# 附 属 資 料

- 1. 供与機材利用状况表
- 2. 討議議事録(R/D)
- 3. 暫定実施計画(TSI)
- 4. 終了時評価ミニッツ
- 5. 評価アンケート様式
- 6. 終了時評価調查表

# 1. 供与機材利用状况表

平成2年度供与機材利用,管理状況

No	機材名	仕様	現地購入価格	数量	利用管理状况
1	トラクター	MF-240	K.462,000.°°	1台	Tiva苗畑で使用中
2	ビックアップ	ニッサン サハラ	K.774,872.00	2台	PF造林・苗畑で使用中
3	フィルム	ASA100	K. 57,000.00	400本	訓練・PFで使用した
4	コピー紙	PPC80GSM	K. 69,000.00	30098	訓練資料・ワーキンクヘーハー等で使用した
5	コンピュークー	IBM PS/2	K.450,000.°°	1式	スクカ 訓練テキスト作成等に使用中
6	ビデオプロジェクター	パナソニック	K.480,000.00	1台	
7	自転車	ļ	K. 14,950.90	5台	PF
8	苗木箱	40 LOAF	K. 86,000.00	200和	PF,Tíva 苗畑等で使用中
9	ポリチューブ	怪3inch	K. 40,000.00	0.5 ს	PF,Tiva 苗畑等で使用した
10	ポリチューブ	径4inch	K. 200, 000. °°	2.5 t	PF,Tiva 苗畑等で使用した
] [	農具	(Jembe,	K. 62,000.00	200≵[	PFで使用中
		Panga,		=	
		Slasher,			
		Shovel )			·
12	タイヤ&チューブ	7.50-16	K. 69,000.00	20本	PF・訓練で使用した
13	コンプレッサー	#ソリン 3HP	K. 85,000.00	1台	Aクカ 実験室で使用中
14	マッフルグラ	BS4450	K. 109, 000.00	1台	n
15	土壌水分計	EL-514	K. 40,000.00	1台	<i>)</i> )
16	ラミナー・フロー	III-6.12	K. 199, 000. 00	1台	n
17	蒸留器	41./HR	K. 85,000.00	1台	n
18	撹拌機	OCTAGON	K. 153, 000. 00	1台	n
19	スペクトロメーター	EL-525	K. 731, 000. 00	1台	"
20	炎色光度計	410	K. 312, 000. 00	1台	n,
21	天秤	EL-22	K. 15,000.00	1台	<i>"</i>
22	電子天秤	EL-225	K. 121,000.00	1台	<i>II</i>
23	恒温器	B-40	K. 66,000.°°	1台	<i>y</i>
24	図書		K. 344, 234. °°	232	ムク# 図書館で保管
L		合 計	K. 5, 025, 056. 00		

# 平成3年度供与機材利用・管理状況

機材名	仕様	現地購入価格	屋戏	利用管理状况
四輪駆動車	ミサビシ バジェロ	K.1,651,936.00	2台	ムクカ・キツイ センターで使用中
タイヤ&チューブ		K.308,600.00		PF・訓練で使用中
	670×14		25本	
	750×16		27本	
	900×20	. 1	7本	
	1178×15		10本	
コピー機	mitaDC1255	K. 120,000.°°	1台	Aがたンター で使用中
オートバイ	47N AG175	K.338,400.00	4台	PFで使用中
リソグラフ	RD 5800	K.706,500.°°	2 台	ムクカ・キツイ センターで使用中
1599-	MF 37511	K. 716, 875. °°	1台	キサイセンター で使用中
水トレーラー	特注 4 m <sup>8</sup>	K.150,000.00	1台	: <b>"</b>
水ポンプ	ヤンマーDP30E	K. 45,000.00	1 台	<b>n</b>
フィルム	135/36	K. 38,800.°°	300本	訓練・PFで使用中
コピー紙	Λ4	K.100,760.00	22911	n,
バキュームポンプ		K. 60,000.00	1 台	実験室で使用中
マッフル灯		K.110,000.00	1台	J)
電子天秤		K. 80,000.°°	1台	n
蒸留器		K. 125,000.00	4台	<b>"</b>
pll メータ		K. 49,000.00	1台	<b>"</b>
			· · · · · · · · · · · · · · · · · · ·	
	合 計	K.4,600,871.00		
	四分のでは、アンコンドででは、大大のでは、アンカン・アンカン・アンカン・アンカン・アンカン・アンカン・アンカン・アンカン	四輪駆動車 5 y ビシ バジェロ 670×14 750×16 900×20 H78×15 mitaDC1255 ヤマハ AG175 RD 5800 MF 375H 特注 4 m² ヤンマーDP30E 135/36 A4 バキュームボンブ マッフルグ 電子器 pH メーク	四輪駆動車 59ビシ バジェロ K.1,651,936.00 R.308,600.00 R.308,600.00 R.308,600.00 R.308,600.00 R.308,600.00 R.308,600.00 R.308,600.00 R.308,400.00 R.338,400.00 R.706,500.00 R.706,500.00 R.706,500.00 R.706,500.00 R.706,500.00 R.716,875.00 R.716,875.00 R.716,875.00 R.716,875.00 R.716,875.00 R.716,875.00 R.716,875.00 R.716,875.00 R.710,760.00 R.710,760.00 R.710,760.00 R.710,760.00 R.710,000.00 R.710,000.0	四輪駆動車 ミグビシ バジェロ K. 1,651,936.00 2台 K. 308,600.00 670×14 25本 750×16 900×20 7本 10本 10本 11分本 11分本 11分本 11分本 11分子 11分子 11分子 11分

# 平成元年度供与機材利用·管理状况

No	機材名	仕様	現地購入価格	数量	利用管理状况
1	四輪駆動車	ミツビシ バジェロ	K. 1, 341, 405. 00	3台	損耗著しく頻繁な整備要(ムクカ2,キサイ1)
2	ビックアップ	139 <i>971</i> 1477	K. 349, 500. °°	1台	損耗著しく頻繁な整備要 (キウイ)
3	ステーションワゴン	ニッサン サニー	K. 513, 822. °°	2台	損耗著しく頻繁な整備要(Aグガ1, キツイ1)
4	ミニバス	ニッサン アーバン	К	1台	損耗著しく頻繁な整備要
5	トラック	139 917 4t	K. 412, 210. aa	1台	損耗著しく頻繁な整備要
6	<b>オートバイ</b>	<b></b> ቱንፆ Ⅱ-100S	K. 164,000.00	4台	損耗著しく頻繁な整備要
7	遠心分離器	EL583-140	K. 261, 292, °°	1台	実験室で使用中
8	オートクレーブ	EL548-020	K. 408, 450. °°	I台	実験室で使用中

# **昭和62年度供与機材利用・管理状況**

ケニア社会林業訓練計画

No	機材名	化锑	現地購入価格	数鼠	利用管理状況
1 2 3 4 5 6 7	ミバス バス ステーションワゴン トラック 四輪駆動車 ピックアップ ダンプカー イクスがペーター	ニッサン アーバン ニッサン サニー トヨタ ダイナ3.4t スズキ ジェラ トヨタ ハイラックス トヨタ 7t コマツ PC60-59	K. 300,000.00 K. 719,890.00 K. 182,056.00 K. 324,000.00 K. 101,684.00 K. 202,240.00 K. 555,000.00	2 1 2 1 1 2 1 1	平成4年度に更新の予定 損耗著しく頻繁な整備要 理成3年度級繁な整備要 損耗著しく頻繁な整備要 平成3年度の頻繁な整備要 平成3年度の頻繁な整備要 平成3年度頻繁な整備要 損耗著しく頻繁な整備要

# 昭和63年度供与機材利用・管理状況

No	機材名	仕様	現地購入価格	数量	利用管理状况
1	\$1-X-U-9-	179 WA100-1	K.1,991,730.00	l台	損耗著しく頻繁な整備要 (平成4年度 スヘアーハーツ交換予定)
2	オートバイ	ስባፃች KE100	K. 35, 200. °°	5台	損耗著しく頻繁な整備要
3	コンピューター	1BM PS/2	K. 320, 000. °°	2台	利用頻度が高く増設が要
4	コピー機	47/7 NP3725	¥.2,574,082.00	2台	損耗著しく頻繁な整備要
5	ポリポット	4"x250G	K. 81, 198. °°	26箱	
6	殺虫菌剂	Aldrin	K. 39, 620. °°	2缶	
7	"	Thidon	K. 3, 540, aa	4镅	
8	IJ	Lebaycide	K. 1,510.00	5缶	·
9	<i>11</i>	Benlate	K. 2, 567. °°	5缶	

# 昭和60年度供与機材利用、管理状況

# ケニア社会林業訓練計画

No	機材名	仕様	現地購入価格	数量	利用管理状况
1	四輪駆動車	ミツビシ バジェロ	K. 506, 490. °°	1台	平成元年度に更新済
2	ステーションワゴン	マツダ 323 バン	K. 129, 305. °°		平成元年度に更新済
3	コピー機	キャノンNP-270	K. 190, 280. °°		消耗著しく頻繁な整備要
4	タイプライター	IBM 6747	K. 26, 419. °°		使用不能、修理困難

# 昭和61年度供与機材利用·管理状況

No	機材名	仕様	現地購入価格	数量	利用管理状况
1	コピー機	Canon NP3025	K. 255, 237. **	1台	KEFRI へ引き渡した
2	ダンブカー	トヨタ 7七	K. 488, 000. 00	1台	扣耗著しく頻繁な整備要
3	トラック	トヨタ れ	K. 456, 025. 00	1台	捐耗著しく頻繁な整備要
4	<b>トラクタ</b>	クボター1.345 11	K. 148, 000. on	1 ft	KEFRI へ引き渡した
5	ステーションリゴン	マツダ323	K. 162, 595. 00	1台	KEFRI へ引き渡した
6	ピックアップ	トヨタ ハイラックス	K. 176,000. °°	1台	KEFRI へ引き渡した
7	水クンクトレーラー	<u> </u>	K. 101, 684. 30	1台	平成3年度更新
8	3:J/X	ニッリン アーバン	K. 300, 986. °°	1台	KEFRI へ引き渡した
9	<b>オートバイ</b>	<i>ክሃያ</i> ት KE−100	K. 93, 600. 00	4台	平成3年度更新
10	ブルドーリー	179 D-50A	K. 1,650,000. 00	1台	<b>掛耗著しく頻繁な整備要</b>
11	トラクター	MF-365	K. 278, 000. °°	1台	平成3年度更新
12	トラクター	MF-240	K. 215, 000.00	1台	平成2年度更新
13	ティピングトレーラー	41.	K. 36, 405. 55	1台	<b>扣耗著しく頻繁な整備要</b>
14	四輪駆動車	スズキ シェラ	K. 290, 700. 00	2台	KEFRI へ引き渡した
	<u>                                     </u>	合 計	K. 4, 652, 233. 65		<u> </u>

### 2. 計議議事録 (R/D) -準備フェーズ

THE RECORD OF DISCUSSIONS

BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM

AND THE AUTHORITIES CONCERNED OF

THE GOVERNMENT OF THE REPUBLIC OF KENYA

ON THE JAPANESE TECHNICAL COOPERATION

FOR NURSERY TRAINING AND TECHNICAL DEVELOPMENT PROJECT FOR SOCIAL FORESTRY

IN KENYA [PREPARATORY PHASE]

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Coooperation Agency, (hereinafter referred to as "JICA") and headed by Mr. Takeshi Misawa visited the Republic of Kenya from November 18 to 26 1985, for the purpose of working out the details of the technical cooperation program concerning Nursery Training and Technical Development Project for Social Forestry in Kenya [Preparatory Phase]

During its stay in the Republic of Kenya, the Team exchanged views and had a series of discussions with Kenyan authorities concerned, in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned project.

