The 'Future of Work' in Animal Health and Production and the Role of Continuing Education for Veterinarians

Dr Miftahul Islam Barbaruah

Workforce Development Programme Manager

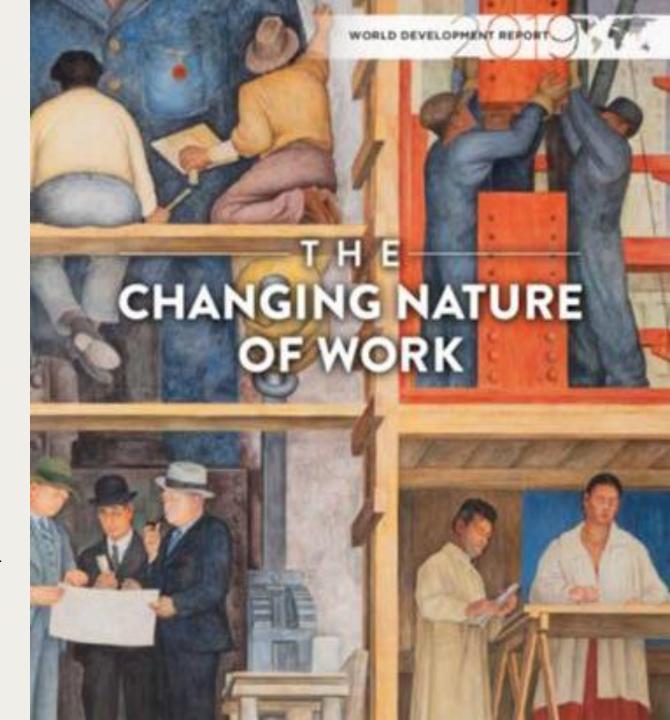
15th October 2025, Almaty, Kazakhstan

Regional workshop on Harmonisation of Veterinary Education: Aligning with WOAH Day-1
Competencies and Integrating One Health in Veterinary Curriculum



World Organisation for Animal Health Organisation mondiale de la santé animale

Organización Mundial de Sanidad Animal







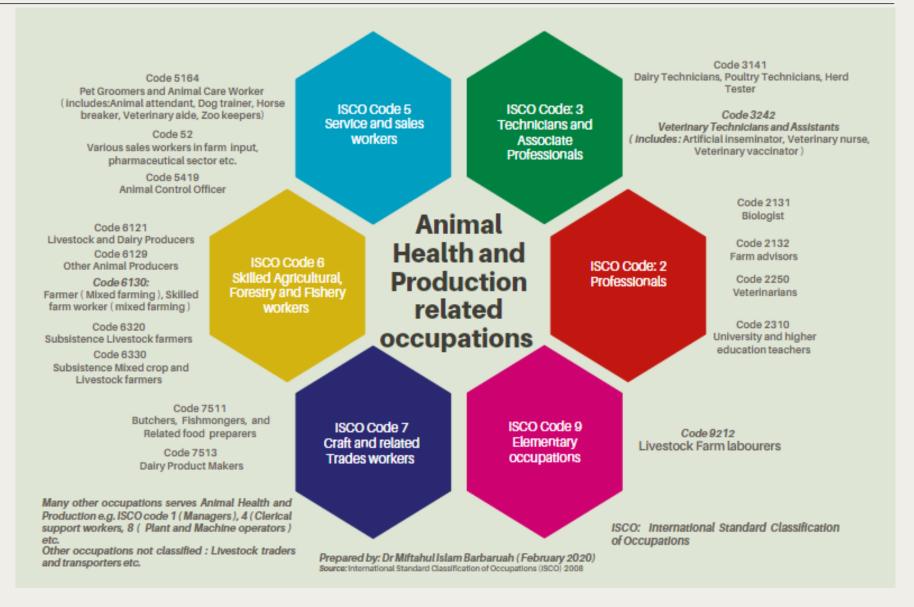
This presentation aims to help all of us relate to a few of the 'future of work' situations as we discuss to equip Veterinarians through initial and continuing education





The occupational landscape is likely to change fast





Source: Miftahul I. Barbaruah, Sonia Fèvre (2021): Veterinary workforce development: the relevance of skill qualification, education, and occupational frameworks, OIE Bulletin (01/2021) http://dx.doi.org/10.20506/bull.2021.NF.3162









If your students graduate in 2026, what kinds of roles will they be doing in 2036? Will ISCO or National classifications even capture them?"

