



TRACER STUDY REPORT

PROFESSIONAL EDUCATION OF
VETERINARY MEDICINE
2023



FACULTY OF
VETERINARY
MEDICINE

**TRACER STUDY REPORT FOR THE PROFESSIONAL EDUCATION
OF VETERINARY MEDICINE (PVM)**

RECTOR'S FOREWORD



Assalamualaikum warahmatullahi wabarakatuh

Praise be to Allah SWT. Let us always offer our gratitude to Allah SWT for His blessings, allowing us to continue striving for continuous improvement in any position. Universities, as one of the leading institutions in building civilization, should set a good example of how to respond to changes and constructively foster change for the nation's development. Constructive change or improvements require sufficient knowledge and information. Therefore, in this regard, the tracer study being conducted is a crucial component in building Universitas Brawijaya's future.

The tracer study in 2022 is expected to provide valuable feedback to the institution for more targeted improvements, especially in the academic field, and may also signal the need for the growth of units or the development of existing unit functions to support necessary interests. The quality of the institution continues to be developed based on, among other things, the results of this tracer study and other established monitoring and evaluation systems, thus achieving inclusive institutional progress. This tracer study also serves as a platform for the institution to communicate with alumni, enhancing their role in the internal development of Universitas Brawijaya and strengthening the university's networking with potential partners where alumni work or contribute.

The results of the tracer study in 2021 are crucial for dissemination and serve as vital information for every related unit at Universitas Brawijaya to strengthen and develop its performance. This tracer study forms an integral part of Universitas Brawijaya's official documents in planning, monitoring, and evaluating institutional performance, especially in the academic field. Finally, offering criticisms and suggestions for the growth and development of Universitas Brawijaya in the future is the responsibility of all of us as members of Universitas Brawijaya. Therefore, every sincere intention to contribute thoughts in the form of criticism and suggestions is necessary for a better future for Universitas Brawijaya.

It is important for me to remind that the development of Universitas Brawijaya to play a role in the nation's development is our collective responsibility. May Allah SWT facilitate and strengthen all of us in fulfilling this trust. Ameen.

Wassalamu' alaikum warahmatullahi wabarakatuh.

Malang, 31 December 2022

Prof. Widodo, S.Si.,M.Si.,Ph.D.Med.Sc

Preface

We express our gratitude to God Almighty for providing the strength and guidance to complete the implementation of the 2022 Tracer Study at Universitas Brawijaya, which focuses on tracking the whereabouts of Universitas Brawijaya alumni who graduated in 2021. According to the 2013 directive from the Directorate of Learning and Student Affairs (Belmawa - Dikti Kemendikbud), every higher education institution is required to have a career center or a similar unit that not only develops alumni careers but also includes a Tracer Study (alumni tracking) section. In line with this directive from DitBelmawa, the Tracer Study at Universitas Brawijaya is now under the auspices of the Directorate of Career Development and Alumni of Universitas Brawijaya.

A Tracer Study is an effort to track and understand the condition of alumni some time after graduating from their studies at a particular higher education institution. The UB 2022 Tracer Study uses a Tracer Study instrument based on directions from the Ministry of Education, Culture, Research, Technology, and Higher Education as a form of evaluation of the implementation of the Main Performance Indicators (IKU) of higher education institutions in Indonesia under the Merdeka Belajar policy. This IKU evaluates whether a higher education institution is performing well. The first IKU under the Merdeka Belajar policy is that graduates obtain decent jobs. Therefore, the success of a university's alumni in securing decent jobs, pursuing entrepreneurship, or continuing their studies significantly impacts the university's overall performance. The more alumni who achieve these milestones, the more successful the university is in achieving the first IKU.

The implementation of the 2022 Tracer Study is certainly far from perfect, but with good collaboration from various parties at Universitas Brawijaya, we hope that future Tracer Studies will improve. We hope that the 2022 UB Tracer Study report can be effectively utilized to enhance the quality of Universitas Brawijaya and increase the competitiveness of its alumni in the job market.

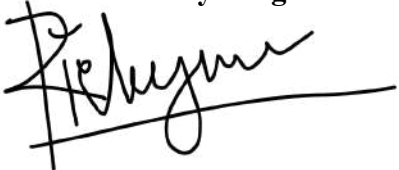



Malang, 31 December 2022

**Director of the Directorate of Career
Development and Alumni**

Agung Sugeng Widodo, ST., MT., Ph.D



APPROVAL SHEET FOR TRACER STUDY REPORT
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CHAPTER I

Tracer Study Universitas Brawijaya

A. Basic Concept

Higher education, like other units of social and economic activity, faces many changes with the advancement of information technology. It is a challenge for universities to continuously improve in response to the era of disruption. Innovation and applicable outputs that can contribute to enhancing the capacity and continuity of social and economic life are demands placed on all educational institutions, especially higher education (Usher et al., 2016).

A tracer study is one of the crucial instruments for continuous improvement in higher education. Achieving better quality over time is the target outcome, as it is an implication of receiving input in the form of market signals and feedback on internal management performance from alumni. Moreover, tracing alumni performance is essential for providing information on the educational outcomes produced by higher education institutions. The higher the employability of graduates and the better the match between graduates and labour market needs, the stronger the institution's capability to produce graduates who meet these needs (job market matching). This also includes the relationship to the level of entrepreneurship generated by higher education, specifically as job creators (Fenta et al., 2019). The information gathered through tracer studies or alumni surveys serves as input for the operational follow-up in the management of Universitas Brawijaya going forward, including in the development of study programme curricula (curriculum development) (Hutagalung et al., 2019).

Higher education institutions need to conduct tracer studies because they require feedback from alumni in their efforts to improve the educational system and management. At the beginning of the academic year, higher education institutions set the direction for educational policies based on input regarding the conditions, experiences, and motivations of new students entering the institution. This input on conditions, experiences, and motivations also determines how the institution implements educational systems and management in terms of teaching and learning patterns/processes, research, practical work, workshops, laboratories, studios, or research activities. The implementation of teaching and learning systems is also influenced by the educational policies established by the institution.

