-off from hills was mentioned as one of the problems resulting in destruction of roads. The chairman of the 'Voi Green Initiative', an organization involved in maintaining Voi Town environment in conjunction with other government departments, requested for support from all other concerned stakeholders. The Town mayor requested for assistance to control surface run-off by preparing one or two furrows to direct water to the park. It was indicated that a lot of destruction had been occurring on the hills since 1960s. However, the Cross Border Biodiversity Project was complimented for its good work in helping the community to change and accept gazettement of hills as well

as participating in forest management. The local leaders were urged to combine forces and map out the way forward in tree planting while ensuring that none of the trees planted will die. The newly appointed CCF, Mr. Gideon Gathaara thanked the president for his appointment to serve in this capacity and indicated the need to decide the way forward rather than talking about the importance of trees. He noted that the last national tree-planting day in the Coast Province was held 20 years ago. He emphasized the need to explore sustainable charcoal production in the region and the gazettement of the hills as soon as possible. He noted that some of the valuable trees species in the region such as the *Dalbergia melanoxylon* (Mpingo) had disappeared and needed to be established and managed sustainably.

In both occasions, the SOFEM project participated fully by distributing extension materials on tree planting to the farmers, extension agents, local leaders and administrators. It was observed that the people had high demand for knowledge and skills on tree



planting. Since then, the project has received several requests for more information from farmers and extension staff. ☆

JEPAK Tree Planting

M. Mukolwe and M. Nakamura
KEFRI/SOFEM

The interdependence between people and environment entails that nature needs a helping hand. The convergence of at least 10 organisations (JEPAK, JICA, Embassy of Japan, Ministry of Environment and Natural Resources (MENR), KEFRI, FD, SOFEM, Kenya Airports Authority, NCC, KEPHIS and the Press among others), along the Jomo Kenyatta International Airport road, which is an international gateway to Kenya on 11th June 2002, was a positive move in this endeavour. The occasion was officiated by Hon. J. Kimkung, Assistant Minister, MENR on behalf of Hon. J. Kamotho and H.E. Makoto Asami, Japanese Ambassador to Kenya. Each planted a Nandi flame (*Spathodea nilotica*) tree bringing to a total of 306 trees, comprising 16 different high value species planted at the site. H.E. Makoto Asami had the following to share with the participants:

Honorable Joseph Kamotho, Minister for Environment, Mr. Samuel Moturi, Chairman of JEPAK, Professor Ratemo Michieka, JEPAK Patron, Mr. Yatich Kangugo, Manager of Jomo Kenyatta International Airport, distinguished guests, Ladies and Gentlemen.

It is great pleasure and honour for me to be here today to take part in planting trees, thereby contributing positively to our environment as well as towards the beautification of Nairobi.

One of the most exemplary things about this project is that it was initiated through JEPAK in collaboration with other organizations like the Social Forestry Extension Model Development Project (SOFEM) implemented by JICA, the Kenya Forestry Research Institute (KEFRI), the Kenya Airports Authority and the Nairobi City Council.

I am especially happy to see that the members of JEPAK which is an organization of the JICA Ex-participants Alumni of Kenya

are taking the initiative to support these kinds of projects thereby not only contributing towards the positive development of this country but also strengthening the ties between Japan and Kenya. These activities reflect the true fruits borne out of the long cooperation between our two countries.

This Project is significant in that it enhances conservation of the environment while at the same time improving the partnership amongst various organizations to work towards a common good. It will also give a chance



for foreign visitors and tourists who visit Kenya their first view of the natural beauty of this country and has the added benefit of making the public aware of SOFEM activities, which have been

carried out for the past seventeen years in Kenya.

I hope that just as the trees planted today grows and enriches their surrounding

areas, so will the relationship between our two countries continue to grow and strengthen in the years to come.

Thank you. ☆

The Minister of Environment and Natural resources Hon. J.J. Kamotho had the following to share with the participants.

"Your Excellency the Ambassador of Japan, Resident Representative of JICA, Senior Government Officials, Chairman of JEPAK, Ladies and Gentlemen.

It gives me great pleasure to officiate in the inauguration of the first phase of the JICA Ex-participants Alumni of Kenya (JEPAK) Community Tree Planting Project. As you are all aware, I launched the National Tree-Planting season early last month an occasion during which I appealed to all Kenyans as well as friends of Kenya to join hands and plant trees for a better environment. It is therefore gratifying to note that this appeal has been seriously taken up by partners such as JEPAK with the assistance of JICA.

The Jomo Kenyatta International Airport is considered as the gateway to Kenya. The first impression that visitors get of our country is very important. The choice of this site is therefore very significant in terms of building the image of our capital. Cities all over the world suffer from special problems associated with population pressure. This gives rise to environmental degradation by way lose of tree cover, pollution, waste management and other adverse effects. Trees can be used to mitigate some of the stated effects. It is therefore important to increase the number of trees in our Cities.

Nairobi is an industrial city with the industrial area starting only a few kilometres from where we are today. These industries emit a lot of waste gases into the atmosphere. The role of trees in carbon sequestration, therefore, becomes very important in this part of the city and I urge the industrial sector to follow your

noble example and plant trees for this purpose.

Trees or forests in urban settings play a very important function. They are important not only as carbon sinks as mentioned above but also for recreational purposes. Here in Nairobi, we are lucky to have a significant amount of forest cover in the name of Ngong Forest, Karura Forest and Nairobi Arboretum. My ministry is determined to protect these forests against conversion to other uses and to also spearhead planting of additional trees outside these gazetted areas.

My ministry has had a long and fruitful partnership with the people of Japan through JICA. In particular reference to forestry, the JICA assisted Social Forestry Training Project (SFTP) was started in 1985. This project was jointly implemented by the Forest Department and KEFRI. The aim of the project was to institutionalize Social Forestry skills within the community by tailoring appropriate training courses to various groups. This project was successfully completed in 1997. Thereafter, it became apparent that the Arid and Semi-arid areas (ASALs) which comprise of over 80% of our country had not received due attention in the areas of Forest Management and Technology Development. This matter has now been addressed through the JICA assisted Social Forestry Extension Model (SOFEM) Project, which through its activities in Kitui has been developed an extension model for the drylands. I am informed that the final evaluation of this project which took place in April this year found that the project purpose had been achieved and what now remains is to replicate the extension model in the drylands. Many officers in my ministry have also had the opportunity to undertake training in Japan and this have helped them to become better equipped to face the emerging challenges

of the day.

I would therefore, like to take this opportunity to thank the Government of Japan for the assistance it has accorded this ministry.

We are here today to inaugurate the first phase of the JEPAK Community Tree-Planting Project. I am informed that JEPAK is an alumni organization comprising of professionals who have benefited from JICA scholarships in the past. This group has come together and has chosen to volunteer their time and efforts for the betterment of our environment. I am told that to date about three hundred trees of various species have been planted on this site and that they are fully established. I commend you for this effort and wish to reiterate once again that tree planting is not an end in itself. We must ensure that we protect all seedlings we plant so that they survive and make a difference to the tree cover of this country.

I am further informed that JEPAK is committed to extending this project along Mombasa Road to the Nyayo National Stadium. This is not an easy undertaking and requires effort from as many partners as possible. To this end, I am appealing to all Kenyans of goodwill and particularly the industries along Mombasa Road to emulate this example and participate in this noble course in as many areas of Nairobi as possible.

