

FORESTRY RESEARCH AND EDUCATION IN BHUTAN: OUTLOOK 2020

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PRESENTATION PLAN

- INTRODUCTION – COUNTRY PROFILE
- PAST RESEARCH AND EDUCATION EXPERIENCE
- ON-GOING ACTIVITIES
- LINKAGES BETWEEN VARIOUS AGENCIES AND STAKEHOLDERS
- FUTURE PLANS ON FOREST RESEARCH AND EDUCATION - 2020

INTRODUCTION – COUNTRY PROFILE

TOTAL AREA:	38,100 sq km
FOREST COVER:	72 %
PROTECTED AREA:	26.32 %
BIOLOGICAL CORRIDORS:	9 %
NO. OF VASCULAR SPECIES:	7000
NO. OF BIRD SPECIES:	770
NO. OF MAMMALS:	167

PAST EXPERIENCE IN FOREST RESEARCH AND EDUCATION

- FOREST RESEARCH
 - FIRST FOREST RESEARCH DIVISION ESTABLISHED IN 1985
 - NO PLANNED RESEARCH AGENDA
 - NO TRAINED/QUALIFIED RESEARCHERS
 - ONLY ONE PROF. FORESTER

- IN 1989 ALL RESEARCH PROGRAMMES UNDER MINISTRY OF AGRICULTURE INTEGRATED
- INTEGRATED AGRICULTURE RESEARCH PROGRAMME CALLED: RENEWABLE NATURAL RESOURCES RESEARCH CENTRE

- RNR RESEARCH PROGRAMME SUB-DIVIDED INTO FOUR SUB-PROGRAMME AND LOCATED IN FOUR DIFFERENT LOCATIONS IN THE COUNTRY
- EACH CENTRE WITH RESEARCH MANDATES ON AGRICULTURE, FOREST, LIVESTOCK AND HORTICULTURE

- EACH CENTRE ENTRUSTED WITH ONE LEAD PROGRAMME

Eg. LEAD PROGRAMME IN FOREST BUT WILL CONDUCT RESEARCH ON AGRICULTURE, HORTICULTURE AND LIVESTOCK

LINK BETWEEN RESEARCH AND EXTENSION

- ALL RESEARCH PRIORITIES SET BY DEPARTMENT
- ANNUAL RESEARCH PLAN APPROVED BY DEPARTMENT
- RESEARCH RESULTS DISSEMINATED THROUGH DFOs, DzFOs
- FEED-BACK FROM FARMERS/FIELD OFFICES TO RESEARCH CENTRES DONE THROUGH DEPARTMENT

PAST EXPERIENCE IN FOREST EDUCATION

- BHUTAN FOREST INSTITUTE
ESTABLISHED IN 1971
- TRAINED FOREST GUARDS
- ENTRY LEVEL: BASIC SCHOOLING
(CLASS I OR II)

- UPGRADED TO ADMIT FORESTER (BEAT OFFICER) IN 1985
- ENTRY LEVEL: CLASS V
- TILL 1985, ALL FORESTERS TRAINED IN INDIA
- ENTRY LEVEL INCREASED TO CLASS VIII IN 1995
- ENTRY LEVEL INCREASED TO CLASS X IN 2000

