

ROADMAP OF DEPARTEMENT OF FOREST RESOURCES CONSERVATION AND ECOTOURISM (DFRCE), FACULTY OF FORESTRY AND ENVIRONMENT, BOGOR AGRICULTURAL UNIVERSITY 2021

Vision of Bogor Agricultural University 2020 – 2025

"To become a research-based university and a leader in innovation for the independence of the nation towards a techno-socio entrepreneurial university that excels at the global level in the fields of agriculture, marine, tropical biosciences"

Research-Based Higher Education are higher education that:

- 1) Create a consistent research condition and produce research results that are able to take part in the international sphere and have an impact on improving the quality of Bogor Agricultural University.
- 2) Have the ability to build an education system with a strong and superior research culture.
- 3) Making research results as the basis in the implementation of education, research and community service.
- 4) Have the ability to build a collaborative system that focuses on the synergy of research in various disciplines or inter/transdisciplinary sciences and forms an effective network inside and outside Bogor Agricultural University.
- 5) Provide funds and science and technology facilities needed in inter/transdisciplinary development and provide solutions for the community in the process of sustainable ecological, economic, social and cultural change.

At the forefront is to be a pioneer, precursor, leader, inspirer, example and role model, change agent and become the main reference. Innovation for the independence of the nation is a contribution in producing new products and services as a result of the application of science and technology that can strengthen the ability of the Indonesian people to meet their basic needs that are quality and sustainable and competitive.

Techno-socio entrepreneurial university are:

- 1) University that use a balanced approach to technology, sociology, and entrepreneurship so that their governance focuses on developing cognitive and technological capabilities in responding to and actively participating in overcoming problems faced by the nation; contribute significantly to economic development, community empowerment, industrial strengthening and social enrichment; as well as
- 2) has a strong attraction for prospective students and other parties to cooperate

Superior are:

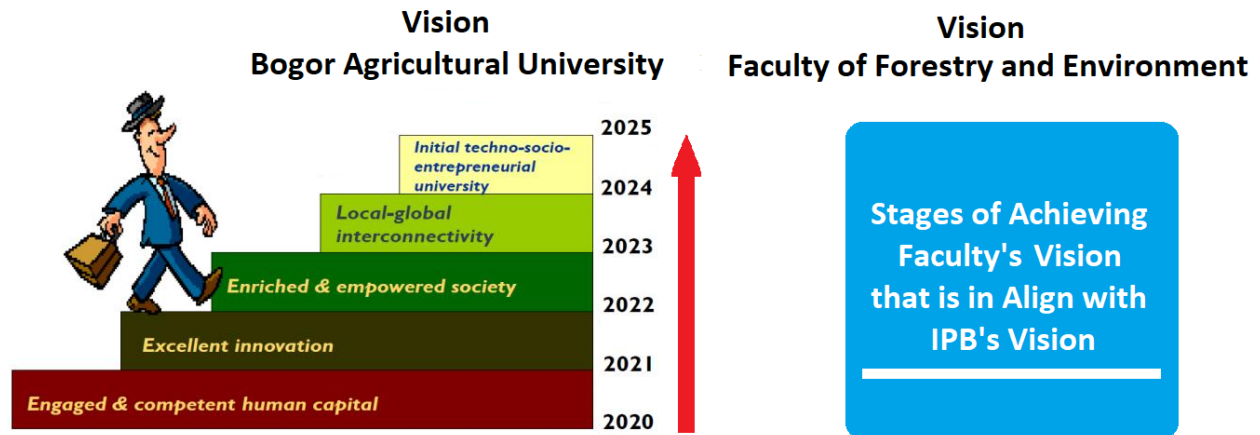
- 1) Having international standard excellence in agriculture, marine and tropical biosciences
- 2) Have a work culture system that meets international standards in implementing the Tridharma of Higher Education so as to be able to produce quality and superior graduates at national and international levels

Vision of the Faculty of Forestry and Environment 2020-2025

"To become a leading research-based faculty and at the forefront of innovation for the independence of the nation towards a techno-socio entrepreneurial university that excels at the global level in the field of forestry and the environment for Indonesia's sustainability"