The tracer study concept at Universitas Brawijaya (UB), as previously conducted, uses a mechanism that refers to the concept and methodology presented by Harald Schomburg (2010). In his presentation, Schomburg classifies four main pillars in tracer study activities. These pillars are:

(1) Input, which includes information about students' personal data, experiences, and motivations, as well as information about the conditions and facilitation of learning;

(2) Process, which includes the processes of learning and the development of students' competencies and qualifications;

(3) Output, which includes knowledge, skills, and motivation, as well as the grades achieved by students;

(4) Outcome, which includes the transition to their first job, the first job obtained/performed, and their capacity to contribute in their work environment. This can be illustrated in Figure A.1.

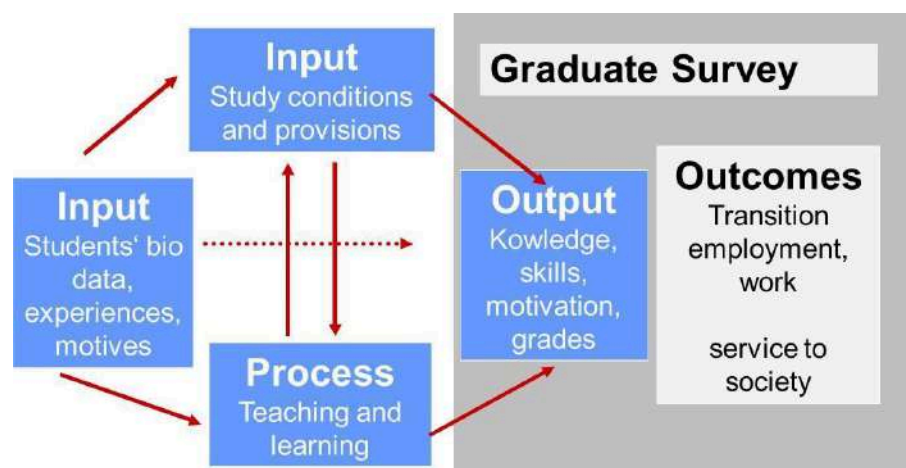


Figure A.1 Tracer Study Flow

The results from inputs such as the conditions, experiences, and motivations of students, the educational systems and policies at higher education institutions, and the teaching and learning processes at these institutions will help shape the character and competencies of their graduates. Graduates/alumni from higher education institutions will generally possess the knowledge, skills, motivation, and competencies required to enter the workforce.

The outcomes of higher education are the knowledge, skills, and competencies of alumni needed to enter the workforce. These outcomes, along with the conditions alumni face in the early stages of their careers, are essential for higher education institutions to improve their educational systems and management. The need to understand the track record of alumni and the relationship between higher education and employment is the

fundamental concept of tracer study research.

1.1. Objectives of Tracer Study

The Tracer Study aims to understand the outcomes of education in the form of the transition from higher education to the business and industrial world. It evaluates the educational outputs in terms of self-assessment of competency mastery and acquisition, the educational process through the evaluation of the learning process, and the contribution of higher education to competency acquisition. Additionally, it gathers further information about graduates as educational input.

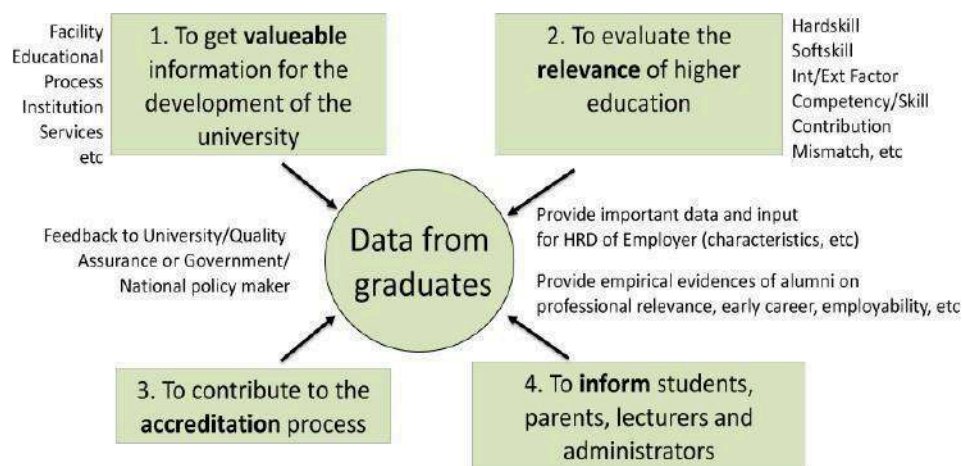


Figure 1.2 Objectives of Tracer Study

The Tracer Study at UB has several important objectives in its implementation. These objectives include:

1. To obtain important information in the form of alumni feedback for the improvement and development of higher education systems and management, including facilities, teaching and learning patterns, processes, and services.
2. To serve as an evaluation tool to determine the relevance of higher education to employment (hard skills, soft skills, internal/external factors, competencies, contributions, etc.).
3. To provide feedback for the quality assurance of higher education institutions or in setting national educational policies.
4. To assist higher education institutions in the accreditation process, both nationally and internationally.
5. To provide input and important data for Human Resource Departments (HRD) of companies regarding the characteristics of higher education alumni/graduates.

6. To provide empirical evidence regarding alumni in terms of employment, early careers, the relevance of alumni jobs to higher education, etc.
7. To provide information for students, parents, lecturers, educational administrators, and educational practitioners about higher education alumni/graduates.

B. Benefits of Tracer Study

The benefits of Tracer Study are not limited to higher education institutions alone; they extend further to provide important information about the relationship between higher education and the business and industrial world. Tracer Study can offer in-depth and detailed information on job matching, both horizontally (across various fields of study) and vertically (across different levels/tiers of education).