As a result of the discussions, both parties agreed to recommend to their respective Governments, the matters referred to in the document attached hereto.

Nairobi, November 26, 1985

Mr. Takeshi Misawa

Leader

Implementation Survey Team
Japan International
Cooperation Agency

JAPAN

r. E.C. arap Lang at

Permanent Secretary Ministry of Environment and

Natural Resources

The Republic of Kenya

#### THE ATTACHED DOCUMENT

### I. COOPERATION BETWEEN BOTH GOVERNMENTS

- 1. The Government of Japan and the Government of the Republic of Kenya will cooperate with each other in implementing Nursery Training and Technical Development Project for Social Forestry in Kenya (Preparatory Phase) (hereinafter referred to as "the Project") for the purpose of developing and improving the techniques for producton of tree seedlings and training of personnel and thus contributing to the development of social forestry in Kenya.
- The Project will be implemented in accordance with the Master Plan, which is given in I of the Annex.

#### II DISPATCH OF JAPANESE EXPERTS

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan, will take necessary measures through JICA to provide at its own expense, services of the Japanese experts as listed in II of the Annex through the normal procedures under the Technical Cooperation Scheme of the Government of Japan.
- 2. The Japanese experts referred to in I above and their families will be granted, in the Republic of Kenya, the priviliges exemptions and benefits no less favourable than those accorded to experts of third countries or international organizations performing similar missions in the Republic of Kenya.

T.M.

Anhich-hom

### TII PROVISION OF MACHINERY AND EQUIPMENT

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take the necessary measures through JICA to provide at its own expense, such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project listed in III of the Annex through the normal procedures under the Technical Cooperation Scheme of the Government of Japan.
- 2. The Equipment will become the property of the Government of the Republic of Kenya upon being delivered c.i.f. to the Kenyan authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in II of the Annex.

#### TV PROVISION OF SPECIAL MEASURES

For fostering the smooth promotion of the Project, in accordance with the laws and regulations in force in Japan, the Government of Japan, will take necessary measures through JICA to supplement a portion of the local cost expenditure for the execution of the physical infrastructure such as construction work of nursery and so on, when the necessity arises.

#### V TRAINING OF KENYAN PERSONNEL IN JAPAN

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Kenyan personnel connected with the Project for technical training in Japan through the normal procedures under the Technical Cooperation Scheme of the Government of Japan.
- The Government of the Republic of Kenya will take necessary measures to ensure that the knowledge and experience acquired by the Kenyan personnel from technical training in Japan will be utilized effectively for the implemention of the Project.

7. m

Anhida-Con

- VI SERVICES OF KENYAN COUNTERPART AND ADMINISTRATIVE PERSONNEL
- In accordance with the laws and regulations in force in the Republic of Kenya, the Government of the Republic of Kenya will take necessary measures to secure at its own expense the necessary services of Kenyan counterpart and administrative personnel as listed in IV of the Annex.
- 2. The Government of the the Republic of Kenya will allocate the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan specified in II of the Annex for the effective and successful transfer of technology under the Project.

### VII MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF KENYA

- In accordance with the laws and regulations in force in the Republic of Kenya, the Government of the Republic of Kenya will take necessary measures to provide at its own expense:
  - (1) Land, buildings and facilities as listed in V of the Annex;
  - (2) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
  - (3) Transportation facilities and travel allowance for the official travel of Japanese experts within the Republic of Kenya;
  - (4) Suitably furnished accommodation for the Japanese experts and their families.

1. M

Anhi-chiloso

- 2. In accordance with the laws and regulations in force in the Republic of Kenya, the Government of the Republic of Kenya will take necessary measures to meet:
  - Expenses necessary for the transportation of the Equipment within the Republic of Kenya as well as for the installation, operation and maintenance thereof;
  - (2) Customs duties, internal taxes and any other charges imposed on the Equipment in the Republic of Kenya;
  - (3) All running expenses necessary for the implementation of the Project.

#### VIII ADMINISTRATION OF THE PROJECT

- 1. The Permanent Secretary of the Ministry of Environment and Natural Resources will bear overall responsibility for the implementation of the Project.
- 2. The Director of Forest Research Department, Kenya Agricultural Research Institute, Ministry of Agriculture and Livestock Development as the Head of the Project, will be responsible for administrative and managerial matters of the Project.
- 3. The Japanese Chief Adviser will provide necessary recommendation and advice on technical and administrative matters concerning the implementation of the Project to the Head of the Project.
- 4. The Japanese experts will give necessary technical guidance and advice to the Kenyan counterpart personnel on matters pertaining to the implementation of the Project.
- 5. For the effective and successful implementation of the Project, a

  Joint Committee will be established with the function and composition
  as referred to in VI of the Annex

T.M.

Inhichmens

#### IX CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of Kenya undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occuring in the course of, or otherwise connected with the discharge of their official functions in the Republic of Kenya except for those arising from the willful misconduct or gross negligence of the Japanese experts.

### X MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with the Attached Document.

### XI TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be two (2) years from the date of signature. However, there will be a general review by both sides on the progress of the implementation of the Project during the second year of the cooperation period in order to consider as to when Nursery Training and Technical Development Project for Social Forestry in Kenya [Main Phase] (hereinafter referred to as "the Project [Main Phase]") should be started, and as a result, the duration of the Project may be amended.

1 M

Inh-chihoro

- T. MASTER PLAN
- 1. Objectives of the Project

The objectives of the Project is to develop and improve techniques for the production of tree seedlings and to train personnel concerned in order to contribute to the development of social forestry in Kenya.

- 2. Objectives of the Japanese Technical Cooperation
  - (1) Formulation of Master Plan and Tentative Implementation Program of the Project [Main Phase]
    - a. Formulation of the nursery techniques development program (seedling production, silviculture including Pilot Forest, etc.)
    - b. Preparation of curricula for training courses
    - c. Other activities as and when required.
  - (2) Training of Kenyan counterpart personnel
  - (3) Collection of data and survey of selected areas
  - (4) Construction of a nursery for trials.

T.M.

Anti-churchon

## 11 JAPANESE EXPERTS

- 1. Chief Adviser
- 2. Experts in the fields of:

Silviculture

Nursery

Note: Short-term experts will be dispatched when necessity arises, for the smooth implementation of the Project.

1. M

Anti-che Rom

# III LIST OF EQUIPMENT

- 1. Equipment for nursery
- 2. Equipment for training
- 3. Vehicles
- 4. Office supplies
- 5. Other necessary equipment, tools and materials

7 m

Inhich-hom

# IV. LIST OF KENYAN COUNTERPART AND ADMINISTRATIVE PERSONNEL

- 1. Head of the Project
- 2. Counterpart personnel in the fields of:

Silviculture

Nursery

- 3. Administrative Personnel
  - (1) Administration
  - (2) Accounting
  - (3) Other necessary supporting staff
- 4. Laborers

1.M

Anh-chiloso

- V. LIST OF LAND, BUILDINGS AND FACILITIES
- 1. Land
- 2. Buildings and facilities
  - (1) Chief Adviser's office
  - (2) Expert's offices
  - (3) Laboratories
  - (4) Nursery facilities
  - (5) Training facilities
  - (6) Other necessary facilities (ware house, garage, etc.)
- Note: 1. All Experts offices will be located at Muguga in preparatory phase.
  - 2. Buildings and facilities in Kitui will be provided when necessity arises.

T.M.

Ant-ch-Ron

## VI THE JOINT COMMITTEE

#### 1. Functions

The Joint Committee will meet at least once a year and whenever necessity arises, and work:

- (1) To formulate an Annual Work Plan of the Project in accordance with the Record of Discussions;
- (2) To review the overal progress of the technical cooperation program in particular, the activities carried out under the above-mentioned Annual Work Plan;
- (3) To review and exchange views on major issues arising from or in connection with the technical cooperation program.

### 2. Composition

- (1) Kenyan Side:
  - (a) Chairman:
    Permanent Secretary, Ministry of Environment and Natural
    Resources (MENR)
  - (b) Members:

Chief Conservator of Forest, Ministry of Environment and Natural Resources.

Director of Forest Research Department, Kenya Agricultural Research Institute, Ministry of Agriculture and Livestock Development.

Representative of Ministry of Finance

Representative of Ministry of Planning and National Development Representative of National Council for Science and Technology

11. M

And alathon

## 2) Japanese Side:

- (a) Chief Adviser
- (b) Other expert(s) nominated by the Chief Adviser
- (c) Resident Representative of Nairobi Office, JICA
- Note: 1. In case the Permanent Secretary, MENR, cannot attend the committee, alternative member of the Kenyan side may act as the chairman of the committee
  - 2. Officials of the Embassy of Japan may attend a Joint Committee meeting as observers

1.M.

