Proposal Plan of Trainig Forest Utilization

ANNEX. 2

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S.C

C.F.D.T.C

-Hmawbi Reserved
Forest Boundary

::: Training Forest
::: (1800 Acres)

⊠ Nursery

Dam

10 5 0   10   20   30   40
(chain)

Plantation (300 Ac)	Agroforestry (150 Ac)	Tree Identification (47 Ac)	Arboretum (25 Ac)	Local Community Development (150 Ac)
Seed Orchard (2 Ac)	Fire Protection (10 Ac)	Machinery (40 Ac)	Catchement Plantation (10 Ac)	Survey (50 Ac)

Preparation and Development Activities for the Utilization of the Training Forest
No.1

Kind of T-Courses and Tech-Development Fiscal Year	1992 - 93	1993 - 94	1994 - 95	1995 -Onward
A Establishment of Plantation				
1.Design of plantations				
(1)Choice of species		─	─	─
(2)Determination of area		─	─	─
(3)Site selection		─	─	─
(4)Area survey		─	─	─
2.Procurement of seeds	─		─	
3.Raising seedlings	─	─	─	
4.Site preparation	─	─	─	
5.Staking	─	─		
6.Planting	─	─	─	
7.Weeding	─	─		
8.Patching	─	─	─	
B Arboretum				
1.Site selection	─			
2.Choice of species	─			
3.Procurement of seeds	─			
4.Raising seedlings	─	─	─	
5.Procurement of seedlings and instant trees	─	─	─	
6.Site preparation	─	─	─	
7.Staking	─	─		
8.Planting	─	─		
9.Weeding	─	─	─	
10.Patching	─	─	─	
11.Signboard making and placing	─	─	─	─
C Seed Orchard				
1.Determination of species	─			
2.Design of seed orchard	─			
3.Site selection	─			
4.Area survey	─			
5.Raising host trees	─	─		
6.Selection of mother tree for scion	─	─		
7.Grafting		─		
8.Site preparation		─		
9.Planting		─		
10.Weeding		─	─	
11.Pruning			─	─

Kind of T-Courses and Tech-Development / Fiscal Year	1992 - 93	1993 - 94	1994 - 95	1995 -Onward
D Forest Fire				
1.Planning of fire break				
(1)Fire practice area	—			
(2)Plantation and other zone	—			
2.Implementation				
(1)Establishment of fire break	—			
(2)Establishment of fire break tree belt		—		
(3)Maintenance of fire break	—	—	—	—
(4)Fire watching tower		—		
E Forest Pathology and Insect Pest				
1.Imprementation				
(1)Collecting specimen of insect	—			—
(2)Periodical observation of disease	—			—
F Man-made Damage				
1.Investigation				
(1)Kind and amount of damage	—			
2.Implementation				
(1)Signboard making and placing	—			
G Forest Management				
1.Investigation				
(1)Area survey to make sub-compartment	—		—	
(2)Stand survey	—			
(3)Vegetation	—			
(4)Topography and soil	—			
(5)Water system and discharge		—		
2.Planning of Forest Management				
(1)Forest road	—			
(2)Plantation, silvicultural treatment, thinning	——			
3.Implementation				
(1)Experimental plot to study tree growth		—		—
(2)Database for forest information		—		—
H Agro-forestry and local community development				
1.Investigation				
(1)Present utilization and situation	——			
2.Planning				
(1)Design of planting	——			
(2)Extention of agro-forestry system	——			
3.Implementation				
(1)Extention of agro-forestry system		—		—
(2)Planting of fuel wood and fruit tree		—		—
(3)Distribution of forest produce		—		—

Kind of T-Courses and Tech-Development / Fiscal Year	1992 - 93	1993 - 94	1994 - 95	1995 -Onward
I Forest Road				
1.Planning of forest road network	—			
2.Road survey and drawing	——	—	——	——
3.Constructional operation	——	——	——	
4.Maintenance of forest road	————			
J Forest Machinery				
1.Preparation of practice site	——			
2.Signboard making and placing	—			
3.Maintenance of fire break	————			