In conclusion, I would like to recognize the important role played by the Nairobi City Council, The Kenya Airport Authority and JICA to make this vision a reality. I reassure you of my Ministry's support to your effort for a better environment.

With this remarks, it is now my pleasure to declare the first phase of the JEPAK Community Tree Planting Project formally inaugurated." ☆

SOFEM Exhibits at the Eastern Africa Conservation Partnership Forum

Theme: "Partnership for Change"

P. Ondachi, KEFRI

This was a one-day event organized by WWF's Eastern African Regional Programme Office (EARPO) on 30th of April 2002, at the Intercontinental Hotel.

WWF, World Wide Fund for Nature formerly World Wildlife Fund, is one of the world's largest and most experienced independent conservation organization with a global network active in over 96 countries. Its mission is to stop degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the reduction of pollution and wasteful consumption.

The forum was designed to bring together conservation partners and stakeholders in the region to share and exchange experiences and ideas with the goal of promoting conservation dialogue in order to strengthen existing conservation partnerships and establish new ones.

It brought together a broad spectrum of conservation partners and stakeholders in the Eastern Africa. There was representation from seven eastern Africa countries namely, Burundi, DR Congo, Ethiopia, Rwanda, Tanzania, Uganda and Kenya. There were about 150 participants and among them was the WWF International Director General. The participants included Ambassadors, Commissioners, Counselors and Heads of missions from 10 different embassies. The Secretary General East Africa Community, Director of Agriculture and Environment IGAAD, Ministers from different countries and Directors/ heads of different organizations were among the participants.

There was an MoU signing ceremony in which WWF signed four MOUs with different partners:

1. Koibatek council / WWF EARPO.
2. Bamburi cement / WWF.
3. WWF / IUCN.
4. WWF International / UNEP.

The participants were informed that two others are at advanced stages of development and will be soon signed between EAC / WWF and KWS / WWF.

EAC's Secretary General, Hon Amana Mushenga, delivered the keynote address. It featured on a pertinent conservation issue in the region (protecting coral reef) and highlighted on-going efforts to address conservation challenges. There were presentations and exhibitions to sensitize and clarify Eastern Africa key environmental challenges and opportunities.

Country presentations highlighted national conservation issues which will focus on preparation for the World Summit on Sustainable Development, WWSD (Rio + 10) in September 2002.

A poster exhibition was run parallel to the discussions to show case achievements in conservation. JICA / KEFRI participated in the poster exhibition. A poster showing KEFRI's conservation activities in the drylands and on SOFEM were exhibited. Pamphlets, newsletters, brochures and calendars showing KEFRI and SOFEM activities were given out to the participants. A video documentary was also shown at the stand.

From the plenary several important issues emerged:

i) Governance of the environment- it was noted that although the environment is an issue of concern at international level (UN) and there have been many conventions, they remain unimplemented. Reasons given for this were:

- Africa is unable to attain most activities due to inadequate resources,
- Some programmes/conventions are interlinked yet some are funded and others are not e.g. climate change is funded while convention on combating desertification is not.
- Infrastructure and IT.

ii) Donors perspective on partnership- whether they welcome the idea and their interpretation of partnership.

- In the field of conservation partnership is not a new concept, but the concept 'partnership' is multifaceted, different from one country or region to another.
- Community involvement and in particular integrate gender.

iii) Private companies: What kinds of themes would attract private companies and how should they be approached.

Challenges cited included poverty, environmental degradation and declining resources.

Six subjects were given around which partnerships can be developed. These are:

1. Forests- conservation, restoration and rehabilitation.
2. Freshwater ecosystems- eco-region approach e.g. case of L. Victoria and Nile basin.
3. Wildlife – emphasis protected areas



and corridors possibly of cross border activities, protected eco-region.

4. Coastal marine ecosystem (only in three countries Kenya, Tanzania and Mozambique) – coral reefs and their protection.
5. Climate change.
6. Renewable energy conservation and generation.

In the way forward, the forum agreed that:

- Conservation should be seen as a tool to deal with the primary problem for Africa i.e. poverty.
- Partnership is a theme worth following as a means and tool to address conservation issues.
- Types of partnership.
- Issues to be addressed by partnership.
- Things important to facilitate partnerships e.g. capacity building. ☆



Coordination of SOFEM Project in Forest Department

P.M. Kariuki, FD

Project Manager is a task that requires a reasonably high level of involvement in the planning and implementation of project activities.

Inputs, including financial, time and technology must be appropriately applied to produce the desired outputs. By the very structure of SOFEM project where KEFRI, FD, JICA and the target communities must move in the same direction regarding the development of farm forestry in Kitui, the coordination of the project activities has been a very important aspect leading to the achievement of the good results that we have registered so far. The coordination of the SOFEM activities in FD has gone

on uninterrupted since 1998 when J.K. Mbaya who was the Project manager upto 31st May 2002, when he retired. Upon his retirement, P.M.Kariuki was appointed as the new Project manager.

This article contains the reflections of J. K. Mbaya on SOFEM Project and a brief by P.M. Kariuki, the current Project Manager for SOFEM in FD on expectations and what the future holds for the activities initiated under SOFEM beyond year 2002. ☆

Memoir

J.K. Mbaya - Outgoing Project Manager. FD

Working as the Project Manager for Social Forestry Extension Model Development (SOFEM) Project in Forest Department (FD) will be one of the most nostalgic experiences to be cherished upon my retirement. I enjoyed the cooperation among my counterparts in JICA and KEFRI. Despite funds allocation and budget limitations by FD,



all project activities run smoothly due to the understanding of our JICA counterparts who would chip in to bridge the gap.

Collaboration between the managing institutions ran smoothly. Holding meetings in different venues alternately proved beneficial as all the collaborators felt a sense of ownership of the project. This made it easier to relay research findings to the farmers and also get their feedback to researchers and extension officers.

Counterpart Training

One of the most memorable times was the visit to Japan on counterpart training. The training was organized by JICA for project counterparts from various countries to train together in Japan. People from various countries around the world met in Japan and exchanged

their cultural and technical experiences during the training. Participants often realised that the problems in developing countries are almost similar. They shared experiences in trying to get the solution. Once back to their countries, they were expected to apply the positive aspects learnt during the training programme.

Of great significance, was the friendliness and courtesy shown by the Japanese people one came across while in the country. The culture of hard work and excellent time management was evident everywhere one went. Punctuality to work, meetings and all other aspects was further enhanced by the efficiency of the public transport system. The country has many forested areas with very elaborate forest conservation and rehabilitation programmes. The country has many public open recreational spaces.

Technological development was an aspect one could not fail to realize. Japan was in the process of perfecting technology of using remote controlled tractors in tree harvesting on difficult terrain where normal tractors would find it difficult to operate.

This overseas counterpart training was not only an incentive to the officers but also benefited the farmers who got advice on the latest technologies upon the officers' return.