Intakon

### 計議議事録(R/D) -本格フェーズ

THE RECORD OF DISCUSSIONS

BETWEEN THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF JAPAN AND THE GOVERNMENT OF THE REPUBLIC OF KENYA ON THE JAPANESE TECHNICAL COOPERATION FOR THE SOCIAL FORESTRY TRAINING PROJECT

The Japan International Cooperation Agency (hereinafter referred to as "JICA") had a series of discussions through the Resident Representative of JICA in Kenya with the authorities concerned of the Government of the Republic of Kenya on the desirable measures to be taken by both Governments for the Japanese Technical Cooperation Programme concerning the Social Forestry Training Project which is the main Phase of Nursery Training and Technical Development Project for Social Forestry in Kenya. (Preparatory Phase).

As a result of the discussions, JICA and the authorities concerned of the Government of the Republic of Kenya agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Nairobi, November 25, 1987

Resident Representative

Kenya Office

Japan International Cooperation

Agency, JAPAN

Mr. E.C. Arap Lang' Permanent Secretary Ministry of Enviroment and Natural Resouces The Republic of Kenya

# THE ATTACHED DOCUMENT

- I. COOPERATION BETWEEN BOTH GOVERNMENTS
- 1. The Government of Japan and the Government of the Republic of Kenya will cooperate with each other in implementing the Social Forestry Training Project (hereinafter referred to as "the Project") for the purpose of conducting training in social forestry at the national and regional levels and implementing the Pilot Forest Scheme combined with training at the regional level and thus contributing to the development of capabilities for social forestry training in in Kenya.
- 2. The Project will be implemented in accordance with the Master plan which is given in Annex I.

## II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex II through the normal procedures under the technical cooperation scheme of the Government of Japan.

. . . / 3



2. The Japanese experts referred to in (1) above and their families will be granted in the Republice of Kenya the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries or international organizations performing similar missions in the Republic of Kenya.

## III. PROVISION OF MACHINERY AND EQUIPMENT

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery as equipment and other materials (hereinafter referred to as the "Equipment") necessary for the implimentation of the projects as listed in Annex III through the normal procedures under the technical cooperation scheme of the Government of Japan.
- 2. The Equipment will become the property of the Government of the Republic of Kenya upon being delivered c.i.f. to the Kenyan authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.

...../4

19.

- 3. All equipment, machinery and materials provided by the Government of Japan through JICA during the implementation of the Nursery Training and Technical Development Project for Social Forestry (Preparatory Phase) will be utilized for the implementation of the Project.
- IV. SPECIAL MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN

  In order to assure smooth implementation of the Project in accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to supplement a portion of the local cost expenditure for the execution of the afforestation promotion programme such as the cost of afforestation activities and so on when the necessity arises.

...../5

A.T.

- V. TRAINING OF KENYAN PERSONNEL IN JAPAN
- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Kenyan personnel connected with the Project for technical training in Japan through the normal procedures under the technical cooperation scheme of the Government of Japan.
- The Government of the Republic of Kenya will take necessary measures to ensure that the knowledge and experience acquired by the Kenyan personnel from technical training in Japan will be utilized effectively for the implementation of the project.
- VI. SERVICES OF KENYAN COUNTERPART AND ADMINISTRATIVE PERSONNEL
- 1. In accordance with the laws and regulations in force in the Republic of Kenya, the Government of the Republic of Kenya will take necessary measures to secure at its own expense the necessary services of Kenyan counterpart and administrative personnel as listed in Annex IV.
- 2. The Government of the Republic of Kenya will endeavour to allocate the necessary number of suitably qualified personnel

...../6

1.7.

corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in Annex II for the effective and successful transfer of technology under the project.

- VII. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF KENYA
- 1. In accordance with the laws and regulations in force in the Republic of Kenya, the Government of the Republic of Kenya will take necessary measures to provide at its own expense:
  - (1) Land, buildings and facilities as listed in Annex V;
  - (2) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the project other than those provided through JICA under III above;
  - (3) Transportation facilities and travel allowance for the official travel of Japanese experts within the Republic of Kenya;
  - (4) Suitably furnished accommodations for the Japanese experts, their families and the Kenyan counterpart staff.

. . . . . . / 7

- 2. In accordance with the laws and regulations in force in the Republic of Kenya, the Government of the Republic of Kenya will take necessary measures to meet:
  - (1) Expenses necessary for the transportation of the

    Equipment within the Republic of Kenya as well as for
    the installation, operation and maintenance thereof;
  - (2) All running expenses necessary for the implementation of the Project;

and to exempt Customs duties internal taxes and any other charges, imposed on the Equipment in the Republic of Kenya.

### VIII. ADMINISTRATION OF THE PROJECT

- The Permanent Secretary, the Ministry of Environment and Natural Resources will bear overall responsibility for the implementation of the Project.
- 2. The Director, the Kenya Forestry Research Institute, as the Head of the Project, will be responsible for the administrative and managerial matters of the project.

..../8

A. T.

- 3. The Japanese Chief Adviser will provide necessary recommendation and advice on technical and administrative matters concerning the implementation of the Project to the Head of the Project
- 4. The Japanese experts will give necessary technical guidance and advice to the Kenyan counterpart personnel on matters pertaining to the implementation of the Project.
- 5. For the effective and successful implementation of the Project, a Joint Committee will be established with the function and composition as referred to in Annex VI.

## IX. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of Kenya undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occuring in the course of or otherwise connected with the discharge of their official functions in the Republic of Kenya except for those arising from the willful misconduct or gross negligence of the Japanese experts.

SPC

### X. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with this Attached Document.

### XI. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five (5) years from 26 November, 1987.

..../10

N.T.

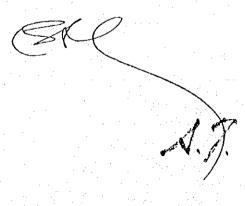
### ANNEX

### I. MASTER PLAN

1. Objective of the Project

To conduct training in social forestry at the national and regional levels and to implement the Pilot Forest Scheme combined with training at the regional level and thus contributing to the development of capabilities for social forestry training in Kenya.

.../11



2. Activities of the Project

To attain the above-mentioned objective, the following cooperation activities will be implemented

- (1) Training in Social forestry at the national and regional levels
  - a. Preparation of curricula and training materials
  - b. Training for senior field and headquarter-based officers of the Forest Department.
  - c. Training for intermediate level field officers of the Forest Department
  - d. Training for extention officers and nursery supervisors of the Forest Department.
  - e. Training for agricultural extension staff at the location and sub-locational levels.
  - f. Training for leading or active farmers at the village level.
  - g. Conducting national seminars for the promotion of social forestry.
  - (2). Implementation of the Pilot Forest Scheme combined with training at the regional level.

..../12

- a. Development and improvement of the techniques for social forestry in semi-arid land through the establishment and operation of a trial plantation.
- b. Technical guidance and material support for the plantation operated by local farmers groups.
- c. Study of natural succession in the protected area.
- d. Other necessary activities including commemorative tree planting.

### II. JAPANESE EXPERTS

- 1. Chief Advisor
- 2. Team Leaders
- 3. Experts in the fields of:
  - (1) Nursery Training
    - (2) Silviculture Training
    - (3) Forestry Extension
    - (4) Nursery
    - (5) Silviculture

### 4. Liaison Officer

- Note: 1. Team Leaders may serve concurrently as experts in one of the fields mentioned above.
  - Short-term experts in other related fields will be dispatched when necessity arises.

### III. LIST OF EQUIPMENT

- Equipment, machinery, instruments, tools and spare parts for forestry training.
- Equipment, machinery, instruments, tools and spare parts for silviculture.
- 3. Seeds, fertilizers, pesticides and other materials.
- 4. Vehicles.
- 5. Other materials necessary for the activities of the Project.
- 1V. LIST OF KENYAN COUNTERPART AND ADMINISTRATIVE PERSONNEL
  - 1. Head of Project
  - 2. Advisory staff (KEFRI Research Officers)
  - 3. Training Manager
- 4. Training Sub-Manager
- 5. Training Officers
- 6. Pilot Forest Manager
- 7. Pilot Forest Sub-Manager
- 8. Pilot Forest Operations Officers
- 9. Administrative and Clerical staff
- 10. Other necessary supporting staff

.../14

EX A.J.

- V. LIST OF LAND, BUILDING AND FACILITIES
- At the National Social Forestry Research and Training Centre.
   Muguga-
  - (1) Project Head Office
  - (2) Training Facilities
  - (3) Nursery
  - (4) Other related facilities
- 2. At the Regional Social Forestry Training Centre, Kitui
  - (1) Project Kitui Office
  - (2) Training facilities
  - (3) Nursery
  - (4) Field accommodation for Japanese experts and Kenyan counterpart.
  - (5) Other related facilities
- 3. At the Pilot Forest area
  - (1) Lands for the Pilot Forest Scheme
  - (2) Nursery
  - (3) Facilities for the afforestation activities
  - (4) Other related facilities

.../15

### VI. THE JOINT COMMITTEE

1. Functions

The joint Committee will meet at least once a year and whenever necessity arises, and work:

- (1) To formulate the Annual Work Plan of the Project in line with the Tentative Schedule of Implementation formulated within the frame of work of this Record of Discussion;
- (2) To review the overall progress of the technical cooperation programme and monitor the project activities in the light of the above-mentioned Annual Work Plan;
- (3) To review and exchange views on major issues arising from or in connection with the technical cooperation programme.



### 2. Composition

(1) Chairman: Permanent Secretary, the Ministry of Environment and Natural Resources.

### (2) Members:

- (a) Kenyan side:
  - Head of the Project
  - Training Manager
  - Pilot Forest Manager
  - Chief Conservator of Forests, Forest
    Department
  - Representative of Ministry of Finance
  - Representative of Ministry of Planning and
     National Development
  - Representative of Ministry of Research,
     Science and Technology
  - Representative of Ministry of Agriculture

### (b) Japanese Side

- Chief Advisor
- Experts designated by Chief Adviser
- Liaison Officer
- Resident Representative, JICA Kenya Office

Note: Official(s) of the Embassy of Japan may attend the joint Committee as observer(s)

KENYA/JAPAN: SOCIAL FORESTRY TRAINING PROJECT - MAIN PHASE FROM NOVEMBER, 1987

In response to the official request by the Kenyan Government, on the establishment of the Social Forestry Training Project, the Japanese Government, through the Japan International Cooperation Agency (JICA), offered Technical Cooperation and Capital Grant Aid.