Thus, Tracer Study can help address the problem of employment opportunity gaps and efforts to improve them. For higher education institutions, information about competencies relevant to the business and industrial world can aid in curriculum improvement and learning system enhancements. On the other hand, the business and industrial world can gain insights into higher education through Tracer Study and thereby prepare themselves by providing more relevant training for new job-seeking graduates.

For UB, Tracer Study is conducted to gain the following benefits:

1. As a database of alumni, recorded by Study Programme and year of graduation.
2. As an important input/information for the development of higher education institutions.
3. As an evaluation tool to see the relevance between higher education and the business and industrial world.
4. As input for improving the performance of lecturers and administrative staff.
5. As input for curriculum improvement.
6. As evaluation material for pursuing international accreditation.
7. As material for building an alumni network.

a. Methodology of Tracer Study at UB

The Tracer Study at UB is conducted by the Sub-Directorate of Alumni and the Tracer Study Directorate within the Directorate of Career Development and Alumni, under the direction of the Rector through the Vice Rector for Student Affairs, Alumni, and Student Entrepreneurship. The UB Tracer Study team consists of both university-level and faculty-level teams. The university-level Tracer Study team acts as the primary facilitator for conducting the Tracer Study at UB. This team includes the DPKA (Directorate of Career Development and Alumni) and various other units at UB that are stakeholders in the tracer study data. The faculty-level Tracer Study team acts as an extension of the university-level team, directing graduates to fill out online questionnaires in the UB

Tracer Study system. The faculty-level team consists of a combination of lecturers and staff at the faculty, department, and study programme levels who are directly involved with their alumni.

In conducting the Tracer Study, the primary task is to collect the respondent/alumni database. Data collection is carried out by retrieving alumni data directly from the Alumni and Tracer Study Information System (SINATRA) and synchronising data from the Student Academic Information System (SIAM). The next major step is the preparation of the Tracer Study questionnaire. The UB Tracer Study uses a questionnaire instrument to gather data. Currently, the questionnaire is online and can be accessed at sinatra.ub.ac.id using each alumni's individual account. The UB Tracer Study questionnaire adopts from the KEMDIKBUD RISTEK questionnaire with additional questions tailored for UB's needs.

CHAPTER II

Implementation of Tracer Study at the Faculty of Veterinary Medicine

A. Journey and Development of Tracer Study at FVM

The tracer study activities at the Faculty of Veterinary Medicine have been ongoing since 2018 and have continued to evolve. Each implementation of the FVM UB tracer study has experienced transformations and developments. The journey of the tracer study at the Faculty of Veterinary Medicine has not been without various challenges. These challenges are part of the transformation and development process of the UB tracer study. The results of the 2022 tracer study indicate that alumni are motivated to play a greater role in the development of the Faculty of Veterinary Medicine. The role of alumni includes providing market signal information and serving as a bridge for collaboration between the university and the community.

The scope of the tracer study targets specific alumni graduates. According to the directives from Ministry of Education, Culture, Research, and Technology through the Main Performance Indicators (IKU) of Higher Education, the target respondents are alumni who graduated one year before the tracer study is conducted. The 2022 tracer study was conducted for all graduates of the study programs within UB. The target respondents for the 2022 tracer study were alumni who graduated between January and December 2022. Each alumnus could fill out the tracer study questionnaire directly on SINATRA at the website address sinatra.ub.ac.id or through a link sent via broadcast email and short message service (SMS) by the Directorate of Information Technology. Additionally, alumni were informed about the questionnaire through information provided by the faculty's tracer study team.

C. Challenges in Tracer Study at the Faculty of Veterinary Medicine

The implementation of the UB tracer study over the years has not been without challenges. In each period of the tracer study, various obstacles have been encountered. However, with increased experience in conducting the tracer study, these challenges have been managed and resolved. A common challenge observed during the preparation stage is the readiness and validity of the contact database of the target respondents. The UB tracer study team

implemented an innovative method for updating alumni biodata when they activate their SINATRA accounts or register for yudisium through SIAM. The tracer study data collection, which targets alumni one year after graduation, yielded interesting results in the 2022 tracer study. Alumni who graduated between 2021 and 2022 experienced the direct impact of the COVID-19 pandemic, which had affected the world in recent times.

The limited job opportunities and the uncertain industrial landscape resulted in many UB alumni not meeting the IKU 1 standard for decent post-graduation activities. Many UB alumni faced long waiting periods exceeding six months, or had incomes less than 1.2 times the regional minimum wage. Additionally, some alumni had not engaged in any post-graduation activities at all. These findings serve as an evaluation point for UB to design better career development programs..

D. Questionnaire Instrument in the Faculty of Veterinary Medicine Tracer Study

In the dynamic process of curriculum change and improvement in the Undergraduate Veterinary Medicine and Professional Veterinary Education programs, the importance of both generic and managerial competencies, alongside specific and technical competencies, is recognized. This approach aims to equip graduates to adapt to the changing job market. One effort to continually gather information and monitor the evolving relationship between higher education and the job market is through alumni feedback.

Alumni currently in the workforce are tracked and analyzed to determine their competitiveness in the job market, their opinions on how well their competencies align with job market needs, and the strength of their presence in the workforce based on user satisfaction with their performance. Additionally, tracking alumni quality is a critical component of the tracer study evaluation to improve the quality and profile of FKH UB graduates. This is accommodated through the SKPL (Graduate User Satisfaction Survey) form. The following are appendices of the questions in the Exit Survey Questionnaire (Appendix 1), TS-1 Questionnaire (Appendix 2), TS-2 Questionnaire (Appendix 3), and SKPL Questionnaire (Appendix 4).

CHAPTER III

Results of the Tracer Study for the Professional Veterinary Education Program in 2021

A. Respondent Distribution

Respondents who completed the TS-1 questionnaire through SINATRA were from two study programs at FKH UB, namely the Undergraduate Veterinary Medicine Program and the Professional Veterinary Education Program. The total number of respondents from the professional program was 161, who entered the Professional Veterinary Education Program at FKH UB in 2020 (Figure 1). Additionally, the origin of respondents (graduates) varied widely (Figure 2).