Facilities

JICA facilitates the working environment by providing both office equipment and transport facilities. The transport element was, however, a bit hampered by the requirement that GoK fuels and maintains the vehicles and equipment. This proved to be quite trying when FD had exchequer issues/problem. Although JICA's policy for cooperation projects was each partner to meet their expenses, it would be much easier and more efficient if all the project funds were to be centrally administered. This would give a chance to the three counterpart managers to draw a joint budget for the project. This will ensure timely implementation so that activities are not delayed. The project has a specific period and all should be smooth running during its life.

Tree Development

One of the biggest developments is the management of *Melia volkensii* both in the nursery and in the farms. Seed pretreatment and germination studies were successfully carried out. The project has been able to popularise its planting and the demand for *Melia* seedlings is growing even outside the project area.

Regional Training

Regional social forestry course has proved to be a big eye opener both for the local and regional participants as they exchange experiences freely. Participants are from countries in Eastern, Central and Southern African Region, while the local ones are selected from districts with similar environmental conditions like the project area in Kitui. Kenyans are able to tap beneficial experiences that will apply in our situation freely.

Farmers also benefit directly from the regional participants during field visits, since lessons learnt are applied immediately on their farms. Regional participants also benefit by interacting with the farmers directly. This has raised the morale of the project core farmers as they feel appreciated while hosting foreigners.

SOFEM Extension Model

The extension task force (ETF) was formed to critically analyze the strengths and weaknesses of SOFEM extension approaches. This enabled the ETF to draw a chart for the way forward and recommend the future of the project.

Recommendations

Project activities call for extra dedication and project staff are occasionally expected to put in extra hours in order to meet deadlines for the smooth running of all activities. It is therefore desirable to have something in place to motivate the project officers for the extra enthusiasm towards the project success. Among the many recommendations was that the status of SOFEM project as a trial extension activity (Process Enlightenment and Trial) in ASALs should be expanded from initiation and enhancement of awareness to implementation, given the success of its

first stage. Forest extension should be considered as long-term development activities. Therefore, a new project proposal should ensure that social forestry development process should transform into a model comprising three stages, namely:

1. Process Enlightenment and Trial.
2. Implementation.
3. Expansion and Stability.

FD and its development partners should identify and provide support to influence enactment of Forest Bill 2000 and gazettement of Kenya Forestry Development Policy.

The ETF report proposed an action plan whose four main components include a Policy and Legislative Support, Technical Development, Enhancement of Social Forestry Extension and Development of Sustainable Extension Infrastructure.

The ETF Report concludes that the importance of ASAL's woody resources in contributing to the sustainable rural livelihood cannot be over-emphasized. Challenges facing ASALs forestry development are many but can be resolved.

It is my hope and sincere wish that all the recommendations of the ETF will be implemented so that the success of the project can be replicated in other parts of the country. This will help in raising the farmers' income thereby contributing towards alleviation of poverty. I also wish to thank all the Japanese experts who have been involved in the project for the technology transfer and harmonious cooperation towards the success of the project. Thanks to my Kenyan colleagues for your support during my tenure in the project and also to the farmers in the project area for heeding our advice and constant feedback. ☆

Expectations and a future for SOFEM activities

P.M Kariuki, FD

In Forest Department (FD) it has been quite an exposure for the officers who have been working in SOFEM on the joint implementation of a bilateral project. Besides generating the extension model as a final output, SOFEM has also

been a good example in demonstrating the applicability of implementing the results of forestry research to forestry extension work quiet easily away from unnecessary bureaucracy. On my part, a deployment like the current one of project coordination brings me back to a fairly familiar ground having worked as a counterpart manager in the implementation of an FAO supported project in Baringo (1987 - 1990) and as Project manager-cum-District Forest Officer in the Danish government funded project in South Nyanza (1993 - 1996)



My views regarding SOFEM are that 5 years for a rural development project is rather too short for piloting and the implementation of the outputs of the pilot

phase. It could have been better for the consideration of a full phase to allow time for the intensification of the activity implementation. However, it is true that SOFEM will formerly end in November, 2002. This being the position, it is good to also contend with the reality having also been involved in other various fora in which other points of view have also been explained.

The other way of looking at the current scenario is that the ending of the 5 years of this technical cooperation under SOFEM was foreseen in 1997, hence the reason why KEFRI and FD must sustain the momentum of the establishment of farm forests and other activities with more vigour. The end here is also a beginning of a new phase with the government taking a leading role and in setting the pace of farm forestry development not only in Kitui but also in other parts of Kenya. The job is not

yet over and there is still a lot to be done. What SOFEM has done is to catalyse the process of farm forest development in Kitui. Going by this, and remembering that a catalyst is only added in very small doses with the expectation that the process will continue up to the end, both FD and KEFRI must take this challenge and support the process. Farm forests development is indeed long-term. The history of Social forestry development in Kenya is just a short one dating back to the mid 1980's. Our Japanese colleagues will judge me correct if I point out that we have a long way to go towards attaining a comfortable level of farm forests development. Even in Kitui where we have been working, we still need to reach more farmers through the farmer to farmer extension approach, extension agents and even through other channels of information dissemination that are available.

Nevertheless, the important thing in the history of the development of the forestry sector in Kenya is that the right moves have been made in FD regarding the restructuring of the forestry sector development through the Forests Bill (2002) which once enacted into law, FD will become a quasi-government organisation, the Kenya Forestry Service (KFS) whose core function will be forestry extension. Farm forestry shall have been accorded a centre stage in the production and supply of the forestry goods and services for Kenya.

It is at this stage that all of us who have been championing the development of farm forestry will be required more than in the past to assist the forestry sector in becoming better focused. It is for this reason that our long, friendly and productive association with JICA and the people of Japan in this area of farm forestry will be required to provide the necessary leadership. X

Co-operative Activities with JOVC

S. Auka and M. Nakamura, KEFRI/SOFEM

The FD Kisumu District, in conjunction with Japanese volunteers based in Nyanza Province organised a 2-day seminar (21st and 2nd February 2002) aimed at emphasising the importance of energy saving cooking stoves around Lake Victoria region.

The seminar participants included Enzaro jiko trainers, CBO representatives and other observers. Seminar topics included construction of energy saving stoves (theory and practical), environmental conservation and tree planting and tending.

The organisers felt that since KEFRI in collaboration with JICA and FD had considerable experience in forestry, they were invited to deliver a paper on tree planting.

This report therefore, covers the activities of a team of two persons (a Japanese expert and a Kenyan counterpart) from Kitui who participated in the seminar.

Forestry extension activities in Nyanza

Province covers 12 districts. These are: Kisumu, Siaya, Bondo, Homabay, Kisii, Nyando, Rachuonyo, Gucha, Migori, Suba, Nyamira, and Kuria. The province, though surrounding the lake, is marginally placed and its environment is therefore arid and semi arid in nature.

Domestic fuelwood energy use accounts for upto 98% of the total energy requirement in the province, leading to pressure on fuelwood resources.

Awareness on afforestation activities in the province is fairly high especially in the highland areas of Kisii where Kenya Woodfuel Afforestation Programme – KWAP, undertook a rural fuelwood project some years back. There are about 62 private tree nurseries in Kisumu District. However, knowledge on tree planting technologies is still lacking and therefore a high proportion of transplanted trees do not survive.

Consequently, the Provincial Forest Officer (PFO) felt that the lake region community could greatly benefit from SOFEM project's farm forestry experiences and tree establishment technological innovations. He requested that if possible replication of SOFEM's impact be tried in the province by posting at least one individual JICA expert in

charge of extension activities.