Under the Capital Grant Aid, approximately Kshs. 142 Million, will be utilized for the establishment of two Forestry Centres.

One is at Muguga and the other at Kitui, the former being a

National Research and Training Centre and the latter a Regional

Training Centre but with a national mandate particularly for the development of social foresty in the semi-arid areas.

The following facilities will be constructed for both Centres:

Training facilities, Equipment and Dormitories
Research facilities and Equipment

Nursery facilities and Equipment.

Construction works for the above will be completed by the end of March, 1988.

Under the Technical Cooperation Scheme, the Main Phase of the Project was started in November, 1987, following the cooperation for the Preparatory Phase for the said project, for the duration of two (2) years from November, 1985. The planned activities

for the Preparatory Phase has been successfully and satisfactorily implemented by Kenya and Japan.

Why the project is placing a special emphasis on the Social Forestry Development in the semi-arid areas, is due to the following reasons:

- a) Among various ecological zones the most vulnerable and calling for immediate action is the semi-arid area which is experiencing an influx of population in high potential area.
- b) The semi-arid area, in addition to the fact that it is under mounting pressure on land, is characterised by a harsh environment, low biological productivity.

  Coupled with the prevailing inappropriate land use practices, the situation is likely to lead to irreparable environmental damages and degration.

After a series of discussions with both parties, a new agreement was signed on 25th November, 1987. The granting of the Master Plan in the above agreement, the Main Phase of the Project consists of two (2) Sub-Projects, Training and Pilot Forest.

. . . . / 3

The Training Sub-Project will carry out training activities at both the Muguga and Kitui Centres. It should be noted, however, that the two (2) Centres have different characteristics. The Muguga National Centre will carry out refresher courses designed for PFO's, DFO's and other officers at a higher level. Secondly, the Centre will also hold workshops for Extension Forest Officers, their assistants or Agricultural Extension Staff for the purpose of monitoring and evaluation of Social Forestry development activities country-wide. It will also hold National Seminars, inviting non-foresters as well as foresters.

The Kitui Regional Centre, on the other hand, will concentrate on the semi-arid land areas of the Eastern Province. The training activities of this Centre will invite extension workers of both forestry and agriculture of intermediate level, plus active farmers and women group leaders at the grass-roots' level and will try to give them a systematic training in social forestry including various subjects needed to tackle the problems of the semi-arid areas.

The Pilot Forest Sub-Project has been carrying out with special measures (approx. Kshs. 2.8 Million, financial support per year under the Japanese Technical Cooperation Scheme). This Sub-Project will be responsible for three (3) groups of activities.

. . . . . / 4

The first group will be the establishment of pilot forest of about 700 hectares through the direct operation of the Project for selection of appropriate tree species and development of nursery planting and tending techniques.

The second activity would be to call in voluntary groups of people to plant trees for their own benefit and support these groups by offering technical guidance and material support.

These groups will be assured of the future benefits coming out of their voluntary tree planting by a legal agreement between KEFRI and the groups. Thus, the groups will be endowed with a right to the various forest products such as fuel-wood, charcoal, honey, etc., and agricultural crops to be harvested from agroforestry practices.

The last group of activity will be social foresty extension to the nearby rural areas. The Pilot Forest Sub-Project will also provide seedlings and technical guidance to the individual farmers in the adjoining rural areas. The local people will also receive guidance and support for soil conservation and other related activities by this sub-project.

All these activities of the Pilot Forest Sub-Project will be closely combined with the training activities of the Kitui

. . . . . / 5

Regional Centre for the social forestry development in the crucial semi-arid land area.

Counterpart Training has been provided in the relevant fields under the JICA Training Programme for the development of Kenyan Staff. At present there are seven (7) <u>Japanese Experts</u> assigned to the Project for the creation of appropriate technology with Kenyan Counterpart Staff, for the Social Forestry Project, especially in the semi-arid zone.

# 3. 暫定実施計画(T.S.I)

#### TENTATIVE SCHEDULE OF IMPLEMENTATION

OF

# THE SOCIAL FORESTRY TRAINING PROJECT

The Japanese Consultation Team and the authorities concerned of the Government of the Repbulic of Kenya have jointly formulated the Tentative Schedule of Implementation of the Social Forestry Training Project (hereinafter referred to as "the Project") as annexed hereto.

This has been formulated in connection with the Attached document of the Record of Discussions signed on 25th November 1987 between the authorities concerned of the Government of Japan and the Government of the Republic of Kenya for the Project on the condition that necessary budget will be allocated for the implementation of the Project by both sides, and that the above-mentioned Schedule is subject to change within the framework of the Record of Discussions, when necessity arises, in the course of the implementation of the Project.

> Nairobi, February 2, 1988

Mr. Eio Shimokawa

Leader

The Japanese Consultation Team, Japan International Cooperation Agency, Japan

sorahu Mr. E.C. Arap Lang'at Permanent Secretary Ministry of Environment and Naturall Resources

The Republic of Kenya

Mr. K. Kumagishi

Resident Representative

Kenya Office

Japan International Cooperation

Agency

ANNEX TENTATIVE SCHEDULE OF IMPLEMENTATION

Item	Year 19 Novem	1987/88   1988/ November November	80	1989/90 November No	1990/91 November No	1991/92 November Nov	November
I. Activities of the Project							
1. Training in social forestry at the national and regional levels.							
1) Preparation of curricula and training materials							
2) Training for senior field and head- quarter-based officers of the Forest Department	. !						· · · · · · · · · · · · · · · · · · ·
<ol> <li>Training for intermediate level field officers of the Forest Department</li> </ol>							···
4) Training for extension officers and nursery supervisors of the Forest Department							
5) Training for agricultural extension staff at the locational and sub- locational levels							
farmers at the village l							
promotion of the Pilot Forest Scheme combined with training at the regional level					:		
<pre>1) Development and improvement of the</pre>							

0

E. S

ANNEX TENTATIVE SCHEDULE OF IMPLEMENTATION

Year Item N	1987/88 November No	1988/89 November	1989/90 November	1990/91 November	November N	November
naterial support f						
the plantation operated by local farmers groups						
<ol> <li>Study of natural succession in the protected area</li> </ol>						
4) Other necessary activities including commemorative tree planting						
<ol> <li>Japanese Contribution</li> <li>Dispatch of Japanese Experts</li> </ol>			······································			
1) Chief Advisor						_
2) Team Leaders						
3) Expercs						
Nursery Training						<u>-</u>
Silviculture Training						· 
Forestry Extension	. ]					
Nursery						
Silviculture						-T
4) Liaison Officer						
5) Short-term Experts in other related fields		3	When necessity	ity arises		
2. Provision of equipment and machinery						
3. Training of Kenya personnel in Japan						
III Kenyan Contribution 1. Counterpart and Administrative Personnel						
1) Head of the Project						- <sub>T</sub>

N.

9.5.

ANNEX TENTATIVE SCHEDULE OF IMPLEMENTATION

Item		Year 1987/88 November	1988/89 November	November November	ľ	November Nov	November
	2) Advisory Staff (KERRT Research Officers)						
	3) Training Manager						
	4) Training Sub-Manager						
	5) Training Officers						
	6) Pilot Forest Manager	:					
	7) Pilot Forest Sub-Manager						
	8) Pilot Forest Operation Officers						
	9) Administrative and Clerical Staff						
	10) Other necessary supporting staff						
 2	Provision of Land, Building and Facilities						
 r			-				
 ) )							

7

8,5.

#### 4. 終了時評価ミニッツ

# MINUTES OF THE JOINT EVALUATION MEETING

ON

# THE KENYA/JAPAN SOCIAL FORESTRY TRAINING PROJECT

The Japanese Evaluation Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Yoshio Utsuki, Managing Director, Forestry and Fisheries Development Cooperation Department, JICA, visited the Republic of Kenya from 27th May to 5th June in 1992 for the purpose of evaluating the Social Forestry Training Project (hereinafter referred to as "the Project").

The Team and the authorities concerned of Kenya headed by Mr. Geoffrey Sheridan Ouma, Deputy Secretary, Ministry of Research, Science and Technology, carried out the joint evaluation of the Project and held the Joint Evaluation Meeting in Nairobi, on 3rd June 1992.

Through the Meeting, both sides agreed to convey to their Governments the results of the joint evaluation referred to the Summary Report of Evaluation attached herewith.

Nairobi, The Republic of Kenya

5th June 1992

Mr. Yoshio Utsuki

Leader, Japanese Evaluation Team,

Japan International Cooperation

Agency,

Japan

Mr. Sospeter Nyagwansa Arasa

Permanent Secretary,

Ministry of Research, Science

and Technology,

The Republic of Kenya

# THE SUMMARY REPORT OF EVALUATION

#### ON

#### THE KENYA/JAPAN SOCIAL FORESTRY TRAINING PROJECT

# 1. INTRODUCTION

The Project has been implemented through the Training and Pilot Forest activities for seven years from 1985 to 1992, based on the Record of Discussions (hereinafter referred to as the "R/D") signed on November 26, 1985 and November 25, 1987 for the preparatory phase and main phase respectively.

The objective of the Project is to contribute to the development of capabilities for social forestry training in Kenya by conducting training in social forestry at the national and regional levels and implementing the Pilot Forest Scheme combined with training at the regional level.

Before the termination of the Project cooperation period, a joint evaluation team consisting of Japanese and Kenyan members carried out an evaluation of the Project.

This is a summary of the findings and recommendations of the joint evaluation.

\f



# 2. EVALUATION

#### 2.1 INPUT

# I Japanese Side

# (1) Dispatch of Japanese Experts

Two (2) Chief Advisers, nineteen (19) long-term experts in the fields of Nursery Training, Silviculture Training, Forestry Extension, Nursery, Silviculture and two (2) Liaison Officers have been dispatched.

Twenty five (25) short-term experts in the fields concerning the Project activities have been dispatched. They have conducted transfer of the techniques in their respective fields to the Kenyan counterpart members.

(2) Training of Kenyan personnel in Japan and Australia

Eighteen (18) Kenyan personnel have been accepted in Japan for technical training, such as, silviculture and forest management.

Five (5) Kenyan personnel have been sent to Australia for the study of silviculture techniques in semi-arid land.

The training has been very useful for the trainees in obtaining productive experiences and it has contributed to successful implementation of the Project's activities.