Figure 1. Distribution of Cohorts of Respondents in the Professional Veterinary Education Program



Figure 2. Distribution of Respondents' Hometowns for Graduates of the Professional Veterinary Education Program, Class of 2022

B. Evaluation Results of the Tracer Study Questionnaire

The following table presents the evaluation results of the tracer study questionnaire based on each component of the questions in TS-1 for the year 2022.

1. Employment Status

The question regarding employment status offered five answer options:

1. Unemployed but actively seeking employment
2. Unable to work (due to marriage, military service, or family care)
3. Self-employed / running own business
4. Pursuing further education
5. Employed by a company/business (full-time/part-time)

Based on Figure 3, it is clear that out of 161 respondents, 78% are employed by a company or business, either full-time or part-time, while the remaining respondents are distributed among those seeking employment, unable to work, self-employed, and pursuing further education.

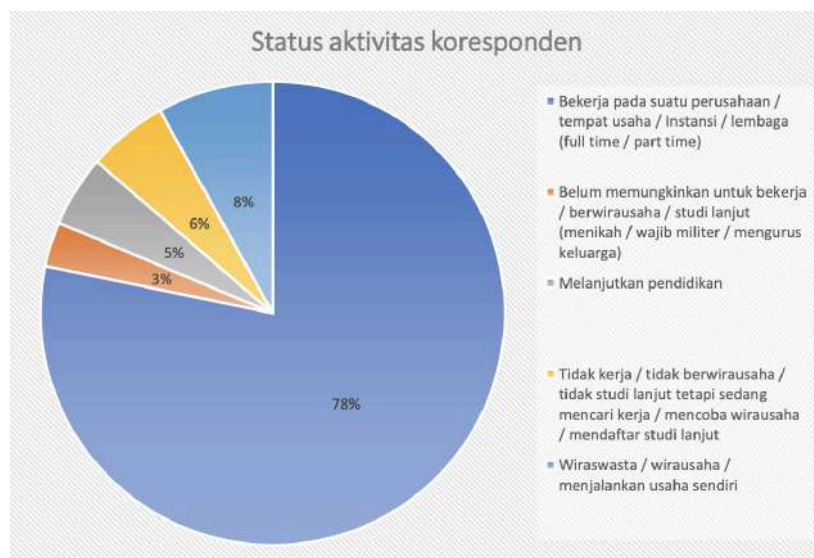


Figure 3. Summary of Employment Status for Professional Degree Respondents

2. Graduates' Waiting Time for Employment

The time it takes for graduates to secure a job after finishing their studies varies widely. The majority of respondents reported finding employment within less than a month to one month after graduation, representing the highest percentage (Figure 4). Other respondents indicated they secured jobs within 2 to 6 months post-graduation. Additionally, 5 respondents noted that they found employment between 6 months to one year after becoming a veterinarian..

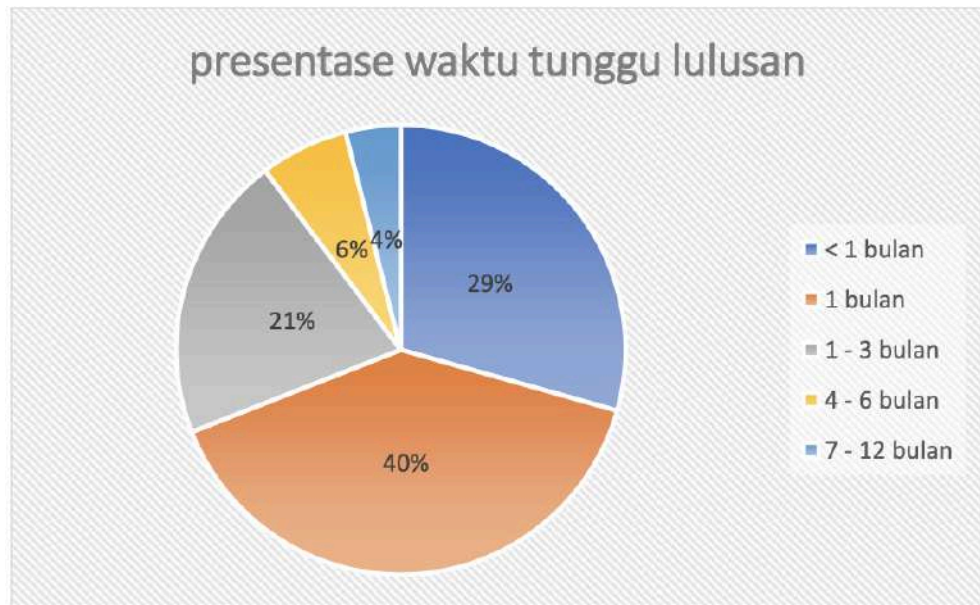


Figure 4. Summary of Professional Degree Respondents' Waiting Time to Secure Employment

3. Categories of Employment and Levels of Organizations Where Graduates Work

In response to questions about employment status, respondents who indicated they were working (either self-employed or employed by a company/organization, full-time or part-time) provided diverse answers. A total of 126 respondents who were employed listed various workplaces. The names of the organizations where graduates work are detailed in Table 1. The categories of workplaces are illustrated in Figure 5.

The majority of graduates work in fields closely related to their area of study (Figure 6). According to the tracer study results, 71% of respondents reported that their current job is highly related to their field of study. The remaining respondents indicated a strong or very strong relation, with only 2% of the 116 respondents noting a less strong relation.