Tantative Plan of Activities for the Utilization of the Training
Forest in Fiscal Year of 1992-93 and 1993-94   No. 1

Activities	Fiscal Year 92-93	93-94
Month	JFMAMJJASOND	JFM

A. Establishment of Plantation
 1. Design of Plantation
    (1) Choice of species *1
    (2) Determination of area *2
    (3) Site selection
    (4) Area survey
 2. Procurement of seeds
 3. Raising seedlings
    (1) Sowing seeds
    (2) Transplanting to pot
    (3) Tending
 4. Site preparation
    (1) Slashing
    (2) Burning
    (3) Reburning
 5. Staking
 6. Planting
 7. Weeding
 8. Patching

B. Arboretum
 1. Choice of species *3
 2. Procurement of seeds
 3. Raising seedlings
    (1) Sowing seeds
    (2) Transplanting to pot
    (3) Tending
 4. Procurement of seedlings and instant trees
 5. Site preparation
    (1) Slashing
    (2) Burning
    (3) Reburning
 6. Staking
 7. Planting
 8. Weeding
 9. Patching
10. Signboard making and placing

C. Seed Orchard
 1. Determination of species *4
 2. Design of seed orchard *5
 3. Site selection *6
 4. Area survey
 5. Raising host trees
    (1) Sowing seeds
    (2) Transplanting
    (3) Tending
 6. Site preparation
    (1) Slashing
    (2) Burning
    (3) Reburning
 7. Planting
 8. Weeding
 9. Fertilizing and soil mulching

Activities	Fiscal Year 92-93	93-94
	Month JFMAMJJASONDJFM	
10. Selection of mother tree for scion		
11. Grafting		
12. Pruning		
D. Forest Fire		
1. Planning of fire break *7		
(1) Fire practice area		
(2) Plantation and other area		
(3) Fire tower *8		
2. Implementation		
(1) Establishment of fire break		
(2) Establishment of fire break tree belt *9		
(3) Constructing of fire watching tower		
(4) Maintenance of fire break		
(5) Patrol		
E. Forest Pathology and Insect Pest		
1. Implementation		
(1) Collecting specimen of insect		
a. Specimen		
b. Photography		
c. Listing and Phenology		
(2) Periodical observation of disease		
a. Photography		
b. Listing and Phenology		
F. Man-made Damage		
1. Investigation		
(1) Kind and amount of damage		
2. Implementation		
(1) Sign board making and placing		
a. Type of sign (announcement, caution)		
b. Quantity		
(2) Patrol		
G. Forest Management		
1. Investigation		
(1) Area survey to make sub-compartment		
a. Border, Road, Water and Plantation		
b. Map making (zoning of management area)		
(2) Stand survey		
a. Present plantation		
(3) Vegetation		
a. Field research		
b. Listing of species		
c. Classification of vegetation and mapping		
(4) Topography and soil		
a. Field research		
b. Drawing of soil map		
(5) Water system and discharge		
a. Field research of lowland and water		
(6) Aerial photo interpretation		
2. Planning of forest Management		
(1) Forest road		
(2) Plantation, silvicultural treatment		

Activities	Fiscal Year 92 -93	93-94
	Month JFMAMJJASONDJFM	
(3) Thinning. Harvesting		
3. Implementation		
(1) Experimental plot to study tree growth		
a. Choice of experimental plot		
(2) Database for forest information		
a. Choice of item for information		
b. Design and programing of database		
c. Data entry		
H. Agro-forestry and Local community development		
1. Investigation		
(1) Present utilization and situation		
a. Field research of present utilization		
(crops. fuel wood and grazing)		
b. Preparing of questionnaire		
c. Research on villagers		
d. Inquiry to local office		
2. Planning		
(1) Design of planting		
a. Defining agro-forestry area		
b. Choice of fruit species		
(cashew. papaya. mango)		
c. Arrangement and density of tree and crops		
d. Design of fuel wood plantation		
(site.area.species)		
(2) Extension of agro-forestry system		
a. Subject and method of extension		
b. Specifying the role of villagers		
c. Conducting training courses		
3. Implementation		
(1) Extension of agro-forestry system		
a. Establishment of promoting		
and consulting team		
b. Printing the pamphlet		
c. Explaining the agro-forestry system		
d. Agreement of crop and planting trees		
e. Inviting villagers to training in CFDTC		
(2) Planting of fuel wood and fruit tree		
a. Procurement of seedlings		
b. Assignment of agro-forestry area		
c. Guidance of growing		
d. Distribution of seedling		
(3) Distribution of forest produce		
a. Clarifing of fuel wood and gazing area		
b. Sharing harvest with villagers		
I. Forest Road		
1. Planning of forest road network *10		
2. Road survey and drawing		
3. Constructional operation		
4. Maintenance of forest road		
J. Forest Machinery		
1. Preparation of practice site		
2. Signboard making and placing		

Activities	Fiscal Year	92 -93	93-94
	Month	JFMAMJJASONDJFM	
3. Maintenance of fire break			

Remarks

*1 Candidates of species were chosen for each type of plantation
   as follows:
   (1) Commercial: teak, padauk, yinma
   (2) Industrial: Eucalyptus camaldulensis, E. grandis
   (3) Fuelwood : mezali, bawzagaing
   (4) Acacia auriculiformis, A. aulacocarpa, A. crassicarpa
*2 10 acres for each type, altogether 40 acres.
*3 50 species comprised mainly of Myanma indigenous
   and some exotic ones.
*4 Teak and padauk
*5 1 acre for each species, square figure hedged by mahogany.
*6 Near the nursery site
*7 Fire breaks around agroforestry zone, arboretum, seed orchard
   and plantations totaling 3,000m.
*8 3 towers at high position of the training forest.
*9 To plant ever green and fire-resistant trees in 3,000m * 15m
   along east side boundary.
*10 Two new routes in southern part, one was buldozed for 1,250m.

Utilization of the Training Forest in the Training Courses

No.1

Kind of T-Courses / Fiscal Year	1992 - 93	1993 - 94	1994 - 95	1995 -Onward
A Plantation Techniques Course				
1.Compass survey				
2.Soil field survey				
3.Practice of plantation works				
4.Observation of damage from disease and pest				
5.Operation of small forest machinery				
6.Thinning practice (after 1998)				
B Nursery Practices Course				
1.Practice of nursery works				
2.Observation of nursery facilities				
3.Levelling survey, plane table survey				
4.Tree identification				
C Forest Protection Course				
1.Fire fighting practice				
2.Observation of fire break				
3.Fire management				
4.Observation of forest disease				
D Forest Machinery (Advance) Course				
1.Area survey				
2.Stand survey				
E Agro-forestry Course				
1.Observation of agro-forestry				
F Forestry for Local Community Development Course				
1.Observation of village supply plantation				
G Forest Road Course				
1.Forest survey and drawing				
2.Construction and maintenance				
(1)Operation technique of Angle Dozer				
(2)Operation technique of Wheel Loader				
(3)Operation technique of Back Hoe				
(4)Operation technique of Motor Grader				
(5)Operation technique of Stone Crusher				
(6)Operation technique of Engine Compressor				
(7)Operation technique of Vibration Roller				

Kind of T-Courses Fiscal Year	1992 – 93	1993 – 94	1994 – 95	1995 -Onward
	| | |	| | |	| | |	| | |
H Forest Machinery				
1.Operation of Machinery	—	—	—	—
(1)Tree cutting technique with Chain Saw				
(2)Grass cutting technique with Bushcutter				
(3)Planting hole technique with Earth Auger				
(4)Operation technique of Angle Dozer				
(5)Operation technique of Wheel Loader				
(6)Operation technique of Back Hoe				
(7)Operation technique of Motor Grader				
(8)Operation technique of Stone Crusher				
(9)Operation technique of Engine Compressor				
(10)Operation technique of Vibration Roller				