(3) Provision of machinery and equipment

Necessary machinery and equipment have been provided to the Project as

planned. Most of them have been well maintained and used effectively by the Project.

## (4) Other financial support

Cost of improvement works on the physical infrastructure of the Project such as two nurseries has been paid by Japan under its project managing expenditure account in the preparatory phase.

For effective and smooth implementation of the Project, the cost for afforestation of the Pilot Forest, training in the training centre and implementation of the relevant Project activities has been covered by Japan.

# II Kenyan Side

# (1) Assignment of counterpart and support staff

Kenyan counterparts, comprising the Head of the Project, Advisory staff, Training Manager, Training Sub-Manager, Training Officers, Pilot Forest Manager, Pilot Forest Sub-Manager, Pilot Forest Operations Officers, Administrative and Clerical staff and other necessary support staff have been assigned as planned.

# (2) Lands, buildings and necessary facilities

The necessary facilities such as offices for Japanese experts, lands for the Pilot Forest Scheme, nurseries and other relevant facilities have been provided for the Project activities. The water supply system at the Kitui Centre has not been fully completed despite an effort made by the Kenyan side.

Ana

# III Joint Committee Meetings

The Joint Committee Meetings have been organized on the major matters concerning the Project.

So far, five meetings have been held and the annual work plans of the Project have been formulated and approved. The overall progress of the technical cooperation programme has been reviewed and the Project activities have been monitored.

#### 2-2 OUTPUT

The Project has been implemented in accordance with the Master Plan as stated in Annex I of the R/D. The following is a review of the output made so far by the Project.

#### 2.2.1 Training

Training has been undertaken for (1) field as well as headquarters-based officers at the Muguga National Centre, and (2) extension staff, farmers and teachers in the Eastern Province at the Kitui Regional Centre.

#### (1) Training at the Muguga National Centre

National social forestry events, including a seminar and a prize day, have been held five times for the purpose of enhancing the nation-wide awareness on social forestry and promoting public relations of the Project. Each event has attracted as many as about 100 participants.

One-week Courses for Provincial and District Forest Officers (PFO and DFO) have been undertaken 12 times and have covered 187 participants, comprising 38 at the PFO level and 149 at the DFO level, including Forest Department (FD) officers as well as those from other ministries and non-governmental organizations. The courses have well attained their purpose of deepening trainees' understanding of the importance of social forestry, and most of the relevant personnel have been covered.

Ten-day Courses for District Forest Extension Officers (DFEO) have been undertaken 13 times and have covered 401 participants from FD, other ministries and non-governmental organisations. The courses have considerably attained their purpose of transferring practical social forestry knowledge and techniques. However, there is still a substantial number of relevant personnel remaining to be trained.

Based on these achievements, training at the Muguga Centre is conceived to have potential for covering untrained officers and diversifying its field by including agroforestry and allied courses.

# (2) Training at the Kitui Regional Centre

Training so far undertaken at Kitui comprises (1) One-week Courses for Nursery Foremen that have been held 6 times covering 159 participants and focusing on nursery techniques, (2) Two-week Courses for Farmers that have been held 11 times covering 256 participants and focusing on the dissemination of nursery and planting techniques, (3) Two-week Courses for Field Technical Assistant Staff that have been held 6 times covering 170 participants from FD and the Ministry of Agriculture and focusing on strengthening capability on social forestry extension in the Arid and Semi-Arid Lands (ASAL), and (4) Two-week Courses for Teachers that have been held 6 times covering 144 participants and focusing on promotion of an understanding and adoption of social forestry techniques among the school teachers. In addition, a course for local community leaders has been undertaken on a trial basis and covered 12 participants.

For these courses, the Project has developed and effectively utilized a variety of training materials, including a textbook "Social Forestry Techniques: Part I" prepared by the Project staff and published in both English and Kiswahili.

All these courses have been attractive to the local people as shown by the rate of effective participation which has been as high as 83 percent. Many participants have actually adopted the techniques which they have gained in these courses, according to a follow-up survey carried out by the Project in 1991. In view of these positive results and a large number of the potential untrained local beneficiaries these courses deserve a further continuation, with emphasis on greater involvement of the people at the grass-root level and diversification of training methods and materials.

#### 2.2.2 Pilot Forest Scheme

The Pilot Forest Scheme combined with training at the regional level has been implemented for (1) development and improvement of social forestry techniques for ASAL through establishment and operation of a trial plantation and nurseries, (2) extension through technical guidance and material support for the plantations operated by the local farmers' groups, (3) study of natural succession in a protected area, and (4) commemorative tree planting.

#### Trial Plantation (1)

A trial plantation programme has been established with an aim at establishing a model for developing techniques and extension methods in social forestry. So far, an area of 300 hectares has been planted. Despite severe natural conditions, the Project has developed techniques for rehabilitation of degraded sites. It is now an important source of data for the Project. Species trial experiment with some 51 species have been undertaken to identify those suitable for social forestry in ASAL. Results of the trial show that 11 species have good performance in survival and growth. These are Acacia gerrardii, A. nilotica, A. polyacantha, Cassia siamea, C. spectabilis, Croton megalocarpas, Dalbergia melanoxylon, Eucalyputas camaldulensis, Gmelina arborea, Grevillea robusta and Prosopis juliflora. A tentative planting manual based on the results of these trials is being developed by the Project. It would be necessary to establish additional trials and maintain these over a longer period to avoid a risk of making hasty conclusions and to develop suitable techniques of planting other species including those of farmers preference and indigenous ones.

For the development of planting techniques in ASAL, a variety of tests have been conducted on different species. Such tests have included hole size effect, spacing and site preparation, shade effect, effect of various methods of water harvesting, various methods of mulching, trimming, and application of charcoal dust in planting holes. Results of this test form a sound basis for further development of social sforestry

techniques for dissemination to farmers, etc.

# (2) Nursery Activities

Nursery work has been undertaken in order to develop and extend seedling production techniques and to produce seedlings for use in the pilot forest area and for local distribution.

In order to develop and operationalize nursery techniques for social forestry, the Project has carried out a number of experiments covering 44 species in the following areas: seed storage, seed pre-treatment, various composition of soil mixture, pot size, colour and form, watering regimes, use of shade, stump seedlings, root pruning, seedling size for planting out, etc. Results of these experiments form a good basis for further development of techniques that would be applied in local nurseries.

At Tiva Nursery, 796,000 seedlings have been so far produced. This level of production has been adequate for developing nursery techniques, production of seedlings for planting in the pilot forest, and distribution through extension programme and use in the training activities.

#### (3) Extension

To promote farmers' plantations, appropriate methods of extension have been tried out and examined.

<u>People's plantation</u> has been organized in the pilot forest site with a total area of 70 hectares. Its purpose has been to let farmers learn and acquire techniques and new practices of the plantation by themselves. Eighteen farmers' groups comprising about 350 members have planted 17,000 seedlings of 15 different species in 5 blocks. The Project has provided incentive support such as supervision, tools, seedlings, participation prizes, firewood and transportation. While a consensus on the need for

social forestry has gradually grown among farmers, a more appropriate approach would be useful to promote the people's plantation, on the basis of the achievements made so far.

As a viable means of extension, <u>small-scale nurseries</u> have been developed by 38 farmers' groups and 6 schools with the Project's support through provision of seeds, pots and tools, technical guidance through periodic field visits, and the promotion of contests among farmers' groups. The nurseries have produced 191,000 seedlings of 28 different species. Development of small-scale nurseries has been quite promising as revealed by an improved survival rate of seedlings especially in schools, and the average number of the trees planted by participant farmers. The average number of trees planted by participant farmers is about 3 times that by non-participant farmers. With less dependence on the Project's support and greater efficiency, the small-scale nurseries would become an important tool for extension activities.

The Project has <u>distributed 444,000 seedlings</u> of 82 different species, on grant basis, to farmers in 10 locations around Kitui Centre. This free distribution of seedlings has been supported with technical guidance and information including a manual. This method has been effective in enhancing people's awareness of plantation at the grassroot level. Positive results observed in this study are further supported by a fast increase in the number of trees per household, ranging from 8 in 1988 to 71 in 1990.

A demonstration plot of an area of 2 hectares has been developed next to the Tiva Nursery. This is an effective living case study for the dissemination of social forestry and training on various techniques such as fencing, establishing and management of orchards, soil conservation, seedling protection, watering, Turkana Method of water harvesting, small-scale nursery and agro-forestry. This plot would be made more effective by integrating and demonstrating appropriate methods of forest management at the grass-root level.

With an aim of disseminating social forestry through leading farmers, six model

farmers have been selected and provided with technical, material and advisory support of the Project for their plantation. Although other farmers have shown interest in this undertaking, they have not emulated the model farmers. Further progress would be achieved by reviewing the method of selecting farmers and the techniques which are appropriate to them as well as through stimulating farmers' willingness to collaborate with the Project and to adopt social forestry technologies.

## (4) Study of Natural Succession in a Protected Area

With a view to identifying a recovery process of the ASAL forests which have been degraded by excessive grazing and tree cutting for fuel wood, an area of 9 hectares has been protected by trenches for a study of natural succession. The study has so far revealed that the protection of the area from cattle and animals has enabled its recovery of natural vegetation to a considerable extent. Continuation of such a study would offer valuable data for social forestry development.

## (5) Commemorative Tree Planting

As a means of achieving positive publicity for social forestry and the Project, the commemorative tree planting has been completed along Mombasa Road between Nairobi City and Jomo Kenyatta International Airport covering a stretch of 4 kilometres. The Project has planted seedlings of 31 different species, and about 2,500 trees are growing. The commemorative tree planting has been completed and enjoys a high reputation among citizens and visitors to Nairobi as well as those concerned with forestry.

#### 3 CONCLUSION AND RECOMMENDATION

#### 3.1 CONCLUSION

The R/D stipulates the objective of the Project as follows:-

"to conduct training in social forestry at the national and regional levels and to implement the Pilot Forest Scheme combined with training at the regional level and thus contributing to the development of capabilities for social forestry training in Kenya"

The Japanese side has completed dispatch of Japanese experts, training of Kenyan personnel in Japan and provision of machinery and equipment in accordance with the R/D and the Tentative Schedule of Implementation (TSI). Meanwhile, the Kenyan side has provided services of Kenyan counterpart technical personnel, administrative personnel, land, buildings and other facilities equally in accordance with the R/D and the TSI. The Joint Committee has also been held in a proper manner, in accordance with the R/D.

With reference to the Project local cost, the Kenyan side has made its maximum effort to bear necessary costs, while the Japanese side has properly provided the expenditures to supplement the effort of the Kenyan side.

However, it should be noted that there have been some points that need to be improved in the matter of local cost expenditures.

Based on the TSI, the Project has generally made a satisfactory output through proper cooperation between the two sides. Training at the Muguga Centre has mostly covered those planned to be trained. A shortfall was observed in the number of training participants at the initial stage, but it has later been recovered.

Training at the Kitui Centre has turned out to be quite effective particularly at the grass-root

level, under the situation without sufficient water supply. But it is recognized that it is necessary to expand and further strengthen training at this level in view of a large number of potential trainees.

In the Pilot Forest Scheme, planting techniques, nursery techniques, forestry extension methods and other relevant matters are being developed in accordance with the TSI. It is, however, necessary to test and refine these methods and techniques.

It can thus be concluded that, in accordance with the TSI, the Project has so far born the output which is almost satisfactory.

#### RECOMMENDATION 3.2

Strong attention has been paid to the Project as a thrust of environmental conservation, women in development (WID) and poverty alleviation. The Project is strongly expected to play an important role in further development of rural communities.

Taking into consideration the importance of social forestry in Kenya, however, one can not but admit that a lot has to be done in order to fully adapt social forestry to farmers' local farming conditions.

Therefore, it is necessary to further expand and reinforce different activities, on the basis of the achievements made so far by the Project. Need is recognized to include agroforestry and allied subjects as target fields of social forestry in addition to the fields covered so far.

It is also important to vitalize intensified research activities for social forestry development.

Bearing these points in mind as well as considering the official request already submitted by the Kenyan Government on "Social Forestry Project Phase II", both sides have agreed to recommend to their authorities concerned that appropriate actions be taken for a second phase in social forestry. The second phase should include the following:

- (1) Full utilization of the first phase achievements is the underlying principle. The achievements made so far should be further improved and complemented through application and testing.
- (2) With reference to <u>training</u>, courses should be organized in connection with the research outcomes from Kenya Forestry Research Institute (KEFRI). Training should include agroforestry courses as important components. Target groups should be diversified enough to include community leaders, women groups, etc.
- (3) With reference to the pilot forest scheme, activities should be carried out with an aim of testing and actually applying forestry techniques in ASAL, whose basic development is underway in the first phase.

#### **OUESTIONNAIRE**

# 5. 評価アンケート様式

#### FOR EVALUATION OF

#### KENYA-JAPAN SOCIAL FORESTRY TRAINING PROJECT

Performance evaluation is essential for this important project to be conducive to the further progress in Kenyan development and Kenya-Japan cooperation. This questionnaire comprises the questions regarding I. Achievement, II. Impact and III. Sustainability of Project. Your kind cooperation in filling out this questionnaire is highly appreciated. Thank you.

cooperation Thank you.	in filling ou	t this quest	ionnaire is	s highly appr	eciated.
NAME	· · · · · · · · · · · · · · · · · · ·		<del></del>		
POSITION			·	•	
FIELD					
I. ACHIEVE	MENT	- · · · · · · · · · · · · · · · · · · ·			
		,			
1 National	Policy Level	•			
I. National	solich reset				**
i					
	ant policy goa	als to which	the Projec	t has been su	ipposed to
addres	s itself to:				
1)					
2)					
3)					
				•	•
1.2 Degree	of the actual	contributio	in hy the D	roject toward	itho policy
	as stated unde				
	nt item).	L I.I (Indic	ace the de	gree by givin	g x on
		_	-		
1)	Very large	Large	Fair	Limited	Little
			•	es established	
2)	Very large	Large	Fair	Limited	Little
3)	Very large	Large	Fair	Limited	Little
			95		÷ .
			:		

	reference to the polic	y goal of:			·
	1)				
		· ·			
	2)			•	•
•					
	. 3)				
	31				
2. Pr	oject Level				
2.1	Degree of achieving th	e Project's	s objective	being to "de	evelop and
	improve techniques for	the produc	ction of tr	ee seedlings	and to
	train personnel concer	med in orde	er to contr	ibute to the	
	development of social	forestry in	n Kenya" (i	ndicate the d	legree by
	giving "X" on relevant	items)	•		
	Very large	Large	Fair	Limited	Little
	e de la companya de La companya de la co		•		
2.2	Major reasons for the	degree of a	achievement	as stated al	oove:
				· · · · · · · · · · · · · · · · · · ·	
3. Di	rect Project Output (su	ich as seed.	ling produc	tion, technic	cal
de	velopment extension and	training)		·	
3.1	Degree of achieving th	ne expected	output fro	om:	
3.1	1) The Project as a wh		<b>44</b>		
	Very large		Fair	Limited	Little
	2) The component/field	ı wnıcı you	are direct	.ty responsib	re/engaged
	for/in				7 11 3 -
	Very large	Large	Fair	Limited	Little
3.2	Major reasons for the	degree of	achievement	as stated a	bove:
	1)				
N (1)	21	**			

1.3 Major reasons for the degree of contribution as stated above, with

4.1 Degree of achievement in: 1) Dispatch of Japanese experts Very large Large Fair Limited Little 2) Provision of machineries and equipment Very large Fair Limited Little Large 3) Training of Kenyan Personnel in Japan Large Limited Little 4) Support of local cost expenditures Very large Large Fair Limited Little 4.2 Major reasons for the degree of achievement as stated above, with reference to the planned input of: 1) Dispatch of Japanese experts 2) Provision of machineries and equipment 3) Training of Kenyan Personnel in Japan 4) Support of local cost expenditures 5. Input to the Project by the Kenyan Side 5.1 Degree of achievement in: 1) Staffing of counterpart and administrative personnel Very large Large Fair Limited Little 2) Provision of land, buildings and facilities Very large Large Fair Limited Little 3) Local cost financing Very large Large Limited Little Fair 4) Managerial support Very large Large Fair Limited Little 5.2 Major reasons for the degree of achievement as stated above, with reference to the planned input of:

4. Input to the Project by the Japanese Side

- 1) Staffing of counterpart and administrative personnel
- 2) Provision of land, buildings and facilities
- 3) Local cost financing
- 4) Managerial support

#### II. IMPACT

- 1. Degree of Impact and Major Beneficiaries
  - 1.1 Technical aspects
    - 1) Degree of impact at the level of:
      - a. Project Very large Large Fair Limited -Little b. Sector Very large Large Fair Limited Little c. Region Very large Large Fair Limited Little d. Nation-wide/Macro Very large Large Limited Little Fair
    - 2) Major beneficiaries at the level of:
      - a. Project
      - b. Sector
      - c. Region
      - d. Nation-wide/Macro
  - 1.2 Institutional aspects
    - 1) Degree of impact at the level of:

a. Project			%	
Very large	Large	Fair	Limited	Little
b. Sector				1 · · · · · · · · · · · · · · · · · · ·
Very large	Large	Fair	Limited	Little
c. Region				1.1
Very large	Large	Fair	Limited	Little
d. Nation-wide/Macr	то .	:		
Very large	Large	Fair	Limited	Little
			·	•
				100

- 2) Major beneficiaries at the level of:
  - a. Project
  - b. Sector
  - c. Region
  - d. Nation-wide/Macro

#### 1.3 Economic aspects

- 1) Degree of impact at the level of:
  - a. Project Very large Fair Large Limited Little b. Sector Very large Large Fair Limited Little c. Region Very large Large Fair Limited Little d. Nation-wide/Macro Very large Large Fair Limited Little
- 2) Major beneficiaries at the level of:
  - a. Project
  - b. Sector
  - c. Region
  - d. Nation-wide/Macro

- 1.4 Socio-cultural aspects
  - 1) Degree of impact at the level of:
    - a. Project

Very large	Large	Fair	Limited	Little
b. Sector				
Very large	Large	Fair	Limited	Little
c. Region	÷ .			
Very large	Large	Fair	Limited	Little
d. Nation-wide/Ma	acro .		•	
Very large	Large	Fair	Limited	Little

- 2) Major beneficiaries at the level of:
  - a. Project
  - b. Sector
  - c. Region
  - d. Nation-wide/Macro
- 1.5 Environmental aspects
- 1) Degree of impact at the level of:
  - a. Project

٠	Very large	Large	Fair	Limited	Little
b.	Sector				
	Very large	Large	Fair	Limited	Little
c.	Region	4.	:		
	Very large	Large	Fair	Limited	Little
d.	Nation-wide/Macro	)			
	Very large	Large	Fair	Limited	Little

- 2) Major beneficiaries at the level of:
  - a. Project
  - b. Sector

- c. Region
- d. Nation-wide/Macro
- 2. Other Impact
  - 2.1 Specify below, if any
  - 2.2 Degree of the impact above and the beneficiaries concerned
    - 1) Degree of impact at the level of:
      - a. Project Very large Large Fair Limited Little b. Sector Limited Little Very large Large Fair c. Region Very large Large Fair Limited Little d. Nation-wide/Macro Very large Little Fair Limited Large.
    - 2) Major beneficiaries at the level of:
      - a. Project
      - b. Sector
      - c. Region
      - d. Nation-wide/Macro

#### III. SUSTAINABILITY

1. Significance of the Following Aspect in Ensuring Sustainability of the Project (indicate the significance by giving "X" on relevant item

and specify major reasons briefly, if your answer is "very large" or "large")

1.1	Financial				
•	Very large	Large	Fair	Limited	Little
	Reason:	·			· 
1.2	Organizational/Instit	utional			
	Very large	Large	Fair	Limited	Little
		•			
	Reason:				
1.3	Physical				
	Very large	Large	Fair	Limited	Little
	Reason:			·	
			:		
1 /	Technical	* . 1			
1.7	Very large	Large	Fair	Limited	Little
	CLY LULGO				
	Reason:				
	Reason:				
, "		.1			
1.5	Managerial/Operationa Very large		Fair	Limited	Little
	very large	Large	rair	Dimited	пістс
٠					
	Reason:				
2. Ne	ed for Further/New Jap	anese Techn	ical Cooper	ration to:	
	This Project				1
	1) Degree of the nee	ed			
	Very large	Large	Fair	Limited	Little
v.	2) Specific fields/	components/a	aspects of	the need	•
:	$\left( \mathcal{S}_{\mathcal{A}}}}}}}}}}$				
2:.2	Other projects, if an	y, in terms	of (descri	be below)	

1)	Type/emphasis		
		$e_{i} = e_{i} \cdot e_{i}$	
2)	Locational implication		
3)	Size implication		

- 3. Lastly, please answer for the questions below:
  - 3.1 Your satisfaction with joining this project
  - 3.2 Your preference of continued engagement in this project
  - 3.3 Any comments on this evaluation itself
  - \* Thank you again for your cooperation.

# 6. 終了時評価調查表

# プロジェクト方式技術協力 終了時評価調査表

案 件 名	ケニア社会林業訓練計画 SOCIAL FOREST TRAINING PROJECT
供 与 国	ケニア国
協力期間(R/D)	1985年11月26日〜1987年11月25日 ケニア林業育苗訓練計画 1987年11月26日〜1992年11月25日 ケニア社会林業訓練計画
事 業 分 野	農林水産業
技術協力分野	技術・普及
相手国実施機関	研究科学技術省
終了時評価調査団	総 括 宇津木嘉夫 国際協力事業団林業水産開発協力部長 訓 練 崎野 健輔 農林水産省林野庁林産課
	造 林 安室 正彦 農林水産省林野庁林産課 普 及 駒木 貴彰 森林総合研究所生産システム研究室
	計画評価 上澤上静雄 国際協力事業団林業水産開発協力部
	林業技術協力投融資課 目標達成 薮田仁一郎 (財)国際開発センター調査部長 分析
終了時評価調査団	1992年 5月25日 ~ 1992年 6月 8日(15日間)
派遣期間	

評価結果総括	
(1) 目標達成度	訓練及びパイロットフォレスト事業をつうじ、本プロジェクトの目
	的は十分達成されつつある。
(2) 案件の効果	林業及び関連部門での政府関係者及び地元住民の両レベルで社会林
	業に関する実際的知識・技能が普及しつつある。
(3) 自立発展性	社会林業に関する理解とその知識を有する人材が中央レベルで形成
	されており、今後これらの人材が適切に活用されることが重要であ
	(3. 1 to 1 t
(4) フォローアッフ の必要	新規プロジェクトとして第2フェーズへの展開が望まれる

#### I 協力実施プロセス

1. 要請の内容と背景

ケニアにおいては、人口増加にともなう農耕地の拡大及び木質エネルギーの需要拡大により、森林の減少が著しい。ケニア政府はこれに対して全国的規模での緑化政策に取り組んでいるが、厳しい自然条件のもとで、技術的、経済的な面について援助に依存せざるを得ない状況である。このような状況のもとで、1984年 4月にケニア政府は、林業育苗訓練センター計画について、プロジェクト方式技術協力と無償資金協力とを組み合わせた協力をわが国に対し要請してきた。

- 協力実施プロセ
   ス
  - (1) 要請発出

1984年4月

(2) コンタクト調

1984年 8月26日~ 9月 4日 (10日間)

協力政策 沼田 正俊 外務省経済協力局技術協力課 林業協力 角谷 宏二 国際協力事業団林業水産開発協力部 林業開発課長

(3) 事前調査

1985年 2月10日~ 2月23日 (14日間)

総 括 弘中 義夫 農林水産省林野庁指導部計画課課長補佐協力企画 小田 謙成 農林水産省林野庁指導部計画課係長造 林 小杉山文右工門 森林開発公団業務部造林課長 業務調整 青山 豪 国際協力事業団林業開発課課長代理

(4) 長期調査員

1985年 4月24日~ 5月23日 (30日間)

研究計画 脇 孝介 林業試験場土壌部土壌肥料科長 研修訓練 柳原 保邦 農林水産省林野庁業務部経営企画課

(5) 実施協議 ケニア林業育 苗訓練計画 1985年 8月12日~ 8月26日 (15日間) 第一次 林業技術協力 掘 正彦 農林水産省林野庁林産課貿易第一係長

1985年11月16日~12月 3日(18日間) 第二次 総 括 三澤 毅 農林水産省林野庁指導部計画課長 協力政策 谷崎 泰明 外務省経済協力局技術協力課首席事務官 造 林 堀 正彦 農林水産省林野庁林産課貿易第一係長 業務調整 佐藤 雄一 国際協力事業団林業水産開発協力部

林業開発課

(6) 専門家派遣 開始 1986年 3月 1日 育苗

1986年 4月 1日 チーフアドバイザー、造林

1986年10月 1日 造林

1987年 9月15日 造林 2 名

(7) 計画打合せ調 查(林業育苗 訓練計画) 1986年 4月 8日~ 4月25日 (18日間)

総 括 神足 勝浩 国際協力事業団参与

協力政策 村田 遥人 外務省経済協力局技術協力課課長補佐

協力企画 山本 茂樹 農林水産省経済局国際協力課課長補佐

造林·訓練山下 秀勝 農林水産省林野庁業務部経営企画課

業務調整 芹沢 利文 国際協力事業団林業水産開発協力部

林業開発課

(8) R/D署名

ケニア社会林業訓練計画 1987年11月25日

(9) 専門家派遣

1988年 3月 1日 育苗訓練(育苗から分野変更)

1988年 3月 8日 育苗訓練

1988年 3月 1日 造林訓練(造林から分野変更)

1988年 4月 3日 造林訓練

1988年 3月 1日 林業普及

1988年 5月15日 業務調整

(10) 計画打合せ調 査 1988年 1月23日~ 2月 6日 (15日間)

総 括 下川 英雄 (財)日本住宅・木材技術センター理事長

協力企画 今井 啓二 農林水産省経済局国際協力課

訓練計画 村沢 勝 農林水産省林野庁林業講習所教務指導官

造 林 渡辺 聡 農林水産省林野庁海外林業協力室

業務調整 佐藤 雄一 国際協力事業団林業水産開発協力部

林業開発課

(11) 巡回指導調査

1989年 1月23日~ 2月 6日 (15日間)

総 括 宇津木嘉夫 農林水産省林野庁秋田営林局経営部長

訓 練 保多 暁 農林水産省林野庁管理部管理課課長補佐

業務調整 濱田秀一郎 国際協力事業団林業水産開発協力部

林業開発課

(12) 巡回指導調查

1991年 8月17日~ 8月31日 (15日間)

総 括 宇津木嘉夫 国際協力事業団林業水産開発協力部長

	訓 練 山下 孝親 農林水産省林野庁計画課企画係長 造 林 牧野 利信 農林水産省林野庁業務第一課緑化係長 業務調整 上澤上静雄 国際協力事業団林業水産開発協力部 林業開発課
3.協力実施過程に おける特記事項	1986年度から、ローカルコスト負担事業として造林プロジェクト推進対策事業が認められ、パイロットフォレスト事業が本格的に開始された。
4.他の事業との関連性	無償資金協力により、ムグガセンター及びキツイセンターが建設され、訓練に利用されている。

		T	l	
1	上位計画との整	   <u>当初目標</u>	上位計画における位置	
	合性	燃料不足の解決、環	付けの変化	乾燥地及び半乾燥地
		境悪化及び森林その		域における森林資源
		他の資源の損失を軽	なし	の減少は民生安定上
		減するための自立し		依然大きな問題とな
		た植林活動を推進す	   <u>開発目標に係る前</u> 提条	っており、ケニア政
		るために、ケニアに	件の変化	府は引続き社会林業
		おける社会林業の発		を積極的に推進して
		展を図る。	なし	いる。
	<del></del>			
2	案件目標の達成	当初目標	<u>目標達成状況</u>	:
	状况	ケニアにおける社会	訓練及び造林技術の開	当初考えられた目標
		林業の発展を図るた	発について、ほぼ目標	はほぼ達成されたと
-		め、林業指導者に対	を達成	考えられるが、社会
		する訓練及び半乾燥		林業の重要性からみ
		地造林技術の開発を		れば、目標の一部に
		行う。		ついてのみ達成した
				と考えられる。
		目標達成への前提条		. :
	·	<b>性</b>	i 	
		・ケニア政府が社会		
	:	林業政策を変更しな	前提条件の変化	
	• .	War war a same	なし	
		・住民が社会林業を		
		受入れる		
3	アウトブット目	当初目標	<u>目標達成状況</u>	
•	標の達成状況	①訓練	①訓練	準備フェーズでの訓
		1) 教材作成	1)英語、スワヒリ語版	練ニーズ調査等が適
		2)森林局上級職員の	テキスト作成	切に行われた。
		訓練	2)3)PFO、DFOコ	
		3)森林局中堅職員の	ースを12回(187人) 実	
		研修	施し目標対象者の訓練	
		4)森林局普及員、苗	を終了	
		畑管理者の訓練	4) D F E O コースを13	
		in a second and a second a second and a second a second and a second a second and a	70 —	

- 5)郡レベル林業普及 員の訓練
- 6)先進農民の訓練
- 7)全国セミナー実施
- ②パイロットフォレ スト
- 1)半乾燥地における 社会林業技術の開 発・改良
- 2)農民クルーク造林に対する支援
- 3)植生遷移観察
- 4)展示林造成

## 目標達成基準

- ①訓練
- 1) 教材の作成状況
- $(2) \sim 3$

訓練のコース数 訓練への参加率、 参加者数

- ②パイロットフォレ スト
- 1)造林事業、造林試験

苗畑事業、育苗試 験

普及技術の開発・ 改良

- 2)参加した農民グループ数
- 援助した技術等の 定着
- 3)観察区の設定、観 察の継続
- 4)展示林の造成(樹 種数、植付本数)

回(401名) 実施し目標 し目標対象者訓練終了 5)現場普及貝、学校教 師コースを12回(314人 ) 実施した

- 6) 農民、苗畑主任コースを17回(415人)実施 した
- 7)全国セミナーを5回実施し、それぞれ約100 名が参加
- ②パイロットフォレス ト
- 1)約300ha の造林地造成。各種造林試験(植穴サイズ、下刈方法等)の実施。約80万本の苗木生産。小規模苗畑、川・ションファーム、モデル農家の実施による普及技術の開発。
- 2)70haの農民グループ 造林(18クル-フ)を行い技 術指導、道具、苗木、 運搬手段等の支援を行 った。
- 3) 9ha の観察区を設定 4)ナイロビ空港道路沿 に4km にわたり展示林 を造成 (35樹種、約25 00本)

現場指導者としての 訓練対象者母集団が かなり大きい。

半乾燥地における造 林技術の開発は、自 然条件が厳しく非常 に困難である。 (実施協議時)

(終了時評価時) (目標達成/未達成理由)

# 4 インプット目標 の達成状況

# 当初目標

①日本側インプット長期専門家短期専門家機材供与研修員受入L/C負担

②ケニア側インプッ -

C/Pの配置 職員の配置 土地、建物の提供 運営費の負担

#### 目標達成基準

①日本側 長期専門家

チーフアドバイザー 1名

6分野に各1名

短期專門家

必要に応じ

機材供与

必要に応じ

研修員受入

必要に応じ

モデルインフラ整備

苗畑及び施設

②ケニア側

C/P配置

プロジェクトの長 アトハイリリースタッフ

訓練マネーシャ覺

# 目標達成状況

①日本側インプット (準備フェーズ)長期専門家チ-ファトハイサー 1名育苗1名

造林2名 短期専門家

延べ 9名

(本格フェーズ)

長期専門家

チーフアドバイザー 2名

造林訓練 4名

育苗訓練 4名

造林

4名 3名

育苗

林業普及 2名

業務調整 2名

短期専門家

延べ 16名

機材供与

約 244百万円

L/C負担

基盤整備費

約 49百万円

造林推進対策費

約 143百万円 中堅技術者養成対策

費

約 46百万円

技術普及広報費

約 1.5百万円

②ケニア側インプット C/Pの配置 日本側、ケニア側と も適切に投入を行っ た。

		China 2 and all limited and a company	
	訓練サブマネージャー	2 1 名	
	オフィサー	ムグガセンターは予定	キツイセンターのC
	バイロットフォレストマネージャー	どおりの配置	/ Pには、兼任をす
	ハイロットフォレストサブマネジャ	キツイセンターは量的	るものがいた
	バイロットフォレストオフィサー	に不足	
	その他必要に応じ	その他職員	
i	ムギガセンター	計画どおり	
	キツイセンター		
i	バイロットフォレスト用地	土地建物	
ı	運営費	計画どおり	·
	必要に応じ		
	合同委員会	運営費	
	目標達成への前提条	延べ68,800千ケニアシリン	
	<u>性</u>	ク 支出	
·	・JICA及び日本		
	側関係機関の取組み		
	・輸出人上の法的障		
	害がない		
	・ケニア側が十分な	· · · · · · · · · · · · · · · · · · ·	
	人員、予算を配付す		
	る		

効果の内容	技術的	制度的	経済的	社会文化的	環境的	その他の
4 - 4 - 5 - 5	インバクト	インバクト	インパクト	インパクト	インバクト	インパクト
効果の広が					٠.	
りと受益者						
プロジェクトレベ	·KEFR	·KEFR	・地元	・地元住民	・地元住	
ルのインパクトと	I、その他	I、その他	住民	KEFR	民政府関	
受益者	の関係政府	の関係政府	・造林	「等の専門	係機関	
	機関、地元	機関、地元	   事業に	家	・森林の	e.
	の各層住民	の各層住民	よる雇	・森林の回	回復	
*.	・社会林業	・社会林業	用機会	復、社会林		
	の実際的知	に関する訓	の創出	業の必要性		
	識、技能	練方法				
セクターレベルの	・森林局、	・森林局、	農林業	森林局、農	森林局、	
インパクトと受益	農業省、等	農業省、等	関係者	業省、等の	農業省等	
首	の関係政府	の関係政府	地元住	関係政府機	の政府関	
<b>-</b>	機関	機関	民	関	係機関	
	・社会林業	・社会林業	~   ・雇用	・森林の回	・森林の	
	の実際的知	に関する訓	機会の	復、社会林	回復	
	識、技能	練方法	創出	業の必要性		
也域へのインパク	・地元住民	・地元住民	・地元	地元住民、	・地元住	
トと受益者	、地元政府	、地元政府	住民、	地元グルー	民コミュ	
(キツイ県住民)	機関	、 地元以	企業	プ、地元政	ニティー	
( I ) I MELLI	・苗木生産	'ペペ  ・社会林業	・雇用	府機関	・森林の	
en general de la companya de la com La companya de la co	、造林技術	に関する訓	機会の	・社会林業	回復	
	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	練方法	創出	の必要性		
		74×73 124	41111	V & X II.		
マクロレベルのイ	・森林局、	・農村コミ	・農民	・プランナ	・プラン	
ンパクトと受益者	農業省、等	ユニティー	、小農	一政策形成	ナー、政	
(ケニア全土ある	の関係政府	・社会林業	家	関係者、農	策形成関	l
いは類似気候の地	機関、農民	に関する訓	・雇用	村コミュニ	係者、農	
或 )	他地元住民	練方法	機会の	ティー	村コミュ	
	・社会林業		創出	社会林業	ニティー	'
	の一般知識			の必要性	・森林の	
					回復	

1 組織的自立発展の見通し	
(1) 実施機関存立への政策	ケニア政府は研究科学分野を一元化し、特に重要な分野の
的支援の有無	一つとして林業を上げており、政策的支援は期待できる。
(2)管理運営体制	社会林業に関する具体的知識を有する人材集団が、特に中
	   央レベルで形成されてきており、今後充実されることが期
	待される。
(3)組織の改廃	   1987年より森林研究所は研究科学技術省に移管(研究科学
	分野を研究科学技術省の下に一元化)
2 財務的自立発展の見通し	ケニア政府の財政状況は逼迫しており経常費用資金不足が
	深刻化しつつある。国内で可能なものを開発することが重
	要である。施設の維持、研究活動の運営等にとって最も重
	│ │要な資金であり、その確保が自立的発展にとって最重要課
	題である。
3 物的、技術的自立発展性	
の見通し	
(1)移転技術の内容及び技	訓練方法等の技術は順調に移転されており、技術レベルも
術レベルの適正度	適正と思われる。造林技術は、開発段階にあり移転に至っ
	ていない。
(2)要員配置状況	   有能な人材が配置されており、発展性が十分期待される。
	The country and a country is property in the state of the country in the country is the country in the country
(3)技術の定着状況	   有能な人材が多く技術の定着状況は良好である。
7.3111	THE COUNTY OF THE PROPERTY OF STREET
(4)後継者の育成計画	まだその段階まで進んでいない。
· · · · · · · · · · · · · · · · · · ·	またての技術よく進んでいない。
4 その他管理運営上の制約	キツイセンターの水供給確保は、今後の社会林業訓練活動
要因	の拠点とされる同センターの運営に極めて重要である。

## 1 協力期間延長の要否

燛

(理由)

本計画は、環境問題、WID、貧困対策のプロジェクトとしても注目されており、農村社会開発の一役を担うものとして強い期待がよせられている。活動内容についおけるは満足すべき結果を生み出しているが、ケニアにるだけでる体業の重要性からみればまだ一部を達成しているだけでるめり、農民の生活を改善するためにも社会体業を応さらがある。本計画終了後はフェーズIIとして、さらが必要がある。本計画終了活動を拡大強していくことが必まであり、これまでの協力分野に加えて、アグロフォレストリーの必要性が認められる。社会体業を推進するための明えた。

- 2 フォローアップ等の内容 と方法
- (1)必要な分野
- (2)内容
- (3) 所要期間
- (4)期待される効果

社会林業訓練、普及、造林、育苗

フェーズ I での成果を生かし、実地への応用を図る。その応用をつうじてこれまでの事業の検証を行い、更なる改善と補足を行う。

5年間

半乾燥地における育苗、造林技術の向上とともに、普及技術の開発により、地域住民の苗木生産、造林意欲が向上する。それにより住民による植林活動が推進され、社会林業の必要性に対する認識が高まる。さらには、ケニアにおける環境、貧困問題にも貢献する。

14 \*# 15 採 EΚ 抓 浥 陆 盐 1-₩.

	<b>新</b>		75.0	75.0		87.5		95.0				55.0			72.5				:	71.3				75.0	50.0	75.0	50.0	
	極めて不適用な水浴	(0)																										
ja )	お 強 足な水	(1)																										
評価基準 (評点)	回むなへ 可もなぐ かなら が	(2)										0		0				0				0	О		0		0	
砂堆	<b>原序な光浴</b>	(3)	0	0	0		0			0			0		0	0	0		0	0	0			0		0		
	徳多 な 女 谷 名	(4)				0		0	0		0																	
罪 角ァく ラロ	呼価項目(植数顔のケ	- L - F		1. 訓練 (50)	2.1140+174VX1 (50)	1. 訓練 (50)	2. X4ロットフォレスト (50)	1. 専門家 (30)	2. 数材供与 (30)	3. 研修風受入 (20)	4.0-1/102/1 負担 (20)	1. カケンターパート省己紹 (50)	2. 土地建物提供 (20)	3.70%以上通常数负担(30)	1. 技術的4개() (40)	2.制度的4개か (20)	3. 経済的4개0ト (15)	4.社会的4개() (10)	5. 環域的イバクト (15)	1.70%±274V4A (60)	2.279-VM (25)	3.	4.270VKM (5)			-		
		o: t	11.3	15.0 1	-	21.91	<u>~</u>	23.8 1	- 3	[ es		89	100		50.8	<u> </u>		1 4	L <u>""</u>	21.4	L			1.8.8	15.0	26.3	0.0	
群角ワスラ ロ		評価項目(毘安茂のフェイト)	(1) 上位計画との整合性 (15)	(2) 案件目的の達成状況 (20)		(3) アウトブットの達成状況(25)		(4) 日本町インブットの脳板状況	(67)			(5) 相手国側インブットの違板状			(1) ブロジェクト効果の内容 [70]			÷.		(2) 効果の広がりと受益者 (30)				(1) 組織的自立発展性 (25)	(2) 財務的自立発展性 (30)	(3) 协的·技術的自立発展性(35)	(4) 管理運営上の制約發因 (10)	
ī		o: #	4.0.2										. :		14.4									19.5				74.1
群角フスラ	+ + + 38 Hz 34 -	学直毎日(国教成のフォイド)	1. 目模達成度 (50)					:							2. 案件の効果 (20)									3. 自立発展の見通し (30)				领
			<u>.                                    </u>		· · · · · · · · · · · · · · · · · · ·					•			- 1	86	ا		<del></del>		<u> </u>		1 ·	·.		1				<u>1</u>