Table 1. List of Names and Categories of Institutions/Companies/Animal Clinics
Where Graduates Work

Category of Workplace	Name of Institution/Company/Animal Clinic
Government Institutions	Food Security and Agriculture Office of Samarinda City
	Regional-Owned Enterprise Perumda Tunas, Malang City
	Pilangkenceng Animal Health Centre (Puskesmas)
	Agriculture Office
	Plantation and Livestock Office of Central Sulawesi Province and Hope Pet Care
	Rogojampi Animal Health Centre (Puskesmas)
	Livestock and Fisheries Office
	Livestock Office
	Food Security and Agriculture Office of Dumai City
	Agriculture Office of Gresik Regency
	Agriculture Office
	Agriculture, Food Security, and Fisheries Office of Dairi Regency
	Plantation and Livestock Office of Paser Regency
	Bandung Fish Quarantine Station, Quality Control, and Safety of Fishery Products
	Plantation and Livestock Office of Central Sulawesi Province
Animal Clinics	My Vets by Siti Zaenab
	KitaVet Care Animal Clinic
	Jakarta Animal Clinic
	Gloriavet
	Okami Animal Clinic
	Mojokerto Petcare and Petshop
	Petshop
	Asia Vet
	Practice of Drh. Feny Indriastuti
	Tutu Animal Clinic
	Musya Cat Care
	Pet City Animal Clinic
	Mochi Vet and Pet Care
	PDHB Drh. Cucu Kartini S.
	Karlos Satse Clinic
	Agatha Vet
	My Fadel Vet Veterinary Practice
	Griya Satwa Pekanbaru Animal Clinic
	AHZ Pet Care Animal Clinic
	Amore Animal Clinic
	Radhiyan Pet and Care
Marcelo Exist Pet Centre	
March Animal Clinic	

	Panthera Vet Animal Clinic
	Kemuning Vet Care
	Dr Iman Setyowati Animal Clinic
	Welfare Pet Care
	Amore Animal Clinic
	Andista Animal Care
	Luna Pethouse
	PDHB Sahabat Satwa Banyuwangi
	Tutu Animal Clinic
	CV Amazon Pet Inzo
	DR PAWS Petshop and Veterinary Practice
	Graha Satwa
	Griya Satwa Lestari Animal Clinic
	Bougen Vet Animal Care
	Cetar Pets Animal Clinic
	Teman Hewan Vet and Pets
	Graha Animal Petservice
	Private Practice
	Paws n Purrs Pet Care Animal Clinic, Samarinda
	Ganesha Animal Care Clinic
	GustaVet Animal Clinic
	Winadivet Animal Clinic
	Cherry Pet Shop and Clinic
	Smile Animal Clinic and Care
	De' Lab Animal Clinic
	Amore Animal Clinic
	RN Pet Care
	Djio Petcare & Vets
	Pet House Jakarta
	Pets Choice
	Makassar Pet Clinic
	Okami Animal Clinic
	Fushi Pet
	Platinum Animal Clinic
	Pet Islands
	K1 Veterinary Clinic
Conservation Institutions	Jember Minizoo
	Yayasan Inisiasi Alam Rehabilitasi Indonesia
	Jawa Timur Park 2
	Lembang Park & Zoo
Private Companies	Cheil Jedang
	PT Intertama Trikencana Bersinar

PT Charoen Pokphand Indonesia
Dinamika Megatama Citra (DMC)
CV Kuraku Indonesia
Dairy Pro Indonesia
PT Intertama Trikencana Bersinar
PT Hade Dinamis Sejahtera
PT Romindo Primavetcom
PT USFA Vet Farma
PT Charoen Pokphand Indonesia
PT Avesco
PT Wonokoyo Jaya Corporindo
PT Ranso Welvarindo (Feedlot PT Andini Agro Loka)
PT Inti Niaga Berkah
PT Lembah Hijau
PT Karunia Alam Sentosa Abadi (KASA)
SSR Fatayat NU Jawa Timur
PT Malindo Feedmill Tbk
PT Super Unggas Jaya
PT Cahaya Technology Unggas
PT Happy Pet Indonesia
PT Satwa Bahagia Indonesia
PT Biotis Pharmaceuticals Indonesia
Pokphand
PT Ciomas Adisatwa
YJM
PT Farmsco Feed Indonesia
Agung Farm
Gaina Cempe Lemu
PT Romindo Primavetcom
Charoen Pokphand
HalloVet Animal Care
CPI
Charoen Pokphand Indonesia
PT Bibit Indonesia
Great Giant Livestock
PT Vetindo Citra Persada
PT Romindo Primavetcom
PT Charoen Pokphand Indonesia Tbk
PT Charoen Pokphand Jaya Farm Tbk
PT Charoen Pokphand Indonesia
PT Dinamika Megatama Citra
PT Cakra Gemilang Sejahtera



Figure 5. Categories of Employment for Graduates

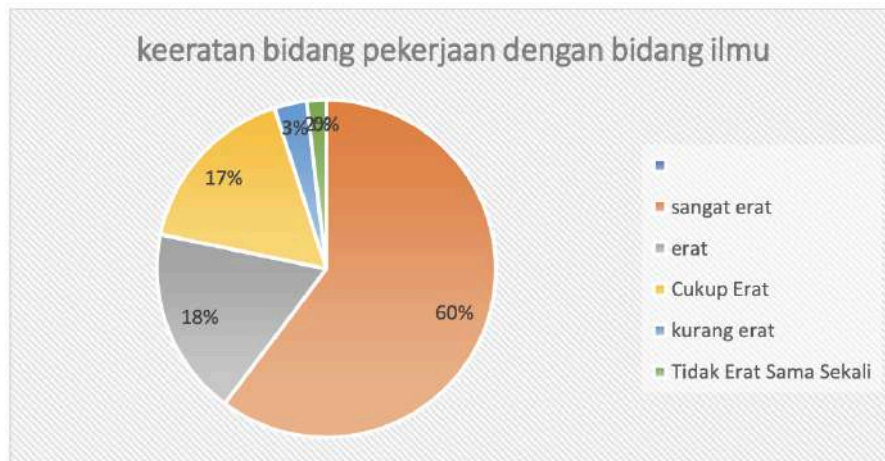


Figure 6. Information on the Relevance of Alumni's Education to Their Work Fields

4. Locations for Further Studies and Scholarship Sources

Among the 161 respondents, 8 continued their studies to the next level. Seven continued at domestic universities, specifically in the Master's Program at the Faculty of Veterinary Medicine at Universitas Gadjah Mada and Universitas Airlangga, with self-funding. One person continued their studies abroad at Zhejiang University with a scholarship.