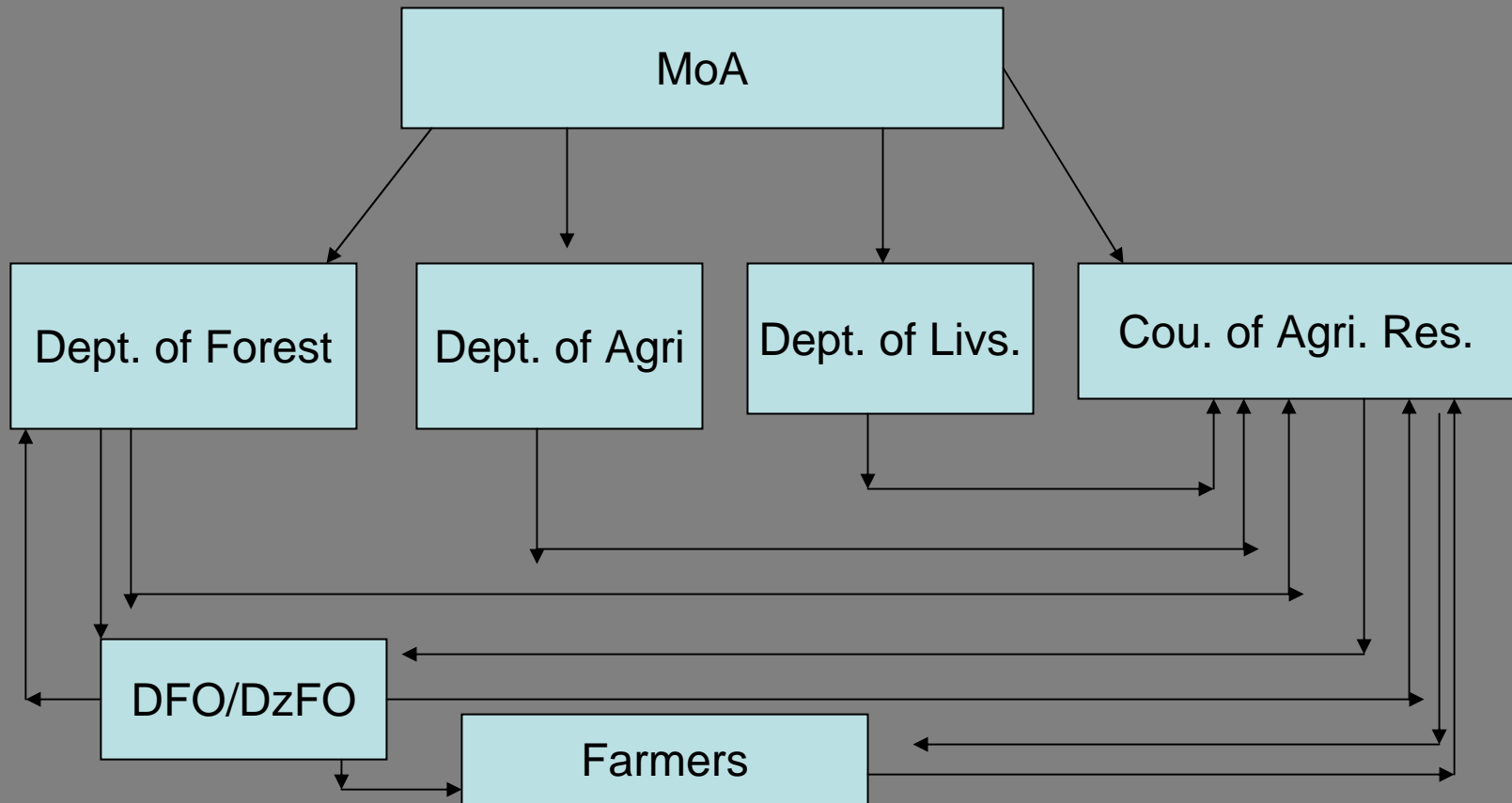
- NATURAL RESOURCES TRAINING INSTITUTE ESTABLISHED IN 1992
- TRAINED FORESTERS WITH FOCUS ON EXTENSION PROGRAMMES
- ENTRY LEVEL: CLASS X
- COURSE DURATION: 3 YEARS
- DEGREE AWARDED: DIPLOMA IN FORESTRY

- ENTRY LEVEL RAISED TO CLASS XII (Sc.) in 2002
- COURSE DURATION: 2 YEARS
- DEGREE AWARDED: DIPLOMA IN FORESTRY

TRAINING FOR PROFESSIONAL FORESTERS

- TRAINING OF RANGERS CARRIED OUT IN INDIA – West Bengal and Assam
- B.Sc, M.Sc. and Ph.D CARRIED OUT IN INDIA, SOUTH ASIA, USA, UK, AUSTRALIA, EUROPEAN COUNTRIES

LINKAGES AMONG STAKEHOLDERS



ON-GOING PROGRAMMES

- NRTI UPGRADED TO COLLEGE OF NATURAL RESOURCES IN 2007
- ENTRY LEVEL: CLASS XII (Sc)
- COURSE DURATION: 3 YEARS
- DEGREE AWARDED: B.Sc IN NATURAL RESOURCES

- ESTABLISHMENT OF UGYEN WANGCHUCK INSTITUTE FOR FORESTRY AND ENVIRONMENTAL STUDIES
- ENTRY LEVEL: CLASS XII (Sc)
- COURSE DURATION: 2 YEARS
- DEGREE AWARDED: DIPLOMA IN FORESTRY

- 40 % CONSTRUCTION COMPLETED
- WILL BE UPGRADED TO A FULL FORESTRY DEGREE COLLEGE IN 2012
- WILL HAVE RESEARCH EXCHANGE PROGRAMME
- WILL ENCOURGAE PROFESSORS FROM RENOWNED UNIV. RESEARCH INSTITUTE, ETC TO TEACH AT THE INSTITUTE ON SABATICAL LEAVE
- TWO PROFS. FROM UNIV. OF MONTANA WILL TEACH AT THE INSTITUTE FROM MID 2008

CONSTRAINTS

- LACK OF TRAINED HUMAN RESOURCES
- FUNDS
- NON CONSISTENCY OF FOCUS ON RESEARCH THEMES
- LACK OF APPLICATION/USE OF RESEARCH DATA BY POLICY MAKERS
- ECONOMY OF SCALE IN THE ESTABLISHMENT OF FORESTRY EDUCATIONAL INSTITUTES

FUTURE PLANS – 2020 OUTLOOK

- UPGRADE THE PRESENT FOREST RESEARCH AND TRAINING INSTITUTES
- LINK THE RESEARCH AND TRAINING INSTITUTES TO THE ROYAL UNIVERSITY OF BHUTAN FOR ACCREDITATION AND ALLIATION
- DEVELOP LINKAGES WITH OTHER FOREST RESEARCH AND TRAINING INSTITUTES IN THE REGION AND ABROAD

- STRENGTHEN LINKAGES BETWEEN POLICY MAKERS, RESEARCHERS AND FARMERS
- MAINTAIN BALANCE BETWEEN ACADEMIC REQUIREMENTS AND ON-FARM RESEARCH NEEDS

- WILL CONTINUE TO SEND OUTSIDE THE COUNTRY FOR M. Sc. AND SPECIALIZED COURSES FOR TILL BHUTAN CAN DEVELOP ADEQAUTE FACILTIES