Mission of the Faculty of Forestry and Environment 2020-2025

"Organizing education, research and community service activities for the advancement of science, technology in forest management and the environment sustainably for the progress and welfare of the nation"



The purpose of providing education at the Faculty of Forestry and Environment of Bogor Agricultural University in accordance with the mission and to achieve the vision of the Faculty of Forestry and Environment of IPB is presented in Figure, which is described as follows:

1. To produce quality graduates (future leaders) who are able to apply and develop science and technology in the forestry sector.
2. Produce environmentally friendly forestry science and technology innovations to support national development and improve people's welfare, and be ready to face the challenges of forestry development which are very dynamic due to the effects of rapid changes at the national or global level.
3. Faculty governance that is fair, transparent, participatory, accountable and integrated between fields to support the effectiveness and efficiency of resource utilization.
4. Strategic, synergistic and sustainable cooperation with partners in the field of forestry and environmental development.

The vision of the DFRCE

"To become a leading research-based and leading department in innovation for the nation's independence towards a leading techno-socio-entrepreneurial at the global level in the fields of Biodiversity Conservation, Ecotourism and Forest Environment for the welfare of the community"

Mission of the DFRCE

1. Organizing and developing research-based academic and professional education in the fields of biodiversity conservation, ecotourism and the forest environment
2. Organizing and developing research oriented to the development of science and technology and problem solving in the fields of biodiversity conservation, ecotourism and the forest environment
3. Facilitating the application of science and technology in the field of biodiversity conservation, ecotourism and the environment for the community in a sustainable manner.
4. Realizing DKSHE as a trend setter in the policy and development of biodiversity conservation, ecotourism and the forest environment.
5. Strengthening the management system of the DFRCE which is modern, effective, transparent and accountable in era 4.0.

The purpose of providing education in the Forest Resources Conservation and Ecotourism Study Program in accordance with the vision and mission is described as follows:

1. Produce quality graduates (future leaders) who are able to implement and develop science and technology in the field of biodiversity conservation, ecotourism and the forest environment
2. Produce innovations in science and technology for conservation of biodiversity, ecotourism and the environment. Eco-friendly forests to support national development and improve community welfare, and are ready to face the challenges of forestry development which are very dynamic due to the effects of rapid changes at the level national or global.

3. Departmental governance that is fair, transparent, participatory, accountable and integrated between fields to support the effectiveness and efficiency of resource utilization.
4. Strategic, synergistic and sustainable collaboration with partners in the fields of Biodiversity Conservation, Ecotourism and Forest Environment

Competency of DFRCE

KSHE Able to explain and apply the theory of science, technology and art (*Ilmu Pengetahuan, Teknologi, dan Seni or IPTEKS*) responsibly and have a techno-socio-entrepreneurial spirit in the fields of biodiversity conservation, ecotourism and forest environmental services to improve the quality of human life.

No.	Graduate Profile	Learning Outcomes
1.	Manager in the field of biodiversity conservation, ecotourism and forest environment	<ul style="list-style-type: none"> • Have leadership skills, and responsible managerial • Able to implement logical, critical, and innovative thinking in sustainable management of biodiversity, ecotourism and forest environment • Able to solve problems and formulate various alternative solutions • Able to develop networking with parties
2.	Ecotechnopreneur	<ul style="list-style-type: none"> • Have an entrepreneurial spirit in the field of biodiversity conservation, ecotourism and forest environment • Have the ability to manage biodiversity conservation, ecotourism and the forest environment effectively and sustainably • Able to conduct business analysis in the field of biodiversity conservation, ecotourism and forest environment. • Able to apply diversified technology for processing biodiversity, ecotourism and forest environment.
3.	Educators and extension workers in the field of conservation, ecotourism, and the forest environment	<ul style="list-style-type: none"> • Able to communicate and socialize ideas or knowledge and work in the field of biodiversity conservation, ecotourism and forest environment at local, national, and international levels. • Able to act as a facilitator and mediator in solving various issues in the field of biodiversity conservation, ecotourism and the forest environment • Able to empower the community in a participatory and independent, fair and environmentally friendly way in managing biodiversity, ecotourism and the forest environment
4.	Young researcher in the field of biodiversity conservation, ecotourism and the forest environment	<ul style="list-style-type: none"> • Able to identify problems and find alternative solutions in the fields of biodiversity conservation, ecotourism and the forest environment. • Have the ability to think creatively, innovatively, and productively in research in the fields of biodiversity conservation, ecotourism and the forest environment. • Have basic analytical and synthesis skills in developing knowledge and technology in the fields of biodiversity conservation, ecotourism and the forest environment