森林局の職員の階級

1. Director General

    森林局長官

2. Dy. Director General

    森林局次長

3. Director

    森林局各部長

    Ａグレードの State/Division Forest Office の所長

    ＣＦＤＴＣプロジェクトのProject Director U Kyaw Myint

4. Dy. Director

    Ｂグレードの State/Division Forest Office の所長

    一部のＡグレードのステート／ディビジョン・フォレスト・オッフィスの副所長

5. Asst. Director

    Staff Officer が約9年の勤務を経て任官する。

    Township Zone Forest Office の所長

    ＣＦＤＴＣプロジェクトのDy. Project Director(CFDTCの校長) U Sann Lwin, 教頭
    U Saw Eh Dha

6. Staff Officer

    大学林学科卒業生が直接実務経験なしに、またはForest Ranger を経験してからP.S.S.
    T.B. による資格試験を受けて任官する場合と、大卒のForest Ranger が約7年、その他
    が9年の勤務を経て任官する場合とがある。

    約9年の勤務後、空席があれば、Asst. Directorに昇格する。

    Ａグレードの Township Forest Office の所長

    ＣＦＤＴＣのメイン・カウンターパート。

7. Forest Ranger

    大学林学部卒業者が森林局の実施する試験を経て採用される場合と Dy. Forest Ranger
    が昇格する場合とがある。

    大学者は約7年、その他は9年の勤務後、空席があれば、Staff Officer に昇格する。

    Ｂグレードの Township Forest Office の所長

    ＣＦＤＴＣの一部のメイン・カウンターパートおよびアシスタント・カウンターパート。

8. Dy. Forest Ranger

Forester が2年以上の実務経験後、試験を受けてミャンマー森林学校に入学して2年間学び、空席があった場合に任官する。

通常、7年間の実務経験後、空席があればForest Ranger に昇格する。

9. Forester

10次スタンダード（高校程度）卒業者が採用された場合とForest Guardが昇格する場合とがある。

2年以上の実務経験後、試験を受けてミャンマー森林学校に入学して2年間学び、空席があれば、Dy. Forest Ranger に昇格する。

10. Forest Guard

最低、4次スタンダード（小学校程度）卒業以上（通常8次スタンダード；中学校程度卒業者）で18才以上の者が採用される。採用後、2年の実務経験で、空席があればForesterに昇格する。
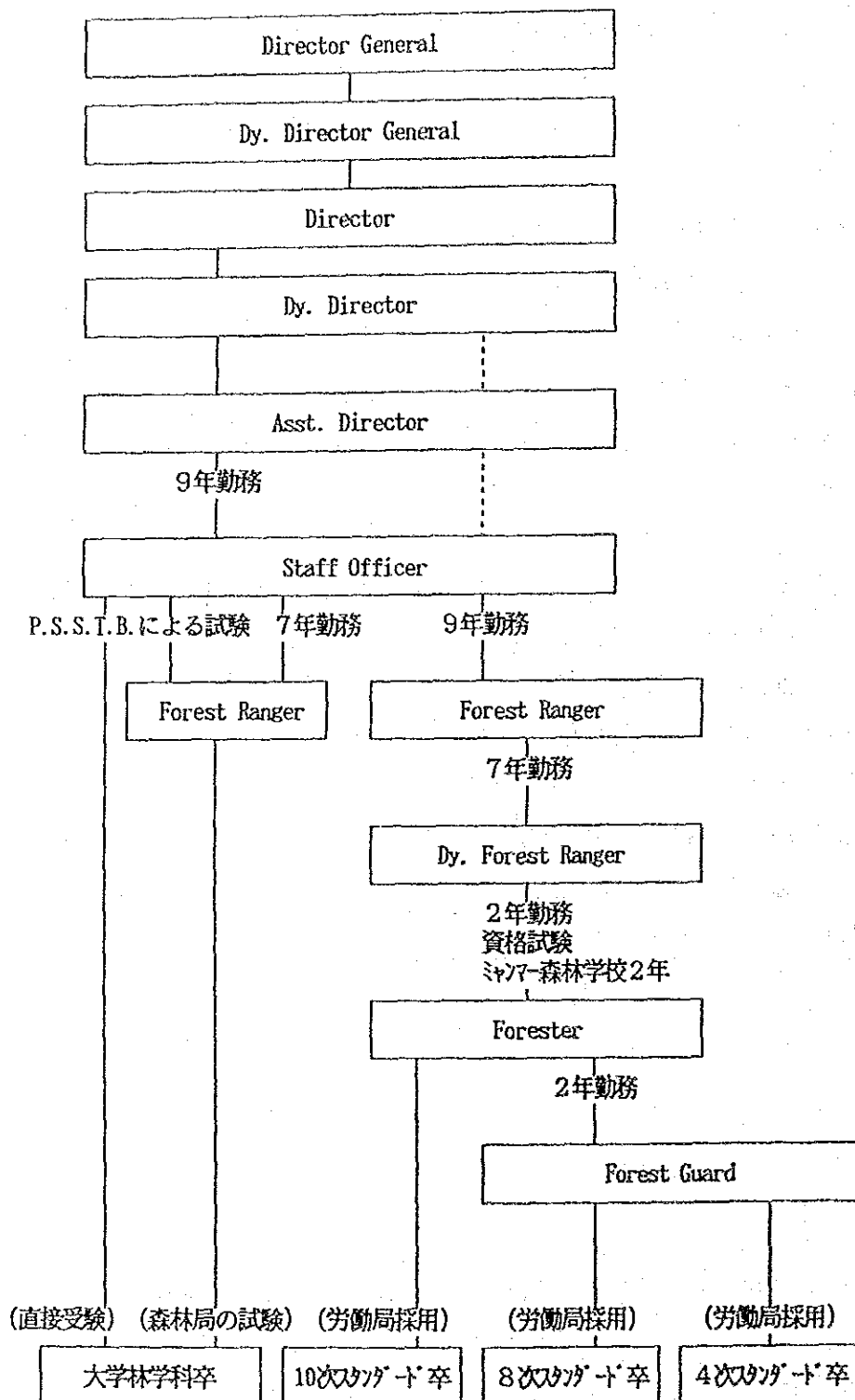
P.S.S.T.B. : Public Service selection and Training Board の略で以前はP.S.C.(Public Service Commision)と呼ばれた。

Staff Officer への資格試験を実施する。

すべての森林局内の昇進はP.S.S.T.B.の承認を要する。人事院的存在。

Forester, Forest Guardの採用には、特に試験はなく、まず労働局に採用され、森林局に配置転換されることによる。

職員の階級および昇任表（現行）

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┌─────────────────────────────┐
│       Director General      │
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│     Dy. Director General    │
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│           Director          │
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│         Dy. Director        │
└─────────────────────────────┘
              │                   ┊
┌─────────────────────────────┐
│        Asst. Director       │
└─────────────────────────────┘
              │                   ┊
          9年勤務
              │
┌─────────────────────────────┐
│        Staff Officer        │
└─────────────────────────────┘
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P.S.S.T.B.による試験　　7年勤務　　　9年勤務

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        ┌──────────────┐      ┌──────────────┐
        │ Forest Ranger│      │ Forest Ranger│
        └──────────────┘      └──────────────┘
                                     │
                                  7年勤務
                                     │
                              ┌──────────────┐
                              │Dy. Forest Ranger│
                              └──────────────┘
                                     │
                                  2年勤務
                                  資格試験
                              ﾐｬﾝﾏｰ森林学校2年
                                     │
                              ┌──────────────┐
                              │   Forester   │
                              └──────────────┘
                                     │
                                  2年勤務
                                     │
                              ┌──────────────┐
                              │ Forest Guard │
                              └──────────────┘
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（直接受験）　（森林局の試験）　（労働局採用）　　（労働局採用）　　（労働局採用）

| 大学林学科卒 | 10次スタンダード卒 | 8次スタンダード卒 | 4次スタンダード卒 |

JICA