Tomorrow's occupational map for veterinarians will look very different. Are we preparing for it?





Initial education is the launchpad; continuing education is the navigation system for an uncertain journey.



To face the uncertain future of work, every institution needs to develop a planned CE program for its employees aligned strategically with organisational policy.

How can WOAH help?

















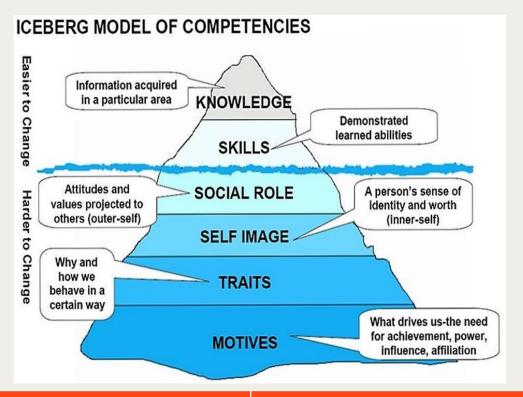












WOAH eLearning Platform

| Level | Knowledge | Skills | Competencies |
|-----------------------------|---|---|---|
| Day 1 Newly graduated | Basic factual and theoretical knowledge | Applying basic skills to tasks | Self-management, responsibility |
| Day 2 Mid-career | Specialised knowledge, critical awareness | Creative problem-solving and innovation | Decision-making, leadership in small teams |
| Expert Senior professionals | Advanced frontier knowledge | High-level expertise, critical evaluation | Strategic management, professional leadership |









The future of veterinary education will be outcomesbased. Skills (not time) will define qualifications, and investments in upskilling and reskilling will be guided by national and regional qualification frameworks.





- Level 6 - learning outcomes

| Knowledge | Skills | Responsibility and autonomy |
|---|---|---|
| Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles | Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study | Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups |

Level 7 - learning outcomes

| Knowledge | Skills | Responsibility and autonomy |
|---|---|---|
| Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research Critical awareness of knowledge issues in a field and at the interface between different fields | Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields | Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams |

- Level 8 - learning outcomes

| Knowledge | Skills | Responsibility and autonomy |
|--|---|---|
| Knowledge at the most advanced frontier of a field of work or study and at the interface between fields | The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice | Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research |





Veterinary education will increasingly need to "speak the same language" of outcomes, levels, and credits, making graduates and CPD training more transparent and portable across borders.









Tomorrow's public veterinarian may spend more of their week certifying food safety, auditing farms for welfare compliance, and advising on climate resilience measures than actually treating animals.

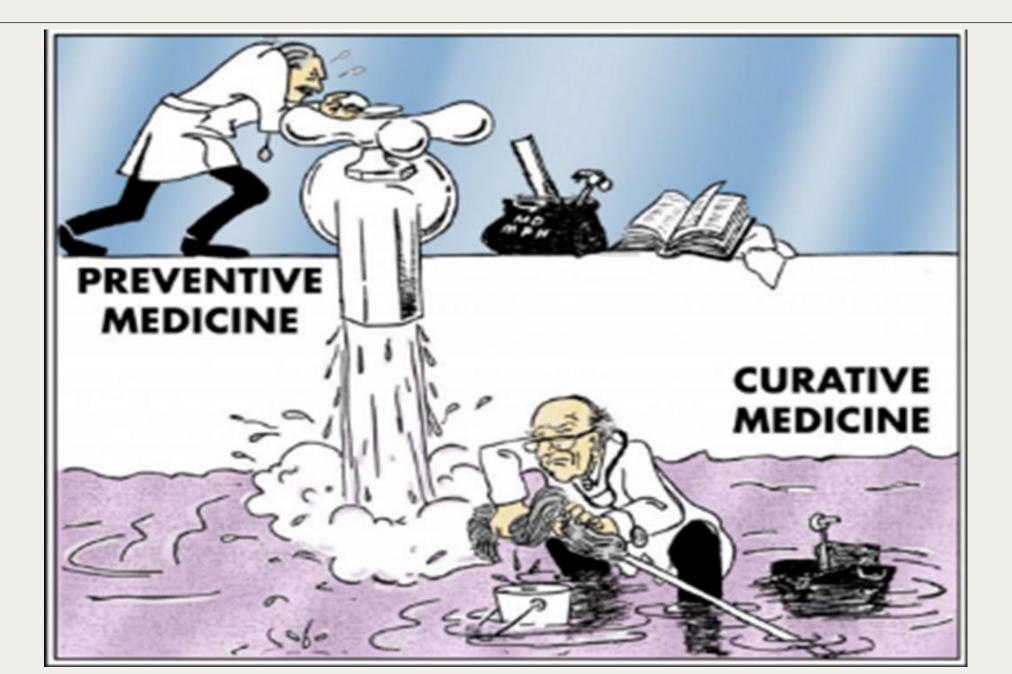




The private practitioner may increasingly act as a herd-health consultant, utilising data analytics to enhance productivity, rather than focusing solely on individual curative care.









"The veterinary role is shifting from treating illness to safeguarding health, productivity, and compliance; education must prepare graduates for prevention-first careers."

How should we respond to this reality in Initial and continuing veterinary education?









In tomorrow's world, evidence-based veterinary intervention will not be optional; it will be mandatory. This means every veterinary graduate and practitioner must be lab-literate, diagnostic-savvy, and data friendly to able to translate evidence into action.

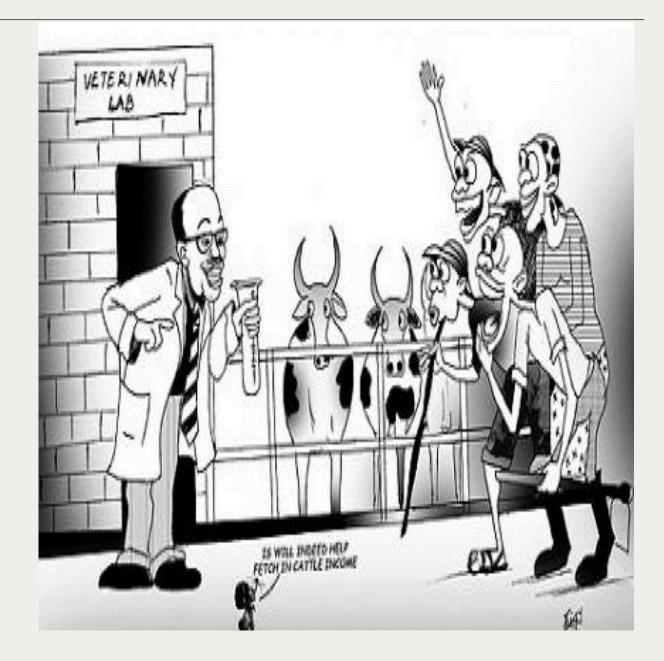




The demand for laboratory services in animal health, public health, and livestock production is increasing.

The Global Veterinary Laboratory Testing industry is projected to grow from USD 8.22 Billion in 2024 to USD 18.93 Billion by 2032, exhibiting a compound annual growth rate (CAGR) of 10.99% during the forecast period (2024 - 2032).

Market Research Future















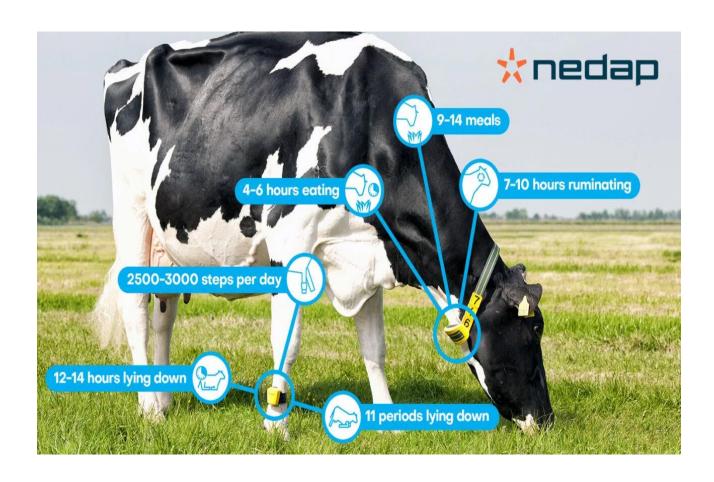


The future of veterinary work will be technologyenabled. Our challenge as educators is to ensure veterinarians are not just users of technology, but leaders who shape it to improve animal health, productivity, and One Health outcomes through both initial training and lifelong learning.





Technology-based herd health management and wellness-focused services are fast emerging.





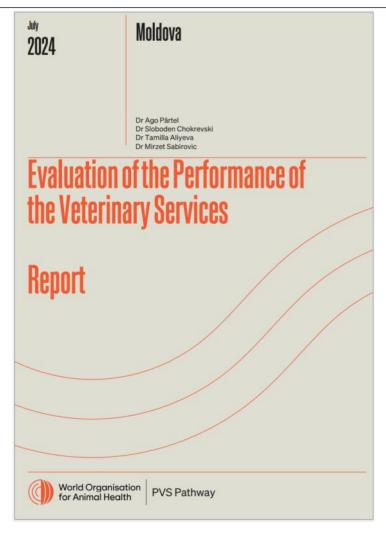


The future will not wait, so neither can veterinary education



It is imperative for educators to continuously scan the national and global environment for relevant changes, opportunities, and likely disruptions.



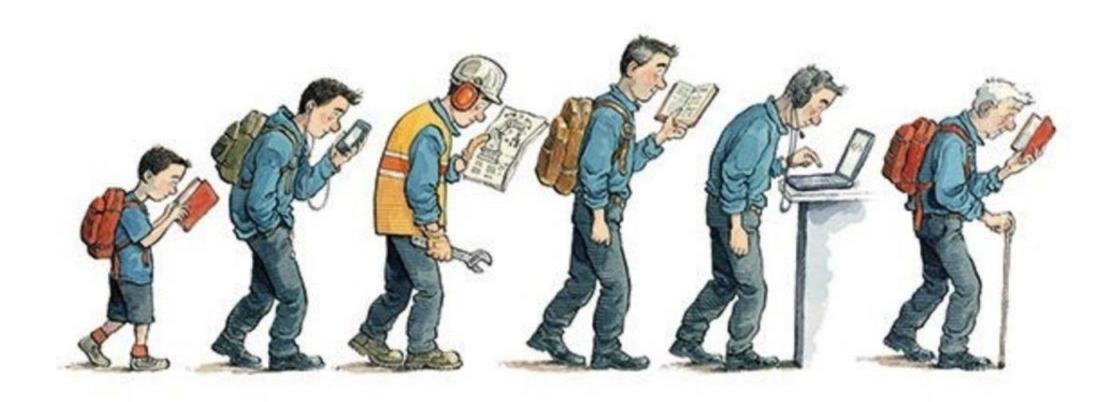




PVSIS PVS Document Repository







Source: Ravi Hutheesing

рақмет сізге Спасибо Thank you

Disclaimer: The images /icons/ cartoons used in this presentation are from various published sources. They are used for non-profit illustrative purposes only. The presenter claims no credit for any images/icons/cartoons used.

12, rue de Prony, 75017 Paris, France

T. +33 (0)1 44 15 19 49 F. +33 (0)1 42 67 09 87

woah@woah.org www.woah.org <u>Facebook</u>

<u>Twitter</u>

<u>Instagram</u>

<u>LinkedIn</u>

<u>YouTube</u>

<u>Flickr</u>



World Organisation r for Animal Health

Organisation mondiale de la santé animale

Organización Mundial de Sanidad Animal