Table 1. Statement of Competency of Undergraduate Study Program “Biodiversity Conservation, Ecotourism and Forest Environment” and its Description in Learning Outcomes (LO)

Statement of Competence:	
Mastering and able to apply the theory of science, technology and art responsibly in the fields of biodiversity conservation, ecotourism and the forest environment.	
The description of the Study Program Competencies into the following Eleven Learning Outcomes (LO):	
Learning Outcomes (LO) 1	Have the ability to understand the theoretical concepts of biodiversity conservation, ecotourism and the forest environment

Table 2. Mandate of Learning Outcomes Achievement in Courses

Learning Outcomes	Course																		
	KSH231	KSH252	KSH398	KSH314	KSH323	KSH332	KSH341	KSH353	KSH315	KSH316	KSH342	KSH343	KSH417	KSH433	KSH444	KSH497	KSH498	KSH499	
Learning Outcomes 1																			
Learning Outcomes 2																			
Learning Outcomes 3																			
Learning Outcomes 4																			
Learning Outcomes 5																			
Learning Outcomes 6																			
Learning Outcomes 7																			
Learning Outcomes 8																			
Learning Outcomes 9																			
Learning Outcomes 10																			
Learning Outcomes 11																			

WORK PROGRAM OF THE DEPARTMENT OF FOREST RESOURCES CONSERVATION AND ECOTOURISM, FACULTY OF FORESTRY AND ENVIRONMENT 2020-2025

Based on the vision, mission, and objectives formulated, the work program of the DFRCE, Faculty of Forestry and Environment, IPB in 2020-2025 is as follows:

A. Education Sector

Program 1: Improving the quality of education to create excellent and competent graduates as future leaders

1. Improving the quality of student input.
2. Development of accredited laboratory facilities to support teaching and learning activities.
3. Development of international classes for multi-level education and development of professional education programs.
4. Improvement of the quality of teaching materials and implementation of effective learning methods.
5. Increasing the use of information technology to support teaching and learning activities.
6. Facilitating students through collaboration with partner institutions in practical work activities, and research activities
7. Improving the monitoring mechanism for student study progress and increasing graduate promotions.
8. Improvement of Academic Quality Assurance System and Maintenance of national/international accreditation status

B. Student Affairs

Program 2: Development of the student world through strengthening organizations, professions, and entrepreneurship

1. Development of leadership and character education in student organizations
2. Development of entrepreneurship;
3. Developing the ability to write scientific papers;
4. English language training;
5. Development of conducive student activity center;
6. Increasing student participation in scientific work competitions, entrepreneurship, at national and international levels;
7. Increasing scholarship sources;
8. Strengthening the alumni-student-faculty communication network;
9. Increasing student participation in research and community service activities

C. Research Areas

Program 3: Improving the quality of superior research to support the development of science and technology and improving the quality of education and community service

1. Establishment of a center of excellence to accommodate lecturers' interest in scientific development in the scope of biodiversity conservation, ecotourism and forest environment.
2. Mapping research demand, developing umbrellas and determining Priority Research Programs and Activities and Leading Activity Programs that are in line with the priorities of the Faculty of Forestry and IPB and in accordance with the needs of forestry development, as well as biodiversity conservation, ecotourism and the forest environment; The Priority Research Programs of the DFRCE are as follows:
 - a. Bioecology Langur Borneo (*Presbytis chrysomelas ssp. cruciger*) in National Park of Sentarum Lake - West Kalimantan Province (2021 - 2023)
 - b. Mitigation-Restoration and Translocation of Local Papuan Priority Species in LNG Tangguh Site Bintuni District - West Papua Province (2021-2022)
 - c. Bioecology of Cuscus (Tree Kangaroo) in the Papua Forest (PT. Wijaya Sentosa) Teluk Wondama District, West Papua Province (2020 - now)
 - d. Biodiversity in Oil Palm Plantation
 - e. Conservation Gallery in Campus Forest Park Arboretum
 - f. Bioprospey and Utilization of Wildlife and Plant
 - g. Habitat Monitoring (deforestation): InaAlert Indonesia Near Realtime Change Detection
 - h. Ecotourism Development in or after the Pandemic Era
 - i. Biodiversity Monitoring with Technology 4.0 (Thermal Camera and Drone)
 - j. Environmental Education
 - k. Biodiversity in Human-Dominated Landscape
 - l. Smart urban forestry
3. Increasing the number and quality of research both funded by grants and national and international collaborations;
4. Development of information systems and knowledge management on research results in order to increase the effectiveness of research results;