5. Feedback on Learning from Alumni

Based on the tracer exit survey results, nearly half of the respondents did not answer questions related to the learning experiences they had and their benefits. This aspect will be used as an evaluation point for the Veterinary Medicine Professional Education Program. However, the Faculty also conducts surveys for feedback on learning through alumni engagement during events like the University and Brawijaya's Dies Natalis. Most alumni expressed that the knowledge taught and gained during the undergraduate and PPDH programs was highly beneficial. Alumni suggested maintaining and enriching the courses and content that are essential for the veterinary field..

6. Analysis of Tracer Results and Follow-up Plans for Improving Learning and/or Curriculum in the Study Program

The tracer results will be shared with the department and faculty leadership for evaluation and improvement of the learning process in the study program.

CHAPTER 4

Closing

A. Conclusion

Based on the results of the UB Tracer Study for the year 2022 on the Veterinary Medicine Professional Education Programme, conducted from January to December 2022, the following conclusions can be drawn:

1. The total response rate for the 2022 tracer study, targeting the 2022 graduates, is commendable, with 161 respondents or 49.6% of the total number of graduates from the PPDH (Veterinary Medicine Professional Education Programme) at FKH UB for the period from the academic year 2021 to the end of 2022, which totals 325 individuals. This achievement was made possible by the active involvement of all parties, including the faculty tracer study team who played a key role in communicating with and guiding the alumni.
2. Out of the 161 Veterinary Medicine graduates from FKH UB who participated in the tracer study, 126 have secured employment across various institutions, including multinational, national, local, private sector, and entrepreneurial ventures. 78% of the graduates' workplaces are closely related to the field of veterinary medicine.
3. Additionally, 8 graduates have pursued further studies, with 7 attending universities within the country and 1 attending an institution abroad.

B. Recommendations

1. To enhance the survey results, a more detailed analysis and visualisation of each question in the Tracer Study is required, so that the information produced can be more useful for all stakeholders involved with the Tracer Study data at Universitas Brawijaya.
2. The number of questions, which requires respondents to spend considerable time completing the Tracer Study, should be reviewed and evaluated.
3. Based on feedback from alumni through the tracer study, UB is encouraged to:
 - a. Expand relationships with industry partners and alumni to:
 - Increase opportunities for internships and MBKM activities for students
 - Provide more job vacancy information for alumni and prospective graduates
 - Organise job fairs or campus hiring events

- b. Strengthen the Alumni Forum/organisation to increase the number of respondents completing the tracer study questionnaire.
 - c. Conduct training sessions to improve soft skills, preparing graduates for the workforce.
4. Better align disciplinary knowledge with industry conditions to meet current industrial needs.

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- Usher, A., Montes, F., Altbach, P., Salmi, J., Denisova-schmidt, E., & Altbach, P. 2016. *Sustainable Futures for Higher Education Institutions*.

Appendices

Appendix 1 Exit Survey Questionnaire (0 months after graduation)

A. Questions related to financing during your studies:

1. During your studies, where did you live?
 1. Student dormitory
 2. Renting/leasing alone
 3. Renting/leasing with others
 4. Parent's/family member's home
 5. Own home

2. Where did the funding for your studies come from?
 1. Self/family funds
 2. ADIK Scholarship
 3. BIDIKMISI Education Cost Aid
 4. PPA Scholarship
 5. AFIRMASI Scholarship
 6. Company/Private Scholarship
 1. Please specify the name

B. Questions related to receiving BIDIKMISI scholarship

*(to be filled only if you have previously indicated receiving BIDIKMISI)

1. Did the BIDIKMISI assistance you received suffice for your daily needs until graduation?
2. During your studies, did you seek additional income outside of the BIDIKMISI assistance received?
 1. What did you do to earn additional income? (Multiple choices allowed)
 1. Teaching/tutoring
 2. Selling
 3. Teaching assistant
 4. Internship
 5. Other, please specify

Questions related to academic activities

1. How much emphasis on the following learning aspects was implemented in your study programme? *created on a scale of 1-5, from very low to very high

1. Lectures
2. Demonstrations
3. Participation in research projects
4. Internships
5. Practical work
6. Fieldwork
7. Discussions

2. What is your assessment of the teaching and learning aspects in your study programme? *created on a scale of 1-5, from very low to very high

1. Opportunity to interact with lecturers outside of lecture hours
2. Academic guidance
3. Opportunity to participate in research projects
4. General conditions of teaching and learning
5. Opportunity to enter and become part of a professional scientific network

3. What is your assessment of the following learning facilities? *created on a scale of 1-5, from very low to very high

1. Library
2. Information and communication technology
3. Learning modules
4. Study rooms
5. Laboratories
6. Variety of offered courses
7. Accommodations
8. Canteen
9. Student activity centre and its facilities and recreational areas
10. Health service facilities

4. Did you graduate on time (not more than 4 years)?

1. What was the main reason for not graduating on time? (Select One)

1. Financial reasons
2. Not meeting the required credit hours
3. Difficulties in completing the final assignment
4. Family reasons
5. Illness
6. Psychological factors
7. Student activities
8. Professional internship
9. Other, please specify

5. During your studies at UB, did you take any additional courses or education? What type of courses did you take?
(Answers can be more than one)

1. Tutoring for subjects
2. Application software
 1. What application software did you learn in the course? (Specify)
3. Foreign languages
 1. What foreign language did you study in the course?
 1. English
 2. French
 3. German
 4. Japanese
 5. Other foreign language, please specify
4. Arts and/or skills
5. Sports
6. Certification in field expertise
7. Religious studies

0. Upon graduation, at what level do you master the competencies below? *created on a scale of 1-5, from very low to very high

1. Ethics
2. Expertise based on field of study
3. English language
4. Information technology usage
5. Communication

6. Teamwork
7. Development
8. Readiness for community involvement

0. How significant is UB's contribution to the competencies you have mastered? *created on a scale of 1-5, from very low to very high

1. Ethics
2. Expertise based on field of study
3. English language
4. Information Technology Usage
5. Communication
6. Teamwork
7. Development

0. During your time at UB, where did you most frequently enhance these skills? *created options to select one, mapped between skills and where they were acquired

- Skills
 - Ethics
 - Expertise based on field of study
 - English language
 - Information technology usage
 - Communication
 - Teamwork
 - Development
 - Readiness for community involvement
- Place
 1. Student Council/Association
 2. Student Activity Units
 3. Lectures
 4. Projects/Research
 5. Internship
 6. Other Community Service Learning (MBKM), specify
 1. Other MBKM

0. What feedback do you have for your study programme?
0. What feedback do you have for Universitas Brawijaya?
0. After graduation, what are your plans for the next 1 - 6 months?

Appendix 2.Tracer Study Questionnaire TS-1

Code	No	Question Description	Answer Type	Answer Options
f8	1	Explain your current status?	Select one / radio button	[1] Employed (full time/part time) [2] Not yet able to work [3] Entrepreneur [4] Continuing Education [5] Not working but actively seeking employment
Question specific to those who answered Employed				
f504	2	Have you obtained employment <= 6 months / including work before graduation?	Select one / radio button	[1] Yes [2] No
	2.a	How many months after graduation did you get the job?	essay / textbox	Numeric entry
	2.b	What is your average monthly income (take home pay)?	essay / textbox	Numeric entry
f510	3	Where is the location of your workplace?	Select one from the list / dropdown	Province names, Districts, and Cities
	3.a	Province		
	3.b	District/City		
F11	4	What type of company/institution/organization do you currently work for?	Select one / radio button If other, please fill in the essay / textbox	[1] Government institution [6] State-Owned Enterprises (BUMN/BUMD) [7] Multilateral Institution/Organization [2] Non-profit organization/Civil Society Organization [3] Private company [4] Entrepreneur/self-owned company [5] Other, please specify:
Other, please specify	Other, please specify	What is the name of the company/office where you work?	essay / textbox	
F5b	5	Where is the street address of the company/office where you work?	essay / textbox	
F5b	5	What is the email address of the company/office where you work?	essay / textbox	

F5b	5	Please write down the phone number of the company/office where you work.	essay / textbox	
F5d	7	What is the level of your workplace?	Select one from the list / dropdown	Local/Regional/unincorporated business National/corporate business Multinational/international
Question specific to those who answered Entrepreneurship				
f504	2	Have you been self-employed <= 6 months / including self-employment before graduation?	Select one / radio button	[1] Yes [2] No
	2.a	How many months after graduation did you start your entrepreneurship?	essay / textbox	Numeric entry
	2.b	What is your average monthly income (take home pay)?	essay / textbox	Numeric entry
f510	3	Where is the location of your entrepreneurship?	Select one from the list / dropdown	Province names, Districts, and Cities
	3.a	Province		
	3.b	District/City		
F5c	6	If you are self-employed, what is your current position/title?	Select one from the list / dropdown	Founder Co-Founder Staff Freelance/Contractor
F5b	5	What is the name of the company/office where you are self-employed?	essay / textbox	
F5b	5	What is the street address of the company/office where you conduct your entrepreneurship?	essay / textbox	
F5b	5	What is the email address of the company/office where you conduct your entrepreneurship?	essay / textbox	
F5b	5	Please write down the phone number of the company/office where you conduct your entrepreneurship?	essay / textbox	
Questions specific to those pursuing Further Studies				
F18	8	Further Studies Questions		

		Source of Funding	Choose one from the list/dropdown	Self-funded Scholarship
		University	Text box	
		Level of Education	Choose one from the list/dropdown	
		Programme of Study	Text box	
		Date of Admission	Date selection / datepicker	
		Date of Graduation	Date selection / datepicker	
General Questions				
F14		How closely related is your field of study to your current job?	Select one / radio button	[1] Very Closely [2] Closely [3] Moderately Closely [4] Less Closely [5] Not at All
F15		What level of education is most suitable for your current job? Select one / radio button	Select one / radio button	[1] Higher Level [2] Same Level [3] Lower Level [4] No Higher Education Needed

	a	Upon graduation, at what level do you master the competencies below?	Choose one / radio button	<table border="1"> <thead> <tr> <th colspan="5">A</th> <th colspan="5">B</th> </tr> <tr> <th colspan="2">Sangat Rendah</th> <th colspan="3">Sangat Tinggi</th> <th colspan="2">Sangat Rendah</th> <th colspan="3">Sangat Tinggi</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th> </tr> </thead> <tbody> <tr> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> <td>Etika^(f1761) (f1762)</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> <td>Keahlian berdasarkan bidang ilmu^(f1763) (f1764)</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> <td>Bahasa Inggris^(f1765) (f1766)</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> <td>Penggunaan Teknologi Informasi^(f1767) (f1768)</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> <td>Komunikasi^(f1769) (f1770)</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> <td>Kerja sama tim^(f1771) (f1772)</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> <tr> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> <td>Pengembangan Diri^(f1773) (f1774)</td> <td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td> </tr> </tbody> </table>	A					B					Sangat Rendah		Sangat Tinggi			Sangat Rendah		Sangat Tinggi			1	2	3	4	5	1	2	3	4	5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Etika ^(f1761) (f1762)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Keahlian berdasarkan bidang ilmu ^(f1763) (f1764)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bahasa Inggris ^(f1765) (f1766)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Penggunaan Teknologi Informasi ^(f1767) (f1768)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Komunikasi ^(f1769) (f1770)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Kerja sama tim ^(f1771) (f1772)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pengembangan Diri ^(f1773) (f1774)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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F2		In your opinion, how much emphasis on the learning methods below is implemented in your study programme?																																																																																																													
		Lectures	Choose one / radio button	[1] Very High [2] High [3] Moderate [4] Low [5] Not at All																																																																																																											
		Demonstrations	Choose one / radio button	[1] Very High [2] High																																																																																																											

				[3] Moderate [4] Low [5] Not at All
		Participation in research projects	Choose one / radio button	[1] Very High [2] High [3] Moderate [4] Low [5] Not at All
		Internships	Choose one / radio button	[1] Very High [2] High [3] Moderate [4] Low [5] Not at All
		Practical work	Choose one / radio button	[1] Very High [2] High [3] Moderate [4] Low [5] Not at All
		Fieldwork	Choose one / radio button	[1] Very High [2] High [3] Moderate [4] Low [5] Not at All
		Discussion	Choose one / radio button	[1] Very High [2] High [3] Moderate [4] Low [5] Not at All
F30x		When did you start looking for a job? Please exclude part-time jobs.	Select one / radio button and there is a field for number of months	Approximately ... months before graduation Approximately ... months after graduation I am not looking for a job
F40x		How did you search for this job? Answers can be more than one	Can choose more than one / check box and there is a field if choosing other	Through advertisements in newspapers/magazines, brochures Applying to companies without specific job postings Attending job fairs/exhibitions Searching through internet/online advertisements/mailling lists Contacted by companies Contacting the Ministry of Manpower Contacting commercial/private employment agencies

				Obtaining information from the career development centre of faculty/university Contacting the student affairs office/alumni relations Building networks since college days Through connections (e.g., professors, parents, siblings, friends, etc.) Starting my own business Through job placement or internship Working at the same place as during college Other
		How many companies/agencies/institutions did you apply to (via letter or email) before obtaining a job?	Text box	... companies/agencies/institutions
		How many companies/agencies/institutions responded to your applications?	Text box	... companies/agencies/institutions
		How many companies/agencies/institutions invited you for an interview?	Text box	... companies/agencies/institutions
F10x		Have you been actively seeking employment in the last 4 weeks?	Select one / radio button and there is a field when choosing other	No No, but I am waiting for the outcome of job applications Yes, I will start working in the next 2 weeks Yes, but I am not sure yet if I will start working in the next 2 weeks Other:
F16x		If you think your current job does not match your education, why did you take it? If not yet/ not working, please choose Others and explain why not / not yet working	Can choose more than 1 / check box and there is an entry if others are selected	The question is not suitable, my current job is already suitable for my education I haven't found a job that is more suitable for my education In this job I get good career prospects I prefer to work in areas of work that have nothing to do with my education I was promoted to a position that is less related to my education than the previous position I can earn a higher income in this job My current job is more secure My current job is more interesting My current job allows me more opportunities to take additional jobs/flexible schedules, etc. My current job is closer to my home My current job can better guarantee the needs of my family At the beginning of my career, I had to accept a job that was unrelated to my education

			Other:
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Appendix 3 Graduate User Satisfaction Survey 2023 Questionnaire

A. User Identity of Graduates

1. Name of respondent
2. Company name
3. Company scale (National/Multinational/International?)
4. Company address
5. Company phone number
6. Company email address
7. Position/title

B. Identity of Assessed UB Graduates

1. Name of UB graduate being evaluated
2. Year of graduation of UB graduate being evaluated
3. Study programme of UB graduate being evaluated
4. Work period of UB graduate in the company

C. User Evaluation of UB Graduates (using the scale: excellent, good, fair, poor)

1. How is the integrity/loyalty of our graduates working at your company?
2. How is the attitude/ethics of our graduates working at your company?
3. How are the skills of our graduates working at your company based on their field of study?
4. How is the foreign language proficiency of our graduates working at your company?
5. How is the information technology skills of our graduates working at your company?
6. How is the communication skills of our graduates working at your company?
7. How is the teamwork skills of our graduates working at your company?
8. How is the self-development skills of our graduates working at your company?
9. How is the readiness to engage with society of our graduates working at your company?
10. What achievements have been attained by our graduates working at your company?
11. Overall, how satisfied are you with our graduates? (excellent, good, fair, poor)

D. User Evaluation of UB Graduates on Veterinary Competencies (Specific to graduates working in the veterinary field, based on SKDHI)

1. Do the graduates have insights into veterinary ethics and understanding of the oath and code of ethics of the profession as well as the basic references of the veterinary profession?
2. Do the graduates have insights into the national animal health system and veterinary legislation?
3. Do the graduates have skills in performing medical procedures legally and artistically?
4. Do the graduates have skills in handling a variety of diseases in large animals, small animals, poultry, exotic animals, wildlife, aquatic animals, and laboratory animals?
5. Do the graduates have skills in: (a) clinical, laboratory, pathological, and epidemiological diagnosis of animal diseases; (b) nutrition formulation for health and medical disorders; (c) ante-mortem and post-mortem examination; (d) pregnancy examination, handling reproductive disorders, and application of reproductive technologies; (e) supervision of safety and quality of animal products; (f) supervision and control of quality of animal drugs and biological materials, including their use and circulation; (g) measurement (assessment) and supervision of animal welfare?
6. Do the graduates have skills in professional communication/dialogue?
7. Do the graduates have capabilities in strategic disease control and zoonosis management, biosecurity-biosafety, and environmental control?
8. Do the graduates have skills in therapeutic transactions, conducting anamnesis, medical records, informed consent for medical actions, prescription writing, doctor's certificates, and client education?
9. Do the graduates have basic knowledge of risk analysis, veterinary economic analysis, and entrepreneurship?

E. Evaluation and Expectations of Universitas Brawijaya and Its Graduates

1. Has your institution/company collaborated with Universitas Brawijaya?
 1. Yes, in what form is the collaboration?
 2. Not yet
2. What are your expectations for Universitas Brawijaya graduates?
3. Suggestions and feedback for Universitas Brawijaya?