Presentation of Lecture Paper on Tree Planting

The lecture was done at the Wildlife Clubs of Kenya and attended by about 30 people. The PFO was invited to open the session. The PFO stressed the importance of promoting innovative technologies such as Enzaro cooking stove through integrated training with organised youth groups, e.g schools. He noted that the integration of women into similar workshops/seminars is important since they are potentially good extension agents. Therefore, organisers of such seminars should in future consider having the training sites situated near small scale tree nurseries to reach as many people as possible. All participants were encouraged to have their own improved cooking stoves to help spread the information to their neighbours.

The Kisumu District Forest Officer and an officer from KEFRI-Kitui jointly presented the lecture on tree planting and establishment. Topics covered included nursery practice, seed collection and handling, site selection and preparation, tree establishment and tending.

The video presentation titled "MITI NI MALI" included a two-part show on nursery practice and tree planting.

Issues raised by participants

- Other topics of interest to participants such as grafting / budding of fruit trees could be incorporated in future.
- The presentation should in future be practically oriented i.e nursery practice should be at a nursery site, seed samples should be availed in order to enhance participants' knowledge.

Constraints

- Time allocation for lecture was only 2 hours, which was meant for both theoretical/video presentations.
- The location of seminar site could not allow for transportation of bulky items, e.g seedlings.

Important issues

- Some communities in western Kenya do not allow women to plant

trees.

- User rights and resource allocation are still major issues as far as forest resource use by women is concerned.

The above scenario must be tackled if promotion of afforestation activities is to succeed in the province. ☆

Members of the East African Legislative Assembly Visit KEFRI

M. Mukolwe, S. Kamonde and S. Gitonga, KEFRI

KEFRI was privileged by a visited by a team comprising 27 honourable legislators of the East African Legislative Assembly (EALA) headed by the Speaker Hon. Abdulrahman Kirera on 7th June 2002. There were 9 members each from Tanzania, Uganda and Kenya. The legislators were conducted on a tour of KEFRI's facilities, on-going research activities in the field and the laboratories, some of which were inherited from the defunct East African Agricultural and Forestry Research Organisation (EAFRO), in Muguga. The legislators also heard presentations on KEFRI's research and development activities, achievements, constraints, opportunities and KEFRI's expectations as far as the renewed East African Community (EAC) is concerned. The presentation was made by the Director KEFRI, Dr P.K. Konuche at the auditorium and was attended by KEFRI's scientific, administrative and technical staff as well the SOFEM Project Japanes Experts.

In a vote of thanks to the KEFRI fraternity, Prof. Margaret Kamar had the following to say on behalf of the Legislators:

"Thank you very much Mr. Speaker. We are very happy to be here. We are actually here for two tasks:

First, because we are the new members of the EALA and we are rebuilding the

old community and by doing this we are trying to trace where our forefathers stepped on. We are happy to hear that you still maintain, for example the seed orchards we saw in the field, which are remnants of the old community's activities. We are happy that we can still be associated with what was there at the beginning.

Secondly, we are here for familiarization. Familiarisation is a very important thing when we talk of a region or a country, our strengths, capacities and limitations, so that we can be able to address them collectively.

We are very grateful to the Director KEFRI for an overview of the station and particularly on KEFRI's expectations as far as the renewed EAC, is concerned. However, we regret about our very short visit time. I want to assure you that we have a committee to look into what KEFRI and others expects of EAC - the list is long, and is represented by survey, tourism, agriculture, livestock, and environment and natural resources management sub-committees. I fall under the environment and natural resources management committee, which I happen to chair hence why I am talking to you. I want to assure you that we are going to pay a lot of attention to the points that you have given us. We are going to look into it because of our comparative strength and potential to share experiences with the region. I also want to mention that the renewed EAC is

trying to come up with centres of excellence.

Currently, the Heads of States, who formed the subject, identified three such centres, which initially are Aviation school at Soroti in Uganda, Mwega



Wildlife College in Tanzania and Utalii College in Kenya. We are telling them that we have to be centres of excellence and we are telling you that we want to see you excel. It is our view in the sub-committee that the way you have shown us around and displayed to us, that you will not miss our response.

I would really like to congratulate you for the spirit you have taken from 1950s and the fact that you have retained some of the things that belong to EAC.

"Thank you very much". ☆



Farmer's Corner: A Farmer's Success Under Great Odds

A. Mwamburi M. Nakamura and W. Syengo, KEFRI/SOFEM

The SOFEM project works closely with over 80 farmers in Kitui District in the establishment of farm forests. In May, the project information staff visited Mr Daniel Munyao of Kabati Division who was very pleased to tell his story on tree planting. Below is the excerpt from the interview.

Daniel, how old are you and how large is your farm?

I am 46 years of age, and my farm is 8 acres. I inherited the farm from my father.

What did you start with as farming activities in your farm?

I started by planting crops such as maize, beans, cowpeas and pigeon peas and other food crops. However, I realized that the trees I have are getting fewer and fewer so I started planting trees too.

When did you start the tree planting?

I started in 1989. The greatest reason for starting this was the lack of fuelwood in my home. There was also lack of shade and ornamental trees in my compound. I realized I could also meet my other forest products needs as I continued with tree planting.

So far, how many trees do you have in your farm?

I have about 500 trees of different types. These include *Grevillea*, *Senna siamea*, *Jacaranda*, mangoes and other trees.

You have now planted trees for over 10 years, What benefits if any, have you seen?

Aha! so many benefits in so many areas, some of which I did not envisage. First and foremost is the area of fuelwood. For example, I had a big problem of fuelwood before I had my own trees. After planting fuelwood trees now I even sell to my neighbours and I obtain some income, which of course I had not anticipated.

How much did you get for example, last year (2001) from fuelwood sales?

About Ksh 2,000/=. I also got about Ksh 15,000/= from the sale of seedlings.

When did you start collaborating with SOFEM?

I started in 1999. They provide me with technical advise on tree planting. They also follow up closely on my activities and I get very encouraged. They also provide me with other inputs but on cost sharing basis. These include fruit trees seedlings such as mangoes and also other trees like *Grevillea*.

Who makes the decision on what to plant in your farm, You or SOFEM?

They made me realize my needs, and assisted me in making the decision by providing the necessary information and guidance. Otherwise, the decision on what trees to plant, and where plant them was mine. I find this a very good approach since from the information obtained, I now can make better decisions on tree planting activities in the farm.

What is your overall view of this collaboration with SOFEM?

This project has helped us a lot. In as much as I started planting trees in 1989, the survival of the trees was very low and discouraging. Through this partnership with SOFEM, we have realized where we were going wrong.

SOFEM also provided us with other tree planting skills that we did not have before such as nursery techniques and grafting which I have found very useful. More importantly, we have realized that tree planting can be an income generation activity just like any other.

What Major problems do you have with tree planting?

The major one is of course water especially during the dry season. The other is pests, especially termites. However, SOFEM taught us traditional methods of termite control which I am practicing. This is through the combined use of ant harvesting and plant concoctions.

What future plans do you have for your farm in terms of farm forestry?