Program 4: Increasing National and International Scientific Publications

1. Increasing active participation of lecturers in international forums (conferences, seminars);

2. International journal writing training in order to increase international journal publications;
3. Increasing the accreditation of scientific journals from the DFRCE (Conservation Media or *Media Konservasi*) and developing international journals.

C. Community Service Sector

Program 5: Quality improvement and integration of community service programs

1. Increased community service activities;
2. Development of strategic partner assistance collaborations that are integrated as internships and field laboratories;
3. Development of training programs to increase the capacity of human resources who are active in the fields of biodiversity conservation, ecotourism and the forest environment.

Program 6: Increasing strategic innovation for regional and national development

1. Development of research-based strategic studies in the fields of Biodiversity Conservation, Ecotourism and Forest Environment on various developments at local, national, and global levels;
2. Improved ability to write Policy Briefs and popular articles in the fields of Biodiversity Conservation, Ecotourism and Forest Environment;
3. Development of a database for strategic data and information for the purposes of study and policy advocacy;
4. Development of Science and Technology and Use of Science and Technology in the fields of Biodiversity Conservation, Ecotourism and Forest Environment.

D. Resources Sector

Program 7: Quality development, career development, and welfare of educators and education staff

1. Improving the welfare of lecturers and education staff to increase work productivity;
2. Completion and implementation of the personnel information system to monitor and accelerate the process of promotion/position of lecturers and education staff (Simpeg and Sipakaril);
3. Strengthening the development of young lecturers and family gatherings to strengthen the kinship of educators and education staff;
4. Improve the skills of education personnel in the field of data analysis, administration and finance.

E. International Cooperation and Programs

Program 8: Development of National and International Cooperation Networks

1. Development of international cooperation in the field of education (credit transfer, double degree), international training & summer school, academic exchange (overseas visiting scholar, sabbatical leave, postdoctoral appointments, visiting professors) and international conferences/seminars
2. Development of international cooperation in the field research through joint (collaborative) research & publication;

3. Development of cooperation with various parties (government, private sector, NGOs) in education, research, and community service.

Program 9: Strengthening Administration and Management

1. Improving the management information system (*Sistem Informasi Manajemen* or *SIM*) of the DFRCE for academic purposes, research and community service, as well as administrative services;
2. Utilization of reliable and integrated academic management information system (*Sistem Informasi Manajemen Akademik* or *SIMAK*), student and alumni (*Sistem Informasi Manajemen Kemahasiswaan dan Alumni* or *SIMAWA*), personnel (*Sistem Informasi Manajemen Kepegawaian* or *SIMPEG*), and facility management (*Sistem Informasi Manajemen Pengelolaan Fasilitas* or *SIMFA*) to support departmental administration systems;
3. ISO 9001:2015 certificate to ensure the implementation of procedures (*Standar Operasional Prosedur* or *SOP*) for financial management, facility management and maintenance, quality system for organizing academic activities, managing collaborative activities;
4. Development of reputation management through (a) development of the department's website quality, (b) increasing the promotion of academic staff's expertise, (c) improving the quality of promotion-kits.

Program 10: Strengthening Communication and Promotion

1. Development of cooperation with print and electronic mass media;
2. Improved promotion of Divisions and Departments that are coordinated and carried out regularly;
3. Optimization of ICT network to increase the synergy of research programs and dissemination & absorption of graduates.

The entire program of the DFRCE related to the Key Performance Indicators (*Indikator Kinerja Utama* or *IKU*) is presented as shown in the figure below:

