Global Plan of Action for One Health	
Towards a more comprehensive One Health approach to global health threats at the human- animal-environment interface	

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### Part I. Introduction

### I.1 Background

- The Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO) have been working successfully together for decades to address risks at the human-animal-environment interface and their collaborative work was formally described in April 2010 in the FAO/OIE/WHO Tripartite Concept Note<sup>[1]</sup>. This note established the objectives and principles for the collaboration among the three Organizations and the shared responsibilities for addressing health risks, with a focus on antimicrobial resistance, rabies, and zoonotic influenza.
- Subsequent strategic documents such as "<u>The Tripartite's Commitment</u>: Providing multi-sectoral, collaborative leadership in addressing health challenges" of October 2017 and the Memorandum of Understanding of May 2018 further outlined actions and commitments amongst the three organizations to provide multi-sectoral, collaborative leadership in addressing health challenges and to enlarge their collaboration to embrace the One Health approach more broadly, recognizing that human health, animal, and environmental health are connected.
- The Tripartite collaboration is governed by an executive committee of senior representatives of the three organizations, which holds Annual Executive Meetings with a rotating chairmanship and the support of a Tripartite Secretariat. In the 27th Tripartite Annual Executive Meeting held in February 2021, the three Organizations called upon the United Nations Environment Programme (UNEP) to join the Tripartite, reaffirming the importance of environmental dimension in the context of the One Health collaboration. In the face of the global COVID-19 pandemic and the increasing international support to One Health, the Tripartite Executive agreed to establish a joint task force "to develop a joint vision on One Health implementation, inter-sectoral collaboration, political will, and linked to resource mobilization".
- Following the 27<sup>th</sup> Tripartite Annual Executive Meeting, the FAO Programme Committee in its 130<sup>th</sup> session (March 2021) requested the joint development, by the Tripartite (FAO/WHO/OIE) and others, of a strategy and action plan to prevent future zoonotic pandemics through the One Health approach.
- The Global Plan of Action for One Health (2022-2026) (GPA) set out in this document replies to these requests and draws its mandate from the <u>WHA74.7 resolution</u> calling "to build on and strengthen the existing cooperation among WHO, FAO, OIE and UNEP to develop options, for consideration by their respective governing bodies, including establishing a common strategy on One Health, including a joint workplan on One Health to improve prevention, monitoring, detection, control and containment of zoonotic disease outbreaks".
- The GPA is intended to guide the four organizations to work together on One Health with the aim of supporting their Members to build One Health capacities and is not a binding policy document. It provides a framework for action and proposes a set of activities that the four organizations can offer together to enable countries to advance and scale up One Health in managing human, animal, plant and environment health threats. The framework uses a One Health approach to strengthen collaboration, communication, advocacy, and coordination equally across all sectors responsible for addressing health concerns at the human-animal-plant-environment interface.

- The GPA builds on, complements, and adds value to existing global and regional One Health and coordination initiatives aiming at helping countries face complex multidimensional health risks with more resilient health systems. It also considers regional specificities, national contexts, and priorities, as well as the level of progress in the implementation of One Health policies, strategies, and interventions.
- The GPA is developed through a participatory process and reflects the inputs from FAO, OIE, UNEP, WHO, the One Health High Level Expert Panel (OHHLEP) and other key partners as well as Members through various consultations.
- The GPA will be implemented over a period of 5 years (2022-2026). It is intended as a living document open to potential adjustments at a later stage to reflect progress, new challenges, and available resources in line with what the Tripartite and UNEP may decide upon.

### I.2 Global health threats at the human-animal-plant-environment interface

- Economic development has led to tremendous improvements in people's well-being, but often at the expense of the environment. With the human global population soon to reach 8 billion, the demands on the environment are tremendous and will continue to grow. The earth's natural resources have been used at a faster rate than they can be replenished using unsustainable and destructive practices and without consideration of the surrounding ecosystem.
- The growing demand for food has led to intensification of agricultural production, large scale deforestation, loss of biodiversity threatening ecosystem integrity with increased risk for health threats at the human-animal-plant-environment interface affecting disproportionally the poorest countries with vulnerable sanitary regulation and infrastructure. These risks are exacerbated by expanding urbanization, changes in food consumption patterns and lengthening of food chains, increased global trade and travel, as well as climate change.
- The effects of environmental degradation influence the relationships between health, food production, and environmental systems- and call for a global risk analysis and reassessment and transformation of the interactions between humans, animals, plants, and the ecosystems they share with the aim to ensure human, animal and plant health and wellbeing, including economic, environmental, and social sustainability. This is critical to maintain progress towards many of the Sustainable Development Goals (SDG).

### I.2.1 Environmental health threats

- Environmental degradation due to both natural and human-caused events is a root cause of several health threats that are invariably complex and rooted in how humans interact with and use the environment. The following are examples of environmental hazards that are negatively affecting the health of people and many other species.
- Environmental contaminations, such as with pollution of water, air and soil cause significant adverse health outcomes in humans, wild and domestic animals, especially in countries with social disparities and a lack of information on sustainable management of the environment. A number of chemical substances may occur in the food supply as a result of environmental contamination. Their effects on health may be extremely serious and have caused great concern in recent years. For example, heavy metals such as lead or mercury and other toxic chemicals (e.g., microplastics) in aquatic ecosystems bioaccumulate in the food chain with negative health consequence in humans and animals. Similarly, air pollution from different sources can have a disastrous effect on all components of the environment, including groundwater, soil, and air, with a serious threat to all living organisms.

- Unsafe water and poor sanitation and hygiene are responsible for human mortality and morbidity as a result of various diseases affecting particularly vulnerable populations in low resource countries. Unintentional poisonings associated mainly with excessive exposure to, and inappropriate use of, toxic chemicals and pesticides present in occupational and/or domestic environments are heavily affecting human health particularly in low-income countries. Intoxication by mycotoxins and biotoxins is another problem of concern. These substances may cause serious adverse effects in humans, as well as in animals.
- The impacts of environmental degradation on health and well-being are compounded by climate change, which acts as a multiplier of these threats, exacerbating their impact while also undermining the resilience of environmental and ecological systems through complex processes.
- The effects of climate change on disease and the health status of people, livestock and wildlife may have several possible outcomes. Some of the most dramatic effects are likely to be seen among insect vectors, such as mosquitoes, midges, ticks, fleas and sand flies, and the pathogens they carry. With changes in temperatures and humidity levels, the populations of these vectors may expand beyond their present geographic range and expose animals and humans to diseases to which they have no natural immunity.

### 1.2.2 The perpetual challenge of emerging infectious diseases

- Infectious diseases represent one of the most significant health and security challenges facing the global community. In low-income countries infectious diseases represent over 60% of disease burden creating a considerable threat to the wellbeing of both human and animal populations. Infectious diseases may be caused by novel pathogens that emerge or reemerge from either humans or animals with the risk to develop into deadly epidemics or pandemics as has been shown by the current COVID-19.
- Most emerging infectious diseases (more than 60%) are of zoonotic origin with the majority of these (70%) originating in wildlife. These threats are significantly increasing in frequency and severity over time with tremendous long-term impacts. The COVID-19 pandemic is the latest emergence or re-emergence of a major zoonotic disease in the two decades since 2000, in addition to severe acute respiratory syndrome (SARS), Nipah virus disease, zoonotic influenza (H5N1, 2009 H1N1 influenza pandemic), Zika, Ebola virus disease and Middle East Respiratory Syndrome (MERS-CoV).
- Emerging infectious diseases are topped in the WHO's 2018 blueprint by an unknown "Disease X" simulating the next most serious disease threat that could reportedly emerge from multiple sources and may strike at any time. Today's Disease X is COVID-19, but there will surely be others.
- These emerging infectious diseases—are striking examples of how these infections threaten global health security<sup>1</sup>, contribute to food insecurity and burden national economies and governmental resources. The effects of these diseases have also wider reaching negative impacts on animal health and welfare, for example through the collapse of markets and trade with knock-on effects on animal production units and conservation of wild animal populations.

### 1.2.3 The persisting burden of Endemic Diseases of Zoonotic and Vector-borne Origin

- In contrast to epidemic- and pandemic- prone zoonotic diseases, neglected zoonotic diseases (NZDs) place a constant social and economic burden on many vulnerable and marginalized

<sup>&</sup>lt;sup>1</sup> For the purpose of this document global health security considers all activities required, both proactive and reactive, to minimize the impact of global health threats that endanger the health of humans, animals, plants, and their environment across geographical regions and international boundaries

- populations, particularly in low-income countries. NZDs are frequently endemic and do not move fast or widely. They tend to be concentrated in localities where they perpetuate poverty by attacking not only people's health but also their livelihoods.
- NZDs comprise an important group of bacterial, parasitic, and viral diseases, many of which are classified as neglected tropical diseases<sup>2</sup>. Of concern are several zoonotic endemic diseases such as rabies, anthrax, brucellosis, bovine tuberculosis, cysticercosis and echinococcosis, which perpetuate poverty by attacking not only people's health but also their livelihoods. These diseases cause considerable economic hardship but receive little national or international attention and resources. Most of these diseases are preventable and despite notable progress in controlling some of them, they remain vastly underreported and are often missed by formal surveillance systems.
- Diseases transmitted by vectors such as mosquitoes, fleas or ticks remain major concerns, posing challenges throughout the world, with diseases such as Japanese encephalitis, West Nile virus infection, dengue fever, Plague, Lyme disease and Rift Valley fever resurging or appearing in new areas causing local or regional epidemics potentially with greater impact.
- Vector-borne diseases account for more than 17% of all infectious diseases, causing more than 700,000 deaths annually. The burden of these diseases is highest in tropical and subtropical areas, and they disproportionately affect the poorest populations.

### 1.2.4 The global upsurge of food safety hazards

- Food-borne hazards have taken on new dimensions with complex food safety challenges around the globe. Hazards, including zoonotic and non-zoonotic pathogens and contaminants, such as chemicals, can enter at any point along the food chain, beginning prior to harvest up until the time it is consumed or disposed of.
- Foodborne diseases are caused by the ingestion of contaminated food and comprise a broad group of illnesses caused by enteric pathogens, parasites, chemical contaminants, and toxins. Unsafe food is estimated to cause 600 million cases of foodborne illnesses and over 400,000 deaths annually around the world3. The total productivity loss associated with foodborne diseases in low- and middle-income countries is estimated to cost \$95.2 billion per year, and the annual cost of treating foodborne illnesses is estimated at \$15 billion<sup>4</sup>.
- In addition to the traditional food-borne disease species such as Escherichia, Salmonella and Campylobacter, new pathogens are emerging, and more foods can now transmit potential foodborne pathogens. Live animals carry zoonotic microbial hazards causing diseases like campylobacterosis, brucellosis, trichinellosis and hepatitis E. Other hazards may contaminate food from the processing environment (e.g., Salmonella, unsafe levels of food additives) or from food workers (e.g. norovirus). Chemical contaminants may also enter the food chain prior to

<sup>&</sup>lt;sup>2</sup> Buruli ulcer, Chagas disease (American trypanosomiasis), Dengue and Chikungunya, Dracunculiasis (Guinea-worm disease), Echinococcosis, Foodborne trematode infections, Human African trypanosomiasis (sleeping sickness), Leishmaniasis, Leprosy (Hansen's disease), Lymphatic filariasis (Elephantiasis), Mycetoma, chromoblastomycosis and other deep mycoses, Onchocerciasis (river blindness), Rabies, Scabies and other ectoparasitoses, Schistosomiasis (Bilharzia), Soiltransmitted helminthiases, Snakebite envenoming, Taeniasis and cysticercosis, Trachoma, Yaws (Endemic treponematoses)

<sup>&</sup>lt;sup>3</sup> WHO report on the burden of foodborne diseases: https://www.who.int/publications/i/item/9789240012264

<sup>&</sup>lt;sup>4</sup> World Bank report:

https://documents1.worldbank.org/curated/en/484371545400065950/pdf/133154-PUB-PUBLIC-9781464813450.pdf

- harvest such as veterinary drug residues in animals and pesticides on plants or heavy metals through pollution of air, water, and soil, thereby affecting human and animal health.
- Unsafe food containing harmful pathogens or chemical substances create a vicious cycle of illness and malnutrition particularly for vulnerable people. Food safety and nutrition are inextricably highlighting the importance of food safety as an integral part of food and nutritional security within the broader perspective of agri-food systems.

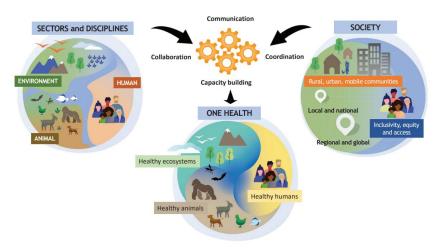
### 1.2.5 The growing threat of Antimicrobial Resistance

- Added to the abovementioned threats, is the silent but growing rise of Antimicrobial Resistance (AMR). The increasing human population and the related increased demand for animal protein, exacerbates the use of antimicrobials in humans, animals, and plants and, thereby, drives the risk of exponential rise of AMR as a global threat.
- Antimicrobials play a crucial role in the health of humans, animals, and plants, as well as in food safety and food security. However, antimicrobial resistance is an ever-increasing threat, driven by overuse and misuse of antimicrobials in human, animal, and plant sectors. There are many social and environmental factors that accelerate the emergence and spread of resistant genes and pathogens among and between humans, animals, and the environment. These include insufficient access to health services, inadequate housing, lack of clean water, poor sanitation, hygiene and human and animal waste management, as well as lack of awareness and education about AMR and appropriate antimicrobial use (AMU).
- With antimicrobials becoming less effective, more challenges have been brought to infectious disease treatments and control with increased risk of human mortality. AMR also threatens the health of animals and plants grown for food with effects on food security, food safety and the environment.

### I.3 Global health threats require sustainable solutions

- The complexity and interconnectedness of the above health challenges shared between humans, animals, plants, and their environment require integrated solutions with focus on a systems approach that incorporates wider structural factors and systemic prevention measures integrating human, animal, plant, and environmental health. Better understanding of links between systems and drivers triggering and regulating disease dynamics, as well as identifying what can be modified or changed to reduce the threat, will generate shared benefits to human, animal, plant, and ecosystem health.
- This shift requires embracing a collaborative, multisectoral, and transdisciplinary approach, namely implementing One Health, to move beyond the siloed approaches that are still currently adopted by many health systems with the aim to enable and institutionalize inter-sectoral knowledge sharing, intelligence gathering and response planning at all levels of the responding organizations and ensure that there are protocols for alerting decision-making levels to threats and intersectoral action response plans.
- One Health is not a new concept, but it has received renewed attention and evolved over the last decade. One Health calls for a holistic and systems approach recognizing the interconnection between the health of people, animals and plants, and the health of environments in which they coexist. The recently established OHHLEP as an independent advisory group of the Tripartite and UNEP has recently released a comprehensive definition of One Health:

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent. The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development.



- One Health, can enable better understanding of the root causes and drivers of disease
  emergence, spread and persistence, impacts of biodiversity loss and environmental degradation,
  provide a more effective assessment of risk, facilitate the development of appropriate risk
  management strategies and inclusive evidence-based policies to strengthen and develop
  sustainable health systems and ecosystems and consequently help building social, ecological,
  and economic resilience.
- This thinking clearly indicates the value of adopting a systems approach to integrate knowledge and perspectives from many parts of the system and work towards positive outcomes for people, animals, plants, and ecosystems, while increasing investment in developing health systems underpinned by prevention, early detection, preparedness and coordinated crosssectoral prompt response to reduce the risk of disease emergence and future pandemics.
- One Health is a powerful approach that can enable achieving health for people, animals and nature, food security and safety, and environmental protection, and therefore can help pave the way towards achieving many of the SDGs, including those on poverty, hunger, health and well-being, inequality, clean water and sanitation, work and economic growth, responsible consumption and production, and partnerships.

### I.4 Implementation of One Health

One Health has been increasingly recognized as an effective approach to the control of and response to health threats to humans, animals, and ecosystems, including zoonotic diseases, vector borne diseases, food safety hazards, AMR, pollution, global temperature increase, and resource scarcity. One Health can be applied to establish a transformative approach to increasing sustainable practices in agriculture and improving food security. In the past years, application of One Health has also increasingly embraced systems thinking and advocated for

structural and operational solutions at the level of the system that promote equality, health for all living beings and sustainability.