First of all, I would like to enlarge my nursery so that I can raise at least 20,000 seedlings per year. This is because I have seen that a Tree nursery can raise a lot of income. Secondly, I plan to have my own forest of timber and fuelwood trees. I intend to plant about 200 trees per year towards accomplishing this goal. I have already started the project.

Of course, apart from the trees I also intend to have at least 2 dairy goats, 1 dairy cow and practice vegetable growing since my farm borders a river.

What Message do you have for your neighbours and other farmers in this area?

As I have mentioned before, a farmer needs to know that tree planting is an income earner. Just 2 timber trees when harvested can manage to generate enough money to pay for school fees for your child.

Thank you Mr. Munyoki for granting us this interview. However, before we finish do you have any question or addition for us?

Yes, I heard that SOFEM is coming to an end. Is there a way of extending the project? I am asking this since SOFEM has come out as a project that can help eradicate poverty in our midst.

*** QUESTION TO THE FARMER'S WIFE**

Do you assist your husband in the tree planting activities and have you seen any benefits so far?

Yes, we perform most of the tree planting work together. He has also taught me grafting and how to manage the nursery. As for the benefits, yes, I now obtain fuelwood from my own shamba and even sell some. The income from tree planting has also assisted us in paying school fees for our children. I am very happy because my husband started farm forestry activities in the farm. ☆

Summary of Farm Forest Establishment Study

T. Hagiwara, SOFEM Short-term Expert

The core farmers had planted the highest numbers of trees averaging 122, followed by 62 for surrounding farmers and 21 for non-participating farmers. A similar trend was also observed with fruit trees planting and possession of nurseries (Core farmers 95%, Surrounding farmers 45%, and Non-participating farmers 8%). In terms of dead tree ratio, core farmers had relatively fewer numbers compared to surrounding farmers. By looking at these facts and other data which will be presented in the report of Farm Forest

Extension Study, the extension work brought significant influences among participating farmers.

However, the data also has shown that the situation being faced by surrounding farmers needs to be improved. The most significant reasons that created this discrepancy are inferred from the degree of knowledge on tree tending between core farmers who have more training from SOFEM and surrounding farmers who get training from their core farmers. These situations led to increasing need for surrounding farmers to have direct training from SOFEM. This desire was observed in the result on constraints of tree planting and nursery management (in both questions, surrounding farmers answered that knowledge is the second most important constraint after water

shortage). A similar trend is seen in a question on a future project. Core and non-participating farmers indicated that they preferred well digging project most, 59% and 66% respectively, but surrounding farmers selected grafting as the most important project (40%) followed by food production (32%), well digging (31%), and nursery (28%).

SOFEM extension work has created a lot of positive impacts in terms of tree production and a sense of sustainability of activities is also developed among farmers. In order to spread this success model to other farmers, however, there is need to empower surrounding and non-participating farmers who have a lot of interest but are hindered due to lack of knowledge. ☆

Information Dissemination through Audio Visuals

S. Kamonde and S. Gitonga, KEFRI

Audio visual is a unit within Training section, of Service programme in KEFRI. Its main task includes:

1. Rendering audio and visual services in support of research activities.
2. Production of training materials.

These are aimed at disseminating information on the Institutes research activities at local and international level. The unit holds a small audio visual library comprising of photo albums, slides and video tapes on different research activities.

Recently, the unit through support from SOFEM Project has made four video documentaries:

The Pilot Forest is a 14 minutes video produced in February 2002. It shows development and management of tree planting technologies for arid and semi arid areas. These technologies are

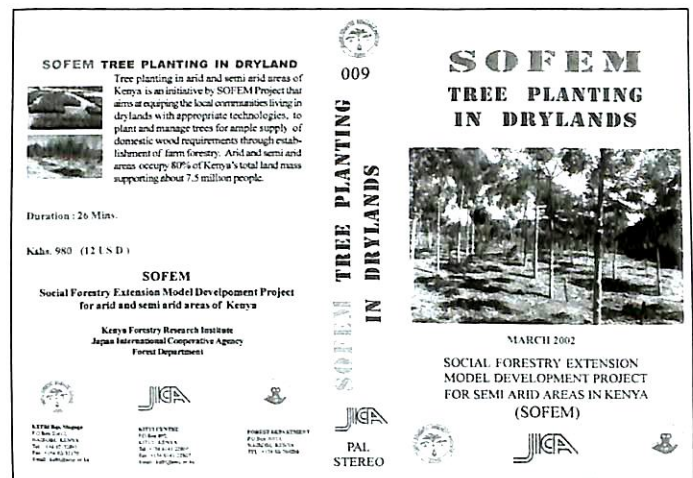
nursery managements, tree planting and management, e.g. weeding, mulching, pruning, and thinning.

The Farm Forestry Demonstration Plot is a 16 minutes video produced in March 2002. It is about a

farm forestry within a home compound with some improved management practices which the farmers can adopt to economically use the land on sustainable basis.

Social Forestry in Drylands is a 30 minutes video produced in March 2002. The video comprises technologies researched and applied by the farmers, it focuses on empowering the local farmers with the ability to supply them with domestic wood requirements through farm forestry.

SOFEM Tree Planting in Drylands is a 25 minutes video tape produced in March 2002. The video captures and



addresses farmers problems, challenges and opportunities in the semi-arid areas of Kitui District, in Kenya. SOFEM project aims at equipping the local communities in the arid and semi arid areas of Kenya, with appropriate techniques to plant, manage and sustainably use trees on their farms/land for domestic, commercial and environmental conservation. The video thus provides an interesting case study.

Though these videos were shot in Kitui area and used by the project to train farmers during mobile shows, they can also be useful to other farmers sharing the same climatic conditions in Kenya.

☆

Enhancing *Melia volkensii* (Mukau) propagation through Biotechnology Applications

B. Kanyi and R. Makena, FD

The Tree Biotechnology Project has taken a major decision of utilizing experiences gained in biotechnology application in Eucalyptus to enhance propagation of *Melia volkensii* in Kenya.

This will be accomplished by tissue culture and clonal propagation, which have been successfully utilized in propagation of elite Eucalyptus clones and improved seedlings at the clonal Tree nursery based in Karura, Nairobi.

The Tree Project has identified a source of elite plantlets propagated through tissue culture. The project will utilize these plantlets to establish trial clonal hedges at Karura Clonal Nursery. From these hedges, the Project will obtain cuttings, which will be rooted to produce transplants. These transplants will be put to trial in the field to test survival, growth and other measurable parameters.

If this process is successful, it will be a breakthrough in *Melia* propagation and it is expected to make *Melia* seedlings readily available to the small-scale farmers in Kenya. This will enhance other propagation methods through seed and root suckers being practiced. We shall endeavour to keep farmers, and other interested groups informed of the progress.

We are also requesting organizations who share our vision to join us and provide support to help see the process through. In particular, those with information willing to share with us are most welcome.

* Tree Biotechnology Project

Objective: is to apply biotechnology techniques in propagation and selection superior tree germplasm both local and introduced, for alleviation of wood products shortage for the resource challenged rural communities.

What was the Problem?

- Inappropriate traditional seed propagation.
- Distribution of poor quality and diseased seeds.
- Poor screening of germplasm.
- Socio-economic beliefs about eucalyptus trees.
- Alarming rates of deforestations.
- Scarcity of fuelwood and increased fuel prices.

Intervention Measures

- Mondi to offer clonal technology.
- Collaboration with Mondi forest to provide some clean germplasm.
- Capacity building in clonal nursery management and propagation.
- Capacity building in selection and trial for improved germplasm.
- Training and information exchange.
- Network building with both public and private institutions

to enhance efficient technology transfer.



Mission and Vision

Provide superior clonal materials to the rural communities in the country and to mitigate the prevailing problem of desertification.

Tree Species Selected

- *Eucalyptus spp*
- *Melia volkensii*
- *Acacia melanoxylon*
- *Azadiracta indica*
- *Prunus africana*
- *Grevillea robusta*

Technical bulletin on Eucalyptus planting currently in production

<u>Species</u>	<u>Altitude (msl)</u>	<u>Ave. annual rainfall (mm yr⁻¹)</u>
<i>E. grandis</i>	1,200-2,200	not < 900.
<i>E. camaldulensis</i>	0-1,200	450- 900.
<i>E. tereticornis</i>	0-1,200	450- 900.
<i>E. urophylla</i>	0-1,800	not < 900.
<i>E. GC (Hybrid)</i>	0-1,600	not < 600.

Land Preparation for Planting

a) On ploughed/tilled land. For the first 2 years, intercropping with annual agricultural crops is advisable especially legumes.

b) Spacing:

2.25 x 2.25 m. For fuelwood (1975 sph) and poles/shatters purpose (880 sph).

2.5 x 2.5 m. For transmission poles, fencing posts, timber and pulp (1600 sph).

c) Pit preparation-30cm deep and 30cm wide hole then fill it with top soil upto 15 cm.

d) Planting of the seedling. Remove the polythene tube carefully to avoid damaging the young plant.

Place it in the hole and cover it with top soil the remaining 15 cm. Ensure that the roots are wholly covered.

Optional

e) **Fertilizer:** 17:17 at planting, 30 g⁻¹ planting spot.

f) **Termiticide:** Regent 3G at 33.0 g⁻¹ planting spot for termite prone areas. For sales contact Rockem Ltd. P.O. Box 47090 Nairobi, Tel 344084/Tel/Fax: 574264.

g) **Water** as need arises.

Eucalyptus will coppice after harvesting. To promote vigorous coppice use a saw and not an axe for felling.

For sale of seedlings contact the Project Manager, P.O. Box 64159-0020, Tel:02-3767700 or 3767028,

E-mail: bensonkanyi@insightkenya.com

Project Impact

- Developing of genetically superior Eucalyptus seedlings and clones with higher quality productivity.
- Faster growth.
- Disease and pest resistance.
- Provision of clean seedlings.
- Use of marginal land for forestry.
- Faster propagation of tree seedlings.
- Improved living standards through higher farm incomes equals the uniformity and structure of the tree increases their commercial viability.
- Improved clones for distribution to

rural communities: 1.5 m seedlings and clones produced and distributed since 2001.

- Spillover to the neighbouring countries: KWU in Uganda.

Achievements

- Speedy adoption of clonal technology by the wider public in Kenya and beyond.
- Installation of clonal nursery with all necessary facilities.
- Over 1.5 m seedlings and clones produced and distributed since 2001.
- Provide an alternative source of wood thus preserving the indigenous trees.

Constraints to Technology Adoption

- Need for capacity building in clonal forestry technology and commercial clonal forestry production.
- Reliable transport and agent for marketing and distribution.
- Credit for small - holder farmers.
- R&D for TC techniques for other desirable species such as *Melia* - (links with KEFRI and GTZ).
- Meeting the demands from Zanzibar and Tanzania mainland for transfer of Clonal technology.
- Traditional beliefs on the Eucalyptus.



SOFEM Launches a Kiswahili Newsletter

A. Mwamburi, KEFRI

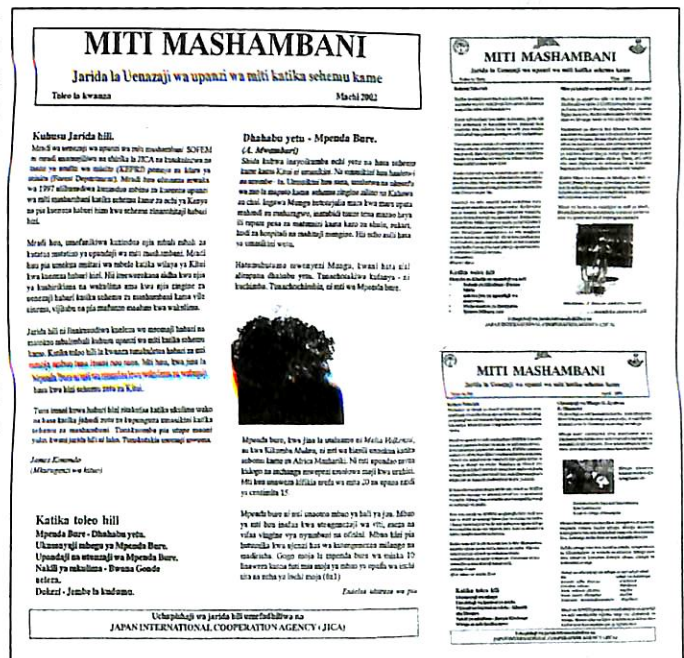
SOFEM started a Kiswahili newsletter entitled "Miti Mashambani" in March 2002. The objective of the newsletter is to pass pertinent formation on farm forestry to the community in Kitui and other similar areas. Three issues of the newsletter have been published so far with themes ranging from establishment and management of high value trees such as *Melia volkensii* to nursery practices. Production of the newsletter makes use of in-house resources and therefore production costs are relatively low.

Distribution is done through the offices of the Forest Department, district agricultural offices, churches and the provincial administration. Some copies are also sent directly to the core farmers so that they can assist in disseminating

the information to surrounding farmers and other groups. The response from the readers especially the farmers have been positive. This is evident through the constant requests we receive for more copies from the extension agents and even the farmers. Farmers and extension agents from as far as Nakuru and Voi have written to the project requesting to be considered as recipients. This was as a result of copies distributed during the national tree planting celebrations.

The editorial team of Miti Mashambani appreciates the constant support

and encouragement received from the Director KEFRI, the Chief Conservator of Forests and Japanese experts seconded to SOFEM. ☆



Staff Movement in SOFEM Project

Name	Field
Mr. C.J. Amwatta	Pilot Forest Manager
Mr. Takayuki Hagiwara	Short-term Expert
Prof. Hisashi Yahata	Short-term Expert
Mr. Gideon Gathaara	Chief Conservator of Forests
Mr. John K. Mbayu	FD-SOFEM Project Manager
Ms. F.J. Wamboi	FD-SOFEM Project Officer
Mr. Ben Wandago	FD-SOFEM Project Officer

Period of Assignment
Replaced Mr. B. Muok
12 February 2002 - 25 April 2002
2 July 2002 - 29 Sept. 2002
Appointment - 6 May 2002
Retired - 31st March 2002
April 2002
April 2002

Training in Japan

J. Kimondo, KEFRI Kitui

I took a three weeks training tour to Japan in October to November 2001 where I spent the first week in Tokyo with a very relaxed programme. The time was mainly occupied by briefings and visits to the officials of the Ministry of Agriculture, Forestry and Fisheries (MAFF) as well as JICA headquarters.

The 2nd week, I moved from Tokyo to Kumamoto. In Kumamoto, I was attached to Dr. Tsuru of Kyushu Research Centre (FFPRI). In the centre I was briefed on the research management and the various activities that are carried out there. I was also taken around the research forest where the centre is located. Further, I visited some field experiments where work on carbon emission, rainfall quantity and the penetration that occurs; ground discharge and their relationship were being monitored. Later in the week I visited some Forest Co-operatives sawmills. The role of forest extension agents was quite significant to these co-operatives as they advised them on a number of technical issues. The forest owners were appropriately advised on when to slash the weeds, when to weed and even carry out thinning. Thus research findings were adequately passed to the forest owners through these agents.

During the 3rd week I was in Kumamoto Prefecture Research Centre and Oita Prefecture Research Centre. In these two centres, it was very clear that the prefecture research centres were more in touch with the forest owners' problem and were actually solving real problems. Indeed, the centres were involved in applied research unlike the national research centres that were engaged in basic research as well.

The forestry sector in Japan is currently undergoing a rather interesting scenario. Immediately after the Second World War, the price of timber was very high and many private owners went into tree planting. This led to a very high forest cover in Japan of over 60%. However, due to the high labour cost in Japan and the ageing population of forest owners combined with the low cost of imported wood, plantations are receiving limited attention in terms of thinning. This thus

poses a situation where: no thinning is done resulting in overcrowded slender trees forest which are vulnerable to typhoons limited light penetration in these dense forests that are causing reduction of vegetation cover on forest floor, which is thus prone to serious soil erosion.

The main research work by prefecture research centre include: determining cost effective ways of producing forest products, forest management maintenance of existing forests typhoons forest plantations protection against red deer in the early years of establishment. Forest products - seasoning of cedar timber, a problem that is being addressed to promote the use of local timber. Currently 80% of the wood consumed in Japan is imported.

In addition to research, the prefecture research centres also carry out training and extension to the forest owners. Extension is done through regional promotion Bureau that are distributed throughout the prefecture.

How does the prefecture research centre determine their research agenda? Ideas are obtained from the private forest land owners through the Regional Promotion Bureau and then passed to the centre. These will then be analysed and a decision on the research agenda made based on three criteria namely:

- Emergency of the work.
- Necessity.
- Distribution or regionally within the prefecture.

The outcome from decision made at this level is then passed to the Department of Forestry and Fisheries in form of a proposal from the prefecture. The department then makes the final decision on the works to be carried out.

What does the research centre consider under 'emergency'; 'necessity' and 'regionally'?

Emergency

The occurrence of trees damaged by typhoons or some large patches of dying trees are classified under this category. Quick action is thus necessary to salvage the remaining trees.

Necessity

When a plantation has attained a thinning age and further delay will only cause trees to be more prone to damage through typhoon, thinning is considered a necessary action. Harvesting of mature trees may also be classified as a necessity. However as part of management, harvesting and planting are only done in small patches at any given time.

Regionally

In Kumamoto prefecture, three regions are easily differentiated.

Amakusa area receives little rainfall and thus research carried out is on drought adaptable species.

Kuma area receives a lot of rainfall. Harvesting large areas may be disastrous. In the area, research should aim at identifying tree species that can control floods or withstand heavy rains.

Aso area is also mountainous but they receive little rainfall.

In identifying research themes, these three areas are considered as independent areas.

To harmonise research between the National and Prefecture Research Centre (NRC and PRC), two to three meetings are held to identify the area research themes. At times the two co-operate in their work. However, NRC mainly carry out basic research, while PRC undertakes a more applied type of research.

Extension

The PRC extends the technical knowledge to people in forestry and the public in general. For example, in Kumamoto PRC, there are 5 specialists and 45 agents in each branch office. The centre holds an open day for both school children and adults. During such days, people are informed about the research activities that are being done. Other practical forest related activities such as charcoal making are also demonstrated. At the Regional Bureau, extension activities that are carried out include:

- demonstrations on how to prevent accidents in forests - forest management and harvesting.

- organise observation tours to timber mills and explain how timber is processed and utilised.

The Bureau agents also go to primary and secondary schools and give lectures on forestry. The agents also hold seminars for children and demonstrate various forestry-related activities such as planting, thinning and pruning. They also hold seminars with people working in forestry where recent research findings are passed to them.

To advertise the open says, the centre uses several media to reach as many people as possible. These include:

- Newspapers.
- Radio.
- Bulletins and posters.

They distribute pamphlets to primary schools in the city and the outskirts. Use of a demonstration plantation, initially,

the extension agent identifies a good plantation within the area of operation. The agent then request the landowner to provide access the land and the office provides the necessary funds. The demonstration plot is usually for a specific period and purpose, e.g. thinning or spacing of say bamboo.

The extension agent advertises to the surrounding farmers about the demonstration plantation. The farmers then gather at the demonstration plantation on the specific day. The agent give instructions on how much say thinning is to be done or how high the trees have to be pruned. Even in forestry activities, the Japanese government provides subsidies due to the functions of forest that of national importance.

Forestry in Japan Today

The Japanese National Government is promoting forestry extension in all ways.

This is because currently, the population of people working in forest sector is decreasing, their age is increasing and the price of local wood is too high. This makes imported wood very cheap thus the high consumption of the same. To complement this, the prefecture government is going out of its way to encourage forest business successors in all ways. Among the targeted people by the prefecture government are:

- Retired workers who have gone back to rural areas.
- Women primary and secondary school children through inclusion of environmental related issues in their education.
- The prefecture government is also promoting recreation sites with facilities as a way of encouraging the population to appreciate the forests.

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ANNOUNCEMENTS

*** Final SOFEM Conference**

It is inevitable that any project has a definite timeframe in which to realize the planned outputs through a set of activities. It is against this background that SOFEM will be holding its Final Conference, to share experiences, achievements and future prospects in farm forest establishment.

Date: 16th - 17th September 2002.
Duration: 2 days.
Participants: National and International Agencies, NGOs, Eastern, Central and Southern Africa, Extension officers.
Venue: KEFRI Headquarters, Muguga, Kenya.
Expected Outputs: SOFEM Publications, Exhibitions, Interactive presentations/discussions.

*** Regional Training Course for the Promotion of Social Forestry in Africa**

Introduction

The Government of Republic of Kenya and the Government of Japan through Kenya Forestry Research Institute (KEFRI) and International Cooperation Agency (JICA) have been implementing a training Programme entitled "Regional Training Course for the Promotion of Social Forestry in Africa". The training course is intended to enhance our institute's/organization's manpower

development by increasing its capacity to promote Social forestry and also to facilitate a regional collaboration in this field for the future.

Purpose

To promote Social forestry in the African region and contribute to forest conservation and mitigation of desertification, by providing the participants with an opportunity to improve their knowledge and technical skills in the field of Social forestry.