- The increasing support for the One Health concept has led to the establishment of several global initiatives around the world, adopting and advancing a One Health approach to address global health threats. With significant investments by funding partners, One Health initiatives and networks are also emerging worldwide, with many countries and regions encouraging collaboration among health professionals and other disciplines and working from community to global levels across sectors and institutional divides.
- Despite this wide support and engagement, implementing One Health in practice still proves challenging, facing technical and institutional barriers, in addition to sustainability concerns, competing priorities, and funding deficiencies. The One Health concept has evolved by its broadening of scope. However, environmental considerations, socio-economic factors in disease emergence and spread, and the cost and benefits of One Health interventions have not been sufficiently integrated into the development and implementation of One Health interventions, policies, strategies, and programmes. The role of the environment in the human-animal-environmental triad has not been clearly defined and well understood by all sectors.
- The environmental sector, which consists of areas such as natural resource management, wildlife management and conservation, and biodiversity, have not previously been incorporated into the One Health approach and subsequently have had little exposure to its meaning and engagement in cross-sectoral initiatives.
- Professional segregation, lack of data sharing and openness, siloed budgets and decision-making processes, and the lack of legal support, regulatory and mandate constraints, and enabling policies are additional barriers hindering effective implementation of One Health particularly at regional, national, and sub-national levels.
- One Health needs continued institutionalization with greater awareness among all stakeholders, cross sectoral competencies and capacities, joint workforce trainings, effective governance rooted in transdisciplinary and multisectoral principles and appropriate legislation, stakeholder and community engagement, integration of the concept into related disciplines' education, and a renewed emphasis with key interventions and collaborations at all levels to move towards a more sustainable healthy and safer world.

### I.5 Rationale of the Global Action Plan

- The global COVID-19 pandemic and its profound impact on human health, societies and economies highlighted interconnectedness of our health and food systems and nature and has revealed vulnerabilities at all levels. Assessment of these complex interactions warn us that future pandemics will emerge more often, spread more rapidly, do more damage to the world economy, and kill more people than COVID-19 unless there is a transformative change in the global approach to dealing with disease emergence and spread, from reaction to prevention and preparedness. Although this warning has been on the international agenda for many years, the COVID-19 crisis has reiterated the urgent need for this route of change.
- The need for this transformative change goes in line with the increasing high level political support to One Health as a sustainable, efficient, and cost-effective solution to manage health threats associated with interactions between humans, animals, plants, and the environment.
- In the face of the increasing number of multidimensional health challenges that the world is facing, a shared vision of coherent and coordinated action at all levels is more important than ever. The Tripartite and UNEP consider this international dynamic a unique opportunity to take their partnership to a new level and stand together as a global coalition to jointly drive change

- and achieve the transformations required to mitigate the impact of current and future health challenges at global, regional, and country levels.
- The GPA embraces this global vision to further strengthen the comprehensive One Health and foster the change pathways required for successful implementation at all levels. The GPA is motivated by the urgent need for global governance in One Health, in which the Tripartite and UNEP play a leading role in advancing One Health collaboration and interventions to reduce risks to public and global health in connecting health systems of humans, animals, and the environment.
- The GPA adopts One Health with a broader perspective integrating a systems approach to support healthy people, healthy animals, healthy plants, and healthy ecosystems, while addressing the underlying factors to disease emergence, spread and persistence, and the complex economic -social and environmental determinants of health. By integrating the environmental dimension towards a more extended understanding of disease emergence and spread, as well as the role of ecosystems in disease regulation, One Health can unfold its entire capacity thereby improving prevention, preparedness and mitigating the impacts of disease, implementing sustainable solutions, and promoting health for all life on the planet holistically in the long term.

### I.6 The Scope of the GPA

- The scope of the GPA is guided by the areas of One Health collaboration defined in the strategic documents of the Tripartite (Concept note 2010 and 2017), the revised Tripartite MoU (2021) which formally includes UNEP as partner of the Tripartite, as well as the One Health recommendations and resolutions from the different Tripartite governing bodies to support achieving public health, animal health, food safety and security, and environmental health.
- The GPA encompasses the priority areas of the Tripartite work plan 2019-2021 and provides an overarching framework for longer-term actions. Specifically, the GPA addresses the risks and consequences of health threats shared by people, animals, and the environment with focus on emerging zoonotic diseases with epidemic and pandemic potential, endemic diseases of zoonotic and vector-borne origin, food safety hazards, AMR, and environmental contaminations. The GPA establishes the need for an inclusive One Health approach to address these threats in an integrated manner, while promoting environment and biodiversity protection and acknowledging the broader systems benefits of cross-sectoral collaboration to achieve collective outcomes.
- Non zoonotic epidemics of transboundary animal diseases and their risk factors can seriously impact society, economic trade, food security, and the health and well-being of humans, and can also benefit from a One Health approach involving collaboration across disciplines and sectors. Despite the close links, these diseases are not specifically addressed in the GPA but are considered at the system level in the broader framework of capacity building, coordination, and resources. To this effect the GPA is strategically linked to the Global framework for progressive control of transboundary animal diseases (GF-TADs) and associated tools and mechanisms.
- The GPA is a technical document informed by evidence, best practices, and existing guidance from the Tripartite and UNEP. It offers a set of practical actions for the Tripartite and UNEP, countries, international partners, and non-State actors such as civil society organizations, professional associations, academia and research institutions. Implementation of proposed actions at the national level considers national contexts, priorities, and resources.
- The GPA is strategically linked to and aligned with other relevant global action plans and initiatives, including the <u>Global Action Plan for AMR</u>, the <u>road map for neglected tropical</u>

diseases (2021–2030; WHO), the Global Strategic Plan to eliminate human deaths from canine rabies by 2030 (Zero by 30) and the Roadmap for Zoonotic Tuberculosis, the CBD Global Action Plan on Biodiversity and Health, the OIE wildlife heath framework and the upcoming joint FAO/WHO food safety implementation framework, among others. The GPA will complement these initiatives while facilitating and supporting their implementation at country level taking a coordinated One Health approach.

### Part II. The action framework

### II.1. Theory of change

The theory of change (ToC) for the GPA argues that One Health as an integrated, multisectoral, holistic and transdisciplinary approach has the potential to solve increasing global health challenges at the human, animal, and environmental interface. Effective implementation of One Health at all levels becomes therefore necessary in order to address complex health interfaces simultaneously and can make significant contribution to the impact and outcomes of the GPA and achieve sustainable and lasting results.

As mentioned in the previous section there are numerous technical, coordination and institutional challenges impairing effective implementation of One Health particularly at national and subnational levels, requiring a radical and transformational global intervention with impact at country level. The GPA seeks to remove these barriers to enable progress towards improved human, animal, ecosystem health outcomes.

The ToC is supported by three pathways to change that represent the areas where the four organizations have the greatest capacity to bring about significant and sustainable change towards the expected medium and long-term outcomes. These three change pathways are:

Pathway 1: Policy, advocacy, and financing: encompasses all aspects related to policy development, political will, enabling regulatory frameworks, Institutionalization of intersectoral governance

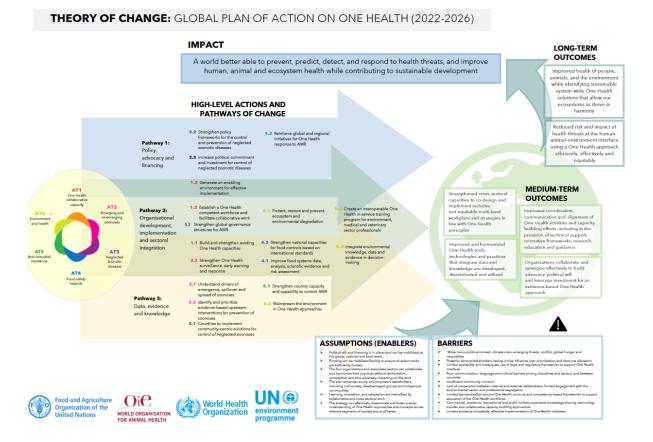
Pathway 2: Organizational development, implementation, and sectoral integration: encompasses all aspects related to implementation of One Health intervention including scaling up of capacity development at regional and country levels, Community engagement and mobilization for action, Multisectoral coordination, collaboration and communication, and equal integration of sector.

Pathway 3: Data, evidence, and knowledge: encompasses Strengthening scientific evidence base, Knowledge translation into data for evidence, technical tools, protocols and guidelines, information, and surveillance systems.

The GPA is built around 6 Action Tracks (see next section) with specific objectives to achieve the expected medium-term outcomes of the GPA. Each objective is associated with implementation of 19 high level actions each with a set of specific activities with clear deliverables and timeline. The Action Tracks are the thematic pillars of the GPA and therefore considered as the first building block of the ToC. The Action Tracks and their high-level actions are mapped out across the three pathways to collectively drive change to the outcomes of the GPA, contributing towards the desired impact.

The Theory of Change is underpinned by key assumptions that must exist to create an enabling environment and also barriers that prevent the GPA outcomes in the causal pathway from being achieved. Activities contributing to high level actions in each action track were designed to work around these barriers.

The figures below gives an overview of the Theory of Change for the GPA. *Note: The professional design of this visual is currently underway.* 



### II.2 Impact, outcomes, and operational objectives

The vision (impact) of the GPA expressed as the desired impact within a 15-20-year timeline is:

A world better able to prevent, predict, detect, and respond to health threats, and improve human, animal and ecosystem health while contributing to sustainable development.

**The goal** is expressed in two long-term outcomes expected to be achieved in alignment with the 2030 development agenda:

**Long-term outcome 1**: Improved health of people, animals, and the environment while identifying sustainable system-wide One Health solutions that allow our ecosystems to thrive in harmony

**Long-term outcome 2:** Reduced risk and impact of health threats at the human-animal-environment interface using a One Health approach efficiently, effectively, and equitably.

To achieve the long-term outcomes the GPA will accelerate action towards four key medium-term outcomes by 2026:

**Medium-term Outcome 1:** Organizations collaborate and synergize effectively to build advocacy, political will, and leverage investment for an evidence-based One Health approach.

**Medium-term Outcome 2:** Improved coordination, communication and alignment of One Health activities and capacity building efforts, including in the provision of technical support, normative frameworks, research, education, and guidance.

**Medium-term Outcome 3:** Strengthened cross-sectoral capacities to co-design and implement inclusive and equitable multi-level workplans and strategies in line with One Health principles.

**Medium-term Outcome 4:** Improved and harmonized One Health tools, technologies and practices that integrate data and knowledge are developed, disseminated, and utilized.

#### **Operational objectives**

The GPA sets out the following operational action-oriented objectives which are interlinked with the goals and outcomes of the GPA:

- Provide a framework for collective and coordinated action to mainstream One Health approach at global, regional, national and community levels, to reduce the risk of health threats at the human-animal-environment interface.
- Support national efforts with upstream policy advice and technical assistance, to set national targets and priorities across the sectors for the development and implementation of One Health initiatives and programmes using a multisectoral, multidisciplinary approach.
- Promote collaboration, learning and exchange within and across nations, sectors, disciplines, and groups of society for collective generation of knowledge and solutions.
- Provide oversight on existing cross-sectoral global and regional initiatives around One Health, identify and advise on synergies and overlaps, and support coordination.
- Mobilize and make better use of resources across sectors, disciplines, and stakeholders.

### **II.3** Guiding principles

The following guiding principles establish a set of values to guide the development and implementation of the GPA at every level.

**Cooperation and shared responsibility.** The GPA emphasizes One Health as a shared responsibility and recognizes the crucial role of cooperation among countries, regional organizations, and other international organizations and stakeholders in supporting countries' efforts to effectively address the health threats identified in this GPA. The GPA recognizes the expertise and abilities of these key stakeholders as essential resources for its effective implementation, coordination, and oversight.

**Multisectoral action and partnership**. Development and implementation of the GPA at all levels require the concerted multisectoral action with engagement by all relevant sectors, as appropriate, to address the challenges. Implementation of GPA should also foster collaboration across and between all stakeholders at all levels, guided by a shared vision to realize the multiplicative benefits of a more comprehensive One Health.

**Gender Equality**. All efforts to implement the GPA must support gender equity and women's empowerment, and take a gender-sensitive perspective, keeping in mind all vulnerabilities specific to each national context, consistent with the 2030 Agenda for Sustainable Development.

**Inclusiveness and equity:** The GPA adopts a conducive framework to enhance inclusiveness and equity in the formulation of One Health policy and practice at national and subnational levels. Implementation of the GPA emphasizes the importance of addressing inclusively and respectfully all stakeholders including local communities and organizations. These local stakeholders have a central role in the identification of the local challenges and in the design and implementation of locally adapted One Health solutions. Local and traditional knowledge should be recognized and mobilized

in tandem with scientific knowledge and research results generated through various activities of the GPA.

### Part III. Strategic action tracks

The GPA is structured around 6 action tracks (areas of action) to address key health challenges at the human, animal and environmental interface that require a One Health approach. The action tracks are interdependent and do not fall in silos. In combination, they capture a systems approach required to reduce health threats shared by humans, animals and their environment and contribute to achieving sustainable health and food systems, and improved ecosystem management.

Action tracks will be supported by the following cross cutting issues, including (i) Adopting system thinking, (ii) Fostering advocacy and communication and Public-Private Partnership, (iii) Enhancing governance and legal frameworks, and (iv) Using traditional knowledge of local and indigenous communities. These cross-cutting issues are adopted to find the connections across the six action tracks and help to look at underlying issues that are the same for all.

# Action Track 1: One Health collaborative capacity to strengthen health systems and promote healthy ecosystems

One Health aims to promote the health of people, animals, plants, and nature and to manage risks at the human-animal-environment interface, such as zoonotic diseases. To achieve this, multisectoral and interdisciplinary coordinative mechanisms and collaborative capacity are needed.

Health for all depends heavily on the protection of ecosystems and their interconnectedness with people, animals, and plants. Healthy ecosystems are intact in their components and interrelationships, such that they are resilient to withstand change and stressors and allow a wide range of living beings to thrive. Healthy ecosystems allow people, animals, and plants to have health and thereby enable sustainability. Efforts are needed to promote environmental sustainability, including preservation of biodiversity and to prevent further environmental degradation and depletion.

Functioning and effective health systems also have a major role to play. They help with the prevention and management of infectious zoonotic and production diseases, antimicrobial resistance, food safety, and other hazards.

Because of the breadth of these issues spanning human health, animal health, and environmental health and their systemic linkages, effective interdisciplinary and interagency collaborations, supported by a One Health approach, are required. Effective One Health coordination is needed to dismantle existing barriers caused by professional and sectoral segregation and implement mechanisms that allow: (i) addressing issues holistically, (ii) dealing with complexity and ambiguity, (iii) negotiating trade-offs and identifying win-win solutions, and (iv) agreeing on priorities, funds, and collective actions (including monitoring and evaluation). Ideally, this would happen with the engagement of representatives of the relevant sub-systems from all levels, including citizens. A wide engagement of people with different expertise and experience will allow bridging the partiality of disciplinary and sectoral knowledge in complex systems. The lessons of COVID-19 to build a better, more holistic, and integrated system will be considered to develop such One Health collaborative systems.

This action track is overarching and focuses on strengthening One Health collaborative capacity to support global, regional, and national One Health coordination for the integrated management of issues at the animal-human-environment interface and to promote the health of humans, animals, plants, and ecosystems; it is cross-cutting and may impact on the other action tracks. It includes the

definition of expected One Health competencies and capacities, One Health needs assessments, creation of processes for agreement on desired outcomes for the health of people, animals, and ecosystems; joint prioritization and decision-making considering human, animal and environmental needs and effects; comprehensive risk analysis at the level of the system, and the creation of enabling environments for One Health operationalization.

### **Objective:**

Strengthen One Health capacities and provide adequate guidance and tools for effective implementation of multisectoral approaches in promoting the health of humans, animals, plants, and ecosystems and preventing and managing risks at the human-animal-environment interface

### Action 1.1. Establish what One Health capacities are available and needed and make plans to build or strengthen them

This action is dedicated to establishing the foundations for collaborative capacity in One Health to (i) tackle risks arising at the human-animal-environment interface and (ii) promote healthy ecosystems for health for all. It has a focus on systems thinking, needs assessment, and planning and includes activities that are intended to generate concrete methodologies, competencies, and tools to design One Health collaborative work capacity at global, regional, national, and local level. It requires definition of One Health capacities and competencies and analysis of existing gaps and the capacity to design, plan, and implement leadership, decision making, strategies, and governance; sustainable frameworks, infrastructures, and competencies; affordable economic models and financial mechanisms; monitoring and evaluation processes.

### **Key activities**

- 1.1.1 Establish One Health governance framework and use it to analyze national governance and regulatory frameworks for One Health and identify gaps.
- 1.1.2 Define One Health collaborative competency and capacity for institutions and individuals and use to assess national One Health performances and identify needs.
- 1.1.3 Define planning mechanisms for One Health coordination, governance, and capacity building at global, regional, national, local levels
- 1.1.4 Define processes and develop methodologies for strengthening countries preparedness and capabilities to tackle risks from emerging and re-emerging pathogens and diseases, leading to the improvement of the health of people, animals, and the environment at the systems level
- 1.1.5 Design a monitoring and evaluation framework for continuous improvement of the organizations' and countries' One Health actions, performances, and capacities
- 1.1.6 Establish financial needs to build One Health collaborative capacity
- 1.1.7 Advocate for and promote political prioritization of One Health collaborative work in regional, national, and local sustainable development strategies and plans

### Action 1.2. Generate mechanisms, tools, and capacities to establish a One Health competent workforce and the frameworks/processes to facilitate One Health collaborative work

This action represents One Health at work and proposes a set of activities to develop resources, tools, mechanisms, and solutions to operationalize it. It also builds on a number of existing programmes and generates competent One Health enablers and facilitators as well as the structures and frameworks to facilitate One Health collaborative work in practice so that the competent workforce will be able to mobilize multiple competencies towards coordinated approaches and efforts.

### Key activities

- 1.2.1 Facilitate the implementation of joint processes and workplans for multisectoral One Health working
- 1.2.2 One Health capacity building implementation, including workforce development
- 1.2.3 Support and promote the next generation of One Health practitioners, researchers, and technical officers
- 1.2.4 Develop frameworks and mechanisms for public participation, including indigenous people, and vertical integration in One Health
- 1.2.5 Promote One Health cross-sectoral collaboration and partnerships, including PPP
- 1.2.6 Develop operational tools to support science-based One Health coordinated strategic technical actions
- 1.2.7 Assure the implementation of processes and mechanisms for an adequate use of the integrated One Health information, surveillance and emergency response systems considering humans, animals, food, plants, and ecosystems

#### Action 1.3. Generate an enabling environment for effective implementation of One Health

This action is key to assure the One Health approach can be used in its full potential. It spans several activities from the regulatory framework to the availability of sustainable financing, from information systems to technologies, from transparency to communication. Essentially, all the support structures that are needed to help One Health collaborative work operate effectively. These build an important foundation also for the other action tracks and will facilitate the four organizations as well as their member countries

### Key activities

- 1.3.1 Implement One Health transparent and trusted collaborative governance, regulatory frameworks, and collaboration mechanisms
- 1.3.2 Build effective communication structures and information systems across organizations, sectors, and society
- 1.3.3 Generate mechanisms for joint funding and resource mobilization
- 1.3.4 Promote One Health task forces and working groups for internal coordination

### Action track 2: Emerging and re-emerging zoonotic epidemics and pandemics

Emerging and re-emerging zoonotic pathogens with epidemic and pandemics potential represent a major threat to humans, animals, and the planet for their immense health, social, economic and security impact. Preparedness, prevention, early warning, early detection, and response to these threats require coordinated multisectoral and interdisciplinary approaches, integrating environmental dimension to preserve biodiversity, build resilience, and lead to sustainable health and food systems. Cohesive and collaborative global efforts that tackle emerging diseases at their source are imperative.

This action track focuses on i) understanding the drivers of re/emerging zoonotic diseases and related processes and pathways, ii) enhancing sustainable and targeted One Health surveillance, early warning and response mechanisms and iii) developing risk mitigation measures, including: early interventions aiming to reverse or halt environment and biodiversity destruction, regulation of trade in wildlife and wild meat; and reduction of spillover risks at key animal value chain points wildlife-domestic-human interfaces, including live animal markets (open markets) and other. The

focus will be on known re/emerging zoonotic diseases previously identified to have epidemic and pandemic potential, while also considering "disease X", a yet unknown zoonotic pathogen that could cause a future epidemic.

### **Objective:**

Reduce the risk and minimize local and global impacts of zoonotic epidemics and pandemics, through understanding the linkages and drivers of emergence and spillover, adopting upstream prevention, and strengthening One Health surveillance, early warning, and response systems

### Action 2.1. Understand drivers of emergence, spillover and spread of zoonotic pathogens

This action reviews existing knowledge of drivers, processes, and pathways, and establishes baselines for monitoring purposes. It proposes to conduct targeted research to fill outstanding knowledge gaps. The action is expected to lead to better understanding of the impact of ecosystem degradation, land use and habitat change on emergence and spread of diseases.

Activities in this action focus on diseases identified as priorities by WHO [https://www.who.int/activities/prioritizing-diseases-for-research-and-development-in-emergency-contexts].

### **Key activities**

- 2.1.1 Conduct coordinated operational research following Tripartite/UNEP/OHHLEP guidance on the drivers, processes, and pathways for zoonotic disease emergence, spread and persistence
- 2.1.2 Develop standardized protocols and SOPs for harmonized One Health research and data collection, to facilitate comparison and meta-analyses
- 2.1.3 Identify climate change-related drivers, including its impact on zoonotic disease emergence and spread, that can lead to increased interfaces or disrupts natural host-pathogen dynamics
- 2.1.4 Monitor human, wildlife, domestic animal, and environmental health using a joint indicator framework, including in intact ecosystems to establish baselines, and over time/along development gradients
- 2.1.5 Raise awareness with key stakeholders about identified risk factors and drivers, as well as solutions for risk mitigation and spillover prevention that are nature-based, where applicable, acceptable, and sustainable
- 2.1.6 Build science-policy interfaces to ensure scientific knowledge, including assessments, syntheses, and reviews, is translated into action
- 2.1.7 Identify One Health research gaps, including indigenous peoples' knowledge and advocate for funding to tackle these gaps

### Action 2.2. Identify and prioritize targeted, evidence-based upstream interventions to prevent emergence, spillover and spread of zoonotic pathogens

This action identifies and prioritizes targeted, evidence-based upstream interventions to prevent emergence, spillover and spread of zoonotic pathogens, through tackling the drivers. These include land use planning and management of ecosystem processes that should be integrated in health and biodiversity risks assessments and interventions and vice versa. The action further identifies sustainable solutions, nature-based where applicable, ensuring indigenous peoples' knowledge inclusion

### **Key activities**

- 2.2.1 Conduct Joint One Health Risk Assessments leading to evidence-based and targeted risk management and communication
- 2.2.2 Incorporate landscape change planning in health and biodiversity risks assessments and vice versa
- 2.2.3 Establish standards for the management of ecosystem processes at all levels to support resilience including mainstreaming habitat degradation prevention and biodiversity protection in health and food systems to maximize co-benefits.
- 2.2.4 Engage with local communities including indigenous peoples, to identify sustainable solutions, nature-based where applicable, for the prevention and control of emerging and re-emerging zoonotic diseases
- 2.2.5 Conduct anthropological and participatory research to identify key risky behaviors, acceptance, and feasibility of risk mitigation measures and to identify appropriate alternatives, including gender-based approaches and indigenous peoples' knowledge
- 2.2.6 Implement enabling, evidence-based and gender-sensitive legislation/regulations for the prevention and control of zoonotic epidemics/pandemics along the value chains, including livestock and wildlife
- 2.2.7 Operationalize existing global strategies on zoonotic infectious diseases and ensure synergy and cohesiveness at global, regional, and national levels
- 2.2.8 Develop a One Health operational research agenda and priorities, engaging human, animal, and ecosystem health to find sustainable solutions to reduce emerging disease

## Action 2.3. Strengthen national, regional, and global One Health surveillance, early warning and response systems

This action aims to ensure timely detection of zoonotic emerging and re-emerging diseases through sustainable and targeted One Health surveillance, establish triggers for action, and develop evidence-based decision support tools.

### **Key activities**

- 2.3.1 Conduct targeted One Health surveillance at wildlife-domestic-human interfaces following Tripartite/UNEP/OHHLEP guidance
- 2.3.2 Implement progressive control pathways for existing and potentially re-emerging zoonotic diseases (zoonotic influenza viruses, MERS-CoV, SARS-CoV-2, Ebola, RVF, etc.)
- 2.3.3 Develop and maintain country capacity related to safe transport of infectious substances according to applicable international transport regulations
- 2.3.4 Develop and implement a monitoring framework for wildlife and the environment, including the management of wildlife along the wild trade and meat value chain
- 2.3.5 Conduct risk factor surveillance and forecasting at the human-animal-ecosystem interface to support predictive epidemic intelligence, including research in pathogen mutation and evolution and microbial diversity in wildlife that has the potential for spillover
- 2.3.6 Build collaborative predictive epidemic intelligence systems (at national, regional, and global levels) to identify high-risk interfaces and hot spots for spillover

2.3.7 Use pandemic risk assessment approaches (e.g., WHO's TIPRA for influenza viruses, molecular risk assessment, FAO's EMPRES-i Genetic Module, etc.) to proactively identify pre-pandemic vaccine candidates for existing zoonotic pathogens to inform vaccine production

2.3.8 Leverage innovations and new technologies in disease surveillance, rapid response, and control

### Action Track 3: Neglected Zoonotic Diseases (NZDs)

Communities bearing the greatest burden of neglected zoonotic diseases are almost always those with little political influence or resources. In order to develop effective control plans, it is therefore essential to build awareness and demand for services from affected communities by understanding their attitudes and knowledge, especially about animals and the environment, and building their capacities. To ensure sustainability, countries should be encouraged and supported to own these community-centric strategies and allocate sufficient domestic resources to the challenge. There are clear long-term benefits to communities and to the broader economy of reduced disease burden and improved livelihoods. Increasing capacity to detect NZDs also increases the likelihood of early detection of pathogens with epidemic or pandemic potential.

In most affected countries, NZDs are endemic although they may be concentrated in certain localities. Resource allocation around NZDs is very limited and data on the real burden of disease is scarce and unreliable. Mis- and underdiagnosis is common due to the lack of easy-to-use, locally available, or technically adequate diagnostic tools, while information-gathering and surveillance rarely address human-animal-environment relationships beyond animals of productive value.

There are already many surveillance tools, agreed standards, data sources and policies that apply to the control of neglected, zoonotic and vector-borne diseases. Many of these can be strengthened, for example in the area of mandatory reporting, and integrated where relevant. The new Road Map for Neglected Tropical Diseases 2021–2030 also addresses key gaps, especially in disease surveillance, diagnostics, monitoring and evaluation, access and logistics, advocacy, and funding.

This Action Track addresses the challenges outlined above building on existing measures which may provide numerous opportunities to integrate NZD control activities, applying One Health principles. The overarching aim is to reduce the burden of neglected zoonotic and vector-borne diseases on people. We note that it is unrealistic to achieve eradication of NZDs. In most countries, effective disease control and elimination of human mortality and morbidity is the target.

### **Objective:**

Reduce the burden of neglected zoonoses by supporting countries to implement community-centric solutions, strengthening policy frameworks from local to global level and across sectors, and increasing political commitment and investment.

### Action 3.1 Enable countries to develop and implement community-centric solutions to NZD control using a One Health approach involving all relevant key stakeholders

This action aims to promote implementation of control measures by building awareness and demand for control of NZDs from within communities and among stakeholders across relevant sectors. Key areas for development are data management and information sharing, surveillance, implementation of control activities, stakeholder training, communication, and community engagement.

Ideally the epidemiology of NZDs at the local level should be well understood and affected communities are engaged in the design and implementation of surveillance and data management

systems, outbreak response, training, and communication. Drivers and disincentives to participation need to be understood and addressed in order to create trust and ensure sustained action.

This action includes support for countries to implement a community-centric, multisectoral approach that engages stakeholders beyond the health sectors to embrace educators, local government, Water, Sanitation and Hygiene (WASH), waste management, agriculture, food safety and media representatives.

### **Key activities**

- 3.1.1 Provide integrated guidance and resources to countries to help empower communities and increase engagement and awareness of NZD prevention, diagnosis, control, and treatment.
- 3.1.2 Provide countries with operational tools and resources for integrated multi-sectoral surveillance and mapping of risk areas for NZDs from national to local levels
- 3.1.3 Support countries to provide access to basic WASH services, including agricultural water use and waste management and training of communities across sectors to address NZDs
- 3.1.4 Strengthen information, awareness, and control of vector- and rodent-borne diseases

# Action 3.2. Ensure the harmonized application of One Health principles at all levels by implementing practical measures to strengthen local, national, regional, and global policy frameworks for the control and prevention of NZDs

This action aims to strengthen and harmonize all relevant protocols on control programs, data, surveillance, and information sharing as well as legal and policy frameworks related to the prevention and control of endemic and zoonotic diseases. This requires operationalizing integrated surveillance systems, capacity building, control and risk management practices and prevention planning at global, national, regional, and local level.

Activities supporting this action help to deliver more systematic data collection to improve knowledge about the burden of disease, identify risk groups, target actions, increase efficiency, improve diagnostics, identify research gaps, increase awareness and expertise of healthcare providers, and raise awareness.

### **Key activities**

- 3.2.1 Support countries to include NZDs when establishing national One Health platforms and multisectoral disease control strategic plans
- 3.2.2 Support countries to strengthen integrated disease notification, data collection, information sharing and outbreak response to build multi-sectoral, One Health coordinated surveillance and risk management capacity and encourage alignment with regional and global frameworks and existing priority disease programmes
- 3.2.3 Provide resources and support to countries to link and integrate single sector and specialized disease programmes and health information systems
- 3.2.4 Provide resources and support to countries to implement proven methodologies, for example Zero by Thirty: the Global Strategic Plan to Eliminate Human Deaths from Dog Mediated Rabies by 2030, as a way of operationalizing a One Health approach

Action 3.3. Increase political commitment and investment in the control of NZDs, by advocating for, and demonstrating the value of a One Health approach.

This action aims to establish a common vision between the Tripartite, UNEP, affected countries and territories and other stakeholders to increase political commitment and investment in NZD control and prevention using a One Health approach. Agencies and countries should draw on the many existing strategies for NTD and NZD control and elimination to ensure messaging and advocacy is consistent and effective.

The action ensures accountability for actions whether global, national, or local, remove barriers to progress and create strong partnerships and networks as a basis for sustainable, long-lasting action.

### **Key activities**

- 3.3.1 Leverage the use and implementation of already existing roadmaps<sup>5</sup> at all levels to accelerate control of NZDs
- 3.3.2 Promote country ownership and galvanize international collaboration to support One Health policies for NZDs
- 3.3.3 Develop or increase One Health capacity of professional, paraprofessional and community health care workforce
- 3.3.4 Build evidence base for One Health approach in reducing disease burden and socioeconomic impact of NZDs across relevant sectors, from global to national levels
- 3.3.5 Support countries to build the investment case and develop sustainable financing and governance mechanisms for cost-effective NZDs control through implementation of One Health principles

### Action Track 4: Food Safety Hazards

Food, and the complex systems that produce it, sits at the nexus of the human-animalsenvironment interface. The ways food is produced may not only affect the safety of the final product, but also the health and welfare of animals and the contamination of the environment. Reciprocally, the environment of food production and the health of animals may impact food safety. Thus, to address this intimate interconnectivity, a One Health approach is critical to address food safety. And food safety is critical to promote One Health.

This action track is aligned with the joint FAO/WHO coordination framework being developed to support the implementation of FAO<sup>6</sup> and WHO<sup>7</sup> food safety strategies at global, regional, and national levels. The action track builds on this momentum to advocate for food safety and support the implementation of both FAO and WHO strategies under the One Health approach without interfering with their governance and structures.

The action track will systematically and holistically address challenges of food safety within a food system perspective with specific actions to address the risks to animal and human health and food safety in the farm to fork continuum, using a One Health analysis framework with specific actions to

<sup>&</sup>lt;sup>5</sup> E.g. Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021– 2030 (NTD Roadmap) (WHO 2021), Zero by 30: the Global strategy to eliminate human deaths from dog mediated rabies by 2030 (WHO, FAO, OIE, 2018), Global Vector Control Response 2017–2030 (WHO, 2017), Roadmap for zoonotic tuberculosis (WHO, FAO, OIE, 2017), Ending the neglect to attain the Sustainable Development Goals: a global strategy on water, sanitation and hygiene to combat neglected tropical diseases, 2021–2030 (WHO, 2021).

<sup>&</sup>lt;sup>6</sup> http://www.fao.org/3/ne021en/ne021en.pdf

<sup>&</sup>lt;sup>7</sup> https://apps.who.int/gb/ebwha/pdf files/WHA73/A73 R5-en.pdf

assess, manage and communicate food safety risks. It is both complementary to and synergistic with the other actions tracks

### **Objective:**

Guide and support countries to assess, prioritize, plan, implement, monitor, and regularly evaluate actions towards reducing the risks of food contamination and the burden of foodborne diseases

### Action 4.1. Strengthen national capacities for food controls based on international standards and promote a One Health approach for food safety coordination

Strengthening national food safety systems begins with establishing or improving critical infrastructure and components of food control systems, including food safety legislation, standards and guidelines, laboratory capacity, food control activities, and emergency preparedness and response capacity.

This action aims to promote One Health for food safety coordination and describe how the four partner Organizations will assist countries to establish, strengthen and implement national food controls by evaluating and improving key components that will contribute to reducing the risks associated with unsafe food, food contamination and foodborne illness, ensuring food authenticity, and enhancing fair and safe trade in food, including strengthening countries sanitary and phytosanitary (SPS) capacity.

#### **Key activities**

- 4.1.1 Support countries to conduct the baseline assessment utilizing the tools developed by the Tripartite and UNEP
- 4.1.2 Provide technical supporting tools and strengthen capacity building for countries in the development of food control systems under a One Health approach
- 4.1.3 Provide guidance on the management of food safety hazards across the food chain
- 4.1.4 Establish food safety incident and emergency response systems
- 4.1.5 Enhance the participation of countries in the standard-setting work of the Codex Alimentarius Commission and relevant work of the OIE and facilitates its implementation through a multisectoral coordinated approach
- 4.1.6 Utilize global campaign to strengthen food safety communication and education with different stakeholders
- 4.1.7 Develop and disseminate information and communication materials on the importance of food safety in a One Health approach

# Action 4.2. Utilize and improve food systems data and analysis, scientific evidence, and risk assessment in developing policy and making risk management decisions

The collection, utilization and interpretation of data lay the foundation for building evidence-based food safety systems. This action aims to assist countries to utilize food system information and approaches, scientific evidence, and risk assessment to the greatest extent feasible in developing policy and making risk management decisions to reduce the burden of foodborne diseases and ensure safer food and in allocating resources to strengthen national food safety systems.

### Key activities

4.2.1 Develop/update guidelines and innovative approaches for best practice for harmonized joint food safety risk analysis in the context of the existing food system

- 4.2.2 Develop/update guidelines and innovative approaches for best practice for harmonized joint food safety risk analysis in the context of the existing food system
- 4.2.3 Provide technical support and develop training programmes to ensure all countries can conduct food safety risk analysis under a One Health approach and a food systems lens
- 4.2.4 Strengthen the capacity to identify and evaluate new and emerging food safety issues arising at human-animal-environment interface
- 4.2.5 Explore new communication channels to emphasize the central role of food safety across the entire food system, in operational and governance decision-making at national and other levels, and to guide adequate food safety investments
- 4.2.6 Reduce potential public health risks associated with traditional food markets and enhance infection prevention and control under a One Health approach

### Action 3. Strengthen national foodborne disease surveillance systems for the detection and monitoring of foodborne disease and food contamination under a One health approach

Without knowledge of the incidence and burden of disease associated with hazard/food combinations, prioritization of mitigation action will be difficult and food safety improvements will be sub-optimal. Data on occurrence and disease burden from foodborne hazards combined with knowledge of source attribution -chemical, microbiological, physical- will be crucial in assessing costs and benefits of current as well as novel control measures. Therefore, an effective surveillance system to address foodborne diseases requires the integration of human and animal disease surveillance with environmental monitoring.

This action aims to strengthen surveillance for foodborne pathogens and food contaminants at human-animal-environment interface, adopting a One Health approach. This will allow countries to detect, prevent and respond to address food-related public health issues more effectively.

#### **Key activities**

- 4.3.1 Strengthen integrated food monitoring and surveillance programmes
- 4.3.2 Manage databases and tools to collect, improve access to and interpret relevant food safety data and other information, including water, food, and wild meat
- 4.3.3 Support countries to strengthen surveillance systems for estimating and sharing data on the burden of foodborne illness and attributing illnesses to specific food sources, to better target prevention and control measures under a one health approach
- 4.3.4 Enhance One Health related research for the transmission of foodborne pathogens and food contaminants at human-animal-environment interface
- 4.3.5 Address causes of foodborne diseases at primary production levels, including possible reduction and/or elimination of certain foodborne pathogens in animal production (e.g., Salmonella, Campylobacter, Esherichia coli)

### Action track 5: Antimicrobial Resistance

AMR represents a major global threat across human, animal, plant, food, and environmental sectors. Limiting the spread and emergence of resistant pathogens is critical to preserving the world's ability to treat diseases in humans, animals, and plants, reduce food safety and security risks, protect the environment, and maintain progress towards the Sustainable Development Goals, including those on

poverty, hunger, health and well-being, inequality, clean water and sanitation, work and economic growth, responsible consumption and production, and partnerships.

Because AMR has multiple drivers and needs to be tackled on many fronts, a One Health approach is essential to ensure that all sectors and stakeholders communicate and work effectively together.

Building on the momentum of increased collaboration, the Tripartite and UNEP have developed a Strategic Framework for AMR. This Framework reflects the joint work of the four organizations to advance a One Health response to AMR and broadly supports the implementation of the five pillars of the Global Action Plan on AMR as well as strengthening global AMR governance. A joint workplan sets out how the organizations will collaborate to deliver the vision of the Framework. This workplan focuses on activities done by the four organizations collaboratively and complements existing individual organizations' workplans and budgets.

The objectives and activities of Action Track 5 mirror the Strategic Framework on AMR and its joint workplan. Linking through the GPA will ensure AMR-related activities and investment are coherent and synergized across other areas of Tripartite and UNEP One Health collaboration, as well as foster lesson-learning amongst other groups, including on communication and information systems.

### Objective:

Take joint actions to preserve antimicrobial efficacy and ensure sustainable and equitable access to antimicrobials for responsible and prudent use in human, animal, and plant health.

Action 5.1. Strengthen the capacity and knowledge of countries to prioritize and implement context-specific collaborative One Health in AMR policies, legislation, and practice.

This action supports AMR control at country level, ensuring interagency coordination, technical support, and capacity development. With Tripartite and UNEP support, country-owned, sustainable One Health governance ensures effective and balanced national AMR responses.

#### **Key activities**

- 5.1.1 Support balanced, functional, well-represented national inter-agency coordination mechanisms, and One health approaches to AMR National Action Plan implementation
- 5.1.2 Provide technical support and capacity development activities for countries in targeted areas
- 5.1.3 Ensure effective management of the AMR Multi-Partner Trust Fund

### Action 5.2. Reinforce global and regional initiatives and programmes to influence and support One Health responses to AMR

This action supports coordination mechanisms and activities to mobilize demonstrated political engagement and resourcing at the global and regional levels to support AMR control at country level.

### **Key activities**

- 5.2.1 Coordinate the global One Health response to AMR
- 5.2.2 Develop and update standards and technical advice on global best practice
- 5.2.3 Support global advocacy efforts
- 5.2.4 Develop a prioritized research agenda to provide direction for investment
- 5.2.5 Conduct monitoring and evaluation and reporting of the Global Action Plan on AMR

### Action 5.3. Strengthen global AMR governance structures

Through this action the four organizations provide support to the inter-related structures to strengthen accountability and global governance of AMR: (i) the Global Leaders Group on AMR that performs a global advisory and advocacy role with the primary objective of maintaining urgency, public support, political momentum and visibility of the AMR challenge on the global agenda; (ii) A Multi-Stakeholder Partnership Platform to facilitate stakeholder engagement on AMR and includes members of the Tripartite Organizations, UN agencies, interested governments, civil society, private sector and academia; and (iii) an Independent Panel on Evidence for Action on AMR.

### **Key activities**

5.3.1 Support the inter-related structures to strengthen the accountability and global governance of AMR

#### Action Track 6: Environment and Health

There is increasing recognition that the health of people, domestic and wild animals and the environment are closely linked and interdependent. Every form of environmental degradation has direct or indirect negative consequences for human and animal health. The effects of air, water and soil pollution on human and animal health are well documented. Wastewater and runoff from livestock farms enhance the propagation of antimicrobial-resistant genes in the environment. There is increasing evidence that land-use change driven by agricultural, industrial, and urban expansion leads not only to unprecedented degradation of natural habitats, deforestation, and alarming loss of biodiversity, but also provides pathways for the spillover of emerging pathogens between domestic animals, wildlife, and people. The unsustainable and/or unregulated use of biodiversity threatens ecosystem integrity and food security, while also providing pathways for zoonotic disease spillover. Freshwater and ocean pollution leads to the accumulation of toxic chemicals, mercury, and microplastic in seafood, causing adverse health outcomes in humans, wild and domestic animals.

These are but a few examples of the impacts of environmental degradation on health, many of which are compounded by climate change, which acts as a multiplier of these threats, exacerbating their impact while also undermining the resilience of environmental and ecological systems through complex processes.

In order to prevent and mitigate these threats, the environmental, public health and veterinary sectors need to understand these interlinkages, speak with one voice, and implement One Health with a harmonized approach to, *inter alia*, protect biodiversity, ecosystems, and natural resources (the "environment") from anthropogenic drivers of degradation; and improve "upstream" interventions to prevent the spill-over and emergence of infectious zoonotic pathogens. The mandates and priorities of the environment sector need to be fully integrated in the One Health approach, including through the integration of environmental data in One Health decision making, increasing the understanding of environmental issues in the One Health community, and strengthening the capacity of the environmental sector and institutions to have an equal voice at the One Health table and in decision-making.

### **Objective:**

Protect and restore biodiversity, prevent the degradation of natural resources and the wider environment to promote the health of animals, people and ecosystems underpinning sustainable development.

Action 6.1. Protect, restore, and prevent the degradation of ecosystems and the wider environment

This action enumerates a series of activities that can be jointly implemented by the four organizations, in partnership with other entities, to contribute to protect the environment and prevent its further degradation. The activities are intended to promote a shared and better understanding of the health threats posed by unhealthy environments, to collaboratively engage in partnerships with civil society, private sectors, and other stakeholder groups and to adopt policies and practices that promote the sustainable management of nature, ensure healthy ecosystems and communities, and prevent encroachment by urban centers or agriculture/farms.

#### **Key activities**

- 6.1.1 Identify main environmental degradation factors and biodiversity threats impacting the health of animals and humans
- 6.1.2 Enhance private sector and NGO engagement in sustainable natural resource management, restoration activities and best practices, including climate-smart and environmentally sound healthcare.
- 6.1.3 Promote sustainable, climate smart, agroecological approaches to agriculture and livestock production
- 6.1.4 Support countries in developing and adopting national policies to protect the rights of indigenous peoples and local communities to sustainable use and trade in natural resources
- 6.1.5 Jointly promote the importance of enhancing the integrity of all ecosystems to support healthy and resilient populations of all species.
- 6.1.6 Support countries in developing and adopting national policies to protect the rights of indigenous peoples and local communities to sustainable use and trade in natural resources
- 6.1.7 Support countries to develop and grow legal, sustainable, resilient, and inclusive, wildlife-based economies while managing the risks of unregulated and illegal wildlife farming and trade
- 6.1.8 Support and link activities to Nationally Determined Contributions (NDCs), other MEA-related commitments and Health National Adaptation Plans (H-NAPS) commitments made by national governments to address climate change and One Health and environmental degradation.
- 6.1.9 Convene relevant sectors to facilitate integrated land and sea use planning
- 6.1.10 Develop and promote the implementation of joint guidelines for the environmentally sound management of public health, medical and veterinary operations and their waste

### Action 6.2. Mainstream the environment into the One Health approach

This action seeks to integrate the mandates, priorities, functions and knowledge of the forestry, wildlife, natural resource management and environment sectors into the One Health approach

### **Key activities**

- 6.2.1 Implement / roll out the Environment Sector Needs and Readiness Assessment Tool to evaluate the role of the environment sector in One Health at country level
- 6.2.2 Map the evidence on the effects of environmental degradation (including habitat conversion, biodiversity loss, pollution, and waste) and climate change on health and the economy
- 6.2.3 Map out, review and revise existing tools aiming to improve intersectoral collaboration (ex: IHR-PVS NBW) and integrate the environmental sector
- 6.2.4 Raise awareness of the environmental sector about the importance of their voice in One Health

- 6.2.5 Develop and implement mechanisms and partnerships to review and ensure the integration of ecosystem health and environment into One Health policies and programmes and ensure equity amongst sectors and groups in One Health platforms at all levels
- 6.2.6 Support the review, update, and implementation of national (biodiversity/environmental/Health...) plans, policies, and programs to integrate all dimensions of One Health
- 6.2.7 Support the implementation of the CBD Global Action Plan on Biodiversity and Health and related action plans and operational frameworks
- 6.2.8 Support the integration of health and environment considerations and risks into impact assessments and performance standards of the IFC and other financial institutions
- 6.2.9 Communicate to decision makers at all levels, the economic and environmental case for a healthy environment to promote human wellbeing and resilient societies and economies
- 6.2.10 Promote the national-level recognition of the human right to a clean, healthy, and sustainable environment (as unanimously approved by the UN Human Rights Council in October 2021)
- 6.2.11 Promote the adoption of climate-smart and environmentally sound health systems

### Action 6.3. Integrate environmental knowledge, data, and evidence in One Health decision-making

Environment sector-sourced data and evidence are integrated at all levels of decision making to protect biodiversity and the wider environment, promote sustainable development, and identify and mitigate health threats.

### **Key activities**

- 6.3.1 Map interoperability between health, animal disease and environment databases and information systems
- 6.3.2 Establish linkages among disease databases and environment databases to support risk modeling, shared information and informed/science based decision and policy making
- 6.3.3 Develop joint information management systems and analytical tools integrating ecosystem, environmental, animal, and human health knowledge, and data
- 6.3.4 Develop appropriate mechanisms/guidelines to ensure participation of indigenous and local communities including their traditional knowledge to guide One Health decision making
- 6.3.5 Establish partnerships with universities and research centers to fill knowledge gaps and monitor environmental impacts on health (both positive and negative)
- 6.3.6 Translate environmental knowledge and data to improve policies and propose practical solutions to prevent and mitigate health threats at the interfaces
- 6.3.7 Develop a One Health needs assessment toolkit to evaluate interoperability, mechanisms and working relationships among sectors at country level
- 6.3.8 Engage with citizen science in data collection for monitoring the health of the environment to inform action

Action 6.4. Create an interoperable One Health in-service training program for the environment, medical and veterinary sector professionals

This action aims to (i) strengthen the capacity of natural resource management and environment sector professionals and institutions to participate in an interoperable manner with human and animal professionals addressing zoonoses, AMR, and food safety health threats and to support One Health policies and interventions, (ii) strengthen the capacity of medical and veterinary sector professionals and institutions to integrate environmental considerations, participate interoperably with environmental professionals, address linkages between health and the environment, and to supporting One Health policies and interventions, and (iii) jointly/simultaneously strengthen the capacity of the medical, veterinary and environment sector professionals to influence decision-making on health and development, and ensure all sectors are adequately equipped to collaborate and integrate priorities of all sectors

### **Key activities**

- 6.4.1 Develop advocacy training and tools for environment professionals to influence decision-makers in other sectors
- 6.4.2 Develop and roll out a national One Health Environment Sector Needs Assessment Tool to benchmark institutional and individual country capacity to participate interoperably in all aspects of One Health
- 6.4.3 Develop an interoperable One Health training course for in-service professionals (the complement to FETP & FETPV) targeting professionals in Ministries responsible for natural resource management (wildlife, biodiversity, ecosystems, environment), climate and other environmental issues
- 6.4.4 Develop and ensure the inclusion of environmental training for in-service medical, public health and veterinary professionals including the importance of and interlinkages between biodiversity conservation, links between health and the environment, how environmental destruction contributes to disease emergence, and the importance of One Health collaboration with the environment sector
- 6.4.5 Ensure that systems thinking is a core module for academic and in-service One Health professionals
- 6.4.6 Support the development of core modules on environment, biodiversity and ecosystem health in the medical, veterinary and public health tertiary education curricula and research agendas.
- 6.4.7 Support the development of core modules on public health in the environment tertiary education curricula
- 6.4.8 Develop a One Health Introductory course that can be delivered simultaneously to in-service professionals from all One Health sectors (health, animal health, environment) and serves as a prerequisite for FETP, FETPV, and FTP-WEBE training

### Part IV. Governance, Implementation and Monitoring

#### Governance

- The Tripartite and UNEP executives are accountable for the implementation of the GPA and will provide leadership and oversight of its implementation. The executives will nominate a Global Steering Committee (GSC) composed of one senior representative from each of the four partner organizations with the responsibility to make all programmatic, financial and resource decisions related to delivering the GPA based on pre-agreed workplans at global, regional, and national levels.

- The chairperson of the GSG will be designated for one year in the Tripartite executive annual meeting on a rotational basis following the Tripartite chairmanship cycle. The GSP will be supported by the following:
- The Tripartite Secretariat: The Tripartite secretariat has been active for the past years in supporting the Tripartite executive annual meetings and ensuring follow up on the implementation of its agreements and recommendations. Building on this momentum, the Tripartite Secretariat extended to UNEP (Tripartite+ Secretariat) will continue its coordination role, while supporting the GSC in facilitating and monitoring the implementation of the GPA at global level.
- OHHLEP: This expert panel will play an advisory role and work with the GSC and Tripartite + Secretariat, to ensure effective implementation and updating of the GPA with evidence, data and knowledge generated.
- When required the GSC will also engage the expertise of external One Health experts. A
  knowledge and evidence sharing platform will be used for transdisciplinary working, sharing, and
  learning with the aim to develop knowledge and evidence products to support implementation
  of the GPA.

### Implementation, monitoring and evaluation

- The GPA will be supported by an implementation framework with workplans at global, regional, and country levels to translate the objectives and high-level actions and activities described in the GPA into context specific activities at global, regional, and country levels.
- The Tripartite+ regional secretariats mirror the role of the global secretariat at the regional level, focusing on facilitating advocacy and operationalization of One Health at regional and country levels. A key responsibility of the regional secretariats will be to link the GPA to a workplan at the regional and country level, with clear roles and responsibilities among partners.
- The Tripartite+ regional secretariats and their respective countries have primary responsibility for implementing the activities detailed in the country workplans, including improving coordination, collaboration, and communication, planning, and implementing One Health interventions at national and sub-national levels and monitoring progress, as well as sharing lessons learned.
- The workplans will include a monitoring and evaluation framework with targets and indicators
  that are relevant to selected deliverables of each action track for measuring progress and
  facilitate global-level reporting on the implementation of the GPA for five years.
- Targets and indicators will be linked to monitoring and information needs countries will use to monitor their capacities to manage health threats and reduce the risk of pandemics. As such, they reflect the contribution to attainment of relevant targets in the SDGs.

Part V. Sustainability, funding and financing mechanism (under development)