Objectives

At the end of the course, the participants are expected to have:

- Fully understood the concept of Social forestry and its usefulness in enhancing forest conservation and mitigating desertification in the region,
- Developed their abilities in policy formulation to promote Social forestry, which enable the application of Social forestry strategies to various local conditions of participating countries,
- Learnt effective measures to be taken to disseminate the practices and related techniques of the Social forestry to farmers and other beneficiaries, and
- Re-developed their abilities to resolve problems in the promotion of Social forestry by expanding their knowledge and techniques and by exchanging experiences among participants from other countries.

Duration

The duration of each course is approximately five (5) weeks. This year's course will be held from 16th September to 18th October 2002.

Participants

The participants are extensionists, trainers, researchers and managers of forestry, agricultural and allied natural resources from both government and non governmental organizations in the participating countries.

Course Structure

The course consists of a three-week in-house presentation; lectures, group work and a two-week study tour to selected Social forestry related activities in eastern, western and coastal parts of Kenya. The course will be conducted in English.

Venue

The Training is conducted at the Social Forestry Training Centre(SFTC) of KEFRI in Muguga, Kenya.

Certificate

The participants who successfully complete the course, will be awarded a certificate of participation by JICA/ KEFRI.

Conditions for Application

The required qualifications are as follows:

1. Be nominated by their respective organization.
2. Be in good health, both physically and mentally, in order to follow and complete the course.
3. Have a working experience of five years in forestry or other related field.
4. Hold B.Sc. or Diploma or the equivalent in forestry or other related field.

5. Have a good command of spoken and written English.
6. Be less than forty-five (45) years of age.
7. Be presently engaged, and also expected to be engaged in the forestry sector, as administrators, managers, trainers and extension officers in government or non-governmental

Application Forms

Some application forms and course information booklets have already been sent to government, academic institutions, non-governmental organizations, diplomatic missions and JICA-country offices in Angola, Botswana, Burundi, Djibouti, Eritrea, Ethiopia, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

Sponsor: Successful applicants are fully sponsored by JICA

For more information contact:

The Director
Kenya Forestry Research Institute (KEFRI)
Attention: Mr. Michael Mukolwe
Social Forestry Training Centre (SFTC)
P.O. Box 20412-00200, Nairobi, Kenya.

Re: Regional Training Course
Facsimile: +254-154-32009/32844/32170
Telephone: +254-154-32009 (D/L) or +254-154-32891/2/3
Extension 312 (Mr. Michael Mukolwe)
315 (Mr. Bernard Owuor or Ms. Josephine Wanjiku)
E-mails:kefri@arcc.or.ke / sftc@kefri.org
Website: www.kefri.org ☆

* The Third Water Forum, Water Voice

Water is a basic need for all human beings globally. Water problems and related issues transcend all boundaries. For these problems to be solved amicably there is need for concerted efforts by all stakeholders in different parts of the world to come up with long lasting solutions that will ensure adequate supplies both in quantity and quality for the present and future generations. The present generation need to have a legacy they can be proud of and towards this end, they need to work towards a common global strategy for more efficient and sustainable water use.

The third Global Water Forum, "water voice" will be held in Osaka Japan, from 16th-23rd March 2003. The world Water Forum is held every three years, gathering water experts, decision makers, NGOs, a wide

range of stakeholders, and the concerned general public for discussions and development of new solutions.

There has been a series of meetings to deliberate on the water issues. Notable among these are: The water and Environment Conference held in Dublin, Ireland in 1992, which discussed water and environmental issues more extensively; the 1st Water Forum held in Morocco following proposal by the World Water Council (WWC) in which the vision for water, life and the environment in the 21st century was developed.

As a prelude to the third water forum, the secretariat is seeking comments, opinions, ideas from a wide section of the international community to build up a strong case for the thematic areas of the forthcoming forum. Discussions are currently going on in the internet. Those who have access to the internet can assist

the secretariat in collecting, collating and sharing the views of those who do not have access.

The Japanese government has already pledged support for the third water forum and the concurrent ministerial Conference. This decision was made at a cabinet meeting held in March, 2001. His Imperial Highness the Crown Prince of Japan agreed to be the Honorary President of the 3rd Water Forum. The united nations has declared the year 2003 as the International Fresh Water Year.

The interested individuals can be involved in discussions through the internet or through accessing the secretariat at the following websites : <http://www.worldwaterforum.org/> <http://www.worldwatercouncil.org> . Alternatively, you can send e-mails to : office@waterforum3.com / wwc@worldwatercouncil.org

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* Mycrome

Mr. Muok from the pilot forestry manager KEFRI, Kitui is now pursuing his Doctorate degree in Kyoto Prefecture University, Japan. He has been accompanied by his Supervisor, Prof. T. Ishii, to Kenya for some research in Mycorrhizal fungi. This is a very important subject in the field of agriculture and forestry. If you are interested in the details of his study, please visit the following website:

Mycorrhizal Information
[http:// mycorrhiza.ag.utk.edu/](http://mycorrhiza.ag.utk.edu/)

This is a very well organized information site with so many latest abstracts on Mycorrhizal fungi
Agricola <http://www.nalnsda.gov/ag98/>

This is the Agriculture research site for Agriculture.
In VAM <http://invam.caf.wvu.edu/>

This site is managed by Dr. J. Morton in the United States. It provides useful

classification on Mycorrhizal.
BEG <http://wwwbio.ukc.ac.uk/beg/>
This is a home page of Mycorrhizal Society in Europe.
ICOMS http://www.waite.adelaide.edu.au/Soil_Science/3icom.htm/

This is the home page of international Mycorrhizal conference, which was held in 2001
On lab <http://bio.kpu.ac.jp/>
This is the home page of Prof. Ishii's laboratory in Kyoto Prefecture University Japan. ☆



Editorial

What happens to SOFEM extension activities when the project closes?

The SOFEM project is coming to an end in November, 2002. Although the project has been operating in only three divisions of Kitui District, it has had an impact countrywide especially in areas where launching of the tree planting seasons took place.

We will look back at the achievements of SOFEM with a passion. Areas of technology development, farm forest establishment and extension methods and information have been thoroughly covered. The question now is "what next after SOFEM?" In this issue of the newsletter, the project coordinator SOFEM/FD, Mr. P.M Kariuki looks at this question and goes further to discuss the current expectations.

One of the achievements of the project is the breakthrough in germination and propagation of *Melia volkensii*. The Tree Biotechnology Project in Karura finds it a challenge to further this achievement by applying experiences in Eucalyptus biotechnology to enhance propagation of *Melia volkensii* in Kenya. This issue is well covered in the newsletter.

Our sincere thanks go to the Japanese experts who have been involved in the running of the project, FD and KEFRI staff and more especially to the farmers whom the model targeted. All said and done, the SOFEM project targeted farmers. In this issue, farmers have their views on what they think of the project. At the end of the project, various documents will be in place for reference regarding the various activities and farmers' experiences.

Let us all cooperate so that those outside the project area can see the difference the project has had on farmers and hence follow suit in the adoption of new on-farm technologies.

SOFEM Project Outputs

The expected SOFEM outputs are:

- Practical techniques for tree planting and management for establishment of farm forestry are provided to farmers through on-station and on-farm technology development and verification,
- Appropriate method of farm forest establishment is developed with initiative of the local residents through selection of target farmers and practical training of farmers and extension agents, and
- Information on farm forestry establishment is shared by the people and other related organisations.